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Indicadores no Contexto da Adoção de Tecnologias e Sistemas de Informação

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DECLARAÇÃO

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É AUTORIZADA A REPRODUÇÃO INTEGRAL DESTA DISSERTAÇÃO APENAS PARA EFEITOS DE INVESTIGAÇÃO, MEDIANTE DECLARAÇÃO ESCRITA DO INTERESSADO, QUE A TAL SE COMPROMETE.

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Resumo

As Tecnologias e Sistemas de Informação (TSI) desempenham um papel fulcral nas organizações, tornando-se quase impossível encontrar uma organização que as não utilize.

A adoção de TSI revela-se particularmente importante para que as organizações se mantenham competitivas, eficientes e rentáveis, pois estas ajudam a melhorar e a otimizar os seus negócios.

No contexto da adoção de TSI têm sido propostos e desenvolvidos diversos modelos e teorias que identificam aspetos que influenciam essa adoção, como, por exemplo: *DeLone & McLean Information Systems Success Model; Diffusion of Innovation Theory; Social Cognitive Theory; Task-Technology Fit; Technology Acceptance Model;* e a *Unified Theory of Acceptance and Use of Technology*.

No entanto, é comum estes modelos e teorias terem um nível de abstração elevado, sem que os constructos que os constituem sejam detalhados, o que dificulta a sua operacionalização prática. Por outro lado, conforme os modelos e as teorias vão sendo aplicados, esses constructos são caracterizados de forma diferente em diferentes casos e por diferentes autores, dificultando também a sua definição.

De modo a procurar contribuir para colmatar estas lacunas, esta dissertação tem como principal objetivo a criação de um referencial com a caraterização dos vários aspetos relevantes no contexto da adoção de TSI (qualidade da informação, qualidade do serviço, qualidade dos sistemas, satisfação com o uso dos sistemas, resultados, etc.) em termos de indicadores relevantes, recorrendo à metodologia de investigação *Design Science Research*. Com o trabalho realizado procura-se contribuir para que a adoção de TSI seja melhor compreendida e facilitada, com vista a possibilitar um maior nível de sucesso em empreendimentos deste tipo.

Palavras-chave: Adoção, Tecnologias e Sistemas de Informação, Constructos, Indicadores, Modelos, Teorias.

Abstract

Indicators in the Context of Adoption of Information Systems and Technologies.

Information Systems and Technologies (IST) play a central role in organizations, making it almost impossible to find an organization that does not use them.

The adoption of IST is particularly important for organizations so can remain competitive, efficient and profitable, as they help improve and optimize their business.

In the context of the adoption of IST, several models and theories have been proposed and developed, identifying aspects that influence the adoption, such as: DeLone & McLean Information Systems Success Model; Diffusion of Innovation Theory; Social Cognitive Theory; Task-Technology Fit; Technology Acceptance Model; and the Unified Theory of Acceptance and Use of Technology.

However, it is common for these models and theories to have a high level of abstraction, without the constructs that constitute them being detailed, which hinders its practical operationalization. On the other hand, as the models and theories are applied, these constructs are characterized differently in different cases and by different authors, making it difficult to define them.

In order to contribute to fill these gaps, this dissertation has as main objective the creation of a reference framework characterizing the various relevant aspects in the context of the adoption of IST (information quality, service quality, systems quality, satisfaction with the use of systems, etc.) in terms of relevant indicators, using the methodology Design Science Research. In this way, we expect to help to make the adoption of IST easier and to improve the level of success in such enterprises.

Keywords: Adoption, Information Systems and Technologies, Constructs, Indicators, Models, Theories.

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Siglas e Acrónimos

C-TAM-TPB	Combined Technology Acceptance Model and Theory Planned Behavior
DTPB	Decomposed Theory of Planned Behavior
DSR	Design Science Research
IDT	Diffusion of Innovations Theory
IST	Information Systems and Technologies
MPCU	Model of Personal Computer Utilization
MM	Motivational Model
SI	Sistemas de Informação
SCT	Social Cognitive Theory
TTF	Task-Technology Fit
TAM	Technology Acceptance Model
TAM2	Technology Acceptance Model versão 2
TAM3	Technology Acceptance Model versão 3
TOE	Technology-Organization-Environment Framework
TI	Tecnologias da Informação
TSI	Tecnologias e Sistemas de Informação
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action
UTAUT	Unified Theory of Acceptance and Use of Technology

1. Introdução

Neste capítulo é efetuado o enquadramento do trabalho, são apresentados os seus objetivos e, por fim, é descrita a estrutura do documento.

1.1. Enquadramento

As Tecnologias e Sistemas de Informação (TSI) desempenham um papel central nas organizações atuais, uma vez que estão presentes em quase todos os aspetos do negócio (Varajão, Colomo-Palacios, & Silva, 2017; Varajão & Trigo, 2016).

A adoção de TSI é fundamental no contexto das organizações, de modo a que estas consigam obter a informação necessária para desenvolver as suas atividades num meio envolvente em permanente mutação. A capacidade de desenvolver e implantar novos sistemas é um aspeto importante que pode diferenciar uma organização de outra (Patnayakuni & Ruppel, 2010; Varajão & Trigo, 2016).

No entanto, essa adoção reveste-se de grande complexidade, sendo necessário ter em conta diversos aspetos relevantes, entre os quais, a qualidade da informação, a qualidade do serviço, a qualidade das aplicações informáticas, entre muitos outros.

Ao longo do tempo têm vindo a ser desenvolvidos e propostos diversos modelos e teorias de adoção de TSI, entre os quais se encontram, por exemplo: *DeLone & McLean Information Systems Success Model* (DeLone & McLean, 1992, 2003); *Diffusion of Innovation Theory* (IDT) (Rogers, 1983, 1995, 2003); *Social Cognitive Theory* (SCT) (Bandura, 1986; Compeau & Higgins, 1995b); *Task-Technology Fit* (TTF) (Goodhue & Thompson, 1995); *Technology Acceptance Model* (TAM) (Davis, 1989; Venkatesh & Bala, 2008; Venkatesh & Davis, 2000); *Technology-Organization-Environment Framework* (TOE) (Tornatzky & Fleischer, 1990); e a *Unified Theory of Acceptance and Use of Technology* (UTAUT) (Venkatesh, Morris, Davis, & Davis, 2003; Venkatesh, Thong, & Xu, 2012).

Contudo, é comum estes modelos e teorias terem um nível de abstração elevado, sem detalhar os diversos constructos que os constituem, o que dificulta a sua operacionalização prática. Por outro lado, conforme os modelos e as teorias vão sendo aplicados, esses constructos são avaliados de forma diferente em diferentes casos e por diferentes autores, o que também dificulta a sua caracterização.

Além disso, os profissionais são confrontados com uma escolha entre uma "infinidade" de modelos com a consequente escolha de constructos dos modelos, ou então escolher um dos modelos e ignorar as contribuições de modelos alternativos (Venkatesh et al., 2003).

Procurando contribuir para colmatar estas lacunas, a presente dissertação propõe-se a caraterizar em detalhe os vários aspetos/constructos da adoção de TSI (qualidade da informação, qualidade do serviço, qualidade dos sistemas, satisfação com o uso dos sistemas, resultados líquidos, etc.).

1.2. Finalidade e Objetivos da Dissertação

Esta dissertação tem como objetivo principal a criação de um referencial de caraterização dos vários aspetos da adoção de TSI (qualidade da informação, qualidade do serviço, qualidade dos sistemas, satisfação com o uso dos sistemas, resultados, etc.) em termos de indicadores[1] relevantes. Com o trabalho proposto, procura-se contribuir para que a adoção de TSI seja melhor compreendida e facilitada, conduzindo a um maior nível de sucesso em empreendimentos deste tipo.

Os resultados esperados estão diretamente relacionados com o cumprimento do objetivo principal:

- Caraterização da adoção de TSI;
- Identificação e caracterização de modelos e teorias de adoção de TSI;
- Identificação dos diversos aspetos relevantes para a adoção de TSI;
- Identificação de estudos que definam os constructos presentes nos modelos e teorias;
- Caraterização detalhada dos diversos aspetos relevantes para a adoção de TSI, em termos de indicadores (ou variáveis de medida).

1.3. Estrutura do Documento

Nesta secção é descrita a estrutura do presente documento.

O primeiro capítulo, Introdução, está organizado em três secções. Na primeira secção é realizado o enquadramento da temática da dissertação, seguido pela segunda secção onde são definidos os objetivos a atingir com a realização deste trabalho e, por fim, na terceira secção é apresentada de forma sucinta a estrutura do documento.

O segundo capítulo, Abordagem Metodológica, está divido em três secções. Na primeira secção é descrita a metodologia escolhida para a realização da dissertação, é apresentado o processo de investigação definido e são identificadas as atividades desenvolvidas. Na segunda secção são apresentadas as fontes de dados e a estratégia de pesquisa utilizada na revisão de literatura. A terceira

[1] Neste contexto o termo "indicador" refere-se a variáveis de medida dos constructos.

secção procura definir os conceitos principais relacionados com a adoção de tecnologias e sistemas de informação.

O terceiro capítulo, Modelos e Teorias de Adoção de Tecnologias e Sistemas de Informação, incide na descrição de uma forma generalizada dos modelos/teorias de adoção de TSI selecionadas.

O quarto capítulo, Referencial de Caracterização de Constructos e Indicadores de Modelos e Teorias da Adoção de Tecnologias e Sistemas de Informação, está estruturado em duas secções. Na primeira secção são apresentados os constructos identificados que constituem as teorias e modelos estudados. Na segunda secção são caracterizados os constructos e os indicadores de modelos e teorias da adoção de tecnologias e sistemas de informação.

No quinto capítulo, Discussão de Resultados, é feita uma reflexão sobre os principais resultados obtidos no desenvolvimento da dissertação.

No sexto capítulo, Conclusão, são feitas diversas considerações finais sobre o trabalho desenvolvido nesta dissertação.

2. Abordagem Metodológica

Neste capítulo é descrita a abordagem metodológica seguida na realização da dissertação e a sua aplicação no contexto da dissertação. São também apresentadas as fontes de dados e a estratégia de pesquisa seguida na revisão de literatura. Finaliza com os conceitos relevantes relacionados com a adoção de tecnologias e sistemas de informação (incluindo o conceito de tecnologias da informação, sistemas de informação e uma abordagem geral da adoção de tecnologias e sistemas de informação).

2.1. Design Science Research

A *Design Science Research* (DSR) é muitas vezes chamada de "Investigação de Melhoria" e esta designação enfatiza a resolução de problemas/melhoria de desempenho da natureza da atividade. Esta metodologia envolve a criação de novos conhecimentos através do *design* de artefactos inovadores e a análise do uso e/ou desempenho desses artefactos junto com reflexão e abstração, de maneira a melhorar e entender o comportamento de diversos aspetos (Vaishnavi & Kuechler, 2004).

Na DSR a investigação começa com a tomada de consciência do problema. As sugestões para uma solução do problema são extraídas da base existente do conhecimento da área do problema. Estas sugestões podem, no entanto, ser inadequadas para o problema ou sofrer de lacunas significativas de conhecimento. Baseado no conhecimento existente, é efetuada uma tentativa para resolver criativamente o problema. A solução, um projeto provisório, é utilizada para implementar um artefacto na fase seguinte (desenvolvimento). As implementações parcialmente ou totalmente bem-sucedidas são então avaliadas de acordo com uma especificação funcional (por vezes implícitas) durante a fase de avaliação. O desenvolvimento, a avaliação e a sugestão são frequentemente realizadas iterativamente no curso da investigação. A iteração realiza-se quando o ciclo termina, redirecionando o fluxo de conhecimento de volta para a consciência do problema, indicado na Figura 1 pela seta circunscrição. A conclusão indica o fim de um ciclo de pesquisa ou a terminação de um projeto específico de *design science research* (Vaishnavi & Kuechler, 2004).

No desenvolvimento deste trabalho é seguida a metodologia *Design Science Research* (Vaishnavi & Kuechler, 2015) conforme a Figura 1. Como anteriormente referido, esta metodologia visa construir um artefacto (por exemplo, teorias, abordagens, modelos, métodos, etc.) para resolver um problema específico.

De seguida são sucintamente descritas as fases da *Design Science Research*.

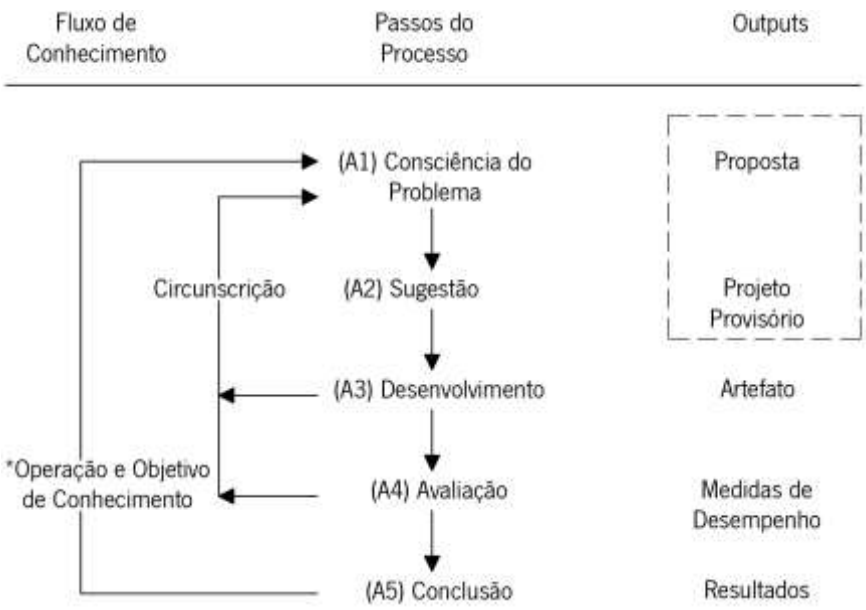


Figura 1 - Abordagem Metodológica.
Adaptado de (Vaishnavi & Kuechler, 2015)

2.1.1. Consciência do Problema

A tomada de consciência de um problema interessante para investigação pode ser proveniente de diversas fontes, incluindo novos desenvolvimentos numa determinada indústria ou de uma disciplina de referência. A leitura de uma disciplina aliada também pode fornecer a oportunidade para a aplicação de novas descobertas no campo do investigador (Vaishnavi & Kuechler, 2004). Os recursos necessários para esta atividade incluem o conhecimento do estado do problema e a importância da sua solução (Peffers, Tuunanen, Rothenberger, & Chatterjee, 2007). O resultado desta fase consiste numa proposta, formal ou informal, para uma nova investigação (Vaishnavi & Kuechler, 2004).

No contexto da dissertação o processo foi iniciado pela tomada de "consciência do problema" (A1). Neste primeiro passo avaliou-se o problema identificado e incluiu a realização de uma revisão de literatura e a caraterização do estado-da-arte no que respeita a modelos e teorias de adoção de TSI.

2.1.2. Sugestão

A fase da sugestão surge imediatamente após a fase da consciência do problema, e os seus resultados (proposta e o projeto provisório, respetivamente) estão intimamente ligados (Vaishnavi & Kuechler, 2004). Nesta fase são investigadas e preliminarmente avaliadas as formas de alcançar as possíveis soluções para o problema (Kuechler & Vaishnavi, 2012). Geralmente, quando é utilizada a *DSR*, o projeto provisório e o desempenho do protótipo desse projeto, faz parte integrante da proposta.

Além disso, após ser investido um esforço considerável num problema interessante, deve ser apresentado pelo investigador um projeto provisório ou, pelo menos, o princípio de uma ideia para a solução do problema, ou então essa ideia (proposta) será anulada. A fase da sugestão demonstra ser essencialmente uma etapa criativa (Vaishnavi & Kuechler, 2004).

No contexto da dissertação, seguiu-se a "sugestão" de uma solução (A2), através da proposta de um referencial para a caracterização dos diversos aspetos relevantes para a adoção de TSI.

2.1.3. Desenvolvimento

O projeto provisório é desenvolvido e implementado na fase de desenvolvimento. As técnicas de implementação variam conforme o artefacto a ser criado. Poderá ser necessária a construção de uma prova formal para demonstrar exatidão do artefacto (Vaishnavi & Kuechler, 2004). Esses artefactos são potencialmente constructos, modelos, métodos ou instâncias (cada um definido amplamente) ou "novas propriedades de recursos técnicos, sociais e/ou informacionais" (Hevner, March, Park, & Ram, 2004; Järvinen, 2007; Peffers et al., 2007). A implementação em si pode ser trivial e não precisar de envolver novidade para além do estado de prática de determinado artefacto. A novidade deve ser o projeto, e não a construção do artefacto (Vaishnavi & Kuechler, 2004).

No contexto da dissertação, após a sugestão da solução, segue-se o seu "Desenvolvimento" (A3), em que foi criado o referencial.

2.1.4. Avaliação

Uma vez construído, o artefacto necessita de ser avaliado de acordo com critérios frequentemente explicitados na proposta (fase da tomada de consciência do problema) (Vaishnavi & Kuechler, 2004). A avaliação consiste na observação e medição de quão bem o artefacto suporta uma solução para o problema (Peffers et al., 2007). Os desvios das expectativas, quer quantitativos, quer qualitativos, são cuidadosamente observados e devem ser explicados. Ou seja, a fase de avaliação contém uma subfase analítica na qual são realizadas hipóteses sobre o comportamento do artefacto. Os resultados da fase de avaliação e as informações adicionais obtidas na construção e no funcionamento do artefacto são reunidas e reenviadas para outra fase de sugestão. As hipóteses explicativas, que são bastante amplas, raramente são descartadas, mas sim modificadas de modo a estar de acordo com as novas observações. Isto sugere um novo *design*, frequentemente precedido por uma nova revisão de bibliografia com as direções sugeridas pelos desvios do desempenho teórico (Vaishnavi & Kuechler, 2004).

No contexto da dissertação, na atividade de “Avaliação” (A4), a avaliação foi feita através de uma nova pesquisa aleatória de referências e verificar se as mesmas se encontram cobertas pelo referencial criado.

2.1.5. Conclusão

A conclusão consiste na formalização geral do processo e a sua comunicação às comunidades académica e de profissionais (Lacerda, Dresch, Proença, Júnior, & Valle, 2013). Esta fase pode ser apenas o fim de um ciclo de investigação ou o final de uma investigação específica. O final de uma investigação é tipicamente a obtenção de uma solução suficientemente satisfatória para o problema. Isto é, mesmo existindo desvios no comportamento do artefacto a partir das (múltiplas) previsões hipotéticas realizadas, os resultados são julgados como "suficientemente bons" (Vaishnavi & Kuechler, 2004).

Segundo Vaishnavi & Kuechler (2004), nesta fase, os resultados da investigação são consolidados e expostos, e os conhecimentos adquiridos na investigação são frequentemente categorizados como: "Firmes" - fatos que foram aprendidos e que podem ser repetidamente aplicados ou invocados; ou "Pontas soltas" - comportamento anormal que desafia a explicação e pode muito bem servir como tema de novos trabalhos de investigação.

Relativamente ao contexto da dissertação, na “Conclusão” do trabalho (A5) são apresentados os resultados obtidos. O desenvolvimento da dissertação (A6) ocorreu ao longo de todo o processo.

2.2. Fontes de Dados e Estratégia de Pesquisa e Seleção dos Artigos

Nesta secção são apresentadas as fontes de dados e a estratégia de pesquisa, assim como a seleção dos artigos realizada.

2.2.1. Fontes de Dados e Estratégia de Pesquisa

A estratégia de pesquisa utilizada para a realização da revisão de literatura incidiu em três etapas. Primeiramente realizou-se uma pesquisa com a finalidade de identificar os modelos ou teorias existentes relacionadas com a adoção de tecnologias e sistemas de informação. Posteriormente, na segunda etapa, foi realizada outra pesquisa, esta já concentrada nos modelos ou teorias identificadas na etapa anterior, com o intuito de identificar as referências de qualidade sobre os modelos/teorias. E, por fim, na terceira etapa, já com as informações recolhidas na etapa anterior, foram aplicados determinados critérios de modo a refinar o número de modelos/teorias.

Para garantir a qualidade dos trabalhos encontrados, foram escolhidos livros e artigos publicados em revistas conceituadas na área dos sistemas de informação, tais como, *European Journal of Information Systems*, *Information Systems Journal, Information Systems Research, Journal of the Association for Information Systems, Journal of Information Technology, Journal of Management Information Systems, Journal of Strategic Information Systems* e *MIS Quarterly.* Foram também tidos em conta artigos provenientes de conferências, como, *Americas Conference on Information Systems* (AMCIS), *European Conference on Information Systems* (ECIS), *International Conference on Information Systems* (ICIS) e a *Pacific Asia Conference on Information Systems* (PACIS).

Para a realização da pesquisa, foram utilizadas as seguintes bases de dados (ordenadas alfabeticamente):

- Google Scholar;
- RepositoriUM;
- ScienceDirect;
- Scopus;
- WebOfScience.

Na Tabela 1 são apresentadas as pesquisas realizadas no período de setembro de 2016 a dezembro de 2016 e os resultados obtidos nessas mesmas pesquisas. Para um melhor entendimento da tabela, segue uma explicação do que cada coluna significa no contexto da pesquisa e como deve ser feita a leitura da mesma.

A coluna "Modelo/Teoria" diz respeito ao modelo ou teoria pesquisada.

A coluna "Base de Dados" corresponde à base de dados em que foi realizada a pesquisa.

A coluna "Filtros" coincide com os filtros que foram utilizados referentes à área de pesquisa.

A coluna "Revistas" representa as revistas disponíveis selecionadas para utilizar como um segundo filtro na pesquisa.

A coluna "Conferência", tal como a coluna "Revistas", representa as conferências disponíveis selecionadas para utilizar como um segundo filtro na pesquisa.

Importa referir que os resultados obtidos na tabela são fruto de pesquisas distintas, sendo que na mesma pesquisa não se utilizaram, em simultâneo, as revistas e as conferências como filtro (quando eram utilizadas as revistas como filtro, não eram utilizadas as conferências e vice-versa).

Por fim, na coluna "Resultados (Revistas | Conferências)", subdividida em duas colunas, estão representados os resultados obtidos na conjugação de todas as colunas anteriores como critério. A primeira coluna indica os resultados obtidos quando foram utilizadas "revistas" como segundo filtro,

na segunda coluna estão representados os resultados obtidos quando foram utlizadas “conferências” como segundo filtro.

Tabela 1 - Resultados obtidos na pesquisa

Modelo/Teoria	Base de Dados	Filtros	Revistas	Conferências	Resultados (Revistas | Conferências)	
Combined TAM and TPB	Scopus	✓ Computer Science ✓ Engineering	–	• ECIS 2007	0	1
	Web of Science	✓ Computer Science ✓ Information Science Library Science ✓ Engineering	–	–	0	0
Decomposed Theory of Planned Behavior	Scopus	✓ Computer Science, ✓ Engineering	• European Journal of Information Systems • Information Systems Research • MIS Quarterly Management Information Systems	• AMCIS 2005, 2006, 2009 • ECIS 2005, 2009, 2010, 2013 • ICIS 2013 • PACIS 2005, 2011, 2013	5	12
	Web of Science	✓ Computer Science ✓ Information Science Library Science ✓ Information Systems ✓ Engineering ✓ Computer Science Theory Methods ✓ Computer Science Software Engineering ✓ Computer Science interdisciplinary applications	• European Journal of Information Systems • Information Systems Research • MIS Quarterly • Information Systems Journal	• PACIS 2005	7	1

Modelo/Teoria	Base de Dados	Filtros	Revistas	Conferências	Resultados (Revistas | Conferências)	
DeLone & McLean IS Success Model	Scopus	✓ Computer Science ✓ Engineering	• Journal of Management Information Systems • European Journal of Information Systems • Information Systems Journal • Information Systems Research • Journal of Strategic Information Systems	• AMCIS 2005, 2006, 2007, 2009, 2010, 2012, 2013, 2014, 2016 • ECIS 2005, 2006, 2009, 2010, 2011, 2012 • ICIS 2008, 2010, 2015 • PACIS 2011, 2013, 2016	9	43
	Web of Science	✓ Computer Science ✓ Information Science Library Science ✓ Engineering ✓ Science Technology other topics	• Journal of Management Information Systems • Information Systems Research • European Journal of Information Systems	• AMCIS 2010 • PACIS 2006, 2008	9	3
Diffusion of Innovations Theory	Scopus	✓ Computer Science ✓ Engineering ✓ Undefined	• MIS Quarterly Management Information Systems • Journal of Information Technology • European Journal of Information Systems • Journal of Management Information Systems • Journal of Strategic Information Systems • Information Systems Research • Information Systems Journal	• AMCIS 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2016 • ECIS 2006, 2007, 2008, 2011, 2012, 2014 • ICIS 2011, 2012, 2013, 2014, 2015 • PACIS 2011, 2013, 2014, 2017	41	117

Modelo/Teoria	Base de Dados	Filtros	Revistas	Conferências	Resultados (Revistas | Conferências)	
Diffusion of Innovations Theory (cont.)	Web of Science	✓ Computer Science ✓ Information Science Library Science ✓ Engineering ✓ Science Technology other topics	• MIS Quarterly • Journal of Information Technology • Information Systems Research • European Journal of Information Systems • Journal of Management Information Systems • Journal of Strategic Information Systems • Information Systems Journal • Journal of the Association for Information Systems	• AMCIS 1998, 1999, 2010 • PACIS 2006, 2007	76	10
Hedonic-motivation system adoption model	Scopus	✓ Computer Science ✓ Engineering	• Journal of the Association for Information Systems, • Journal of Management Information Systems	• AMCIS 2010 • ECIS 2009 • ICIS 2013 • PACIS 2011	4	4
	Web of Science	✓ Computer Science ✓ Information Science Library Science ✓ Engineering	• Journal of the Association for Information Systems • MIS Quarterly • Journal of Management Information Systems • European Journal of Information Systems	–	7	0
Model of Personal Computer Utilization	Scopus	✓ Computer Science ✓ Engineering	• MIS Quarterly Management Information Systems • Journal of Management Information Systems	–	2	0
	Web of Science	✓ Computer Science ✓ Information Science Library Science ✓ Engineering ✓ Science Technology other topics	• MIS Quarterly	–	1	0

Modelo/Teoria	Base de Dados	Filtros	Revistas	Conferências	Resultados (Revistas | Conferências)	
Motivational Model	Scopus	✓ Computer Science ✓ Engineering	• MIS Quarterly Management Information Systems • Journal of Information Technology • European Journal of Information Systems • Journal of Management Information Systems • Information Systems Journal	• AMCIS 2008, 2010, 2011, 2012, 2013, 2014, 2015 • ECIS 2009, 2011, 2013 • ICIS 2007, 2012, 2013, 2015 • PACIS 2011, 2013	14	50
	Web of Science	✓ Computer Science ✓ Information Science Library Science ✓ Engineering ✓ Science Technology other topics ✓ Construction Building Technology	• MIS Quarterly • Journal of Management Information Systems • European Journal of Information Systems • Information Systems Journal	• PACIS 2008	13	1
Multi-Motive Information Systems Continuance Model	Scopus	–	–	• ECIS 2013	0	1
	Web of Science	–	–	–	0	0
Social Cognitive Theory	Scopus	• Computer Science • Engineering	• European Journal of Information Systems • Information Systems Journal • Information Systems Research • Journal of the Association for Information Systems • Journal of Information Technology • Journal of Management Information Systems • MIS Quarterly Management Information Systems	• AMCIS 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2014, 2015 • ECIS 2009, 2013 • ICIS 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015 • PACIS 2012, 2013, 2014	50	128

Modelo/Teoria	Base de Dados	Filtros	Revistas	Conferências	Resultados (Revistas | Conferências)	
Social Cognitive Theory (cont.)	Web of Science	✓ Computer Science ✓ Information Science Library Science ✓ Engineering ✓ Science Technology other topics	• European Journal of Information Systems • Information Systems Journal • Information Systems Research • Journal of the Association for Information Systems • Journal of Information Technology • Journal of Management Information Systems • MIS Quarterly	• PACIS 2006, 2007	75	2
Task-Technology Fit	Scopus	✓ Computer Science ✓ Engineering	• European Journal of Information Systems • Information Systems Research • Journal of the Association for Information Systems • Journal of Information Technology • MIS Quarterly Management Information Systems	• AMCIS 2005, 2006, 2007, 2008, 2009, 2011, 2012, 2013, 2014, 2015, 2016 • ECIS 2010, 2011, 2012, 2013, 2014 • ICIS 2006, 2007, 2010, 2011, 2012, 2014 • PACIS 2005, 2008, 2009, 2011, 2012	17	67
	Web of Science	✓ Computer Science ✓ Information Science Library Science ✓ Engineering	• European Journal of Information Systems • Information Systems Journal • Journal of the Association for Information Systems • Journal of Information Technology • MIS Quarterly	• AMCIS 1997, 1999 • PACIS 2000, 2005, 2007, 2008	29	8

Modelo/Teoria	Base de Dados	Filtros	Revistas	Conferências	Resultados (Revistas | Conferências)	
Technology Acceptance Model	Scopus	✓ Computer Science ✓ Engineering	• European Journal of Information Systems • Information Systems Journal • Information Systems Research • Journal of the Association for Information Systems • Journal of Information Technology • Journal of Management Information Systems • MIS Quarterly Management Information Systems • Journal of Strategic Information Systems	• AMCIS 2005, 2006, 2007, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016 • ECIS 2005, 2009, 2011, 2012 • ICIS 2007, 2008, 2009, 2010, 2011, 2012, 2013 • PACIS 2008, 2010, 2011, 2013, 2014	113	286
	Web of Science	✓ Computer Science ✓ Information Science Library Science ✓ Engineering ✓ Science Technology other topics ✓ Construction Building Technology	• European Journal of Information Systems • Information Systems Journal • Information Systems Research • Journal of the Association for Information Systems • Journal of Information Technology • Journal of Management Information Systems • MIS Quarterly • Journal of Strategic Information Systems	• AMCIS 1998, 1999 • PACIS 2005, 2006, 2008	392	57
Technology-Organization-Environment Framework	Scopus	✓ Computer Science ✓ Engineering	• European Journal of Information Systems • Journal of Management Information Systems • MIS Quarterly Management Information Systems • Journal of Strategic Information Systems	• AMCIS 2006, 2011, 2012, 2013, 2014, 2015 • ECIS 2006, 2010, 2012, 2013, 2014 • ICIS 2006, 2013 • PACIS 2007, 2008, 2010, 2012, 2013, 2014	7	27

Modelo/Teoria	Base de Dados	Filtros	Revistas	Conferências	Resultados (Revistas | Conferências)	
Technology-Organization-Environment Framework (cont.)	Web of Science	✓ Computer Science ✓ Information Science Library Science ✓ Engineering ✓ Science Technology other topics ✓ Construction Building Technology	• European Journal of Information Systems • Journal of Management Information Systems • MIS Quarterly • Journal of Strategic Information Systems	• ICIS 2002 • PACIS 2005, 2008, 2007	6	4
Theory of Planned Behavior	Scopus	✓ Computer Science ✓ Engineering	• European Journal of Information Systems • Information Systems Journal • Information Systems Research • Journal of the Association for Information Systems • Journal of Management Information Systems • MIS Quarterly Management Information Systems	• AMCIS 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016 • ECIS 2008, 2009, 2012, 2013 • ICIS 2013, 2014 • PACIS 2006, 2008, 2010, 2011, 2013, 2014	27	86
	Web of Science	✓ Computer Science ✓ Information Science Library Science ✓ Engineering ✓ Science Technology other topics ✓ Construction Building Technology	• European Journal of Information Systems • Information Systems Journal • Information Systems Research • Journal of the Association for Information Systems • Journal of Management Information Systems • MIS Quarterly	• AMCIS 1997 • PACIS 2005, 2006, 2008	62	9

Modelo/Teoria	Base de Dados	Filtros	Revistas	Conferências	Resultados (Revistas | Conferências)	
Theory of Reasoned Action	Scopus	✓ Computer Science ✓ Engineering	• MIS Quarterly Management Information Systems • European Journal of Information Systems • Information Systems Research	• AMCIS 2005, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014 • ECIS 2010, 2012 • ICIS 2007, 2008, 2011, 2014 • PACIS 2007, 2014	10	24
	Web of Science	✓ Computer Science ✓ Information Science Library Science ✓ Engineering ✓ Science Technology other topics ✓ Construction Building Technology	• MIS Quarterly • European Journal of Information Systems • Information Systems Research • Journal of the Association for Information Systems	• PACIS 2005, 2006, 2007	28	5
Unified Theory of Acceptance and Use of Technology	Scopus	✓ Computer Science ✓ Engineering	• European Journal of Information Systems • Journal of the Association for Information Systems • Journal of Management Information Systems • MIS Quarterly Management Information Systems	• AMCIS 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2015, 2016 • ECIS 2008, 2009, 2011, 2012, 2014 • ICIS 2011, 2013, 2014	9	42
	Web of Science	✓ Computer Science ✓ Information Science Library Science ✓ Engineering ✓ Science Technology other topics ✓ Construction Building Technology	• European Journal of Information Systems • Journal of Information Systems • Journal of the Association for Information Systems • Journal of Management Information Systems • MIS Quarterly	• ECIS 2008 • PACIS 2007	14	2

Para a realização da revisão de literatura relacionada com os modelos e teorias de adoção de TSI, foram apenas considerados os modelos e teorias que apresentassem um número de resultados superior a cinco em ambas as bases de dados (*Scopus* e *Web of Science*), resultados estes referentes

à pesquisa em revistas (dando assim prioridade aos estudos provenientes de revistas e colocando as conferências em segundo plano).

A decisão de serem só considerados os modelos e teorias que apresentassem mais de cinco resultados, foi tomada com o intuito de obter uma amostra suficientemente sólida de artigos para a realização da análise e caraterização dos constructos e indicadores da adoção de TSI.

Seguindo os critérios em cima referidos, foram tidos em conta os seguintes modelos e teorias: *Decomposed Theory of Planned Behavior* (DTPB), *DeLone & McLean Information Systems Success Model, Diffusion of Innovation Theory* (IDT), *Motivational Model* (MM), *Social Cognitive Theory* (SCT), *Task-Technology Fit* (TTF), *Technology Acceptance Model* (TAM), *Technology-Organization-Environment Framework* (TOE), *Theory of Planned Behavior* (TPB), *Theory of Reasoned Action* (TRA), e a *Unified Theory of Acceptance and Use of Technology* (UTAUT).

2.2.2. Seleção dos Artigos

Os artigos foram selecionados, a partir de uma análise inicial realizada ao título e ao resumo do artigo. Sempre que o título e o resumo não foram suficientemente claros quanto ao seu conteúdo, foi efetuada uma leitura geral do artigo, de modo a percecionar se este continha a informação pretendida.

No processo de seleção dos artigos foram tidos em consideração os seguintes critérios:

- Foco no tema da adoção de tecnologias e sistemas de informação;
- Consideração de Modelos/Teorias de adoção de tecnologias e sistemas de informação selecionados;
- Definição dos constructos que constituem os modelos/teorias de adoção de tecnologias e sistemas de informação selecionados;
- Definição das variáveis de medida (indicadores) dos constructos que constituem os modelos/teorias de adoção de tecnologias e sistemas de informação selecionados;

2.3. Adoção de Tecnologias e Sistemas de Informação

Nesta secção são descritos os conceitos relacionados com a adoção de tecnologias e sistemas de informação relevantes no contexto do presente trabalho, incluindo o conceito de tecnologias da informação, sistemas de informação e uma abordagem geral da adoção de tecnologias e sistemas de informação.

2.3.1. Tecnologias da Informação

As TI desempenham um papel importante na organização e estão integradas nos sistemas de informação e em praticamente todas as atividades organizacionais (Varajão, Trigo, & Soto-Acosta, 2016). No presente, procurar encontrar uma organização que não recorra à utilização de TI é um empreendimento quase impossível, podendo-se afirmar que as tecnologias da informação têm gerado efeitos profundos na realidade das organizações, tanto na incorporação destas tecnologias na cadeia de valor da organização, como na constituição de vantagens competitivas. Com o passar do tempo torna-se mais claro que é necessário uma utilização eficiente e eficaz das TI, para que as organizações sejam competitivas e rentáveis e que, em muitos casos, a sobrevivência de uma organização depende dessa capacidade (Varajão, 2003).

As TI encontram-se em rápida e permanente evolução, revelando-se como elementos fundamentais na condução e posicionamento competitivo de qualquer organização, transformando definitivamente a sua realidade e a própria essência dos negócios (da Glória Fraga, Varajão, & Oliveira, 2017; Varajão, 2003).

Para Cooper & Zmud (1990) a tecnologia da informação é vista num sentido amplo, referindo-se a qualquer artefacto cuja base tecnológica subjacente é composta de *hardware* e *software* de computador ou de comunicações.

A tecnologia da informação é o conjunto de equipamentos e suportes lógicos (hardware e software) que permitem executar tarefas como aquisição, transmissão, armazenamento, recuperação e exposição de dados (Alter, 1992; Varajão, 2003).

March & Smith (1995) definem tecnologia da informação como a tecnologia usada para adquirir e processar informações em apoio de propósitos humanos.

No ponto de vista de Attaran (2003), a tecnologia da informação corresponde às capacidades oferecidas às organizações por computadores, aplicações de *software* e telecomunicações para fornecer dados e informações a indivíduos e processos.

2.3.2. Sistemas de Informação

Devido à cada vez maior complexidade das organizações e da sociedade em geral, o volume de dados e de informação tem aumentado. Por este motivo, existe a necessidade da existência de sistemas que assegurem a recolha, armazenamento, processamento, consulta e comunicação da informação necessária para o desenvolvimento desejado das atividades das organizações (Varajão, 2003).

Os sistemas de informação atualmente são essenciais para melhorar a produtividade, reduzir os custos operacionais, melhorar a tomada de decisões de gestão e obter vantagens competitivas (Varajão et al., 2017).

Segundo Buckingham, Hirschheim, Land, & Tully (1987), um sistema de informação é um sistema que reúne, armazena, processa e entrega informações relevantes para uma organização, de maneira que a informação seja acessível e útil para aqueles que desejam utilizá-la, incluindo gestores, funcionários, clientes e cidadãos. Um sistema de informação é um sistema de atividade humana que pode ou não envolver o uso de sistemas de computação.

De acordo com Alter (1996), trata-se de um sistema que utiliza a tecnologia da informação para capturar, transmitir, armazenar, recuperar, manipular ou exibir informações usadas em um ou mais processos de negócios.

Para Varajão (2003), um sistema de informação é um conjunto de meios e procedimentos cuja finalidade é assegurar a informação útil necessária às diversas funções e níveis da organização, bem como à sua envolvente externa.

Huber, Piercy, & McKeown (2007) perspetivaram um sistema de informação como uma coleção organizada de pessoas, informações, processos de negócios e tecnologia da informação, com o propósito de alcançar um objetivo.

2.3.3. Adoção de Tecnologias e Sistemas de Informação

A adoção de tecnologias e sistemas de informação (TSI) revela-se como um processo complexo que não só envolve as ações do adotante, mas também as ações dentro do contexto em que as TSI são adotadas e as ações realizadas por outros indivíduos que podem influenciar o adotante (Jeyaraj & Sabherwal, 2008).

A adoção de qualquer tecnologia, em particular de uma tecnologia da informação ou comunicação, tende a mudar as práticas de trabalho associadas e, muitas vezes, exige um redesenho do sistema de informação da organização. Assim, o sistema de informação e a adoção da tecnologia da informação não podem ser separados (Twati, 2014).

Segundo Carvalho (2010), lidar com a adoção e exploração das tecnologias da informação nas organizações implica um conhecimento de natureza multidisciplinar, enquadrando diversos aspetos, nomeadamente:

- As tecnologias da informação;
- A informação;

- Os fenómenos humanos e sociais associados à produção, processamento e utilização da informação;
- Os fenómenos da adoção e utilização das TI;
- Aspetos comportamentais, ao nível dos indivíduos, dos grupos, das organizações relevantes para os contextos da adoção e utilização das TI e suas aplicações;
- Os métodos, técnicas e ferramentas aplicáveis na condução de atividades de gestão e de intervenção organizacional relacionadas com a adoção e exploração das TI nas organizações.

Um fator organizacional importante na adoção de tecnologias e sistemas de informação é o alinhamento entre a TI e os objetivos organizacionais (Law & Ngai, 2007).

As tecnologias e sistemas de informação são instrumentos de elevada importância para qualquer organização no ponto de vista da sobrevivência e evolução da mesma. Contudo, a adoção de TSI por si só, não gera uma obtenção de resultados positivos ou vantagens competitivas automaticamente. Os benefícios dependem do modo como as TSI disponíveis são utilizadas, não se podendo afirmar que exista uma relação direta entre a adoção de tecnologias e sistemas de informação e a obtenção de retorno (Li, 1995; Strassmann, 1997; Varajão, 2003).

A adoção e utilização de TSI pelas organizações é um processo evolucionário, pois envolve uma aprendizagem organizacional, devendo por isso seguir um padrão ou conjunto de etapas bem definidas. Para que utilização das TSI e a progressão da organização sejam corretas, as organizações devem ter como modelo de orientação os conjuntos de etapas definidas e as respetivas características associadas (Amaral, 1994).

3. Modelos e Teorias de Adoção de Tecnologias e Sistemas de Informação

As tecnologias e sistemas de informação são consideradas como uma ferramenta essencial para o aumento da competitividade de uma organização. É reconhecido que as TSI têm efeitos significativos na produtividade das organizações. Esses efeitos só serão absolutamente realizados se as TSI forem amplamente divulgadas e utilizadas. Assim sendo, torna-se essencial compreender os determinantes da adoção de TSI e os modelos teóricos de referência (Oliveira & Martins, 2010).

De seguida, neste capítulo são descritos diversos modelos relacionados com a adoção de tecnologias e sistemas de informação, incluindo: *Decomposed Theory of Planned Behavior; DeLone & McLean Information Systems Success Model; Diffusion of Innovation Theory; Motivational Model; Social Cognitive Theory; Task-Technology Fit; Technology Acceptance Model; Technology-organization-environment Framework; Theory of Planned Behavior; Theory of Reasoned Action; e a Unified Theory of Acceptance and Use of Technology.*

Nas descrições das teorias e modelos optou-se por manter o idioma original (inglês) de modo a não se perder riqueza semântica e garantir o rigor.

3.1. Decomposed Theory of Planned Behavior

A *Decomposed Theory of Planned Behavior* (DTPB), proposta por Taylor & Todd (1995b), Figura 2, consiste numa decomposição da *Theory of Planned Behavior* (Ajzen, 1991). Esta teoria foi proposta com o intuito de auxiliar a entender melhor as relações existentes entre as estruturas de crença e os antecedentes da intenção (Taylor & Todd, 1995b).

A decomposição feita à *Theory of Planned Behavior* (Ajzen, 1991) concentrou-se nos constructos *Attitude*, *Subjective Norm* e *Perceived Behavioral Control*.

De acordo com Taylor & Todd (1995b) estes constructos são determinados por estruturas de crenças subjacentes, nomeadamente as crenças atitudinais, crenças normativas e crenças de controlo, estando estas relacionadas respetivamente com a *Attitude*, *Subjective Norm* e *Perceived Behavioral Control*.

Relativamente à decomposição das crenças atitudinais, Taylor & Todd (1995b) basearam-se num conjunto de dimensões de crenças de atitude proveniente da literatura sobre inovações de Rogers (1983), decompondo as crenças atitudinais em três constructos: *Relative advantages*, *Complexity* e *Compatibility.*

Em relação à decomposição das crenças normativas, Taylor & Todd (1995b) decompuseram-nas em *Normative Influences*.

No que diz respeito à decomposição das crenças de controlo, Taylor & Todd (1995b) seguiram diretamente Ajzen (1985, 1991), decompondo as crenças de controlo em dois constructos: *Facilitating Conditions* e *Efficacy.*

Segundo Taylor & Todd (1995b), a decomposição das crenças traz vantagens, como a clarificação e melhor compreensão das relações existentes, fornecimento de um conjunto de crenças que podem ser utilizadas em diversos contextos e, ao concentrar-se em crenças específicas, o modelo torna-se administrativamente relevante, apontando para fatores específicos que podem influenciar a adoção e o uso. Esses fatores podem ser trabalhados por meio de projeto de sistemas e estratégias de implementação (Taylor & Todd, 1995b, 1995c).

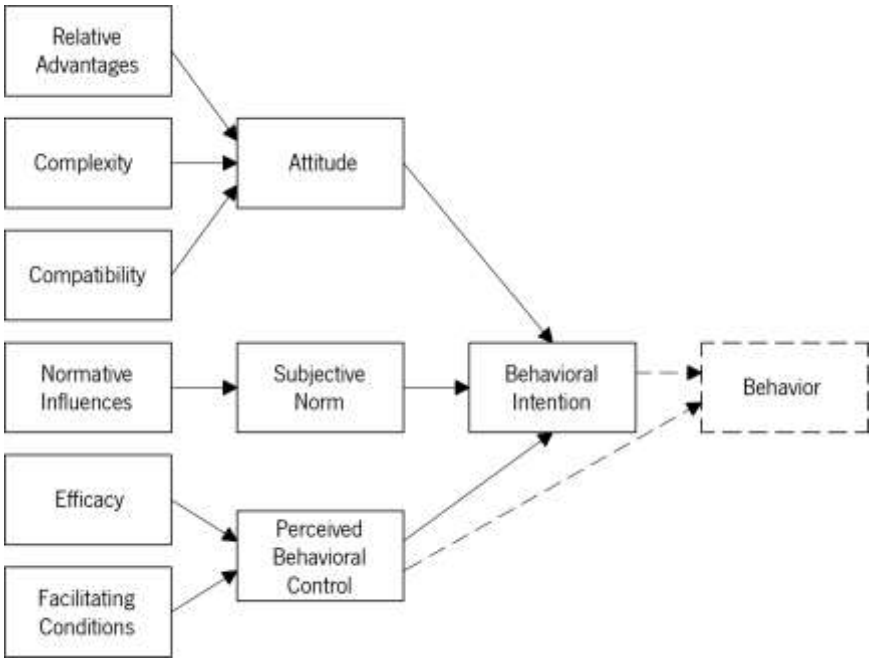


Figura 2 - Decomposed Theory of Planned Behavior
Adaptado de (Taylor & Todd, 1995b).

Relative Advantages refere-se ao grau em que os benefícios gerados por uma inovação substituem os do seu antecedente, tendo em consideração fatores como, por exemplo, benefícios económicos, melhoria da imagem, conveniência e satisfação (Rogers, 1983; Taylor & Todd, 1995b).

Complexity representa o grau em que um individuo perceciona que uma inovação é difícil de entender, aprender ou operar (Rogers, 1983; Taylor & Todd, 1995b).

Compatibility é o grau em que uma inovação se enquadra com os valores, experiências passadas e as necessidades atuais do potencial adotante (Rogers, 1983; Taylor & Todd, 1995b).

Quanto a *Normative Influences,* não é dada nenhuma definição específica por parte dos autores da teoria. No entanto, os autores referem que o modelo trata as crenças normativas como unidimensionais. Taylor & Todd (1995b) afirmam ainda que espera-se que a influência esperada das referências relevantes, família e amigos, seja altamente correlacionada e, portanto, unidimensional, levando a concluir que a *Normative Influences* irá ao encontro da definição da *Subjective Norm* correspondendo à probabilidade de referências importantes, família e amigos, aprovem ou desaprovem a realização de determinado comportamento.

Efficacy é baseada no constructo *Self-Efficacy* proposto por Ajzen (1991) e é descrito como sendo a confiança na competência de se comportar com sucesso na situação em questão (Bandura, 1977, 1982; Taylor & Todd, 1995b).

Facilitating Conditions refletem a disponibilidade de recursos necessários para realizar um determinado comportamento. Os recursos em questão podem ser financeiros ou outros. A ausência das *Facilitating Condition*s pode dificultar a adoção e inibir a formação da intenção (Taylor & Todd, 1995b; Triandis, 1979).

3.2. Delone and McLean IS Success Model

O *DeLone and McLean IS Success Model,* Figura 3, proposto por DeLone & McLean (1992), tem como base investigações teóricas e empíricas nos sistemas de informação, conduzidas por inúmeros investigadores entre os anos 1981-1990 (DeLone & McLean, 2003, 2016).

Segundo DeLone & McLean (2003), o *DeLone and McLean IS Success Model* é baseado na investigação das comunicações de Shannon & Weaver (1949), na *Information Influence Theory* (Mason, 1978), bem como nas investigações empíricas da gestão de sistemas de informação.

De acordo com DeLone & McLean (1992), o *DeLone and McLean IS Success Model* foi proposto como um *framework* e como modelo para conceptualizar e operacionalizar o sucesso dos sistemas de informação.

Para Bradley, Pridmore, & Byrd (2006), o este modelo veio clarificar o que constitui o sucesso dos sistemas de informação, ao estudar as interações entre as dimensões do modelo.

O modelo proposto contribuiu de uma maneira importante para o entendimento do sucesso dos sistemas de informação, fornecendo um esquema para categorizar as múltiplas medidas de sucesso

dos sistemas de informação utilizadas na literatura, e sugerir um modelo de interdependências temporais e causais entre as categorias (McGill, Hobbs, & Klobas, 2003).

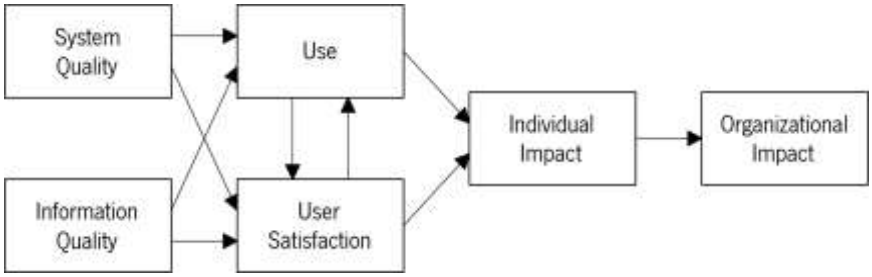


Figura 3 - DeLone and McLean IS Success Model
Adaptado de (DeLone & McLean, 1992).

System Quality corresponde às características de qualidade desejadas de um sistema de informação. Por exemplo, a facilidade de uso, a flexibilidade do sistema, a confiabilidade do sistema e a facilidade de aprendizagem, assim como características do sistema de intuitividade, sofisticação, flexibilidade e tempos de resposta (DeLone & McLean, 1992, 2016).

Information Quality refere-se à qualidade desejada do output do sistema de informação. Como, por exemplo, relevância, compreensão, exatidão, concisão, completude, compreensibilidade, circulação, pontualidade e usabilidade (DeLone & McLean, 1992, 2016).

Use trata-se do grau e da forma como os indivíduos utilizam as capacidades de um sistema de informação. Por exemplo, frequência de uso, natureza do uso, adequação de uso, extensão de uso e finalidade de uso (DeLone & McLean, 1992, 2016).

User Satisfaction define-se como o nível de satisfação que o utilizador do sistema de informação exprime em relação ao mesmo (DeLone & McLean, 1992, 2016).

Individual Impact diz respeito ao efeito causado pelo sistema de informação sobre o comportamento do utilizador (DeLone & McLean, 1992).

Organizational Impact é o efeito que o sistema de informação proporciona no desempenho organizacional (DeLone & McLean, 1992).

Passados dez anos, DeLone & McLean (2003) propuseram uma atualização ao modelo que previamente tinham proposto em 1992, ficando conhecido como *Updated DeLone and McLean IS Success Model,* Figura 4.

Esta atualização ao modelo surge após os autores realizarem uma revisão das várias contribuições das investigações sobre o sucesso dos sistemas de informação com elevada importância na

década anterior, focando essencialmente os esforços nas investigações que aplicavam, validavam, desafiavam e proponham melhorias ao modelo original (DeLone & McLean, 2003).

Na proposta do *Updated DeLone and McLean IS Success Model (DeLone & McLean, 2003),* foi adicionado o constructo *Service Quality* como uma dimensão importante do sucesso de sistemas de informação dando importância ao suporte nos sistemas de informação, e colapsando os constructos *Individual Impacts* e *Organizational Impact* em *Net Benefits (DeLone & McLean, 2003)*.

Foi adicionada ainda a variável *Intention to Use* ao constructo *Use*, depois de Seddon (1997) sugerir que o conceito de *Use* era altamente ambíguo e que eram necessários mais esclarecimentos para esse constructo (DeLone & McLean, 2016).

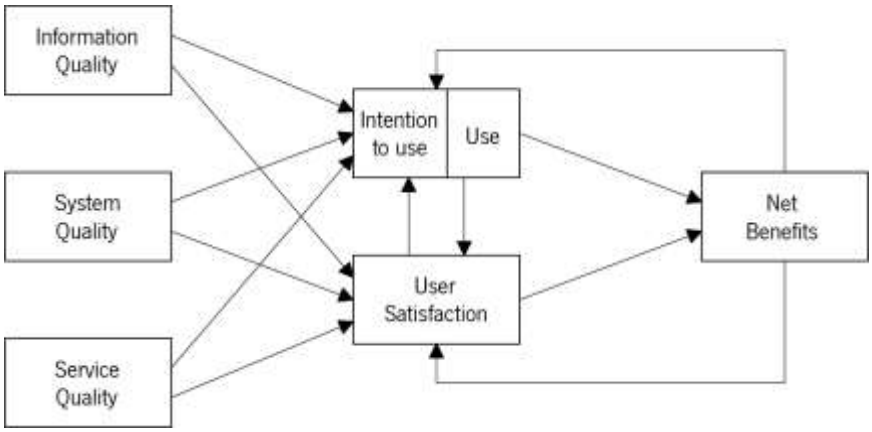


Figura 4 - Updated DeLone and McLean IS Success Model
Adaptado de (DeLone & McLean, 2003).

Service Quality corresponde à qualidade do suporte que os utilizadores do sistema recebem por parte da organização responsável pelo sistema de informação e pelo pessoal do suporte às tecnologias da informação. Por exemplo, capacidade de resposta, exatidão, confiabilidade, competência técnica e empatia do pessoal das tecnologias da informação (DeLone & McLean, 2003, 2016).

Net Benefits traduzem até que ponto os sistemas de informação estão a contribuir para o sucesso dos utilizadores. Como por exemplo, redução de custos, ampliação de mercados, vendas adicionais, poupança de tempo (DeLone & McLean, 2003).

3.3. Diffusion of Innovations Theory

A *Diffusion of Innovation Theory* (IDT) foi fundada na área da sociologia, e foi popularizada por Rogers (1962, 1983, 1995, 2003). Este sintetizou um grande número de estudos na área da difusão, nos campos que inicialmente influenciaram a teoria: antropologia, sociologia inicial, sociologia rural,

educação, sociologia industrial e sociologia médica. Com a síntese realizada, Rogers produziu uma teoria da adoção de inovações entre indivíduos e organizações (Rogers, 1962).

Rogers (1995) define difusão como o processo que uma inovação é comunicada através de determinados canais ao longo do tempo entre os membros de um sistema social. Destacando como os quatro principais elementos: a inovação, os canais de comunicação, o tempo e o sistema social.

Rogers (1995, 2003) refere que “usamos frequentemente a palavra "inovação" e "tecnologia" como sinónimos”.

Como descrito por Rogers (1995), a decisão de um indivíduo sobre uma inovação não é um ato instantâneo. Pelo contrário, é um processo que ocorre ao longo do tempo, consistindo numa série de ações e decisões. O processo de decisão de inovação é o processo através do qual um indivíduo passa (I) do primeiro conhecimento de uma inovação, (II) a formar uma atitude em relação à inovação, (III) a uma decisão de adotar ou rejeitar, (IV) à implementação da ideia nova, e (V) à confirmação da decisão.

O autor sugere então o modelo do processo de decisão da inovação, ilustrado na Figura 5, conceptualizando o processo em cinco etapas: *Knowledge*, *Persuasion*, *Decision*, *Implementation* e *Confirmation* (Rogers, 1995).

I. *Knowledge* ocorre quando um indivíduo é exposto à existência de uma inovação e ganha alguma compreensão sobre o funcionamento da mesma (Rogers, 1995).

II. *Persuasion* ocorre quando um indivíduo forma uma atitude favorável ou desfavorável em relação à inovação (Rogers, 1995).

III. *Decision* ocorre quando um indivíduo se envolve em atividades que levam à escolha da adoção ou rejeição da inovação (Rogers, 1995).

IV. *Implementation* ocorre quando um indivíduo coloca uma inovação em uso (Rogers, 1995).

V. *Confirmation* ocorre quando um indivíduo procura reforçar a decisão tomada ou reverter a decisão anterior de adotar, ou rejeitar a inovação se exposta a mensagens conflituantes sobre a inovação (Rogers, 1995).

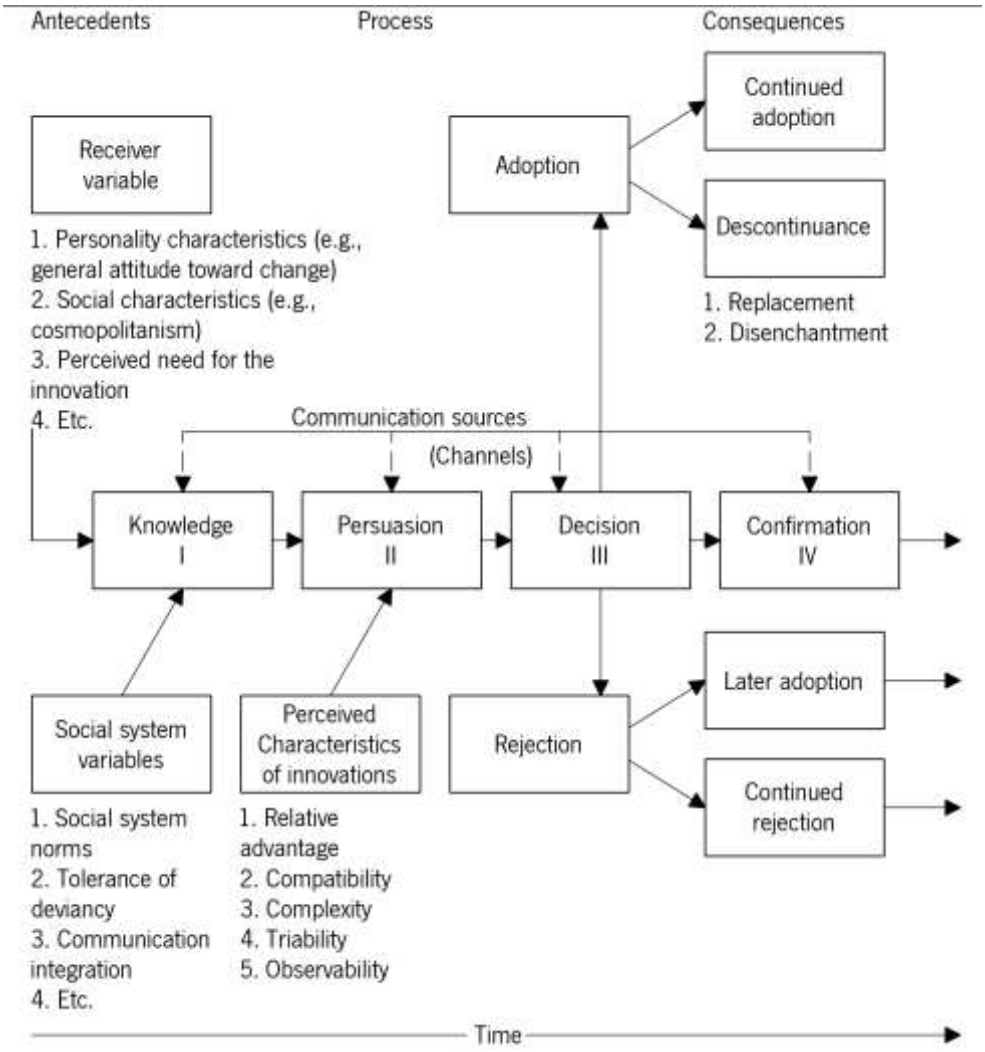


Figura 5 - Model of Stages in the Innovation-Decision Process
Adaptado de (Rogers, 1995).

A medição das perceções dos potenciais adotantes de inovações é uma questão clássica na literatura de inovação e uma peça importante na investigação da difusão. Rogers (1983) identificou cinco características de uma inovação, de uma variedade de estudos da área de difusão, que influenciam consistentemente a adoção de uma inovação (Moore & Benbasat, 1991).

De acordo com Rogers (1983, 1995, 2003), as inovações que são percecionadas pelos indivíduos como tendo maiores *relative advantages*, *compatibility*, *trialability*, *observability* e menos *complexity,* serão adotadas mais rapidamente do que outras inovações.

Relative Advantage corresponde ao grau em que uma inovação é percecionada como sendo melhor do que a sua precursora (Rogers, 1983, 1995).

Compatibility diz respeito ao grau como uma inovação é percecionada como consistente com os valores existentes, necessidades e experiências passadas dos potenciais adotantes (Rogers, 1983, 1995).

Complexity é o grau com que uma inovação é percecionada como sendo difícil de usar (Rogers, 1983, 1995).

Observability trata-se do grau em que os resultados de uma inovação são observáveis para outros (Rogers, 1983, 1995).

Trialability é definida como o grau em que uma inovação pode ser experimentada antes da adoção (Rogers, 1983, 1995).

3.4. Motivational Model

O *Motivational Model* (MM) foi apresentado por Davis, Bagozzi, & Warshaw (1992) no contexto do uso de tecnologia. O *MM* teoriza que a motivação extrínseca e intrínseca são os principais condutores da intenção de um indivíduo para a realização de um determinado comportamento, sendo a intenção de realizar um comportamento, um constructo que está intimamente ligado ao comportamento real (Venkatesh & Speier, 1999).

Davis et al. (1992) argumentam que as intenções das pessoas utilizarem computadores no local de trabalho são influenciadas principalmente pela sua perceção de quão úteis os computadores são para melhorar o seu desempenho no trabalho e, secundariamente, pelo grau de prazer que têm ao utilizar os computadores por si só.

Extrinsic Motivation refere-se ao desempenho de uma atividade, porque é vista como sendo instrumental na obtenção de resultados proveitosos, que são distintos da atividade em si, como um melhor desempenho no trabalho, salários ou promoções (Davis et al., 1992).

Enquanto a *Extrinsic Motivation* influencia o comportamento devido a mais-valias que resultam da realização da atividade, a *Intrinsic Motivation* refere-se ao desempenho de uma atividade sem um benefício aparente que não seja a realização da atividade em si (Davis et al., 1992).

Davis et al. (1992), dentro desta divisão, definem a *Perceived Usefulness* como um exemplo da *Extrinsic Motivation*, e o *Perceived Enjoyment como* um exemplo da *Intrinsic Motivation*.

A *Perceived Usefulness* é definida como a expectativa de um indivíduo de que ao usar o computador resultará num melhor desempenho no trabalho (Davis et al., 1992).

Perceived Enjoyment refere-se ao grau em que a atividade de usar o computador é percebida como agradável por direito próprio, além de quaisquer consequências de desempenho que possam ser antecipadas (Davis et al., 1992).

3.5. Social Cognitive Theory

A *Social Cognitive Theory* (SCT), fundada na área da psicologia, é uma teoria que fornece uma estrutura para compreender, prever e mudar o comportamento humano (Bandura, 1986). Esta teoria foi proposta por Bandura (1986), onde inicialmente era designada de *Social Learning Theory*, mas, devido a denominarem outras teorias criadas por outros investigadores de *Social Learning Theory* e assim criando uma confusão incontável na literatura sobre a teoria de Bandura, o autor decidiu renomear a teoria como *Social Cognitive Theory.*

A SCT afirma que o funcionamento humano é produto de uma interação recíproca de determinantes intrapessoais, comportamentais e ambientais (Bandura, 1986, 2012).

Posteriormente, Compeau e Higgins (1995b), aplicaram e estenderam a SCT ao contexto de utilização de computadores, Figura 6. No entanto, a natureza do modelo e da teoria subjacente, permitem que seja estendido à aceitação e uso da tecnologia da informação em geral (Venkatesh et al., 2003).

O *Encouragement by Others* no grupo de referência de um determinado indivíduo, o *Others' Use* nesse grupo de referência, e o *Support* organizacional no uso do computador, influenciam a *Computer Self-Efficacy* e as *Outcome Expectations*. A *Computer Self-Efficacy* influencia a *Usage* diretamente, bem como indiretamente, através das *Outcome Expectations*, do *Affect* e da *Anxiety*. As *Outcome Expectations* influenciam a *Usage* diretamente, bem como indiretamente, através do *Affect*. Finalmente, o *Affect* e a *Anxiety* são cada um deles influentes na *Usage (Compeau & Higgins, 1995b)*.

O *Encouragement by Others* corresponde ao grau em que o uso de computadores foi encorajado por outros no grupo de referência do indivíduo (Compeau & Higgins, 1995b).

Others' Use representa o grau em que os computadores foram realmente utilizados por outros no grupo de referência do indivíduo (Compeau & Higgins, 1995b).

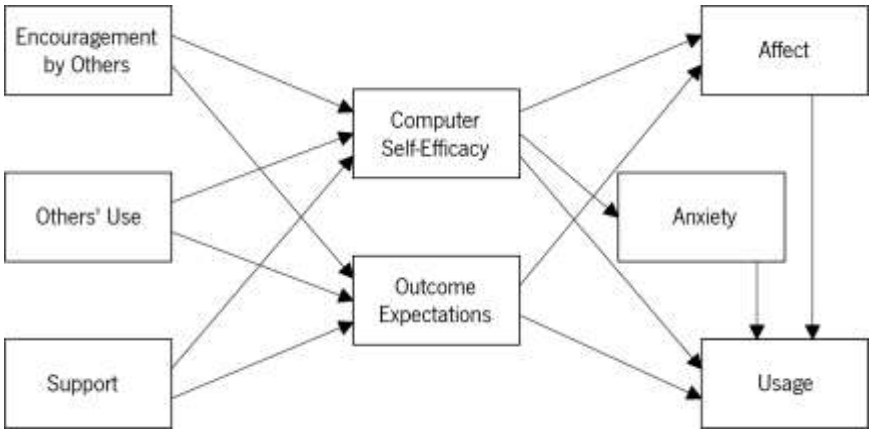


Figura 6 - Social Cognitive Theory.
Adaptado de (Compeau & Higgins, 1995b).

Support diz respeito ao grau em que a assistência está disponível em termos de seleção de equipamentos, dificuldades de *hardware*, dificuldades de software e instrução especializada (Compeau & Higgins, 1995b).

Computer Self-Efficacy reflete as crenças de um indivíduo sobre as suas capacidades de utilizar computadores (Compeau & Higgins, 1995b; Compeau, Higgins, & Huff, 1999).

Outcome Expectations são definidas como as consequências prováveis da utilização de computadores, sendo divididas em duas dimensões: *Performance* e *Personal* (Compeau & Higgins, 1995b; Compeau et al., 1999).

Outcome Expectations (Performance) são as expectativas associadas com melhorias no desempenho no trabalho (eficiência e eficácia) associados ao uso de computadores (Compeau & Higgins, 1995b; Compeau et al., 1999).

Outcome Expectations (Personal) relacionam-se com as expectativas de mudança de imagem ou *status,* ou com expectativas de recompensas, tais como promoções, aumentos ou elogios (Compeau & Higgins, 1995b; Compeau et al., 1999).

Affect e *Anxiety* representam as respostas afetivas dos indivíduos em relação ao uso de computadores (Compeau & Higgins, 1995b; Compeau et al., 1999).

Affect representa o lado positivo, o prazer que deriva de uma pessoa usar computadores (Compeau & Higgins, 1995b; Compeau et al., 1999).

Anxiety representa o lado negativo, os sentimentos de apreensão ou ansiedade que se tem ao usar computadores (Compeau & Higgins, 1995b; Compeau et al., 1999).

Usage representa o grau de uso de computadores no trabalho e em casa (Compeau & Higgins, 1995b; Compeau et al., 1999).

3.6. Task-technology Fit

O *Task-Technology Fit* (TTF), proposto por Goodhue & Thompson (1995), segue a linha do *Delone & McLean IS Success Model* proposto por DeLone & McLean (1992), em que a utilização e a atitude do utilizador face à tecnologia levam a impactos no desempenho individual. Porém o TTF vai além do *Delone & McLean IS Success Model (DeLone & McLean, 1992)* de duas formas importantes. Em primeiro lugar, realça a importância do *task-technology fit* para explicar como a tecnologia leva a impactos no desempenho (Goodhue & Thompson, 1995). O *task-technology fit,* segundo Goodhue & Thompson (1995), é um constructo importante em falta ou implícito em vários modelos propostos anteriormente. Em segundo lugar, o TTF revela-se mais explícito em relação às ligações existente entre constructos, assegurando uma base teórica mais sólida para pensar sobre várias questões relacionadas com o impacto das tecnologias da informação no desempenho (Goodhue & Thompson, 1995).

Segundo Dishaw & Strong (1999) o modelo TFF tenta resolver uma das principais fraquezas do *Technology Acceptance Model* em relação à compreensão da utilização das tecnologias da informação, a fraqueza em questão incide na falta de concentração na tarefa, uma vez que a tecnologia da informação é a ferramenta que o utilizador usa para a realização das suas tarefas. Esta fraqueza contribuiu para a variedade existente nos resultados das avaliações de TI (Goodhue & Thompson, 1995). Embora o conceito de utilidade da TAM se concentre nas tarefas, a adição de mais características da tarefa poderia fornecer um melhor modelo de utilização de TI (D'Ambra, Wilson, & Akter, 2013).

De acordo com Dishaw & Strong (1999) o TTF centra-se na correspondência entre as necessidades da tarefa do utilizador e a funcionalidade disponível da tecnologia da informação.

Na visão de D'Ambra et al. (2013), o TTF explora a relação entre as tarefas individuais e os perfis de ajuste de tecnologia, medindo o desempenho do utilizador e a utilização da tecnologia.

Um dos principais focos do TTF tem-se centrado nos indivíduos para avaliar e explicar o sucesso dos sistemas de informação e o seu impacto no desempenho individual (Goodhue & Thompson, 1995). Goodhue e Thompson (1995) propuseram a *Technology-to-Performance Chain*, representada na Figura 7, onde as características da TI, tarefas e os utilizadores individuais explicam o uso do sistema de informação e o desempenho individual.

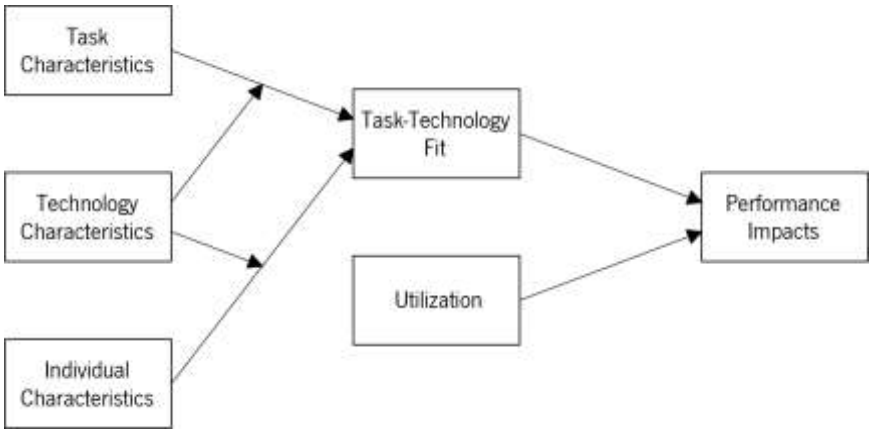


Figura 7 - Technology-to-Performance Chain
Adaptado de (Goodhue & Thompson, 1995).

As tarefas são definidas como ações realizadas por indivíduos para transformar *inputs* em *outputs,* para satisfazer as suas necessidades de informação. As *Task Characteristics* podem incluir características de interesse para o utilizador e fazer com que ele confie mais em determinados aspetos da tecnologia da informação. As tarefas podem variar em diversas características, como a variedade da tarefa, a dificuldade ou não-rotina da tarefa, a interdependência e a criticidade do tempo (D'Ambra et al., 2013; Goodhue, 1995; Goodhue & Thompson, 1995).

As tecnologias são vistas como ferramentas (hardware, software e dados) utilizadas pelos indivíduos no desempenho das suas tarefas. O modelo pretende ser geral o suficiente para se concentrar nos impactos de um sistema específico, ou então ser mais geral. As *Technology Characteristics* podem afetar o uso e a perceção dos utilizadores sobre a tecnologia. O modelo TTF considera importante adequar as funcionalidades e atributos da tecnologia às necessidades dos indivíduos (D'Ambra et al., 2013; Goodhue & Thompson, 1995).

Os indivíduos utilizam tecnologias para auxiliar o desempenho das suas tarefas. As *Individual Characteristics* como, por exemplo, o treino, a experiência com o computador, a motivação, podem afetar a facilidade com que o individuo irá utilizar a tecnologia (Goodhue & Thompson, 1995).

O *Task-Technology Fit* é o grau em que uma tecnologia auxilia um individuo na realização das suas tarefas. Mais especificamente, o TTF é a correspondência entre as necessidades de tarefas, as capacidades individuais e a funcionalidade da tecnologia (Goodhue & Thompson, 1995).

A *Utilization* trata-se do comportamento de utilizar uma determinada tecnologia na realização de tarefas. São utilizadas como medidas a frequência de utilização ou a diversidade das aplicações utilizadas (Davis, Bagozzi, & Warshaw, 1989; Goodhue & Thompson, 1995; Thompson, Higgins, & Howell, 1991, 1994).

Os *Performance Impacts* estão relacionados com a realização de um conjunto de tarefas por um indivíduo. Um maior desempenho implica a combinação da melhoria da eficiência, melhoria da eficácia e/ou uma maior qualidade. Um *Task-Technology Fit* alto aumenta a probabilidade de utilização e aumenta também o *Performance Impact* do sistema, independentemente do motivo pelo qual está a ser utilizado. Um sistema com um elevado *Task-Technology Fit* irá conduzir a um melhor desempenho, uma vez que comtempla as necessidades da tarefa do individuo (Goodhue & Thompson, 1995).

3.7. Technology Acceptance Model

O *Technology Acceptance Model* (TAM) é apresentado inicialmente por Davis (1986), aquando a realização da sua tese de doutoramento. Este modelo é uma adaptação à *Theory Reasoned Action* (TRA) (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), onde o principal objetivo é explicar o comportamento do uso de sistemas de informação (Almeida, 2002; Davis et al., 1989).

Segundo Davis et al. (1989), o *Technology Acceptance Model* é consideravelmente mais específico do que a *Theory Reasoned Action* (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), sendo concebido para o comportamento do uso no computador. Porém, devido à evolução da área de sistemas de informação, o TAM encontra-se também adequado para o estudo da aceitação do computador.

Posteriormente, em 1989, com os trabalhos desenvolvidos por Davis, Bagozzi & Warshaw (Davis et al., 1989) o TAM foi finalmente conceptualizado, onde ganhou visibilidade, estando representado na Figura 8. De acordo com Davis et al. (1989), o TAM foi desenvolvido com o objetivo de explicar os determinantes da aceitação do computador, explicar o comportamento do utilizador numa vasta gama de tecnologias de computação orientadas a utilizadores em particular e a populações de utilizadores. Ou seja, pretende explicar o porquê da rejeição ou aceitação dos sistemas de informação por parte de alguns dos utilizadores no seu local de trabalho (Almeida, 2002; Davis et al., 1989).

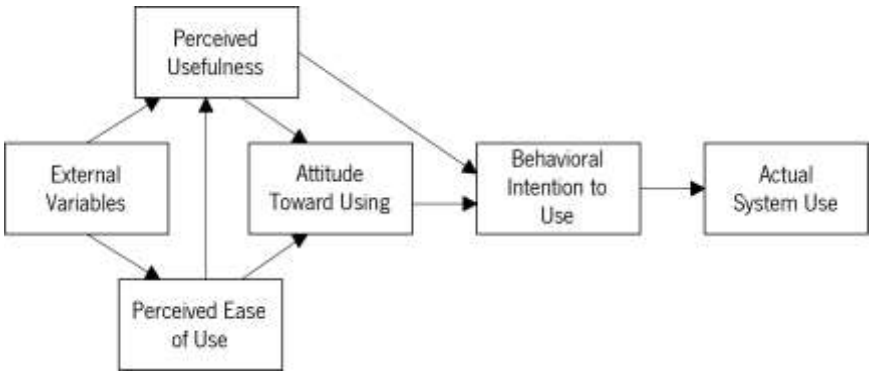


Figura 8 - Technology Acceptance Model
Adaptado de (Davis et al., 1989).

Na visão de Almeida (2002), o *Technology Acceptance Model* pretende explicar o comportamento dos utilizadores de um sistema informático, alegando que a utilização do sistema informático depende diretamente da intenção que o indivíduo tem em utilizá-lo. Refere também que a *Behavioral Intention to Use* resulta da influência da atitude do utilizador face ao sistema (*Attitude Toward Using*) e da utilidade que o indivíduo lhe atribui (*Perceived Usefulness*). Consequentemente, a *Attitude Toward Using* é influenciada por dois fatores essenciais, a *Perceived Usefulness* e a *Perceived Ease of Use. Almeida (2002),* acrescenta ainda que Davis et al. (1989) consideram que a *Perceived Ease of Use* pode também afetar a *Perceived Usefulness* do sistema, ao mesmo tempo que ambas são influenciadas por *External Variables*.

As *External Variables* podem ser consideradas como as características funcionais e de interface do sistema, a metodologia de desenvolvimento, a formação e treino dada ao indivíduo ou o envolvimento do utilizador no projeto (Davis, 1989).

A *Perceived Usefulness* corresponde ao grau em que um indivíduo acredita que utilizando um determinado sistema irá melhorar o seu desempenho no trabalho (Davis, 1986, 1989).

A *Perceived Ease of Use* é definida como o grau em que um indivíduo acredita que utilizando um sistema particular estará livre de esforço físico e mental (Davis, 1986, 1989).

A *Attitude Toward Using* reflete os sentimentos favoráveis ou desfavoráveis de um indivíduo perante a utilização da tecnologia, onde estes sentimentos são determinados conjuntamente pela utilidade percecionada e pela facilidade de uso percecionada (Davis et al., 1989; Taylor & Todd, 1995c).

A *Behavioral Intention* representa a intenção de utilização da tecnologia da informação, e é vista como sendo determinada em conjunto pela atitude do indivíduo em relação ao sistemas (*Attitude Toward Using*) e pela utilidade percecionada (*Perceived Usefulness*) (Davis et al., 1989; Taylor & Todd, 1995c).

Quanto ao *Actual System Use* não é dada nenhuma definição específica do constructo por parte dos autores do modelo.

Ainda que o modelo estivesse validado e com resultados aceitáveis, a complexidade das relações entre as variáveis levam a novas tentativas de adaptação da versão original do modelo com o objetivo de melhorar os resultados obtidos (Almeida, 2002). Uma das extensões mais importantes realizadas ao TAM foi proposta por Venkatesh & Davis (2000), que propuseram o modelo TAM2.

O *Technology Acceptance Model 2* (TAM2) (Venkatesh & Davis, 2000), na Figura 9, tem origem após Venkatesh e Davis identificarem no TAM algumas limitações no que diz respeito à explicação

das razões pelas quais uma pessoa percecionava que um dado sistema era útil e, portanto, propuseram que variáveis adicionais poderiam ser adicionadas como antecedentes à variável *Perceived Usefulness* (Chuttur, 2009). A proposta de Venkatesh & Davis (2000) vem acrescentar constructos relacionados com processos de influência social (*Subjective Norm, Voluntariness* e *Image*) e processos de influência instrumentais cognitivos (*Job Relevance*, *Output Quality* e *Result Demonstrability*).

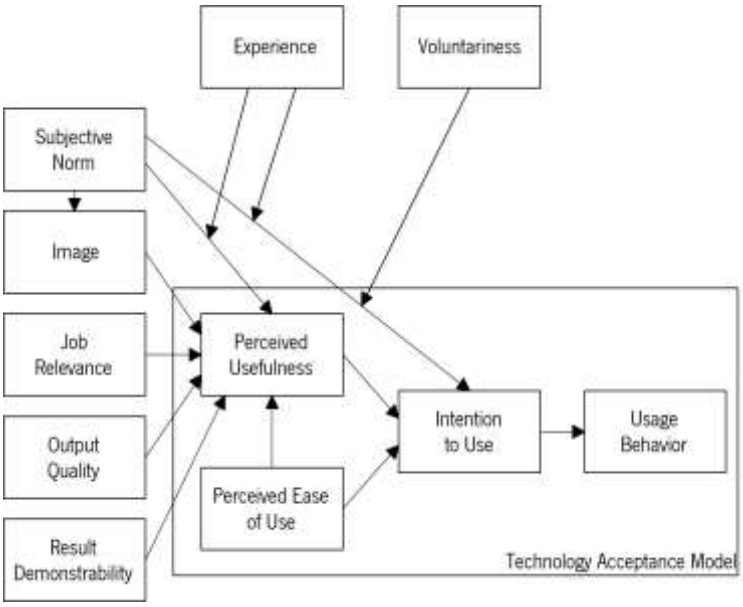


Figura 9 - Technology Acceptance Model 2
Adaptado de (Venkatesh & Davis, 2000).

Subjective Norm trata-se de um constructo proveniente da *Theory of Reasoned Action* (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), utilizado previamente na proposta inicial do TAM por Davis (1986).

Experience representa a experiência anterior que um individuo tem com uma tecnologia específica (Chuttur, 2009; Venkatesh & Davis, 2000).

Voluntariness, conforme Venkatesh & Davis (2000) referem citando (Agarwal & Prasad, 1997; Hartwick & Barki, 1994; Moore & Benbasat, 1991), é definida como uma medida em que os potenciais adotantes consideram a decisão de adoção como não obrigatória. Segundo Almeida (2002), *Voluntariness* verifica-se quando o utilizador não se encontra pressionado por superiores para ter determinado comportamento, podendo este escolher livremente em tê-lo ou não.

Image, de acordo com Venkatesh & Davis (2000) citando Moore & Benbasat (1991), é o grau ao qual o uso de uma inovação é percecionado por um indivíduo com o intuito de melhorar a sua imagem

ou estatuto no sistema social. Este constructo pode ser traduzido pelo efeito que um indivíduo perceciona, em relação ao impacto causado pela adoção de um determinado comportamento, na sua relação com os outros elementos do grupo a que pertence. Se o indivíduo considerar que a sua imagem melhora diante dos outros ao utilizar o sistema, a *Perceived Usefulness* será maior (Almeida, 2002).

Job Relevance diz respeito à perceção que um individuo tem sobre o grau em que o sistema em causa é aplicável no seu trabalho, por outras palavras, é a importância para o trabalho, do conjunto de tarefas que o sistema é capaz de suportar (Venkatesh & Davis, 2000).

A *Output Quality* é considerada como a perceção de quão bem o sistema executa tarefas que correspondem aos objetivos do trabalho, isto é, o quão adequado estão os resultados obtidos recorrendo ao sistema em relação à qualidade estabelecida pelo utilizador do resultado final do seu desempenho (Almeida, 2002; Venkatesh & Davis, 2000).

Result Demonstrability no ponto de vista de Venkatesh & Davis (2000) citando Moore & Benbasat (1991), é definida como a tangibilidade dos resultados do uso da inovação. Este constructo revela o grau de observabilidade que a melhoria do desempenho indivídual deve ter para que o utilizador esteja recetivo à adoção do sistema (Almeida, 2002).

Surgiu, ainda em 2008, uma extensão ao TAM2 proposta por Venkatesh e Bala, denominada de *Technology Acceptance Model 3* (TAM3) *(Venkatesh & Bala, 2008),* Figura 10. O *Technology Acceptance Model 3* (Venkatesh & Bala, 2008) foi desenvolvido através da combinação do TAM2 (Venkatesh & Davis, 2000) e do modelo dos determinantes da facilidade de uso percebida (Venkatesh, 2000). O TAM3 apresenta uma rede nomológica (modelo integrado) completa dos determinantes da adoção e uso de TI pelos indivíduos (Venkatesh & Bala, 2008). Em relação ao TAM2 foram adicionados constructos com influência na *Perceived Ease of Use, nomeadamente, variáveis de âncora (Computer Self-Efficacy, Perceptions of External Control, Computer Anxiety, Computer Playfulness)* e variáveis de ajuste (*Perceived Enjoyment* e *Objective Usability)*.

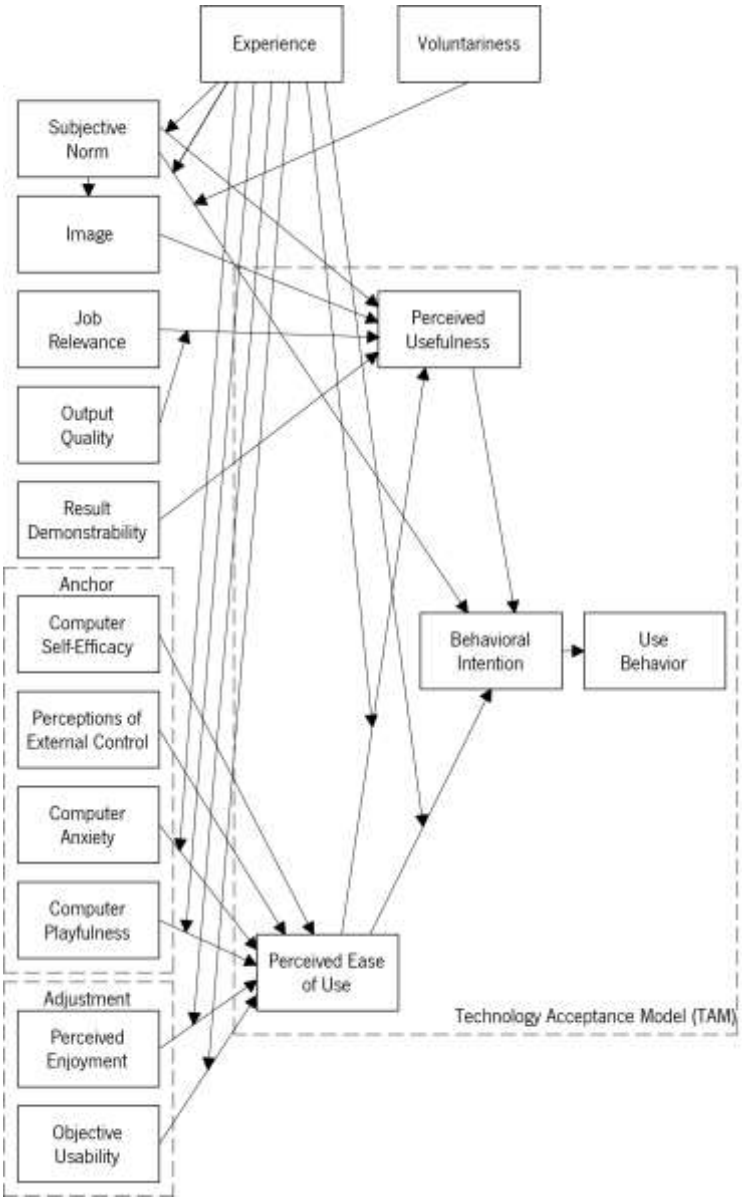


Figura 10 - Technology Acceptance Model 3
Adaptado de (Venkatesh & Bala, 2008).

Computer Self-efficacy conforme Venkatesh & Bala (2008), citando Compeau & Higgins (1995a, 1995b), é o grau em que um indivíduo acredita que tem a capacidade de executar uma determinada tarefa ou trabalho usando o computador.

Perceptions of External Control, de acordo com Venkatesh & Bala (2008) citando Venkatesh, Morris, Davis, & Davis (2003), corresponde ao grau em que um indivíduo acredita que existem recursos organizacionais e técnicos para apoiar o uso do sistema.

Computer Anxiety, na visão de Venkatesh & Bala (2008) citando Venkatesh (2000), é definida como o grau de "apreensão de um indivíduo, ou mesmo medo, quando ele/ela é confrontada com a possibilidade de usar computadores".

Computer Playfulness segundo Venkatesh & Bala (2008) citando Webster & Martocchio (1992) é definido como "...o grau de espontaneidade cognitiva nas interações de microcomputadores".

Perceived Enjoyment no dizer de Venkatesh & Bala (2008) citando Venkatesh (2000), é a medida em que "a atividade de usar um sistema específico é percebida como agradável em seu próprio direito, além de quaisquer consequências de desempenho resultantes do uso do sistema".

Objective Usability para Venkatesh & Bala (2000) citando Venkatesh (2000), é uma "comparação de sistemas baseada no nível real (em vez de perceções) do esforço requerido para completar tarefas específicas".

3.8. Technology-organization-environment Framework

O *Technology, Organization, and Environment (TOE) Framework* foi desenvolvida por Tornatzky & Fleischer (1990), e é consistente com a *Diffusion of Innovations Theory* (Rogers, 1983). O TOE *Framework,* representado na Figura 11, revela-se útil para estudar a adoção e assimilação de diferentes tipos de inovação de tecnologias de informação (Oliveira & Martins, 2010).

O TOE é um *framework* consideravelmente útil e adaptativo para explicar o comportamento da adoção em relação a três tipos de inovações tecnológicas, nomeadamente, inovações aplicadas para tarefas técnicas, inovações para administração de negócios e inovações incorporadas nos processos de negócios principais de uma organização (Ramdani & Kawalek, 2007; Swanson, 1994).

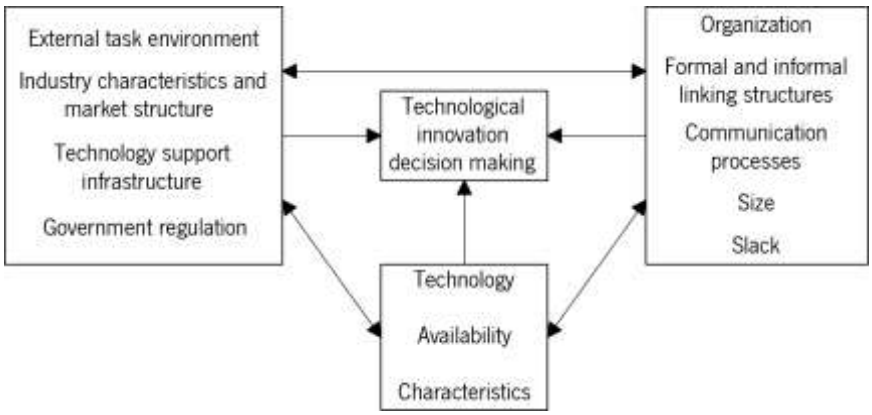


Figura 11 - Technology, Organization, and Environment Framework
Adaptado de (Tornatzky & Fleischer, 1990)

O TOE Framework identifica três aspetos do contexto de uma organização que influenciam o processo de esta adotar e implementar uma inovação tecnológica, nomeadamente, contexto tecnológico, contexto organizacional e contexto ambiental externo.

O contexto tecnológico (*Technology*) está relacionado com as tecnologias internas e externas que estão disponíveis para uma organização, onde se pode incluir as práticas correntes e equipamentos internos à empresa, bem como o conjunto de tecnologias disponíveis que são externas à organização. O foco principal deste aspeto recai sobre de como as características tecnológicas podem influenciar o processo de adoção de uma tecnologia (Oliveira & Martins, 2010; Patrick & Tam, 1997; Tornatzky & Fleischer, 1990).

O contexto organizacional (*Organization*) refere-se às características de uma organização. As características comuns de uma organização incluem o tamanho da organização, o grau de centralização, a formalização, a complexidade da sua estrutura administrativa, a qualidade dos recursos humanos e a quantidade de recursos disponíveis internamente. Este aspeto foca-se na análise da estrutura e dos processos que limitam ou facilitam a adoção e implementação de tecnologias (Oliveira & Martins, 2010; Patrick & Tam, 1997; Tornatzky & Fleischer, 1990).

O contexto ambiental externo (*External task environment*) é a arena em que uma organização conduz os seus negócios. Engloba a indústria, os concorrentes, os regulamentos e as relações com o governo. Os fatores externos a uma organização apresentam restrições e oportunidades para inovações tecnológicas. Entre estas, as condições de mercado, em termos de forças de mercado competitivas e de incerteza de mercado, são um fator importante no processo de inovação (Oliveira & Martins, 2010; Patrick & Tam, 1997; Tornatzky & Fleischer, 1990).

3.9. Theory of Planned Behavior

A *Theory of Planned Behavior* (TPB) foi proposta inicialmente por Ajzen (1985), tendo ganho notoriedade posteriormente quando foi publicada (Ajzen, 1991). Esta teoria tem origem na área da psicologia social (Taylor & Todd, 1995c), e trata-se de uma extensão da *Theory of Reasoned Action* (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), realizada especificamente a partir das limitações do modelo original ao lidar com comportamentos sobre os quais as pessoas têm um controlo incompleto da vontade (Ajzen, 1991).

A TPB, representada na Figura 12, propõe que a intenção de um indivíduo para ter um dado comportamento pode ser explicada com precisão pela atitude que o indivíduo tem face ao comportamento, por um conjunto de normas subjetivas, e pela perceção sobre o controlo do comportamento pelo indivíduo (Ajzen, 1991).

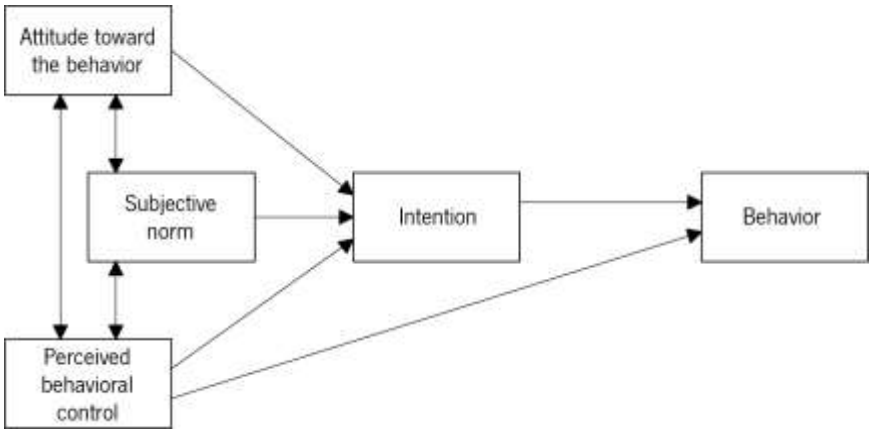


Figura 12 - Theory of Planned Behavior
Adaptado de (Ajzen, 1991).

Attitude toward the behavior corresponde à avaliação favorável ou desfavorável que um indivíduo faz na avaliação do comportamento em questão (Ajzen, 1991). No contexto das tecnologias e sistemas de informação, podemos afirmar que corresponde à apreciação realizada pelo utilizador de uma determinada tecnologia relativamente aos seus custos e aos benefícios provenientes da utilização da tecnologia em questão (Almeida, 2002).

Subjective norm trata-se de um constructo proveniente da *Theory of Reasoned Action* (Fishbein & Ajzen, 1975) e refere-se à pressão social sentida por um indivíduo para a execução ou não execução de um determinado comportamento (Ajzen, 1991). Relativamente à adoção de uma tecnologia, essa pressão é normalmente exercida pelas pessoas que o rodeiam, nomeadamente pelos colegas de trabalho ou pelos superiores hierárquicos e representa a perceção do individuo sobre a opinião dessas pessoas relativamente ao que deve ser o seu comportamento em relação à tecnologia (Almeida, 2002).

Perceived behavioral control é descrito como a perceção do indivíduo sobre a facilidade ou dificuldade de realizar o comportamento em questão e é suposto refletir sobre a experiência passada, bem como impedimentos e obstáculos previstos (Ajzen, 1991). A facilidade ou dificuldade de realizar o comportamento, traduz-se para a facilidade ou dificuldade em utilizar um sistema tecnológico em particular, quando enquadrado na adoção das tecnologias e sistemas de informação.

Segundo Sentosa & Mat (2012), citando Ajzen (1985, 1991), a *Intention* é a representação cognitiva da prontidão de uma pessoa para realizar um determinado comportamento, e é considerada como o antecedente imediato do *Behavior*. Por sua vez, Taylor & Todd (1995c) afirmam que a combinação da *Attitude toward the behavior*, da *Subjective norm* e do *Perceived behavioral control* levam à formação da *Intention,* referenciando também *Intention* como *Behavioral Intention*. Como regra

geral, quanto mais favorável a atitude e a norma subjetiva, e quanto maior o controlo percecionado, mais forte será a intenção do indivíduo executar o comportamento em consideração (Ajzen, 1991, 2007).

Por fim, Sentosa & Mat (2012) citando Ajzen & Fishbein (1980), caracterizam o *Behavior* como a resposta manifestada, observada numa determinada situação em relação a um dado alvo. Observações comportamentais únicas podem ser agregadas em determinados contextos e termos para gerar uma medida do comportamento mais representativa. Taylor & Todd (1995c) alegam que o *Behavior* é uma função direta da *Behavioral Intention* com o *Perceived behavioral control*.

3.10. Theory of Reasoned Action

A *Theory of Reasoned Action* (TRA) é proveniente da área da psicologia social e foi proposta por Fishbein & Ajzen (1975). A TRA, ilustrada na Figura 13, é de uma das teorias mais fundamentais e influentes do comportamento humano (Venkatesh et al., 2003), onde o objetivo é investigar a relação existente entre a atitude e o comportamento com base em dois conceitos principais, comportamentais e normativos (Fishbein & Ajzen, 1975; Mishra, Akman, & Mishra, 2014).

De acordo com a *Theory of Reasoned Action* (Fishbein & Ajzen, 1975), o desempenho de um indivíduo num determinado comportamento é determinado pela sua *Behavioral Intention* para realizar o comportamento, e a *Behavioral Intention* é determinada conjuntamente pela *Attitude toward behavior* da pessoa e a *Subjective Norm* sobre o comportamento em questão.

Segundo a TRA, a *Attitude toward behavior* é determinada pelas crenças que um indivíduo tem sobre as consequências de realizar um comportamento, multiplicado pela avaliação dessas consequências (Davis et al., 1989).

A TRA argumenta ainda que a *Subjective Norm* é determinada por uma função multiplicativa das crenças normativas de um indivíduo, isto é, as expectativas percecionadas de indivíduos ou grupos específicos e a motivação que o indivíduo tem para cumprir essas expectativas (Davis et al., 1989; Fishbein & Ajzen, 1975).

Os limites dentro dos quais se espera que a TRA prediga o comportamento são: 1) O comportamento deve estar sob controlo volitivo (isto é, quando as habilidades pessoais inerentes e os fatores externos não exercem uma influência significativa na execução da ação pretendida); 2) A intenção não muda antes do desempenho do comportamento; e 3) As medidas de intenção devem corresponder ao critério comportamental em termos de ação, objetivo, contexto, tempo e especificidade (Ajzen & Fishbein, 1980; Liker & Sindi, 1997).

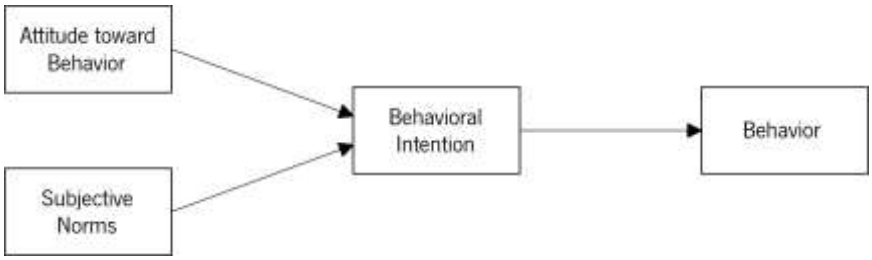


Figura 13 - Theory of Reasoned Action
Adaptado de (Fishbein & Ajzen, 1975).

Attitude Toward Behavior consiste nos sentimentos positivos ou negativos de um indivíduo (efeito avaliativo) sobre a realização de um determinado comportamento (Fishbein & Ajzen, 1975).

Subjective Norm refere-se à perceção que um indivíduo tem sobre o que a maioria das pessoas que são importantes para ele acham se este deve ou não deve executar um determinado comportamento (Fishbein & Ajzen, 1975).

Behavioral Intention é a medida da força da intenção de um indivíduo realizar um comportamento específico (Davis et al., 1989; Fishbein & Ajzen, 1975). A *Behavioral Intention* corresponde à antecedente imediata do *Behavior*, e trata-se da função da informação saliente ou crenças sobre a probabilidade de que a realização de um determinado comportamento conduz a um resultado específico (Madden, Ellen, & Ajzen, 1992).

Behavior não é definido explicitamente pelos autores, contudo podemos concluir que seja o comportamento em si.

3.11. Unified Theory of Acceptance and Use of Technology

A *Unified Theory of Acceptance and Use of Technology* (UTAUT), proposta por Venkatesh, Morris, Davis, & Davis (2003), foi formulada através da combinação de oito modelos de investigação de aceitação das tecnologias da informação, nomeadamente a *Theory of Reasoned Action* (TRA) (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), *Technology Acceptance Model* (TAM) (Davis, 1986; Davis et al., 1989), *Motivational Model* (MM) (Davis et al., 1992; Vallerand, 1997), *Theory of Planned Behavior* (TPB) (Ajzen, 1985, 1991), um modelo que combina a *Technology Acceptance Model* e a *Theory of Planned Behavior* (C-TAM-TPB) (Taylor & Todd, 1995a), *Model of PC Utilization* (MPCU) (Thompson et al., 1991), *Innovation Diffusion Theory* (IDT) (Moore & Benbasat, 1991) e a *Social Cognitive Theory* (SCT) (Bandura, 1986; Compeau & Higgins, 1995b).

Segundo Venkatesh et al. (2003) "os investigadores são confrontados com uma escolha entre uma infinidade de modelos e estes devem selecionar e escolher constructos dos mais diversos modelos, ou escolher um modelo que se enquadre no que pretendem, e ignorar as contribuições dos modelos alternativos". Desta forma, existiu a necessidade de realizar uma revisão e síntese de algumas das contribuições já existentes, com o intuito de progredir em direção a uma visão unificada de aceitação do utilizador, surgindo então a *Unified Theory of Acceptance and Use of Technology,* ilustrada na Figura 14.

A UTAUT utiliza quatro constructos fundamentais de uso e *intenção (Performance Expectancy*, *Effort Expectancy*, *Social Influence*, e *Facilitating Conditions*), juntamente com quatro moderadores (*Gender*, *Age*, *Experience* and *Voluntariness of Use*) de relacionamento-chave (Venkatesh et al., 2003; Venkatesh et al., 2012).

De acordo com Venkatesh et al. (2003) a *Performance Expectancy*, a *Effort Expectancy* e a *Social Influence* foram formuladas para influenciar a *Behavioral Intention* da utilização de uma tecnologia, enquanto a *Behavioral Intention* e as *Facilitating Conditions* determinam o uso da tecnologia (*Use Behavior*). Foram formuladas ainda variáveis de diferença individual como a *Age*, *Gender*, *Experience* e a *Voluntariness of Use* para moderar as várias relações existentes na UTAUT.

Como descrito por Venkatesh et al. (2003), os constructos dos diferentes modelos pertencentes à *Perfomace Expectancy* são a *Perceived Usefulness* (TAM/TAM2 e C-TAM-TPB), *Extrinsic Motivation* (MM), *Job-Fit* (MPCU), *Relative Advantage* (IDT), e *Outcome Expectations* (SCT). Em relação aos constructos que se enquadram com o conceito de *Effort Expectancy* são a *Perceived Ease of Use* (TAM/TAM2), *Complexity* (MPCU), e *Ease of Use* (IDT). Quanto ao constructo *Social Influence* é representado como a *Subjective Norm* (TRA, TAM2, TPB/DTPB e C-TAM-TPB), os *Social Factors* (MPCU) e a *Image* (IDT). Por sua vez, as Facilitating Conditions englobam a *Perceived Behavioral Control* (TPB/DTPB, C-TAM-TPB), *Facilitating Conditions* (MPCU) e *Compatibility* (IDT).

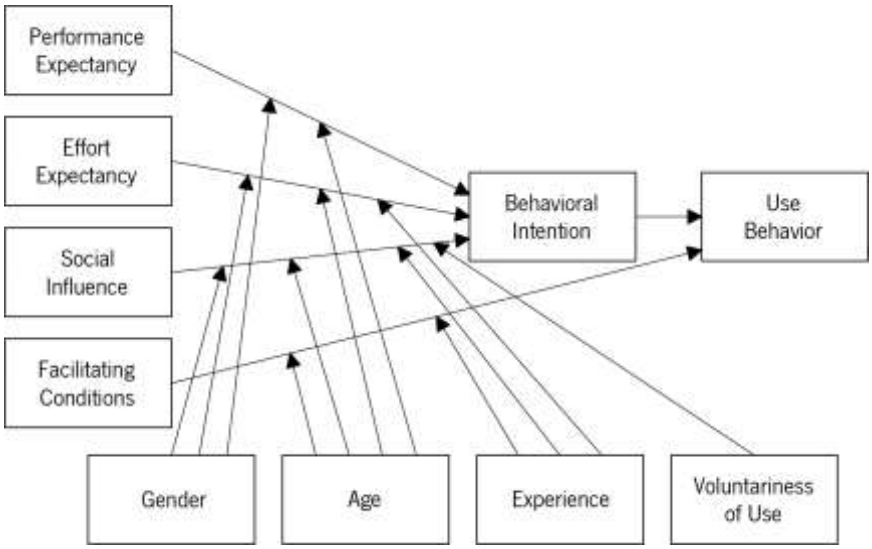


Figura 14 - Unified theory of acceptance and use of technology
Adaptado de (Venkatesh et al., 2003).

Performance Expectancy é definida como o grau em que um indivíduo acredita que utilizando um determinado sistema irá ajudá-lo a melhorar o desempenho do trabalho (Venkatesh et al., 2003).

Effort Expectancy corresponde ao grau de facilidade que está associado ao uso do sistema (Venkatesh et al., 2003).

Social Influence é definida como o grau em que um indivíduo percebe que pessoas importantes acreditam que ele ou ela deve usar o novo sistema (Venkatesh et al., 2003).

Facilitating Conditions representam o grau em que um indivíduo acredita na existência de uma infraestrutura organizacional e técnica para suportar a utilização do sistema em questão (Venkatesh et al., 2003).

Behavioral Intention não é descrita especificamente pelos autores da teoria, porém podemos concluir que representa o grau da intenção que um determinado indivíduo tem em utilizar a tecnologia.

Igualmente, o *Use Behavior* não é descrito especificamente pelos autores da teoria, à semelhança da *Behavioral Intention*, podemos assumir que traduz o uso efetivo da tecnologia.

O *Gender*, a *Age*, a *Experience* e a *Voluntariness of Use*, estão representados no modelo apresentado, contudo tratam-se de moderadores e não de constructos.

Posteriormente, em 2012, surge uma extensão à UTAUT, apresentada por Venkatesh et al. (2012), sendo esta orientada para o estudo da aceitação e uso de tecnologia no contexto do uso do consumidor. A extensão realizada, denominada de *Unified Theory of Acceptance and Use of Technology 2* (UTAUT2), Figura 15, vem acrescentar três constructos: *Hedonic Motivation*, *Price Value* e o *Habit*. Em relação aos moderadores são utilizados os mesmos da versão original, com a exceção da

Voluntariness of Use, sendo esta descartada pois o estudo de onde surge a UTAUT2 (Venkatesh et al., 2012) tem um contexto de comportamento voluntário.

Em comparação com a versão original, a UTAUT2 vem produzir uma melhoria substancial na variância explicada na intenção comportamental e no uso da tecnologia (Venkatesh et al., 2012).

Tanto o comportamento do consumidor, como a investigação em sistemas de informação têm teorizado e encontrado vários constructos relacionados com a *Hedonic Motivation,* onde estes são importantes no consumo de produtos e/ou uso de tecnologia. A integração da *Hedonic Motivation* complementa o preditor mais forte da UTAUT que enfatiza a utilidade (Venkatesh et al., 2012).

Segundo Venkatesh et al. (2012), a integração do *Price Value* na estrutura da UTAUT surge de modo abordar a questão do custo do uso da tecnologia na definição do consumidor. Ao ser integrado um constructo relacionado com o preço/custo, o modelo é complementado, visto que este se concentrava apenas no tempo e no esforço.

Venkatesh et al. (2012) afirmam que a integração do *Habit* na UTAUT complementa o foco da teoria, em que a intencionalidade se trata de um mecanismo abrangente e o principal motor do comportamento.

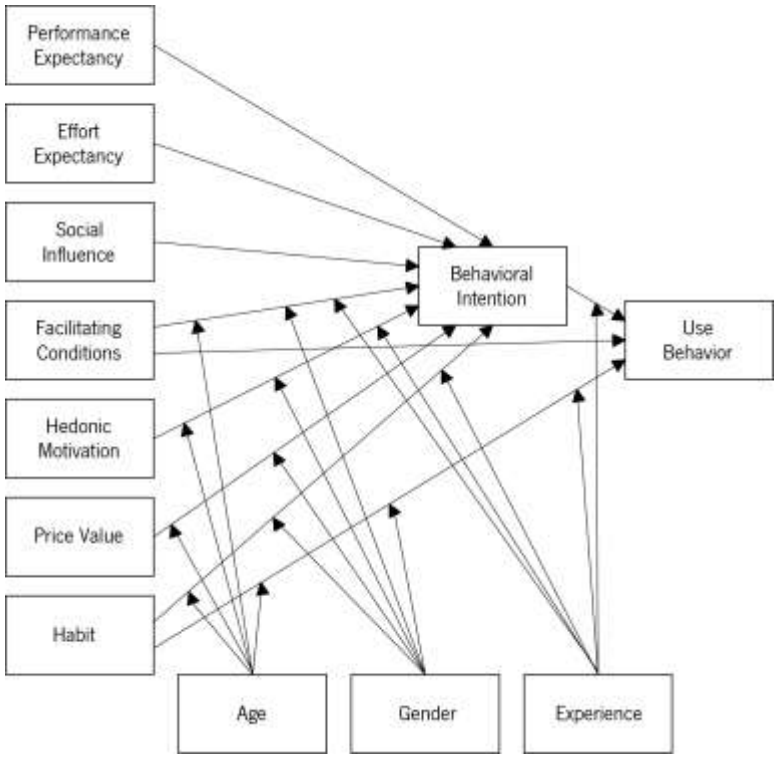


Figura 15 - Unified theory of acceptance and use of technology 2
Adaptado de (Venkatesh et al., 2012).

Hedonic Motivation é definida como a diversão ou o prazer proveniente da utilização de uma determinada tecnologia, e tem-se demonstrado que desempenha um papel importante na determinação da aceitação e uso da tecnologia (Venkatesh et al., 2012).

Price Value traduz-se como o compromisso cognitivo dos consumidores entre os benefícios percecionados das aplicações e o custo monetário para usá-las (Venkatesh et al., 2012).

Habit corresponde à medida em que os indivíduos tendem a realizar determinados comportamentos automaticamente por causa da aprendizagem (Venkatesh et al., 2012).

4. Referencial de Caracterização de Constructos e Indicadores de Modelos e Teorias da Adoção de Tecnologias e Sistemas de Informação

Neste capítulo são apresentados os constructos identificados que constituem as teorias e modelos estudados. São ainda caracterizados os constructos e os indicadores de modelos e teorias da adoção de tecnologias e sistemas de informação.

4.1. Identificação dos Constructos Constituintes dos Modelos e Teorias

Para uma melhor perceção da informação apresentada no capítulo anterior e assim ter uma visão geral dos constructos que constituem os modelos e teorias de adoção de tecnologias e sistemas de informação, é apresentado, na Tabela 2, o cruzamento dos constructos existentes com o respetivo modelo ou teoria.

Na construção da tabela optou-se por manter as designações dos constructos no idioma original (Inglês) para garantir o rigor.

Tabela 2 - Constructos por modelo/teoria

Constructo	Modelo/Teoria														
	DTPB	DeLone & McLean IS Success Model	Updated DeLone & McLean IS Success Model	IDT	MM	SCT	TTF	TAM	TAM2	TAM3	TOE	TPB	TRA	UTAUT	UTAUT2
Actual System Use								X							
Affect						X									
Anxiety						X									
Attitude	X														
Attitude Towards the Behavior												X	X		
Attitude Towards Use								X							
Behavior	X											X	X		
Behavioral Intention	X									X			X	X	X
Behavioral Intention to Use								X							
Compatibility	X			X											
Complexity	X			X											
Computer Anxiety										X					
Computer Playfulness										X					

Constructo	Modelo/Teoria															
	DTPB	DeLone & McLean IS Success Model	Updated DeLone & McLean IS Success Model	IDT	MM	SCT	TTF	TAM	TAM2	TAM3	TOE	TPB	TRA	UTAUT	UTAUT2
Computer Self-efficacy						X				X					
Efficacy	X														
Effort Expectancy														X	X
Encouragement by Others						X									
Experience									X	X					
External Task Environment											X				
External Variables								X							
Facilitating Conditions	X													X	X
Habit															X
Hedonic Motivation															X
Image									X	X					
Individual Characteristics							X								
Individual Impact		X													
Information Quality		X	X												
Intention												X			
Intention to Use (Use)			X						X						
Job Relevance									X	X					
Net Benefits			X												
Normative Influences	X														
Objective Usability										X					
Observability				X											
Organization											X				
Organizational Impact		X													
Others' Use						X									
Outcome Expectations (Performance)						X									

Constructo	Modelo/Teoria														
	DTPB	DeLone & McLean IS Success Model	Updated DeLone & McLean IS Success Model	IDT	MM	SCT	TTF	TAM	TAM2	TAM3	TOE	TPB	TRA	UTAUT	UTAUT2
Outcome Expectations (Personal)						X									
Output Quality									X	X					
Perceived Behavioral Control	X											X			
Perceived Ease of Use					X			X	X	X					
Perceived Enjoyment					X					X					
Perceived Output Quality					X										
Perceived Usefulness					X			X	X	X					
Perceptions of External Control										X					
Performance Expectancy														X	X
Performance Impacts							X								
Price Value															X
Relative Advantage	X			X											
Result Demonstrability									X	X					
Service Quality			X												
Social Influence														X	X
Subjective Norm	X								X	X		X	X		
Support						X									
System Quality		X	X												
Task Characteristics							X								
Task-Technology Fit							X								
Technology											X				
Technology Characteristics							X								
Task Importance					X										
Trialability				X											
Usage					X	X									
Usage Behavior									X						

Constructo	Modelo/Teoria														
	DTPB	DeLone & McLean IS Success Model	Updated DeLone & McLean IS Success Model	IDT	MM	SCT	TTF	TAM	TAM2	TAM3	TOE	TPB	TRA	UTAUT	UTAUT2
Usage Intentions					X										
Use		X													
Use Behavior										X				X	X
User Satisfaction		X	X												
Utilization							X								
Voluntariness									X	X					

Analisando a informação apresentada na Tabela 2, podemos verificar que determinados constructos se encontram em diversos modelos ou teorias, como, por exemplo, a *Subjective Norm,* que surge na DTPB, TAM2, TAM3, TPB e TRA. Em vários casos isto deve-se ao facto da proveniência comum dos modelos/teorias apresentados, visto que existem modelos/teorias originários de adaptações ou extensões de outros modelos/teorias que também estão presentes na tabela, ou então serem baseados num antecedente em comum.

Outra conclusão a que podemos chegar a partir da análise da Tabela 2, é que existem constructos com designações similares, e com o mesmo significado, porém são designados de diferentes formas conforme os autores, por exemplo a *Behavioral Intention* e a *Behavioral Intention to Use*.

Podemos verificar ainda que, por vezes, os modelos/teorias provenientes de extensões, utilizam designações diferentes para constructos já existentes. Por exemplo, no TAM2 um constructo é denominado de *Usage Behavior*, no entanto, no TAM3 surge como *Use Behavior*.

4.2. Caracterização dos Constructos e Indicadores Constituintes dos Modelos e Teorias

Importa referir que nesta etapa foram analisados cerca de 580 artigos, com o intuito de identificar se estes continham os indicadores pretendidos.

Na análise realizada aos artigos foram tidos em consideração determinados critérios, tais como:

- Foram tidos em conta apenas os artigos que estivessem relacionados com a adoção, implementação, uso e aceitação de tecnologias e sistemas de informação, pois estes termos enquadram-se no conceito de adoção (é possível constatar que grande parte dos modelos ou teorias que estudam a adoção de TSI referem-se a teorias e modelos relacionados com o uso e aceitação de TSI, nomeadamente à intenção de um indivíduo usar determinada tecnologia);

- Foram tidos em conta apenas os artigos que utilizavam as teorias/modelos selecionadas ou então utilizavam uma teoria/modelo resultante da combinação de uma das teorias/modelos em estudo com outras teorias/modelos que não são estudadas neste trabalho;
- Foram também tidos em conta os artigos ou livros onde as teorias/modelos foram inicialmente propostas, no entanto, por vezes não foi possível ter acesso ao documento original.

Na realização da pesquisa e análise dos artigos, quando um artigo surgiu com a combinação de duas teorias/modelos ou mais em estudo, foi decidido que os indicadores identificados no artigo seriam divididos pelas teorias/modelos a que correspondiam.

Ainda relacionado com a análise efetuada aos artigos encontrados, quando a teoria ou modelo do artigo não coincidiu com a teoria/modelo pesquisada (por exemplo, foi efetuada uma pesquisa relativa ao *Technology Acceptance Model (TAM)*, e um artigo oriundo dessa pesquisa após ser analisado constatou-se que este afinal utiliza a *Unified Theory of Acceptance and Use of Technology (UTAUT)* e não o pesquisado) nestes casos estes artigos foram aproveitados.

Com vista à caraterização dos vários aspetos da adoção de TSI, foi criado um referencial com todos os constructos e indicadores identificados nos artigos encontrados (relacionados com cada teoria e modelo selecionado).

A titulo de exemplo, na Tabela 3 encontram-se os constructos e indicadores referentes ao *DeLone And McLean IS Success Model*. Foram considerados todos os constructos pertencentes tanto à versão original do modelo, como ao *Updated DeLone and McLean IS Success Model.*

As restantes tabelas referentes aos outros modelos analisados podem ser consultadas em **Apêndice**, juntamente com a lista de referências utilizadas na análise das teorias/modelos**.** No seu conjunto, constituem o referencial de caracterização de constructos e indicadores de modelos e teorias da adoção de tecnologias e sistemas de informação. Importa referir que as tabelas em questão são resultados fundamentais do trabalho, tendo sido colocadas em apêndice apenas para facilitar a leitura do documento como um todo e também facilitar a utilização do referencial.

O referencial desenvolvido proporciona informação organizada sobre os constructos e indicadores relacionados com a adoção de TSI. O referencial criado torna possível perceber os indicadores identificados para caracterizar os constructos pertinentes na adoção de TSI. O referencial encontra-se divido por teoria/modelo. Em cada tabela encontram-se os constructos que constituem cada teoria/modelo, assim como os constructos que foram sugeridos pelos autores dos artigos analisados. No referencial está ainda identificado o contexto em que estes constructos e indicadores foram estudados, oferecerendo assim ao utilizador do referencial a possibilidade de encontrar um contexto em

comum ao seu estudo. Posteriormente, encontram-se os indicadores que estão associados ao constructo em estudo, bem como a escala em que este foi avaliado. Para posterior consulta, são ainda disponibilizadas as referências dos trabalhos onde foi encontrada a informação.

Nos estudos encontrados, os modelos ou teorias nem sempre são utilizados na totalidade ou de forma exatamente igual. Por vezes, são adicionados constructos conforme os pontos de vista dos autores ou a necessidade do estudo. Para uma maior abrangência deste trabalho, nesta dissertação foram considerados também os novos constructos sugeridos e adicionados aos modelos/teorias originais.

Na Tabela 3, podemos encontrar os constructos que constituem o modelo em estudo, o contexto em que se encontram, bem como os indicadores, a escala com a qual o indicador é medido e também os estudos onde podem ser encontrados. Importa referir que na Tabela 3 estão também identificados os novos constructos sugeridos, sendo estes apresentados (com fundo a cinzento) após os constructos das teorias originais.

Tabela 3 - Caracterização dos constructos e indicadores do *DeLone & McLean IS Success Model*

Constructo	Contexto	Indicadores	Escala	Referências
Individual Impact	Employee Portal	The employee portal enables me to accomplish tasks more quickly.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The employee portal improves my job performance.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The employee portal increases my productivity.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The employee portal enhances my job effectiveness.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The employee portal makes it easier to accomplish tasks.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The employee portal is useful for my job.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)

Constructo	Contexto	Indicadores	Escala	Referências
Individual Impact (cont.)	Student Information System (SIS)	Using SIS enables me to accomplish student-related tasks more quickly.	Scale 1 to 7	(Rai, Lang, & Welker, 2002)
		Using SIS improves my job performance.	Scale 1 to 7	(Rai, Lang, & Welker, 2002)
		Using SIS in my job increases my productivity.	Scale 1 to 7	(Rai, Lang, & Welker, 2002)
		Using SIS enhances my effectiveness on the job.	Scale 1 to 7	(Rai, Lang, & Welker, 2002)
		Using SIS makes it easier to do my job.	Scale 1 to 7	(Rai, Lang, & Welker, 2002)
		I find SIS useful on my job.	Scale 1 to 7	(Rai, Lang, & Welker, 2002)
Information Quality	Employee Portal	The information provided by our employee portal is useful.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The information provided by our employee portal is understandable.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The information provided by our employee portal is interesting.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The information provided by our employee portal is reliable.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The information provided by our employee portal is complete.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The information provided by our employee portal is up-to-date.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
	e-Commerce	The e-commerce system provides the precise information you need.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
		The information content meets your needs.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
		You feel the output is reliable.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
		The e-commerce system provides up-to-date information.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)

Constructo	Contexto	Indicadores	Escala	Referências
Information Quality (cont.)	e-Government Website	This Web site provides sufficient information.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		Through this Web site, I get the information I need in time.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		I am satisfied with the accuracy of this Web site.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		Information provided by this Web site meets my needs.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		Information provided by this Web site is in a useful format.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		Information provided by this Web site is clear.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		Information provided by this Web site is accurate.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		Information provided by this Web site is up-to-date.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		Information provided by this Web site is reliable.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
	Not Specified	Users receive reports in a timely manner.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Users receive accurate information output.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Users receive current information output.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Users receive complete (thorough) information output.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Users receive relevant information output.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Users receive reliable information output.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
	Student Information System (SIS)	Does SIS provide the precise information you need?	Scale 1 to 5	(Rai, Lang, & Welker, 2002)
		Does SIS provide output that is exactly what you need?	Scale 1 to 5	(Rai, Lang, & Welker, 2002)
		Does SIS provide sufficient information to enable you to do your tasks?	Scale 1 to 5	(Rai, Lang, & Welker, 2002)
		Does SIS have errors in the program that you must work around?	Scale 1 to 5	(Rai, Lang, & Welker, 2002)

Constructo	Contexto	Indicadores	Escala	Referências
Information Quality (cont.)	Student Information System (SIS) (cont.)	Are you satisfied with the accuracy of SIS?	Scale 1 to 5	(Rai, Lang, & Welker, 2002)
		Are the output options (print types, page sizes allowed for, etc.) sufficient for your use?	Scale 1 to 5	(Rai, Lang, & Welker, 2002)
		Is the information provided helpful regarding your questions or problems?	Scale 1 to 5	(Rai, Lang, & Welker, 2002)
Intention to Use (Use)				
Net Benefits				
Organizational Impact	Employee Portal	The employee portal has helped my organization improve the efficiency of internal operations.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The employee portal has helped my organization improve the quality of working results.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The employee portal has helped my organization enhance and improve coordination within the organization.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The employee portal has helped my organization enhance and improve collaboration within the organization.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The employee portal has helped distinguish my organization from similar organizations.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The employee portal has helped my organization make itself an overall success.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
Service Quality	Employee Portal	The responsible service personnel are always highly willing to help whenever I need support with the employee portal.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The responsible service personnel provide personal attention when I experience problems with the employee portal.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The responsible service personnel provide services related to the employee portal at the promised time.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The responsible service personnel have sufficient knowledge to answer my questions in respect of the employee portal.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)

Constructo	Contexto	Indicadores	Escala	Referências
Service Quality (cont.)	e-Commerce	When you have a problem, the e-commerce system service shows a sincere interest in solving it.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
		The e-commerce system service is always willing to help you.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
		You feel safe in your transactions with the e-commerce system service in terms of security and privacy protection.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
		The e-commerce system service has the knowledge to answer your questions.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
		The e-commerce system service gives you individual attention.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
		The e-commerce system service understands your specific needs.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
	e-Government Website	This Web site provides dependable services.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		This Web site provides services at the times it promises.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		This Web site gives prompt service to citizens.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		This Web site is responsive to citizen's request.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		This Web site is designed with citizen's best interests at heart.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		This Web site is designed to satisfy the needs of citizens.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
System Quality	Employee Portal	Our employee portal is easy to navigate.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Our employee portal allows me to easily find the information I am looking for.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Our employee portal is well structured.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Our employee portal is easy to use.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Our employee portal offers appropriate functionality.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)

Constructo	Contexto	Indicadores	Escala	Referências
System Quality (cont.)	Employee Portal (cont.)	Our employee portal offers comfortable access to all the business applications I need.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
	e-Commerce	The e-commerce system is user friendly.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
		The e-commerce system is easy to use.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
	e-Government Website	This Web site is easy to use.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		This Web site is user friendly.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		I find it easy to get this Web site to do what I want it to do.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		I believe that this Web site is cumbersome to use.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		Using this Web site requires a lot of effort.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		Using this Web site is often frustrating.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
	Student Information System (SIS)	Is SIS user friendly?	Scale 1 to 5	(Rai, Lang, & Welker, 2002)
		Is SIS easy to use?	Scale 1 to 5	(Rai, Lang, & Welker, 2002)
Use	Employee Portal	Retrieve information.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Publish information.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Communicate with colleagues.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Store and share documents.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Retrieve your colleagues' contact information.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Retrieve competence profiles.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)

Constructo	Contexto	Indicadores	Escala	Referências
Use (cont.)	Employee Portal (cont.)	Network with colleagues.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Execute work processes.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
	Student Information System (SIS)	I am dependent on SIS.	Scale 1 to 5	(Rai, Lang, & Welker, 2002)
User Satisfaction	Employee Portal	How adequately does the employee portal support your area of work and responsibility?	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		How efficient is the employee portal?	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		How effective is the employee portal?	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Are you satisfied with the employee portal on the whole?	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
	e-Commerce	You are satisfied with this e-commerce system.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
		The e-commerce system is of high quality.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
		The e-commerce system has met your expectations.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
	e-Government Website	How adequately do you feel this Web site meets your needs of interaction with the government agency?	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		How efficient is this Web site in fulfilling your needs of interaction with the government agency?	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		How effective is this Web site in fulfilling your needs of interaction with the government agency?	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		Overall, are you satisfied with this Web site?	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
	Student Information System (SIS)	How would you rate your satisfaction with SIS?	Scale 1 to 5	(Rai, Lang, & Welker, 2002)

Constructo	Contexto	Indicadores	Escala	Referências
Collaboration Quality	Employee Portal	Our employee portal enables an easy and comfortable communication with my colleagues.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Our employee portal supports an effective and efficient sharing of information with my colleagues.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Our employee portal enables a comfortable storing and sharing of documents with my colleagues.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Our employee portal allows me to easily and quickly locate my colleagues' contact information.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Our employee portal allows me to enter my competence profile easily and in a structured way.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Our employee portal enables me to identify experts within my organization easily and quickly.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Our employee portal supports an effective networking between the members of my organization.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
Communication Quality	Not Specified	Communication systems are available for use 24 hours per day, seven days per week.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Communication systems response times are adequate to keep users satisfied.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Communication systems exhibit high degrees of reliability.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Communication systems uptimes are comparable to available user time.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
Hardware Quality	Not Specified	Hardware and operating systems are available for use 24 hours per day, seven days a week.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Hardware and operating systems response times are adequate to keep users satisfied.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Hardware and operating systems exhibit high degrees of reliability.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Hardware and operating systems uptime are comparable to available user time.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Impact of Operational IS Use	Not Specified	Activities associated with purchasing inputs (raw materials) required by your firm.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Receiving, storing, and disseminating inputs to the products (e.g., materials handling, warehousing).	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Transforming inputs into final product (e.g., cutting, assembly).	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Collecting, storing, and distributing the final product to your firm's customers (e.g., order processing, scheduling).	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Providing service to maintain or enhance the value of the product (e.g., maintenance notices, upgrades).	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Improving your firm's products and processes (e.g., R&D).	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Coordinating different activities described above (e.g., purchasing, order processing, marketing, etc.).	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Interacting and coordinating activities with customers.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
Impact of Strategic IS Use	Not Specified	IT has enabled your firm to gain market share.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		IT has enabled your firm to establish competitive barriers.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		IT has enabled your firm to establish a defensible market.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
Impact of Tactical IS Use	Not Specified	IT has enabled your firm to improve administrative efficiency.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		IT has enabled your firm to improve productivity.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		IT has enabled your firm to improve allocation of scare resources.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		IT has enabled your firm to improve internal services.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Impact of Tactical IS Use (cont.)	Not Specified (cont.)	IT has enabled your firm to improve external services.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
Intention to Continue Using	e-Government Website	I intend to continue using this Web site rather than discontinue it.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		My intention is to continue using this Web site rather than use any alternative means (e.g., offline interaction with the government agency).	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		I will not discontinue my use of this Web site	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
Intention to Reuse	e-Commerce	Assuming that you have access to the e-commerce system, you intend to reuse it.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
		You will reuse the e-commerce system in the future.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
		You will frequently use the e-commerce system in the future.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
Knowledge-Intensity	Employee Portal	A high level of complex knowledge and understanding is required to perform my regular work.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		I need a great deal of information to accomplish my tasks.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		My job can be considered as very knowledge intensive.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
Management Support	Employee Portal	My supervisor actively encourages me to use the employee portal.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		My organization's leadership explicitly supports the employee portal's use.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
Perceived Value	e-Commerce	The product/service of the e-commerce system is a good value for money.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
		The price of the product/service of the e-commerce system is acceptable.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)
		The product/service of the e-commerce system is considered to be a good buy.	Likert 1-7, Strongly Disagree to Agree	(Wang, 2008)

Constructo	Contexto	Indicadores	Escala	Referências
Plan Quality	Not Specified	IT department's planning supports your firm's ability to keep up with changing technology.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		IT department's services evolve to meet your firm's changing needs and capabilities.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Long-term data infrastructure plans exist and are followed.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
		Long-term network infrastructure plans exist and are followed.	Likert 1-7, Strongly Disagree to Agree	(Bradley, Pridmore, & Byrd, 2006)
Process Quality	Employee Portal	Our employee portal supports the work processes efficiently.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Our employee portal supports the work processes reliably.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Our employee portal supports the work processes accurately.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Our employee portal supports the easy initiation of work processes.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Our employee portal supports the work processes in a way that allows one to understand them.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Our employee portal supports the work processes in a way that allows one to trace them.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		Our employee portal supports the work processes fully.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
Process Standardization	Employee Portal	The tasks I have to accomplish to do my job are largely repetitive.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		The activities of my work processes are transparent and comprehensible.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)
		My job is characterized by a high degree of process standardization.	Likert 1 -7, Very Low to Very High	(Urbach, Smolnik, & Riempp, 2010)

Constructo	Contexto	Indicadores	Escala	Referências
Trust in Government	e-Government Website	I feel that government acts in citizen's best interest.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		I feel fine interacting with the government since government generally fulfills its duties efficiently.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		I always feel confident that I can rely on government to do their part when I interact with them.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		I am comfortable relying on the government to meet their obligations.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
Trust in Government Web Site	e-Government Website	This Web site is trustworthy.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		This Web site seems to be honest and truthful to me.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		This Web site can be trusted.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
Trust in Technology	e-Government Website	The Internet has enough safeguards to make me feel comfortable using it.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		I feel assured that legal and technological structures adequately protect me from problems on the Internet.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)
		I feel confident that encryption and other technological advances on the Internet make it safe for me to transact there.	Likert 1-7	(Teo, Srivastava, & Jiang, 2008)

5. Discussão de Resultados

Neste capítulo são discutidos os resultados obtidos no desenvolvimento da dissertação. São primeiramente identificados os constructos que são utilizados mais consistentemente pelos autores dos artigos estudados. Seguidamente, são apresentados os resultados obtidos a partir da análise feita aos dados recolhidos relativamente a cada teoria/modelo selecionada. Do mesmo modo, são apresentados os resultados obtidos a partir da análise realizada aos dados recolhidos relativamente a cada constructo identificado. Por fim, são apresentadas algumas conclusões e uma plataforma web desenvolvida para suportar a consulta dos constructos e indicadores.

Na Tabela 4 é apresentado o resultado do agrupamento de todas as variáveis de medida (indicadores) identificadas nas tabelas referidas na secção anterior, relativas a cada teoria e modelo estudado. Relativamente às tabelas apresentadas no capítulo anterior, foi retirada a coluna "Contexto" e os indicadores foram reescritos de modo a se tornarem independentes do contexto. Este agrupamento consistiu em relacionar os indicadores que referissem o mesmo, de modo a não existir conteúdo repetido e desnecessário (por exemplo, "*Learning to operate the Internet is easy for me.*" e "*Learning to operate the system is easy for me.*"). Optou-se por não agrupar os indicadores que utilizassem um tempo verbal diferente, dado poderem significar coisas distintas (por exemplo, "*I find the <System> easy to use*" e "*I would find the <System> easy to use*").

Nesta tabela foi aplicado o critério de que apenas seriam apresentados os indicadores que possuíssem cinco ou mais ocorrências (indicadores que são referidos em cinco ou mais artigos) de modo a procurar identificar, por um lado, os indicadores utilizados mais consistentemente pelos autores e por outro para identificar a consistência da medição dos constructos. A Tabela 4, no seu formato original continha 2111 linhas.

Para além da Tabela 4, podemos também visualizar uma amostra da constituição da tabela no seu formato original, na Figura 16 (sem considerar um mínimo de ocorrências).

Constructo	ID	Indicadores	Número de Ocorrências	Percentagem de Utilização
Affect	1	I like working with the <System>.	2	100,00%
	2	Once I get working on the <System>, I find it hard to stop.	2	100,00%
	3	I look foward to those aspects of my job that require me to use the <System>.	1	50,00%
	4	Using the <System> is frustating for me.	1	50,00%
	5	I get bored quickly when working on the <System>.	1	50,00%
Anxiety	6	I feel apprehensive about using the <System>.	3	100,00%
	7	It scares me to think that I could cause the <System> to destroy a large amount of information by hitting the wrong key.	2	66,67%
	8	I hesitate to use the <System> for fear of making mistakes I cannot correct.	2	66,67%
	9	The <System> is somewhat intimidating to me.	2	66,67%
Attitude	10	All things considered my continuing to use the <System> in my job is Extremely negative ... Extremely positive.	1	14,29%
	2050	All things considered my continuing to use the <System> in my job is Extremely good ... Extremely bad.	1	14,29%
	2051	All things considered my continuing to use the <System> in my job is Extremely harmful ... Extremely beneficial.	1	14,29%
	2052	All things considered my continuing to use the <System> in my job is Extremely pleasant ... Extremely unpleasant.	1	14,29%
	11	All things considered, using the <System> is: extremely negative ... extremely positive.	1	14,29%
	2053	All things considered, using the <System> is: extremely bad... extremely god.	1	14,29%
	2054	All things considered, using the <System> is: extremely harmful ... extremely helpful.	1	14,29%
	12	Using the <System> is a good idea.	5	71,43%
	13	Using the <System> is a wise idea.	2	28,57%
	14	Using the <System> is pleasant.	2	28,57%
	15	I <scale> the idea of using the <System>.	2	28,57%
	16	Using the <System> in my tasks is unpleasant.	2	28,57%
	17	Using the <System> is beneficial to my tasks.	2	28,57%
	18	Buying the <System> would be a ____ idea: <scale>.	1	14,29%
	19	I think buying the <System> is a ____ idea: <scale>.	1	14,29%
	20	For me, cleaning spyware from my <System> would be: <scale>	2	28,57%
	21	For me, preventing spyware from self-installing on my <System> would be: <scale>	2	28,57%
	22	For me, protecting my <System> from spyware would be: <scale>	2	28,57%
	23	Using the <System> is <scale>	1	14,29%

Figura 16 - Indicadores generalizados de todas as teorias e modelos (extrato da tabela original)

Para um melhor entendimento da Tabela 4, segue uma explicação do que cada coluna significa e como deve ser feita a leitura da mesma.

A coluna "Constructo" diz respeito ao nome do constructo em estudo.

A coluna "ID" corresponde ao identificador atribuído à variável de medida.

A coluna "Indicadores" coincide com as variáveis de medida (indicadores) identificados e trabalhados nos artigos.

A coluna "Número de Ocorrências" representa o número de artigos em que esta variável de medida (indicador) é identificada no que diz respeito ao constructo a que está associado.

A coluna "Número de Ocorrências Constructo" refere-se ao número total de artigos que utilizam o constructo em questão.

Por fim, na coluna "Percentagem de Utilização", é representada a percentagem que este indicador é utilizado relativamente ao constructo. Esta percentagem é conseguida através da divisão do número de artigos que este indicador é identificado em relação ao constructo a que está associado (Número de Ocorrências) pelo número total de artigos que utilizam o constructo em questão (Número de Ocorrências Constructo).

Tabela 4 - Indicadores generalizados resultantes

Constructo	ID	Indicadores	Número de Ocorrências	Número de Ocorrências Constructo	Percentagem de Utilização
Attitude	12	Using the <System> is a good idea.	5	7	71,43%
Behavioral Intention	43	I predict I would use the <System> in the next <n> months.	6	21	28,57%
	44	I plan to use the <System> in the next <n> months.	7	21	33,33%
	50	I intend to use the <System> in the next <n> months.	6	21	28,57%
Compatibility	84	Using the <System> fits my work style.	6	14	42,86%
Computer Self-efficacy	141	I could complete the job using the <System> if there was no one around to tell me what to do as I go.	5	7	71,43%
	142	I could complete the job using the <System> if I had only the system manuals for reference.	5	7	71,43%
	143	I could complete the job using the <System> if I had seen someone else using it before trying it myself.	5	7	71,43%
	147	I could complete the job using the <System> if I had just the built-in help facility for assistance.	5	7	71,43%
	148	I could complete the job using the <System> if someone showed me how to do it first.	5	7	71,43%
Effort Expectancy	166	I would find the <System> easy to use.	6	10	60,00%
	167	My interaction with the <System> would be clear and understandable.	5	10	50,00%
	168	It would be easy for me to become skillful at using the <System>.	7	10	70,00%
Facilitating Conditions	183	I have the resources necessary to use the <System>.	5	12	41,67%
	184	I have the knowledge necessary to use the <System>.	8	12	66,67%
	185	A specific person (or group) is available for assistance with difficulties with the <System>.	7	12	58,33%
Perceived Ease of Use	346	Learning to use the <System> is easy for me.	8	43	18,60%
	347	My interaction with the <System> is clear and understandable.	15	43	34,88%
	348	I find the <System> easy to use.	17	43	39,53%
	357	Learning to operate the <System> is easy for me.	6	43	13,95%
	361	It would be easy for me to become skillful at using the <System>.	11	43	25,58%
	362	I would find the <System> easy to use.	9	43	20,93%
	364	It is easy for me to become skillful at using the <System>.	7	43	16,28%
	365	I find it easy to get the <System> to do what I want it to do.	15	43	34,88%

Constructo	ID	Indicadores	Número de Ocorrências	Número de Ocorrências Constructo	Percentagem de Utilização
Perceived Ease of Use (cont.)	368	Interacting with the <System> does not require a lot of my mental effort.	9	43	20,93%
	382	My interaction with the <System> would be clear and understandable.	5	43	11,63%
	408	Learning to use the <System> would be easy for me.	6	43	13,95%
Perceived Enjoyment	414	I find using the <System> to be enjoyable.	5	10	50%
	416	I have fun using the <System>.	5	10	50%
Perceived Usefulness	432	Using the <System> enables me to accomplish tasks more quickly.	10	41	24,39%
	433	Using the <System> increases my productivity.	12	41	29,27%
	444	Using the <System> makes my work easier.	7	41	17,07%
	446	Using the <System> would improve my performance.	10	41	24,39%
	447	Using the <System> would enhance my effectiveness.	8	41	19,51%
	448	I find the <System> useful.	10	41	24,39%
	449	Using the <System> enhances my effectiveness.	11	41	26,83%
	467	I would find the <System> useful.	10	41	24,39%
	472	Using the <System> would increase my productivity.	6	41	14,63%
	474	Using the <System> improves my performance.	10	41	24,39%
	480	Using the <System> would make it easier for me to do my job.	6	41	14,63%
Performance Expectancy	514	Using the <System> increases my productivity.	6	10	60,00%
	521	Using the <System> enables me to accomplish tasks more quickly.	5	10	50,00%
Social Influence	606	People who influence my behavior think that I should use the <System>.	12	15	80,00%
	607	People who are important to me think that I should use the <System>.	11	15	73,33%
Subjective Norm	635	People who influence my behavior think that I should use the <System>.	7	15	46,67%
	636	People who are important to me think that I should use the <System>.	9	15	60,00%

A partir da análise das tabelas apresentadas na caracterização dos constructos e indicadores de cada teoria e modelo estudados, foram criadas a Tabela 5 e a Tabela 6 de modo a ser possível retirar conclusões sobre os dados recolhidos e assim contribuir para um melhor conhecimento dos indicadores no contexto da adoção de tecnologias e sistemas de informação.

Para um melhor entendimento da Tabela 5, segue uma explicação do que cada coluna significa e como deve ser feita a leitura da mesma.

A coluna "Teoria/Modelo" diz respeito ao nome da teoria ou modelo em estudo.

As colunas "N.º de Artigos que Identificam Indicadores" e "N.º de Artigos que Não Identificam Indicadores" representam o número total de artigos analisados em que foram ou não, respetivamente, identificados indicadores para cada teoria/modelo.

A coluna "Total de Constructos Originais" corresponde ao número total de constructos originais identificados por teoria/modelo, isto é, constructos que pertencem às versões originais das teorias e modelos selecionados.

A coluna "Total de Constructos Adicionais" coincide com o número total de constructos sugeridos identificados por teoria/modelo nos artigos estudados, isto é, constructos que foram sugeridos pelos autores dos artigos para além dos que pertencem às versões originais das teorias e modelos selecionados.

As colunas "N.º Mínimo de Indicadores por Constructo" e "N.º Máximo de Indicadores por Constructo" representa o número mínimo e máximo, respetivamente, de indicadores que foram identificados num constructo de cada teoria/modelo.

Por fim, na coluna "N.º de Contextos", refere-se ao número de contextos em que a teoria/modelos foi aplicada.

Tabela 5 - Análise à informação recolhida relativa aos constructos e indicadores identificados

	Teoria/Modelo	Nº de Artigos que Identificam Indicadores	Nº de Artigos que Não Identificam Indicadores	Total de Artigos Analisados	Total de Constructos Originais	Total de Constructos Adicionais	N.º Mínimo de Indicadores por Constructo	N.º Máximo de Indicadores por Constructo	N.º de Contextos
	DTPB	4	5	9	10	19	1	12	4
	DeLone & McLean	5	5	10	9	17	1	9	5
	IDT	9	69	78	5	39	1	15	8
	MM	2	13	15	7	3	1	4	3
	SCT	4	67	71	9	14	3	13	3
	TTF	8	23	31	6	88	1	8	7
	TAM	35	354	389	23	101	1	16	30
	TOE	3	4	7	3	19	1	6	1
	TPB	5	54	59	5	40	1	8	3
	TRA	5	17	22	4	30	1	6	5
	UTAUT	11	6	17	9	46	2	7	9
Total	11	86*	495*	581*	71*	348*	1	16	64*

* O número apresentado não representa a soma de todos os valores apresentados nas linhas anteriores, pois existem valores em comum e foram contados apenas uma vez (por exemplo, o constructo *Subjective Norm* surge em mais do que uma teoria/modelo (4 vezes)).

Para um melhor entendimento da Tabela 6, segue-se uma explicação do que cada coluna significa e como deve ser feita a leitura da mesma.

A coluna "Constructo" diz respeito ao nome do constructo em estudo.

A coluna "N.º de Teorias/Modelos originais que consideram o constructo" corresponde ao número total de teorias e modelos na sua versão original que o constructo em estudo pertence.

A coluna "N.º de Teorias/Modelos derivadas que consideram o constructo" coincide com o número total de teorias e modelos, resultantes da combinação de uma ou mais teorias ou modelos selecionados com outras teorias/modelos, que o constructo em questão pertence.

A coluna "N.º de Artigos Usados" representa o número de artigos em que constructo associado é utilizado.

As colunas "N.º Mínimo de Indicadores utilizados" e "N.º Máximo de Indicadores utilizados" representa o número mínimo e máximo, respetivamente, de indicadores que foram identificados em cada constructo.

Por fim, na coluna "Percentagem de Utilização", é representada a percentagem média que este constructo é utilizado. Esta percentagem é conseguida através do cálculo da média dos valores apresentados de cada constructo da Tabela 5, mais precisamente na coluna "Percentagem de Utilização".

Na Tabela 6, podemos encontrar os constructos que constituem as teorias e modelos em estudo, e também os constructos sugeridos pelos estudos identificados, sendo estes apresentados após os constructos das teorias/modelos originais (assinalados com o fundo cinzento).

Tabela 6 - Análise à informação recolhida relativa aos constructos identificados

Constructo	N.º de Teorias/Modelos originais que consideram o constructo	N.º de Teorias/Modelos derivadas que consideram o constructo	N.º de Artigos Usados	N.º Mínimo de Indicadores utilizados	N.º Máximo de Indicadores utilizados	Percentagem média de Utilização dos Indicadores
Actual System Use	1	0	0	0	0	0
Affect	1	1	2	5	5	70%
Anxiety	1	1	3	1	4	75%
Attitude	1	1	7	3	4	22,86%

Constructo	N.º de Teorias/Modelos originais que consideram o constructo	N.º de Teorias/Modelos derivadas que consideram o constructo	N.º de Artigos Usados	N.º Mínimo de Indicadores utilizados	N.º Máximo de Indicadores utilizados	Percentagem média de Utilização dos Indicadores
Attitude Towards the Behavior	2	0	7	3	4	19,64%
Attitude Towards Use	1	0	4	3	4	29,55%
Behavior	1	0	0	0	0	0
Behavioral Intention	4	0	21	2	3	8,26%
Behavioral Intention to Use	1	0	4	2	3	28,13%
Compatibility	2	2	14	2	6	10,23%
Complexity	2	0	3	2	6	33,33%
Computer Anxiety	1	0	2	4	9	72,22%
Computer Playfulness	1	0	3	1	7	37,5%
Computer Self-efficacy	2	1	7	3	12	48,98%
Efficacy	1	0	2	6	8	70%
Effort Expectancy	1	0	10	3	7	26,43%
Encouragement by Others	1	0	1	7	7	100%
Experience	1	0	0	0	0	0
External Task Environment	1	0	0	0	0	0
External Variables	1	0	0	0	0	0
Facilitating Conditions	2	2	12	2	10	14,67%
Habit	1	0	3	2	4	47,62%
Hedonic Motivation	1	0	1	3	3	100%
Image	1	1	5	3	4	37,78%
Individual Characteristics	1	0	0	0	0	0
Individual Impact	1	0	2	6	6	100%
Information Quality	1	1	6	3	9	22,44%
Intention	1	0	4	2	6	31,82%
Intention to Use (Use)	1	1	13	2	6	10,26%
Job Relevance	1	0	2	2	3	83,33%
Net Benefits	1	0	0	0	0	0
Normative Influences	1	0	1	6	6	100%
Objective Usability	1	0	0	0	0	0
Observability	1	0	0	0	0	0
Organization	1	0	0	0	0	0
Organizational Impact	1	0	1	6	6	100%
Others' Use	1	0	1	7	7	100%
Outcome Expectations (Performance)	1	0	2	6	6	100%
Outcome Expectations (Personal)	1	0	2	5	5	100%

Constructo	N.º de Teorias/Modelos originais que consideram o constructo	N.º de Teorias/Modelos derivadas que consideram o constructo	N.º de Artigos Usados	N.º Mínimo de Indicadores utilizados	N.º Máximo de Indicadores utilizados	Percentagem média de Utilização dos Indicadores
Output Quality	1	0	2	2	3	83,33%
Perceived Behavioral Control	2	1	7	2	5	21,43%
Perceived Ease of Use	2	4	43	3	6	6,62%
Perceived Enjoyment	2	0	10	2	5	16%
Perceived Output Quality	1	0	1	3	3	100%
Perceived Usefulness	2	4	41	2	8	6,31%
Perceptions of External Control	1	0	2	4	5	90%
Performance Expectancy	1	0	10	3	4	17,14%
Performance Impacts	1	0	2	3	6	50%
Price Value	1	0	1	3	3	100%
Relative Advantage	2	1	8	2	10	13,46%
Result Demonstrability	1	2	6	3	4	26,92%
Service Quality	1	0	3	4	6	33,33%
Social Influence	1	1	15	2	5	13,06%
Subjective Norm	3	0	15	1	4	14,51%
Support	1	1	2	2	6	50%
System Quality	1	0	5	2	6	27,14%
Task Characteristics	1	0	1	6	6	100%
Task Importance	1	0	1	1	1	100%
Task-Technology Fit	1	0	1	5	5	100%
Technology	1	0	0	0	0	0
Technology Characteristics	1	0	1	6	6	100%
Trialability	1	1	3	2	5	41,67%
Usage	2	1	3	2	4	33,33%
Usage Behavior	1	0	1	4	4	100%
Usage Intentions	1	0	1	1	1	100%
Use	1	0	2	1	8	50%
Use Behavior	2	0	4	1	6	25%
User Satisfaction	1	0	4	1	4	30%
Utilization	1	1	3	2	5	37,5%
Voluntariness	1	2	5	1	3	55%
A Priori Attitudes	0	1	1	4	4	100%
Accessibility	0	1	1	3	3	100%
Accuracy	0	2	2	3	3	50%
Actual Frequency of Use	0	1	1	3	3	100%
Actual Usage	0	2	2	2	3	50%

Constructo	N.º de Teorias/Modelos originais que consideram o constructo	N.º de Teorias/Modelos derivadas que consideram o constructo	N.º de Artigos Usados	N.º Mínimo de Indicadores utilizados	N.º Máximo de Indicadores utilizados	Percentagem média de Utilização dos Indicadores
Adaptive Use Intention	0	1	1	3	3	100%
Adoption Decision	0	1	1	1	1	100%
Agreeableness	0	1	1	6	6	100%
Applications for Fun	0	1	1	4	4	100%
Applications for Personal Use	0	1	1	3	3	100%
Asset Specificity	0	1	1	3	3	100%
Assistance	0	1	1	3	3	100%
Attitude toward Getting Information	0	1	1	2	2	100%
Attitude toward using technology	0	1	1	4	4	100%
Authorization	0	1	1	2	2	100%
Availability	0	2	2	2	3	50%
Avoidance of Personal Interaction	0	1	1	3	3	100%
Awareness	0	2	3	3	5	45,83%
Awareness of Local Contexts	0	1	1	3	3	100%
Behavioral Expectation	0	1	1	3	3	100%
Behavioral Intention for Continued Use	0	1	1	3	3	100%
Cognitive Absorption	0	2	2	3	16	55,88%
Cognitive Absorption (Control)	0	2	2	3	3	50%
Cognitive Absorption (Curiosity)	0	2	2	3	3	60%
Cognitive Absorption (Focused Immersion)	0	2	2	3	4	58,33%
Cognitive Absorption (Heightened Enjoyment)	0	2	2	3	4	58,33%
Cognitive Absorption (Temporal Dissociation)	0	2	2	3	5	66,67%
Cognitive Trust in Competence	0	1	1	2	2	100%
Cognitive Trust in Integrity	0	1	1	3	3	100%
Cognizance of Alternative Technologies	0	1	1	4	4	100%
Collaboration Quality	0	1	1	7	7	100%
Collaborative Norms	0	1	1	4	4	100%
Comfort with Changes	0	2	2	2	2	100%
Communication Effectiveness	0	1	1	5	5	100%
Communication Quality	0	1	1	4	4	100%

Constructo	N.º de Teorias/Modelos originais que consideram o constructo	N.º de Teorias/Modelos derivadas que consideram o constructo	N.º de Artigos Usados	N.º Mínimo de Indicadores utilizados	N.º Máximo de Indicadores utilizados	Percentagem média de Utilização dos Indicadores
Compatibility with Existing Practices	0	1	1	5	5	100%
Compatibility with Preferred Work Style	0	1	1	4	4	100%
Compatibility with Prior Experience	0	1	1	6	6	100%
Compatibility with Values	0	1	1	6	6	100%
Competitive Intensity	0	1	1	3	3	100%
Competitive Pressure	0	2	2	3	5	50%
Completeness	0	1	1	3	3	100%
Concurrency	0	1	1	3	3	100%
Confirmation	0	1	1	2	2	100%
Conscientiousness	0	1	1	6	6	100%
Consistency	0	1	1	3	3	100%
Consistency with User Knowledge	0	1	1	2	2	100%
Consumer Willingness	0	1	1	5	5	100%
Content Quality	0	1	1	3	3	100%
Continuance Behavior	0	1	1	3	3	100%
Continuance Intention	0	1	1	3	3	100%
Controllability	0	2	2	2	3	83,33%
Controllability over Getting Information	0	1	1	2	2	100%
Convenience	0	1	1	3	3	100%
Cost	0	1	1	3	3	100%
Costs	0	1	1	2	2	100%
Currency	0	1	1	3	3	100%
Customization	0	1	1	2	2	100%
Declining Cost	0	1	1	3	3	100%
Disconfirmation	0	2	2	4	4	50%
Disposition to Trust	0	1	1	5	5	100%
Documentation	0	1	1	5	5	100%
Download Delay	0	1	1	4	4	100%
Ease of Use	0	6	6	3	6	18,25%
E-business Know-How	0	1	1	2	2	100%
E-business Usage	0	1	1	4	4	100%

Constructo	N.º de Teorias/Modelos originais que consideram o constructo	N.º de Teorias/Modelos derivadas que consideram o constructo	N.º de Artigos Usados	N.º Mínimo de Indicadores utilizados	N.º Máximo de Indicadores utilizados	Percentagem média de Utilização dos Indicadores
E-business Value (Impact on Commerce)	0	1	1	4	4	100%
E-business Value (Impact on Coordination)	0	1	1	2	2	100%
E-business Value (Impact on Internal Efficiency)	0	1	1	2	2	100%
Emotional Trust	0	1	1	3	3	100%
Engagement with the Technology	0	1	1	3	3	100%
Environment Context (Competition Intensity)	0	1	1	3	3	100%
Environment Context (Competitive Pressure)	0	1	1	4	4	100%
Environment Context (Regulatory Environment)	0	1	1	4	4	100%
Environmental Uncertainty	0	1	1	5	5	100%
Environmental Uncertainty (Dynamism)	0	1	1	3	3	100%
Environmental Uncertainty (Heterogeneity)	0	1	1	1	1	100%
Environmental Uncertainty (Hostility)	0	1	1	3	3	100%
External Computing Support	0	1	1	4	4	100%
External Influence	0	1	1	3	3	100%
External Pressure	0	1	1	5	5	100%
External Training	0	1	1	4	4	100%
Extraversion	0	1	1	6	6	88,89%
Facilitating Conditions (Resources)	0	3	3	3	12	33,33%
Facilitating Conditions (Technology)	0	2	2	3	6	64,29%
Familiarity	0	2	2	1	5	50%
Familiarity with Communication Partners	0	1	1	3	3	100%
Family, Relatives, Friends, and Peer Influence	0	1	1	4	4	100%
Fear of Technological Advances	0	1	1	3	3	100%
Flexibility	0	2	2	3	3	100%

Constructo	N.º de Teorias/Modelos originais que consideram o constructo	N.º de Teorias/Modelos derivadas que consideram o constructo	N.º de Artigos Usados	N.º Mínimo de Indicadores utilizados	N.º Máximo de Indicadores utilizados	Percentagem média de Utilização dos Indicadores
Format	0	1	1	3	3	100%
Frequency Imitation	0	1	1	4	4	100%
Friends and Family Influences	0	1	1	4	4	100%
Future Obligation	0	1	1	3	3	100%
Getting Information	0	1	1	1	1	100%
Getting Information Habit	0	1	1	2	2	100%
Getting Information Skills	0	1	1	4	4	100%
Governmental Influence	0	1	1	2	2	100%
Group Valence	0	1	1	4	4	100%
Group's Perceptions About the Complexity of the Technology	0	1	1	2	2	100%
Group's Perceptions About the Task-Technology Fit	0	1	1	5	5	100%
Group's Strength of Adoption of the Technology	0	1	1	3	3	100%
Groupware Use	0	1	1	3	3	100%
Hardware Quality	0	1	1	4	4	100%
Hedonic Outcomes	0	1	1	3	3	100%
Immediacy	0	1	1	3	3	100%
Impact of Operational IS Use	0	1	1	8	8	100%
Impact of Strategic IS Use	0	1	1	3	3	100%
Impact of Tactical IS Use	0	1	1	5	5	100%
Impact on Downstream Sales	0	1	1	3	3	100%
Impact on Internal Operations	0	2	2	3	15	50%
Impact on Marketing and Sales	0	1	1	7	7	100%
Impact on Procurement	0	1	1	5	5	100%
Impact on Upstream Coordination	0	1	1	3	3	100%
Individual Adaptation Behaviors	0	1	1	6	6	100%
Individual Performance Impact (Performance Impact of Computer Systems)	0	1	1	2	2	100%
Individual performance improvement after groupware adoption	0	1	1	3	3	100%
Individualism/Collectivism	0	1	1	6	6	100%
Information Credibility	0	1	1	3	3	100%
Information Satisfaction	0	1	1	2	2	100%

Constructo	N.º de Teorias/Modelos originais que consideram o constructo	N.º de Teorias/Modelos derivadas que consideram o constructo	N.º de Artigos Usados	N.º Mínimo de Indicadores utilizados	N.º Máximo de Indicadores utilizados	Percentagem média de Utilização dos Indicadores
Integration	0	1	1	3	3	100%
Intention to Continue	0	1	1	3	3	100%
Intention to Continue Using	0	2	2	2	3	83,33%
Intention to Participate	0	1	1	2	2	100%
Intention to Reuse	0	1	1	3	3	100%
Intention to Use Future Features	0	1	1	2	2	100%
Intentions	0	1	1	3	3	100%
Intentions to Adopt	0	2	2	2	4	50%
Intentions to Get Information	0	1	1	2	2	100%
Internal Computing Support	0	1	1	4	4	100%
Internal Self-efficacy	0	1	1	3	3	100%
Internal Training	0	1	1	4	4	100%
Internet Penetration	0	1	1	4	4	100%
Internet Self-efficacy	0	1	1	4	4	100%
Internet Skills	0	1	1	5	5	100%
Interpersonal Influence	0	1	1	3	3	100%
Intra-group Conflict	0	1	1	6	6	100%
IT Infrastructure	0	1	1	6	6	100%
Job Satisfaction	0	1	1	3	3	100%
Knowledge of Search Domain	0	1	1	2	2	100%
Knowledge-Intensity	0	1	1	3	3	100%
Learning Goal Orientation	0	1	1	6	6	100%
Management Profile	0	1	1	1	1	100%
Management Support	0	2	2	2	6	50%
Managerial Obstacles	0	1	1	4	4	100%
Masculinity/Femininity	0	1	1	5	5	100%
M-Business Impact on Firm Performance	0	1	1	4	4	100%
M-Business Usage	0	1	1	8	8	100%
Media Fit (Information Exchange)	0	1	1	2	2	100%
Media Fit (Solve Problems)	0	1	1	4	4	100%
Mobile Environment	0	1	1	6	6	100%
Mobility	0	1	1	3	3	100%
Monetary Resources	0	1	1	4	4	100%
Network Externality	0	1	1	3	3	100%

Constructo	N.º de Teorias/Modelos originais que consideram o constructo	N.º de Teorias/Modelos derivadas que consideram o constructo	N.º de Artigos Usados	N.º Mínimo de Indicadores utilizados	N.º Máximo de Indicadores utilizados	Percentagem média de Utilização dos Indicadores
Network Externality (Use of Complementary Products)	0	1	1	5	5	100%
Neuroticism	0	1	1	7	7	100%
Normative Beliefs	0	1	1	6	6	100%
Openness to experience	0	1	1	5	5	100%
Organization Context (Financial Resources)	0	1	1	2	2	100%
Organization Context (Firm Size)	0	1	1	1	1	100%
Organization Context (Global Scope)	0	1	1	5	5	100%
Organization Size	0	1	1	1	1	100%
Organizational Support	0	1	1	4	4	100%
Outcome Imitation	0	1	1	7	7	100%
Partner Pressure	0	1	1	3	3	100%
Partner Readiness	0	1	1	3	3	100%
Past Experience – Getting Information	0	1	1	3	3	100%
Past Experience – Purchasing	0	1	1	3	3	100%
Peer Influence	0	3	3	3	4	41,67%
Perceived Behavioral Control over Getting Information	0	1	1	1	1	100%
Perceived Behavioral Control over Purchasing	0	1	1	1	1	100%
Perceived Benefits	0	1	1	1	1	100%
Perceived Complexity	0	1	1	3	3	100%
Perceived Credibility	0	1	1	2	2	100%
Perceived Critical Mass	0	2	2	2	4	50%
Perceived Diagnosticity	0	1	1	4	4	100%
Perceived Ease of Getting Information	0	1	1	4	4	100%
Perceived Ease of Purchasing	0	1	1	4	4	100%
Perceived Effectiveness	0	1	1	4	4	100%
Perceived Efficiency	0	1	1	3	3	100%
Perceived Financial Resources	0	1	1	2	2	100%
Perceived Frequency of Use	0	1	1	3	3	100%
Perceived Individual Benefits	0	1	1	3	3	100%
Perceived Information Protection	0	1	1	4	4	100%

Constructo	N.º de Teorias/Modelos originais que consideram o constructo	N.º de Teorias/Modelos derivadas que consideram o constructo	N.º de Artigos Usados	N.º Mínimo de Indicadores utilizados	N.º Máximo de Indicadores utilizados	Percentagem média de Utilização dos Indicadores
Perceived Innovativeness	0	2	2	3	4	87,5%
Perceived Long-term Usefulness	0	1	1	4	4	100%
Perceived Near-term Usefulness	0	1	1	6	6	100%
Perceived Network Externalities	0	1	1	6	6	100%
Perceived Organizational Benefits	0	1	1	3	3	100%
Perceived Performance	0	1	1	3	3	100%
Perceived Personalization	0	1	1	3	3	100%
Perceived Playfulness	0	1	1	7	7	100%
Perceived Purchasing Usefulness	0	1	1	4	4	100%
Perceived Resources	0	1	1	4	4	100%
Perceived Service Cost	0	1	1	3	3	100%
Perceived Technology Control	0	1	1	4	4	100%
Perceived Usefulness (Adoption)	0	1	1	4	4	100%
Perceived Usefulness (Post-adoption)	0	1	1	4	4	100%
Perceived Usefulness (Productivity)	0	1	1	3	3	100%
Perceived Usefulness (Resource Advantage)	0	1	1	3	3	100%
Perceived Usefulness of Getting Information	0	1	1	4	4	100%
Perceived Value	0	1	1	7	7	100%
Perceived Voluntariness of Use	0	1	1	4	4	100%
Perceptions of Internal Control	0	1	1	10	10	100%
Personal Innovativeness	0	1	1	3	3	100%
Personal Innovativeness In Information Technology	0	1	1	4	4	100%
Personal Network Exposure	0	1	1	1	1	100%
Plan Quality	0	1	1	4	4	100%
Power Distance	0	1	1	7	7	100%
Predicted Usage	0	1	1	4	4	100%
Prior Computer Experience	0	1	1	1	1	100%
Prior experience	0	1	1	1	1	100%
Prior Use	0	1	1	2	2	100%
Privacy	0	1	1	3	3	100%
Process Quality	0	1	1	7	7	100%

Constructo	N.º de Teorias/Modelos originais que consideram o constructo	N.º de Teorias/Modelos derivadas que consideram o constructo	N.º de Artigos Usados	N.º Mínimo de Indicadores utilizados	N.º Máximo de Indicadores utilizados	Percentagem média de Utilização dos Indicadores
Process Standardization	0	1	1	3	3	100%
Product Involvement	0	1	1	3	3	100%
Product Value	0	1	1	4	4	100%
Psychological Ownership of Information Technology	0	1	1	7	7	100%
Purchasing	0	1	1	1	1	100%
Purchasing Attitude	0	1	1	2	2	100%
Purchasing Controllability	0	1	1	2	2	100%
Purchasing Habit	0	1	1	2	2	100%
Purchasing Intentions	0	1	1	2	2	100%
Purchasing Self-Efficacy	0	1	1	2	2	100%
Purchasing Skills	0	1	1	4	4	100%
Purchasing Subjective Norm	0	1	1	2	2	100%
Relevance	0	2	2	2	4	60%
Reliability	0	1	1	3	3	100%
Replacement Versus Disenchantment Discontinuance	0	1	1	1	1	100%
Risk Awareness	0	1	1	3	3	100%
Satisfaction	0	4	4	3	4	25%
Satisfaction (Process Satisfaction)	0	1	1	5	5	100%
Satisfaction (Solution Satisfaction)	0	1	1	5	5	100%
Satisfaction with IS (Accessibility)	0	1	1	2	2	100%
Satisfaction with IS (Compatibility)	0	1	1	3	3	100%
Satisfaction with IS (Confusion)	0	1	1	2	2	100%
Satisfaction with IS (Ease of Use of Hardware and Software)	0	1	1	2	2	100%
Satisfaction with IS (Flexibility)	0	1	1	3	3	100%
Satisfaction with IS (Locatability)	0	1	1	3	3	100%
Satisfaction with IS (System Reliability)	0	1	1	3	3	100%
Satisfaction with IS support (Assistance)	0	1	1	2	2	100%
Satisfaction with IS support (Authorization)	0	1	1	3	3	100%

Constructo	N.º de Teorias/Modelos originais que consideram o constructo	N.º de Teorias/Modelos derivadas que consideram o constructo	N.º de Artigos Usados	N.º Mínimo de Indicadores utilizados	N.º Máximo de Indicadores utilizados	Percentagem média de Utilização dos Indicadores
Satisfaction with IS support (Training)	0	1	1	2	2	100%
Screen Design	0	1	1	2	2	100%
Screen Layout	0	1	1	2	2	100%
Secondary Sources' Influences	0	1	1	3	3	100%
Security Concern	0	1	1	2	2	100%
Seeker Knowledge Growth	0	1	1	4	4	100%
Self-Efficacy	0	7	8	2	4	17,65%
Self-Efficacy over Getting Information	0	1	1	2	2	100%
Sensitivity to Cost Factors	0	1	1	1	1	100%
Social Network	0	1	1	4	4	100%
Social Norm	0	1	1	3	3	100%
Social Presence	0	1	1	3	3	100%
Social Pressure	0	1	1	1	1	100%
Sources of Influence (External Versus Interpersonal)	0	1	1	1	1	100%
Status Gains	0	1	1	3	3	100%
Strategic Importance of IT	0	1	1	1	1	100%
Subjective Norm on Getting Information	0	1	1	2	2	100%
Superior Influence	0	2	2	3	3	50%
System Functionality	0	1	1	4	4	100%
System Interactivity	0	1	1	3	3	100%
System Quality (Accuracy)	0	1	1	2	2	100%
System Quality (Content)	0	1	1	4	4	100%
System Quality (Currency)	0	1	1	1	1	100%
System Quality (Format)	0	1	1	2	2	100%
System Quality (Functionality)	0	1	1	5	5	100%
System Quality (Meaning)	0	1	1	1	1	100%
System Quality (Right data)	0	1	1	1	1	100%
System Quality (Right Level of Detail)	0	1	1	1	1	100%
System Quality (Timeliness)	0	1	1	1	1	100%
System Reliability	0	1	1	2	2	100%
System Response	0	1	1	3	3	100%

Constructo	N.º de Teorias/Modelos originais que consideram o constructo	N.º de Teorias/Modelos derivadas que consideram o constructo	N.º de Artigos Usados	N.º Mínimo de Indicadores utilizados	N.º Máximo de Indicadores utilizados	Percentagem média de Utilização dos Indicadores
System Satisfaction	0	1	1	2	2	100%
System Use	0	1	1	3	3	100%
Task Characteristics (Interdependence)	0	1	1	1	1	100%
Task Characteristics (Knowledge Tacitness)	0	1	1	4	4	100%
Task Characteristics (Nonroutineness)	0	1	1	4	4	100%
Task Characteristics (Task Equivocality)	0	1	1	3	3	100%
Task Characteristics (Task Interdependence)	1	1	2	2	6	50%
Task Characteristics (Variety)	0	1	1	4	4	100%
Task-Technology Adaptation Behaviors	0	1	1	7	7	100%
Task-Technology Fit (Authorization)	0	1	1	2	2	100%
Task-Technology Fit (Compatibility)	0	1	1	3	3	100%
Task-Technology Fit (Ease of Use /Training /Training)	0	1	1	2	2	100%
Task-Technology Fit (Ease of Use /Training/Ease of Use of Hardware & Software)	0	1	1	2	2	100%
Task-Technology Fit (Locatability)	0	1	1	2	2	100%
Task-Technology Fit (Locatability/Meaning)	0	1	1	2	2	100%
Task-Technology Fit (Production Timeliness/Timeliness)	0	1	1	2	2	100%
Task-Technology Fit (Quality/Currency)	0	1	1	2	2	100%
Task-Technology Fit (Quality/Right Data)	0	1	1	2	2	100%
Task-Technology Fit (Quality/Right Level of Detail)	0	1	1	2	2	100%
Task-Technology Fit (Relationship with Users/Consulting)	0	1	1	2	2	100%

Constructo	N.º de Teorias/Modelos originais que consideram o constructo	N.º de Teorias/Modelos derivadas que consideram o constructo	N.º de Artigos Usados	N.º Mínimo de Indicadores utilizados	N.º Máximo de Indicadores utilizados	Percentagem média de Utilização dos Indicadores
Task-Technology Fit (Relationship with Users/IS Interest and Dedication)	0	1	1	2	2	100%
Task-Technology Fit (Relationship with Users/IS Performance)	0	1	1	1	1	100%
Task-Technology Fit (Relationship with Users/IS Understanding of Business)	0	1	1	2	2	100%
Task-Technology Fit (Relationship with Users/Responsiveness)	0	1	1	3	3	100%
Task-Technology Fit (Systems Reliability)	0	1	1	3	3	100%
Technological Novelty Seeking	0	1	1	3	3	100%
Technology Characteristics (Compatibility)	0	1	1	4	4	100%
Technology Characteristics (Output Quality/Completeness)	0	1	1	4	4	100%
Technology Characteristics (Output Quality/Relevancy)	0	1	1	4	4	100%
Technology Competence	0	2	2	3	3	50%
Technology Context (Technology Readiness)	0	1	1	4	4	100%
Technology Experience	0	1	1	4	4	100%
Technology Integration	0	1	1	2	2	100%
Technology Interaction Behaviors	0	1	1	8	8	100%
Technology Readiness	0	1	1	3	3	100%
Terminology	0	2	2	2	2	100%
The Intention to Adopt as a Decision Aid	0	1	1	3	3	100%
The Intention to Adopt as a Delegated Agent	0	1	1	2	2	100%
Time Resources	0	1	1	4	4	100%
Timeliness	0	2	3	2	3	33,33%
Top Management Belief	0	1	1	3	3	100%
Training	0	1	1	1	1	100%
Trait Imitation	0	1	1	4	4	100%
Trust	0	1	1	3	3	100%

Constructo	N.º de Teorias/Modelos originais que consideram o constructo	N.º de Teorias/Modelos derivadas que consideram o constructo	N.º de Artigos Usados	N.º Mínimo de Indicadores utilizados	N.º Máximo de Indicadores utilizados	Percentagem média de Utilização dos Indicadores
Trust – Getting Information	0	1	1	4	4	100%
Trust – Purchasing	0	1	1	6	6	100%
Trust in Government	0	1	1	4	4	100%
Trust in Government Web Site	0	1	1	3	3	100%
Trust in Technology	0	1	1	3	3	100%
Trust of State Government	0	1	1	4	4	100%
Trust of the Internet	0	1	1	3	3	100%
Turnover Intention	0	1	1	3	3	100%
Uncertainty	0	1	1	4	4	100%
Uncertainty Avoidance	0	2	2	4	6	62,5%
Usage Intensity	0	1	1	2	2	100%
Usage Intentions	0	1	1	2	2	100%
Usage Scope	0	1	1	2	2	100%
Usefulness	0	2	2	3	4	50%
User Involvement	0	1	1	7	7	100%
User Participation (Communication)	0	1	1	6	6	100%
User Participation (Hands-on)	0	1	1	4	4	100%
User Participation (Responsibility)	0	1	1	4	4	100%
User Satisfaction (Accuracy)	0	1	1	2	2	100%
User Satisfaction (Currency)	0	1	1	3	3	100%
User Satisfaction (Meaning)	0	1	1	3	3	100%
User Satisfaction (Presentation)	0	1	1	2	2	100%
User Satisfaction (The Right Data)	0	1	1	3	3	100%
User Satisfaction (The Right Level of Detail)	0	1	1	2	2	100%
User Trust	0	1	1	5	5	100%
Utilitarian Outcomes	0	1	1	4	4	100%
Utility for Children	0	1	1	3	3	100%
Visibility	0	4	4	2	4	25%
Web Vendor Reputation	0	1	1	1	1	100%
Website Navigability	0	1	1	4	4	100%

Para o desenvolvimento deste trabalho inicialmente foram analisadas **103 teorias/modelos** na área dos sistemas de informação, de modo a identificar, entre essas, quais teorias ou modelos abordavam a adoção de tecnologias e sistemas de informação. Após a analise realizada foram selecionadas e estudadas **11 teorias/modelos** (**DTPB, DeLone & McLean, IDT, MM, SCT, TTF, TAM, TOE, TPB, TRA, UTAUT**), estas foram as teorias e modelos selecionadas pois na revisão de literatura realizada foi possível observar que são as teorias e modelos mais utilizadas no contexto da adoção de tecnologias e sistemas de informação. Apesar de algumas delas não terem sido criadas com o propósito específico de estudar a adoção de TSI, revelaram-se bastante úteis e enquadradas na área em estudo.

Através da analise realizada, podemos afirmar que a teoria/modelo mais utilizada para o estudo da adoção de tecnologias e sistemas de informação é o *Technology Acceptance Model*, onde foi possível identificar **35 artigos** que têm este modelo como base do estudo. Surge de seguida a *Unified Theory of Acceptance and Use of Technology* (**11 artigos**), porém com uma ampla diferença.

As teorias ou modelos que apresentam o menor número de constructos são a *Technology-Organization-Environment Framework*, com **3 constructos** (*Technology, Organization*, *External Task Environment*) e a *Theory of Reasoned Action,* com **4 constructos** (*Attitude Towards the Behavior, Behavior, Behavioral Intention, Subjective Norm*), respetivamente.

O modelo que apresenta o maior número de constructos é o *Technology Acceptance Model,* com **23 constructos** (*Actual System Use, Attitude Towards Use, Behavioral Intention, Behavioral Intention to Use, Computer Anxiety, Computer Playfulness, Computer Self-efficacy, Experience, External Variables, Image, Intention to Use (Use), Job Relevance, Objective Usability, Output Quality, Perceived Ease of Use, Perceived Enjoyment, Perceived Usefulness, Result Demonstrability, Subjective Norm, Usage Behavior, Use Behavior, Voluntariness*). Importa referir que o número apresentado é referente à junção dos constructos dos modelos TAM, TAM2 e TAM3. Considerando apenas o **TAM3** podemos verificar que este é constituído por **17 constructos**, destacando-se assim como o modelo que apresenta o maior número de constructos.

No que diz respeito aos constructos que constituem as teorias e modelos estudados, foi possível identificar **419 constructos**, dos quais **71** são originais das teorias e modelos estudados e **348** tratam-se de constructos identificados nos artigos analisados, sendo estes constructos sugeridos pelos autores dos artigos, onde foram utilizados para complementar as teorias ou modelos conforme o seu ponto de vista.

Quanto às teorias ou modelos onde são sugeridos um maior número de constructos, a *Technology Acceptance Model* conta com **101 constructos** sugeridos, posteriormente surge o *Task-Technology Fit*

com **88 constructos** sugeridos. De salientar que este número pode ser influenciado pelo número de artigos analisados (quantos mais artigos forem analisados maior é a probabilidade de existir mais constructos sugeridos).

Como referido anteriormente, por vezes os autores dos artigos (estudos) analisados apresentam diversas modificações às teorias e modelos base de adoção de tecnologias e sistemas de informação e, conforme a necessidade de cada estudo, sugerem novos constructos que acham oportunos para a investigação. Com isto, tendo em conta o número de constructos sugeridos e o número de teorias e modelos existentes, conseguimos observar que em média são sugeridos **32 constructos** por teoria/modelo (348 constructos/ 11 teorias = 32 constructos). Através do número de constructos sugeridos e o número de artigos analisados, conseguimos determinar que em média são sugeridos **4 constructos** adicionais em cada artigo (348 constructos/ 86 artigos = 4 constructos).

Após analisar os dados recolhidos foi possível também percecionar que os constructos que surgem num maior número de teorias e modelos são a ***Self-Efficacy***, que surge **7** vezes (em teorias/modelos derivadas), a ***Ease of Use***, que surge **6** vezes (em teorias/modelos derivadas), a ***Perceived Ease of Use***, que surge **6** vezes (**MM**, **TAM** e em teorias/modelos derivados), a ***Perceived Usefulness***, que surge **6** vezes (**MM**, **TAM** e em teorias/modelos derivados) e a ***Behavioral Intention*** que surge **4** *vezes* (**DTPB**, **TAM**, **TRA**, **UTAUT**).

No que diz respeito aos constructos que surgem mais vezes em artigos podemos constatar que se trata da ***Perceived Ease of Use*** surgindo em **43 artigos.** Seguidamente surge a ***Perceived Usefulness*** em **41 artigos.**

O número mínimo de indicadores por constructo identificado foi **1**, este mínimo foi encontrado em diversos constructos. Não se tratando de algo isolado, encontra-se em constructos originais e também em constructos sugeridos. Podemos observar este facto por exemplo nos constructos ***Subjective Norm***, ***Task Importance***, ***Usage Intentions*** e ***Use***.

No sentido oposto, o número máximo de indicadores por constructo identificado, foi **16 indicadores**, num constructo sugerido, nomeadamente a ***Cognitive Absorption***. Quanto ao constructo original que contém mais indicadores, verificou-se ser o ***Computer Self-Efficacy***, com **12 indicadores**.

Analisando todos os constructos e indicadores propostos, podemos concluir que em média foram identificados **4 indicadores** por constructo.

De referir que em alguns casos, determinados constructos, após a analise realizada aos artigos encontrados, verificou-se que esses constructos não foram caracterizados em termos de indicadores. Tal foi possível de observar nos constructos ***Actual System Use, Behavior, Experience, External Task***

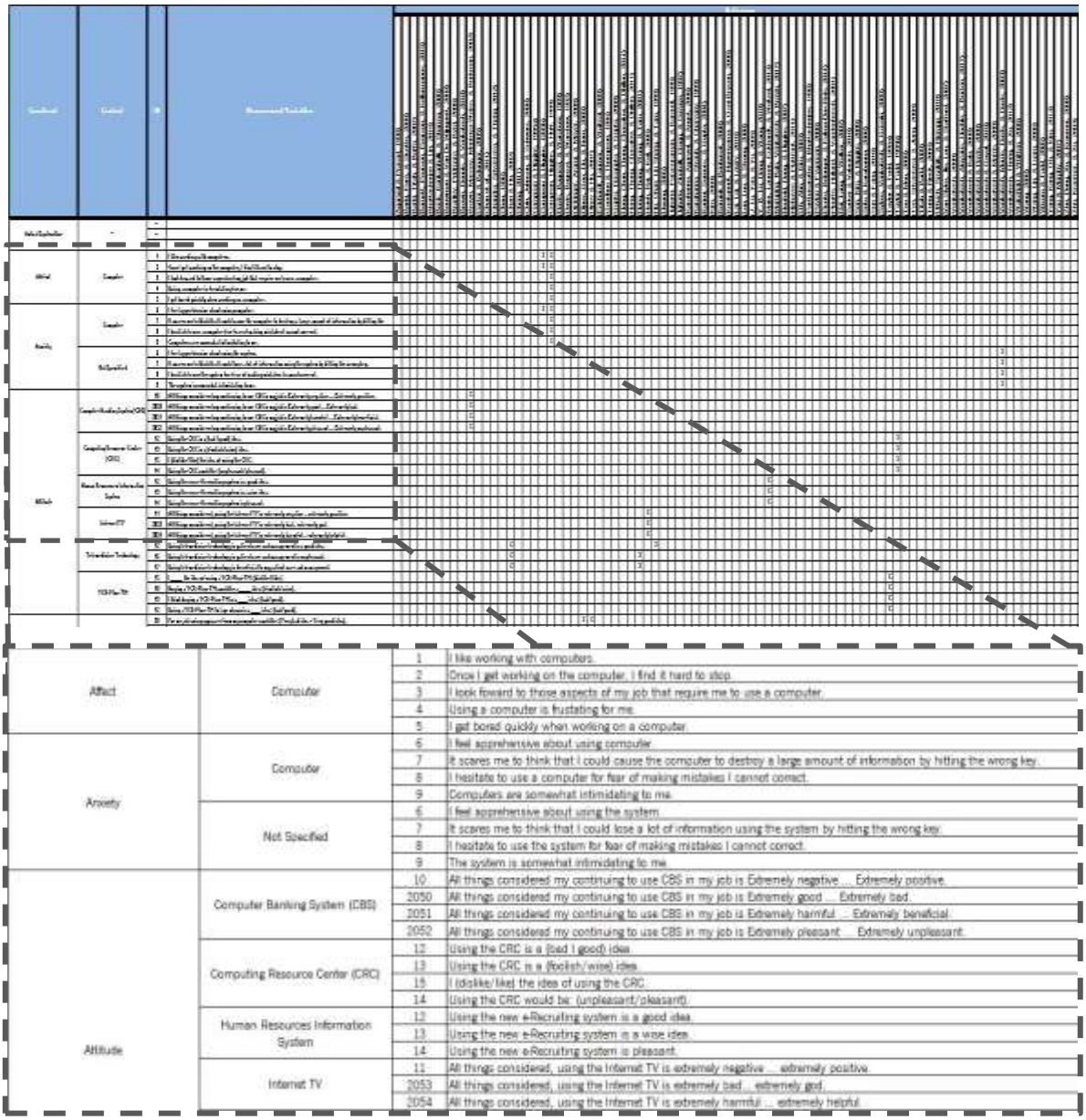
Environment, External Variables, Individual Characteristics, Net Benefits, Objective Usability, Observability, Organization e *Technology,* podemos constatar que em alguns casos isso pode acontecer devido a se tratarem de constructos latentes.

Existem **1861 indicadores** que são referidos apenas uma vez, apesar de alguns serem muito similares, como por exemplo, "*All things considered, my continuing to use the <System> in my job is Extremely negative ... Extremely positive.*" e "*All things considered, using the <System> is: extremely negative ... extremely positive.*" ou ainda "*If I were to adopt the <System>, it would fit my work style.*" e "*If I were to adopt the <System>, it would fit well with the way I like to work.*"

Tendo em consideração o número de indicadores identificados e a estabilidade que estes apresentam, mais concretamente o número de vezes que estes foram utilizados em estudos, podemos afirmar que os constructos que se encontram melhor definidos são a *Perceived Ease of Use* e a **Perceived Usefulness**. Estes dois constructos apresentam **11 indicadores** (cada), que surgem em cinco ou mais artigos. Dentro desses indicadores existem casos que surgem em **17 artigos** na *Perceived Ease of Use* e em **12 artigos** na *Perceived Usefulness*. Aplicar o critério de considerar apenas os indicadores que surgissem em cinco ou mais artigos, ajudou a obter os indicadores que apresentavam uma base sólida e excluir os que surgem ocasionalmente.

No total foram identificados **63 contextos** diferentes, contextos estes que surgem dos diversos artigos estudados, onde as teorias e modelos foram aplicados. Os contextos mais estudados foram o uso do **Computador** com **4 artigos** relacionados. De seguida, surge a adoção de *e-Government* com **3 artigos** e a adoção de *Enterprise Resource Planning (ERP)* também com **3 artigos**.

No contexto desta dissertação foi realizada uma tabela que consiste na junção de todas as tabelas realizadas e apresentadas na caracterização dos constructos e indicadores em apêndice, relativas aos indicadores por teorias e modelos, onde se pode visualizar toda a informação existente sobre um determinado constructo. Contudo foi decidido não a colocar na dissertação, pois é demasiado extensa e acrescentaria cerca de 170 páginas ao documento e a sua utilização não seria viável. Não obstante, a tabela em questão demonstrou ter um papel fundamental no desenvolvimento do trabalho. Podemos visualizar uma pequena amostra da tabela realizada, na Figura 17 e Figura 18.



Affect	Computer	1	I like working with computers.
		2	Once I get working on the computer, I find it hard to stop.
		3	I look foward to those aspects of my job that require me to use a computer.
		4	Using a computer is frustating for me.
		5	I get bored quickly when working on a computer.
Anxiety	Computer	6	I feel apprehensive about using computer.
		7	It scares me to think that I could cause the computer to destroy a large amount of information by hitting the wrong key.
		8	I hesitate to use a computer for fear of making mistakes I cannot correct.
		9	Computers are somewhat intimidating to me.
	Not Specified	6	I feel apprehensive about using the system.
		7	It scares me to think that I could lose a lot of information using the system by hitting the wrong key.
		8	I hesitate to use the system for fear of making mistakes I cannot correct.
		9	The system is somewhat intimidating to me.
Attitude	Computer Banking System (CBS)	10	All things considered my continuing to use CBS in my job is Extremely negative ... Extremely positive.
		2050	All things considered my continuing to use CBS in my job is Extremely good ... Extremely bad.
		2051	All things considered my continuing to use CBS in my job is Extremely harmful ... Extremely beneficial.
		2052	All things considered my continuing to use CBS in my job is Extremely pleasant ... Extremely unpleasant.
	Computing Resource Center (CRC)	12	Using the CRC is a (bad / good) idea.
		13	Using the CRC is a (foolish/wise) idea.
		15	I (dislike/like) the idea of using the CRC.
		14	Using the CRC would be: (unpleasant/pleasant).
	Human Resources Information System	12	Using the new e-Recruiting system is a good idea.
		13	Using the new e-Recruiting system is a wise idea.
		14	Using the new e-Recruiting system is pleasant.
	Internet TV	11	All things considered, using the Internet TV is extremely negative ... extremely positive.
		2053	All things considered, using the Internet TV is extremely bad ... extremely good.
		2054	All things considered, using the Internet TV is extremely harmful ... extremely helpful.

Figura 17 - Junção de todos os constructos e indicadores identificados

Construct	Content	ID	Measurement Variables	(Cheng, 2011)	(Chin, Johnson, & Schwarz, 2008)	(Compeau & Higgins, 1995a)	(Compeau & Higgins, 1995b)	(Compeau, Higgins, & Huff, 1999)	(Davis, Bagozzi, & Warshaw, 1989)	(Davis, Bagozzi, & Warshaw, 1992)	(Dishinger, Arami, & Meyer, 2008)	(Dinev, Goo, Hu, & Nam, 2009)	(Dinev & Hu, 2007)	(Eckhardt, Laumer, & Weitzel, 2009)	(Goodhue & Thompson, 1995)	(Gupta, Dasgupta, & Gupta, 2008)	(Hong, Chan, Thong, Chasalow, & T
Computer Self-efficacy	Digital Library	144	I could complete the job using the software package if I could call someone for help if I got stuck.														X
		145	I could complete the job using the software package if someone else had helped me get started.														X
		146	I could complete the job using the software package if I had a lot of time to complete the job for which the software was provided.														X
		147	I could complete the job using the software package if I had just the built-in help facility for assistance.														X
		148	I could complete the job using the software package if someone showed me how to do it first.														X
	e-Learning System	151	I could complete my learning activities using the e-learning system if I had never used a system like it before.	X													
		142	I could complete my learning activities using the e-learning system if I had only the system manuals for	X													
		143	I could complete my learning activities using the e-learning system if I had seen someone else using it before trying it myself.	X													
	Not Specified	141	I could complete the job using a software package if there was no one around to tell me what to do as I go.														
		147	I could complete the job using a software package if I had just the built-in help facility for assistance.														
		148	I could complete the job using a software package if someone showed me how to do it first.														
		149	I could complete the job using a software package if I had used similar packages before this one to do the														
	Software Package	150	I could complete the job using the software package if there was someone giving me step by step instructions.			X	X										
		141	I could complete the job using the software package if there was no one around to tell me what to do as I go.			X	X	X									
		142	I could complete the job using the software package if I had only the software manuals for reference.			X	X	X									
		143	I could complete the job using the software package if I had seen someone else using it before trying it			X	X	X									
		144	I could complete the job using the software package if I could call someone for help if I got stuck.			X	X	X									

Figura 18 - Junção de todos os constructos e indicadores identificados (continuação)

Com alternativa, para permitir o uso eficiente e eficaz da informação criada foi desenvolvida uma plataforma Web, (*ISIND – Information Systems Models – Construct Indicators),* relacionada com o trabalho desenvolvido, onde é possível consultar toda a informação existente sobre as teorias e modelos estudados, constructos constituintes e sugeridos dessas teorias/modelos pelos diversos autores dos estudos analisado e respetivas variáveis de medida (indicadores). Podemos visualizar alguns prints da plataforma desenvolvida, na Figura 19, Figura 20 e Figura 21. Este Website pode ainda ser consultado através do URL http://www.sciencesphere.org/isresearchindicators/. O Website foi desenvolvido por João Varajão tendo por base os dados resultantes desta dissertação, com vista a facilitar a consulta dos resultados por parte das diversas comunidades interessadas na adoção de tecnologias e sistemas de informação, incluindo, docentes, investigadores e profissionais da área.

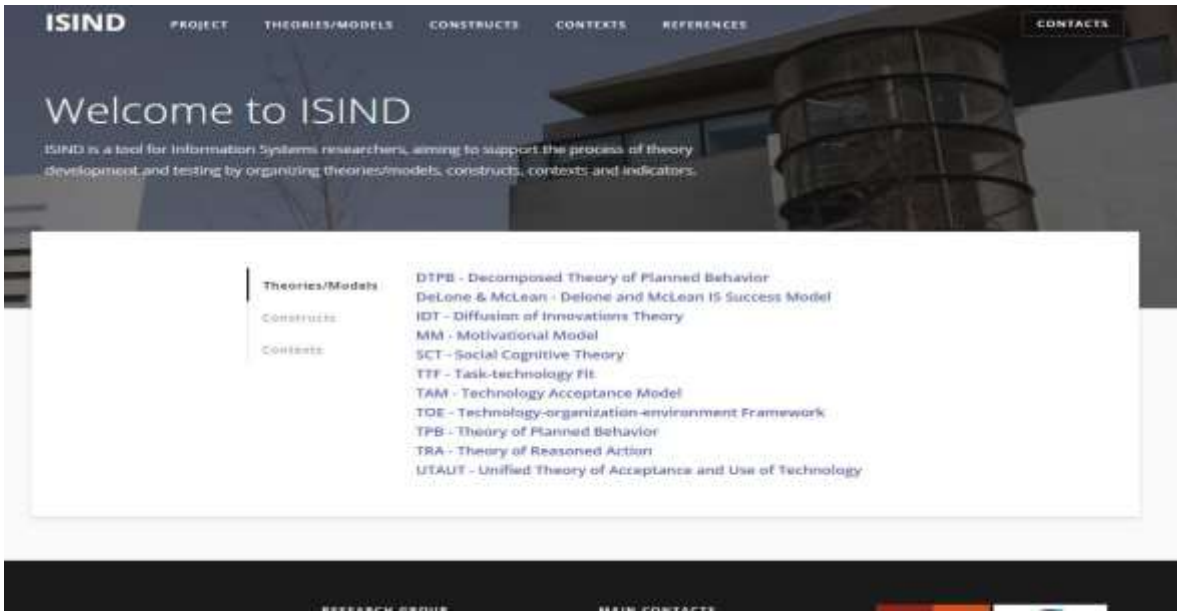


Figura 19 - Homepage do website

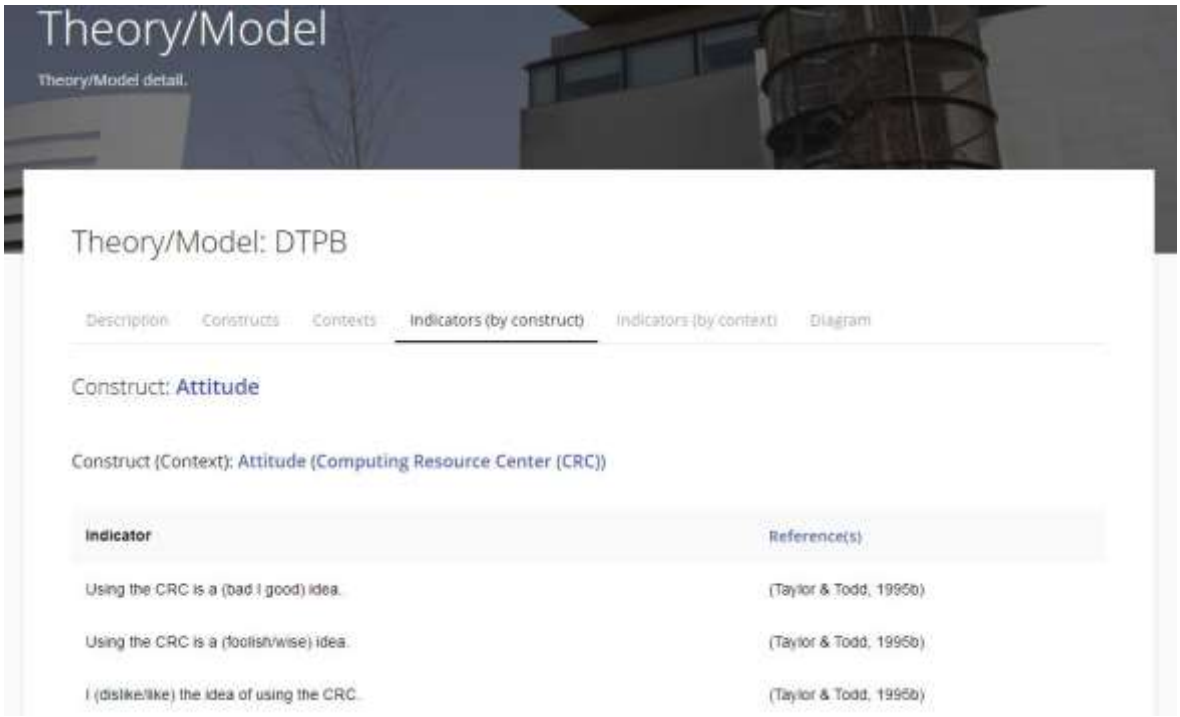


Figura 20 - Página da Teoria/Modelo no separador "Indicators (by construct)"

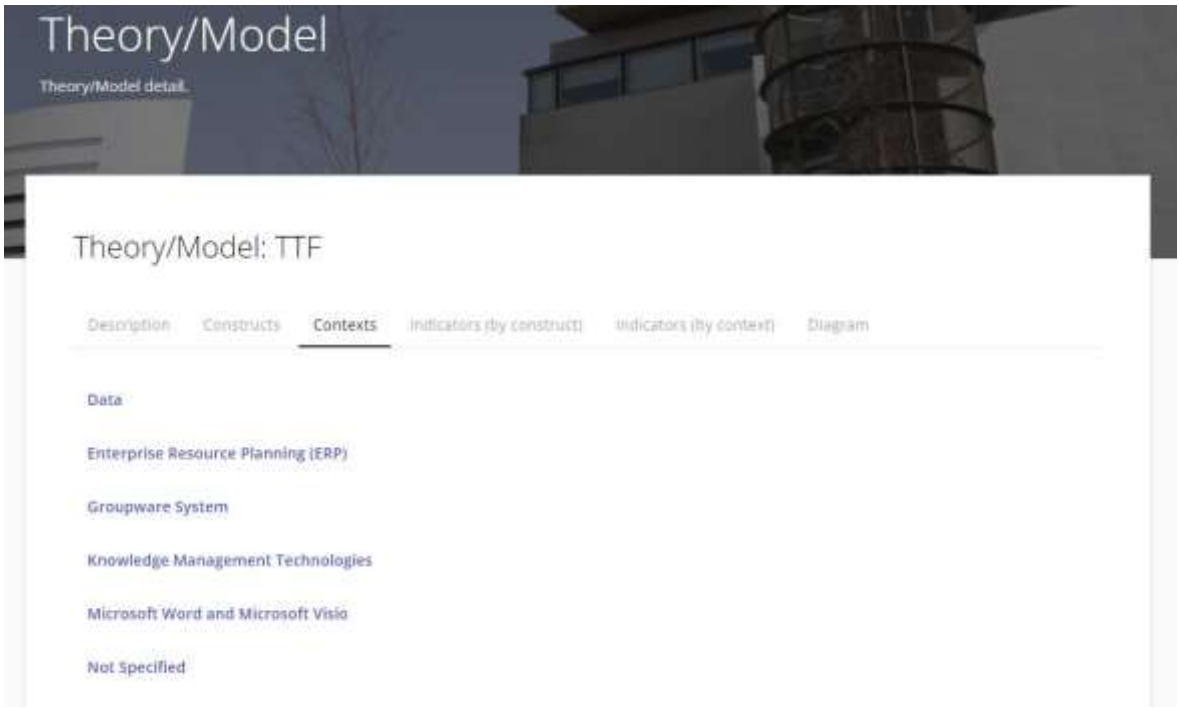


Figura 21 - Página da Teoria/Modelo no separador "Contexts"

6. Conclusão

O objetivo principal desta dissertação foi a criação de um referencial de caraterização dos vários aspetos da adoção de TSI (qualidade da informação, qualidade do serviço, qualidade dos sistemas, satisfação com o uso dos sistemas, resultados, etc.) em termos de indicadores relevantes. Com este trabalho, procura-se contribuir para que a adoção de TSI seja melhor compreendida e facilitada, conduzindo a um maior nível de sucesso em empreendimentos deste tipo.

Foram definidos como objetivos subjacentes a caraterização da adoção de TSI; a identificação e caracterização de modelos e teorias de adoção de TSI; a identificação dos diversos aspetos relevantes para a adoção de TSI; a identificação de estudos que definam os constructos presentes nos modelos e teorias; e a caraterização detalhada dos diversos aspetos relevantes para a adoção de TSI, em termos de indicadores (ou variáveis de medida).

O desenvolvimento da dissertação iniciou-se com a realização de uma pesquisa de literatura com o intuito de identificar os modelos e teorias existentes relacionados com a adoção de tecnologias e sistemas de informação. Seguidamente, foi realizada outra pesquisa, esta já concentrada nos modelos e teorias identificados na etapa anterior, com vista a identificar referências de qualidade sobre os modelos/teorias. Já com as informações recolhidas nas etapas anteriores, foram aplicados determinados critérios de modo a refinar o número de modelos/teorias.

Para uma melhor contextualização do problema foram definidos os conceitos de tecnologias da informação, sistemas de informação, e efetuada uma abordagem mais geral sobre adoção de TSI.

Após os modelos e teorias terem sido selecionados, estes foram descritos de um modo geral, de modo a se esclarecer a sua origem, o que pretendem transmitir e os constructos que os constituem, fornecendo assim uma visão abrangente dos modelos e teorias que focam a adoção de TSI.

Foi também efetuado o levantamento de todos os constructos que constituem os modelos ou teorias e foi realizado o cruzamento desses constructos com os modelos e teorias, de forma a perceber os aspetos em comum entre modelos/teorias. Na análise elaborada ao cruzamento dos constructos foi possível verificar que determinados constructos se repetem em diversos modelos/teorias, devendo-se ao fato da comum proveniência de alguns dos modelos/teorias, visto que existem modelos/teorias originários de adaptações ou extensões de outros modelos/teorias também estudados, ou baseados num antecedente em comum. Foi também possível concluir que existem constructos que tem designações similares, e o mesmo significado, porém conforme variam os autores são designados de forma diferente. Verificou-se, ainda, que por vezes os modelos/teorias provenientes de extensões, utilizam diferentes designações para constructos já existentes.

Para o desenvolvimento deste trabalho foram analisadas 103 teorias/modelos na área dos sistemas de informação, das quais foram selecionadas e estudadas 11 teorias/modelos que estavam relacionadas com a adoção de TSI. Foram analisados ainda cerca de 580 artigos, com o intuito de identificar se estes continham os indicadores pretendidos.

No que diz respeito aos constructos que constituem as teorias e modelos estudados, foi possível identificar 419 constructos, dos quais 71 são originais das teorias e modelos estudados e 348 são sugeridos.

Conseguimos reter que em média são sugeridos 32 constructos por teoria/modelo, e que em média são sugeridos 4 constructos adicionais em cada artigo.

Os constructos que surgem num maior número de teorias e modelos (originais e derivadas) são a *Self-Efficacy*, que surge 7 vezes, a *Ease of Use*, que surge 6 vezes, a *Perceived Ease of Use*, que surge 6 vezes, a *Perceived Usefulness*, que surge 6 vezes e a *Behavioral Intention* que surge 4 vezes.

Os contructos mais utilizados são a *Perceived Ease of Use* (43 artigos) e a *Perceived Usefulness* (41 artigos). São também os constructos melhor definidos.

O número mínimo de indicadores por constructo identificado foi 1, em constructos como, *Subjective Norm*, *Task Importance*, *Usage Intentions* e *Use*. Já o número máximo de indicadores por constructos identificado, foi 16 indicadores, na *Cognitive Absorption* (constructo sugerido) e o *Computer Self-Efficacy* (constructo original), com 12 indicadores.

Analisando todos os constructos e indicadores propostos, podemos concluir que em média foram identificados 4 indicadores por constructo.

Os constructos, *Actual System Use, Behavior, Experience, External Task Environment, External Variables, Individual Characteristics, Net Benefits, Objective Usability, Observability, Organization* e *Technology* não apresentam indicadores (não identificados nos estudos).

No total foram identificados 63 contextos diferentes, onde os contextos mais estudados foram o uso do Computador (4 artigos), a adoção de *e-Government* (3 artigos) e a adoção de *Enterprise Resource Planning (ERP)* (3 artigos).

Através do trabalho realizado conseguimos concluir que existe um conjunto de constructos que são repetidamente propostos pelos autores.

Concluimos também que raramente as teorias e modelos são aplicadas na sua forma original, surgindo diversas vezes constructos sugeridos pelos autores dos estudos.

Com o estudo realizado aos indicadores identificados, nota-se que existe uma grande instabilidade na caracterização dos constructos.

De referir que 1861 indicadores identificados são referidos apenas uma vez, apesar de alguns serem muito similares, como por exemplo, "*All things considered my continuing to use the <System> in my job is Extremely negative ... Extremely positive.*" e "*All things considered, using the <System> is: extremely negative ... extremely positive.*" ou ainda "*If I were to adopt the <System>, it would fit my work style.*" e "*If I were to adopt the <System>, it would fit well with the way I like to work.*"

Com o desenvolvimento da dissertação é possível perceber que existe um grande número de artigos em que são referidas as teorias/modelos, mas que não definem os indicadores relativos aos constructos constituintes dessas mesmas teorias e modelos. Surge então deste trabalho a recomendação de que os autores definam os indicadores utilizados nos seus trabalhos e que os revisores/editores dos trabalhos assim o exijam.

São vários os contributos perspectivados com esta dissertação para a teoria e para a prática. Relativamente aos profissionais de TSI, torna-se possivel obter uma noção dos diversos aspectos importantes para a melhoria dos processos de adoção de TSI. No que respeita aos investigadores, estes encontram assim informação organizada sobre as teorias/modelos e constructos relacionados com a adoção de TSI, indicando os indicadores mais estáveis para a caracterização dos constructos. Identificam-se também os contextos em que as teorias e modelos foram utilizados.

Como trabalho futuro propõe-se a realização deste estudo periodicamente de modo aos resultados se manterem atualizados.

Finalmente, de referir que neste momento estão em fase de finalização dois artigos que serão submetidos a periódicos científicos da área. No primeiro artigo, cujo o título provisório é "IT/IS adoption theories and models in pratice – a quick snapshot", o contributo do presente trabalho diz respeito à revisão de literatura dos modelos utilizados. O segundo artigo resulta diretamente do trabalho realizado nesta dissertação e visa apresentar os principais resultados obtidos. Tem por titulo provisório "A review of theories, constructs and indicators in IT adoption research".

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APÊNDICE - Constructos e Indicadores de Modelos e Teorias da Adoção de Tecnologias e Sistemas de Informação

A - Constructos e Indicadores da Decomposed Theory of Planned Behavior

A presente tabela contém todos os constructos e indicadores identificados relacionados com a *Decomposed Theory of Planned Behavior.*

Constructo	Contexto	Indicadores	Escala	Referências
Attitude	Computing Resource Center (CRC)	Using the CRC is a (bad I good) idea.	Scale 0 to 7	(Taylor & Todd, 1995c)
		Using the CRC is a (foolish/wise) idea.	Scale 0 to 7	(Taylor & Todd, 1995c)
		I (dislike/like) the idea of using the CRC.	Scale 0 to 7	(Taylor & Todd, 1995c)
		Using the CRC would be: (unpleasant/pleasant).	Scale 0 to 7	(Taylor & Todd, 1995c)
	Internet TV	All things considered, using the Internet TV is extremely negative ... extremely positive.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		All things considered, using the Internet TV is extremely bad... extremely god.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		All things considered, using the Internet TV is extremely harmful ... extremely helpful.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
	VCR-Plus+TM	I _____ the idea of using a VCR-Plus+TM: (dislike/like).	Scale -3 to +3	(Taylor & Todd, 1995b)
		Buying a VCR-Plus+TM would be a _____ idea: (foolish/wise).	Scale -3 to +3	(Taylor & Todd, 1995b)
		I think buying a VCR-Plus+TM is a _____ idea: (bad/good).	Scale -3 to +3	(Taylor & Todd, 1995b)
		Using a VCR-Plus+TM to tape shows is a _____ idea: (bad/good).	Scale -3 to +3	(Taylor & Todd, 1995b)
Behavioral Intention	Computing Resource Center (CRC)	I intend to use the CRC this term.	Scale 0 to 7	(Taylor & Todd, 1995c)
		I intend to use the CRC to print projects, papers or assignments this term.	Scale 0 to 7	(Taylor & Todd, 1995c)
		I intend to use the CRC frequently this term.	Scale 0 to 7	(Taylor & Todd, 1995c)
	VCR-Plus+TM	I intend to buy a VCR-Plus+ TM within the next 3 months: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		I plan to use the VCR-Plus+TM to tape all my shows: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)

Constructo	Contexto	Indicadores	Escala	Referências
Compatibility	Computing Resource Center (CRC)	Using the CRC will fit well with the way I work.	Scale 0 to 7	(Taylor & Todd, 1995c)
		A service that fits well with the way I work is: (bad/good).	Scale 0 to 7	(Taylor & Todd, 1995c)
		Using the CRC will fit into my workstyle.	Scale 0 to 7	(Taylor & Todd, 1995c)
		A service that fits into my workstyle is: (bad/good).	Scale 0 to 7	(Taylor & Todd, 1995c)
		The setup of the CRC will be compatible with the way I work.	Scale 0 to 7	(Taylor & Todd, 1995c)
		A service that is compatible with the way I work is: (bad/good).	Scale 0 to 7	(Taylor & Todd, 1995c)
Complexity	VCR-Plus+TM	The VCR-Plus + TM will be difficult to learn: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		A product that is difficult to learn is: (bad/good).	Scale -3 to +3	(Taylor & Todd, 1995b)
		The VCR-Plus +TM will be easy to operate: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		A product that is easy to operate is: (bad/good).	Scale -3 to +3	(Taylor & Todd, 1995b)
		The VCR-Plus +TM will be frustrating to learn: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		A product that is frustrating to learn is: (bad/good).	Scale -3 to +3	(Taylor & Todd, 1995b)
Efficacy	Computing Resource Center (CRC)	I would feel comfortable using the CRC on my own.	Scale 0 to 7	(Taylor & Todd, 1995c)
		For me, feeling comfortable using a service on my own is: (unimportant/ important).	Scale 0 to 7	(Taylor & Todd, 1995c)
		If I wanted to, I could easily operate any of the equipment in the CRC on my own.	Scale 0 to 7	(Taylor & Todd, 1995c)
		For me, being able to easily operate equipment on my own is: (unimportant/ important).	Scale 0 to 7	(Taylor & Todd, 1995c)
		I would be able to use the equipment in the CRC even if there was no one around to show me how to use it.	Scale 0 to 7	(Taylor & Todd, 1995c)
		For me, being able to use equipment even if there is no one around to show me how to use it is: (unimportant/ important).	Scale 0 to 7	(Taylor & Todd, 1995c)
	VCR-Plus+TM	If I wanted to, I could easily operate a VCR-Plus+TM on my own: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)

Constructo	Contexto	Indicadores	Escala	Referências
Efficacy (cont.)	VCR-Plus+TM (cont.)	Being able to operate a product on my own is: (unimportant/important).	Scale -3 to +3	(Taylor & Todd, 1995b)
		I know enough to buy a VCR-Plus+TM on my own: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		Knowing enough to buy a product is: (unimportant/ important).	Scale -3 to +3	(Taylor & Todd, 1995b)
		I would feel comfortable buying a VCR-Plus+TM on my own: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		Being comfortable buying a product on my own is: (unimportant/important).	Scale -3 to +3	(Taylor & Todd, 1995b)
		I would be able to use the VCR-Plus+TM even if there is no one around to tell me how to use it: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		Being able to use a product even if no one is around to tell me how to use it is: (unimportant/important).	Scale -3 to +3	(Taylor & Todd, 1995b)
Facilitating Conditions	VCR-Plus+TM	I have the use of a VCR whenever I want it: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		Having the use of a VCR whenever I want it is: (unimportant/important).	Scale -3 to +3	(Taylor & Todd, 1995b)
		The VCR-Plus+TM would work well with my brand of VCR: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		Having a product that works with my existing product is: (unimportant/ important).	Scale -3 to +3	(Taylor & Todd, 1995b)
		I have the time and money needed to buy a VCR-Plus+TM: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		Having the time and money needed to buy a product is: (unimportant/ important).	Scale -3 to +3	(Taylor & Todd, 1995b)
		I have the time needed to set up the VCRPlus+TM: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		Having the time needed to set up a product is: (unimportant/important).	Scale -3 to +3	(Taylor & Todd, 1995b)
		I have the time to use the VCR-Plus+TM: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		Having the time to use a product is: (unimportant/ important).	Scale -3 to +3	(Taylor & Todd, 1995b)
Normative Influences	VCR-Plus+TM	My family would think that I should buy a VCR-Plus+TM: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		My family would think that I should use a VCR-Plus+TM to tape shows: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)

Constructo	Contexto	Indicadores	Escala	Referências
Normative Influences (cont.)	VCR-Plus+TM (cont.)	Generally speaking, I want to do what my family thinks I should do: (unlikely/likely).	Scale 1 to 7	(Taylor & Todd, 1995b)
		My friends would think that I should buy a VCR-Plus+TM: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		My friends would think that I should use a VCR-Plus+TM to tape shows: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		Generally speaking, I want to do what my friends think I should do: (unlikely/likely).	Scale 1 to 7	(Taylor & Todd, 1995b)
Perceived Behavioral Control	Computing Resource Center (CRC)	I would be able to use the CRC.	Scale 0 to 7	(Taylor & Todd, 1995c)
		Using the CRC is entirely within my control.	Scale 0 to 7	(Taylor & Todd, 1995c)
		I have the resources and the knowledge and the ability to make use of the CRC.	Scale 0 to 7	(Taylor & Todd, 1995c)
	Internet TV	I have the resources, knowledge, and ability to use the Internet TV.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		I can use the Internet TV.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		Using the Internet TV is entirely within my control.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
	VCR-Plus+TM	I have the resources, knowledge and ability to buy a VCR-Plus+TM: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		I have the resources, knowledge and ability to operate a VCR-Plus+TM: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		I would be able to buy a VCR-Plus+TM: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		I would be able to operate a VCR-Plus+TM: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
Relative Advantage	VCR-Plus+TM	The VCR-Plus+TM would allow me to tape more shows: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		Being able to tape more shows is: (bad/good).	Scale -3 to +3	(Taylor & Todd, 1995b)
		The advantages of VCR-Plus+TM outweigh the disadvantages: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		A product that has more advantages than disadvantages is: (bad/good).	Scale -3 to +3	(Taylor & Todd, 1995b)
		The VCR-Plus+TM will not offer me any new benefits: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)

Constructo	Contexto	Indicadores	Escala	Referências
Relative Advantage (cont.)	VCR-Plus+TM (cont.)	A product that will not offer me any new benefits is: (bad/good).	Scale -3 to +3	(Taylor & Todd, 1995b)
		The VCR-Plus+TM will fit well with how I use my VCR (for example, taping shows, watching movies, taping music): (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		A product that fits well with how I use my VCR is: (bad/good).	Scale -3 to +3	(Taylor & Todd, 1995b)
		The VCR-Plus +TM will fit well with my lifestyle: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		A product that fits well with my lifestyle is: (bad/good).	Scale -3 to +3	(Taylor & Todd, 1995b)
Subjective Norm	Computing Resource Center (CRC)	People who influence my behavior would think that I should use the CRC.	Scale 0 to 7	(Taylor & Todd, 1995c)
		People who are important to me would think that I should use the CRC.	Scale 0 to 7	(Taylor & Todd, 1995c)
	Internet TV	People who influence me think that I should use the Internet TV.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		People who are important to me think that I should use the Internet TV.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
	VCR-Plus+TM	Most people who are important to me would think that I should buy a VCR-Plus+TM: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		Most people who are important to me would think that I should use a VCR-Plus+TM to tape shows: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		The people who influence my decisions would think that I should buy a VCR-Plus+TM: (unlikely/likely).	Scale -3 to +3	(Taylor & Todd, 1995b)
		The people who influence my decisions would think that I should use the VCR-Plus.	Scale -3 to +3	(Taylor & Todd, 1995b)
Availability	Internet TV	It is difficult for me to use the Internet TV when other members in my household want to watch TV.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		Many people in my household want to use Internet TV, and I don't always get to use it.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
Behavioral Intention for Continued Use	Internet TV	I intend to continue using the Internet TV during the next three months.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		I intend to continue using the Internet TV for email, browsing, or searching during the next three months.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		I intend to continue using the Internet TV frequently during the next three months.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)

Constructo	Contexto	Indicadores	Escala	Referências
Collaborative Norms	Electronic Knowledge Repository (EKR)	Norm of cooperation.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Norm of collaboration.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Knowledge sharing is important.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Knowledge sharing is strongly encouraged.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
Ease of Use	Computing Resource Center (CRC)	Instructions for using equipment in the CRC will be hard to follow.	Scale 0 to 7	(Taylor & Todd, 1995c)
		Instructions that are hard to follow are: (bad/good).	Scale 0 to 7	(Taylor & Todd, 1995c)
		It will be difficult to learn how to use the CRC.	Scale 0 to 7	(Taylor & Todd, 1995c)
		A service that is difficult to learn is: (bad/good).	Scale 0 to 7	(Taylor & Todd, 1995c)
		It will be easy to operate the equipment in the CRC.	Scale 0 to 7	(Taylor & Todd, 1995c)
		A service with equipment that is easy to operate is: (bad/good).	Scale 0 to 7	(Taylor & Todd, 1995c)
Facilitating Conditions (Resources)	Computing Resource Center (CRC)	There will not be enough computers for everyone to use in the CRC.	Scale 0 to 7	(Taylor & Todd, 1995c)
		For me, having enough computers for everyone to use is: (unimportant/ important).	Scale 0 to 7	(Taylor & Todd, 1995c)
		Printing in the CRC will be too expensive.	Scale 0 to 7	(Taylor & Todd, 1995c)
		For me, being able to print for a low price is: (unimportant/important).	Scale 0 to 7	(Taylor & Todd, 1995c)
		I won't be able to use a computer in the CRC when I need it.	Scale 0 to 7	(Taylor & Todd, 1995c)
		For me, being able to use a computer when I need it is: (unimportant/ important).	Scale 0 to 7	(Taylor & Todd, 1995c)
	Electronic Knowledge Repository (EKR)	Limited time to use EKR.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Little spare time to learn about EKR.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Facilitating Conditions (Resources) (cont.)	Electronic Knowledge Repository (EKR) (cont.)	Find time between work to use EKR.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Overextend to get work done on time.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		In a hurry when using EKR.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Pressed for time when using EKR.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Use of EKR encouraged by management.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Management values learning of EKR.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Management values learning of EKR as investment.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Training to use EKR is provided.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Training resources are useful.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Training materials are available.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
Facilitating Conditions (Technology)	Computing Resource Center (CRC)	The equipment (printers, computers, etc) in the CRC are not compatible with the other computers I use.	Scale 0 to 7	(Taylor & Todd, 1995c)
		For me, a service having equipment that is compatible with the other equipment I use is: (unimportant/important).	Scale 0 to 7	(Taylor & Todd, 1995c)
		The software in the CRC is not compatible with the software I use.	Scale 0 to 7	(Taylor & Todd, 1995c)
		For me, a service having software that is compatible with the software I use is: (unimportant/important).	Scale 0 to 7	(Taylor & Todd, 1995c)
		I will have trouble reading my disks in the CRC.	Scale 0 to 7	(Taylor & Todd, 1995c)
		For me, whether or not I have trouble reading my disks is: (unimportant/ important).	Scale 0 to 7	(Taylor & Todd, 1995c)

Constructo	Contexto	Indicadores	Escala	Referências
Family, Relatives, Friends, and Peer Influence	Internet TV	My family thinks that I should use the Internet TV.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		My relatives think that I should use the Internet TV.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		My friends think that I sho\uld use the Internet TV.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		People I work with think that I should use the Internet TV	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
Future Obligation	Electronic Knowledge Repository (EKR)	Feel obliged to contribute in the future.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Strong sense of duty to pay back for seeking.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Pressure to pay back for seeking.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
Governmental Influence	Internet TV	The city government expects me to use the Internet TV.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		The city government thinks that I should use the Internet TV.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
Hedonic Outcomes	Internet TV	Using the Internet TV is enjoyable.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		Using the Internet TV is pleasant.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		Using the Internet TV is fun.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
Peer Influence	Computing Resource Center (CRC)	My friends would think that I should use the CRC.	Scale 0 to 7	(Taylor & Todd, 1995c)
		Generally speaking, I want to do what my friends think I should do.	Scale 0 to 7	(Taylor & Todd, 1995c)
		My classmates would think that I should use the CRC.	Scale 0 to 7	(Taylor & Todd, 1995c)
		Generally speaking, I want to do what my classmates think I should do.	Scale 0 to 7	(Taylor & Todd, 1995c)
Perceived Ease of Use	Electronic Knowledge Repository (EKR)	Takes too much time to find knowledge.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Requires lot of effort to locate knowledge.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Laborious to find knowledge.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Internet TV (cont.)	EKR (cont.)	Think hard to formulate queries.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Think hard to narrow search results.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Think hard to analyze search results.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
	Internet TV	My interaction with the Internet TV is clear and understandable.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		Interacting with the Internet TV does not require a lot of my mental effort.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		I find the Internet TV easy to use.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		I find it easy to get the Internet TV to do what I want it to do.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
Perceived Usefulness	Computing Resource Center (CRC)	The CRC will be of no benefit to me.	Scale 0 to 7	(Taylor & Todd, 1995c)
		A service that is of no benefit to me is: (bad/good).	Scale 0 to 7	(Taylor & Todd, 1995c)
		Using the CRC will improve my grades.	Scale 0 to 7	(Taylor & Todd, 1995c)
		A service that will improve my grades is: (bad/good).	Scale 0 to 7	(Taylor & Todd, 1995c)
		The advantages of the CRC will outweigh the disadvantages.	Scale 0 to 7	(Taylor & Todd, 1995c)
		A service with more advantages than disadvantages is: (bad/good).	Scale 0 to 7	(Taylor & Todd, 1995c)
		Overall, using the CRC will be advantageous.	Scale 0 to 7	(Taylor & Todd, 1995c)
		A service that is advantageous is: (bad/good).	Scale 0 to 7	(Taylor & Todd, 1995c)
	Electronic Knowledge Repository (EKR)	EKR use increases performance.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		EKR use enables quicker task accomplishment.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		EKR use enhances effectiveness.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
Personal Network Exposure	Internet TV	What percent of the people you know in LaGrange has adopted the Internet TV?	Percentage	(Hsieh, Rai, & Keil, 2008)

Constructo	Contexto	Indicadores	Escala	Referências
Seeker Knowledge Growth	Electronic Knowledge Repository (EKR)	EKR use enhances my knowledge.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Use EKR to learn new things.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Use EKR to master new skills.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Use EKR to feel personally challenged.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
Self-Efficacy	Electronic Knowledge Repository (EKR)	Comfortable using EKR on my own.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Easily use EKR on my own.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Use EKR even with no one to help me.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
	Internet TV	I feel comfortable using the Internet TV on my own.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		I can easily operate the Internet TV on my own.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		I feel comfortable using the Internet TV even if there is no one around me to tell me how to use it.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
Superior's Influence	Computing Resource Center (CRC)	My professors would think that I should use the CRC.	Scale 0 to 7	(Taylor & Todd, 1995c)
		Generally speaking, I want to do what my professors think I should do.	Scale 0 to 7	(Taylor & Todd, 1995c)
		I will have to use the CRC because my professors require it.	Scale 0 to 7	(Taylor & Todd, 1995c)
		Generally speaking, I want to do what my professors think I should do.	Scale 0 to 7	(Taylor & Todd, 1995c)
Usage	Electronic Knowledge Repository (EKR)	Usage of EKR for specific task.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)
		Usage of EKR in general.	Likert 1-5	(Bock, Kankanhalli, & Sharma, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Utilitarian Outcomes	Internet TV	Using the Internet TV improves my performance for communication & information search.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		Using the Internet TV improves my productivity for communication & information search.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		Using the Internet TV enhances my effectiveness for communication & information search.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)
		Using the Internet TV is useful for my communication & information search.	Likert 1-7, Strongly Disagree to Agree	(Hsieh, Rai, & Keil, 2008)

B - Constructos e Indicadores da Diffusion of Innovations Theory

A presente tabela contém todos os constructos e indicadores identificados relacionados com a *Diffusion of Innovations Theory.*

Constructo	Contexto	Indicadores	Escala	Referências
Compatibility	Broadband Internet	Using broadband Internet is compatible with most aspects of my work.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Using broadband Internet fits my work style.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Using broadband Internet fits well with the way I like to work.	Not Specified	(Oh, Ahn, & Kim, 2003)
	e-Business	Selling over the Internet is compatible with your company's current selling process.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
		Buying over the Internet is compatible with your company's current procurement process.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
		Conducting transactions over the Internet is compatible with existing distribution channels.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
		Doing e-business is compatible with your company's corporate culture and value system.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
	e-Government	I think using the web would fit well with the way that I like to gather information from the VA TAX.	Not Specified	(Carter & Belanger, 2005)
		I think using the web would fit well with the way that I like to interact with the VA TAX.	Not Specified	(Carter & Belanger, 2005)
		Using the web to interact with the VA TAX would fit into my lifestyle.	Not Specified	(Carter & Belanger, 2005)
		Using the web to interact with the VA TAX would be incompatible with how I like to do things.	Not Specified	(Carter & Belanger, 2005)
	Enterprise Resource Planning (ERP)	Our firm adopted ERP because we believed that using it would not create a disruption to the existing software environment.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because we believed that using it would not create a disruption to the data processing environment.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because we believed that using it would not create an overall change in values, norms and culture within the company.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
	Instant messaging (IM) systems	Using IM is compatible with all aspects of how I communicate with friends.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)

Constructo	Contexto	Indicadores	Escala	Referências
Compatibility (cont.)	Instant messaging (IM) systems (cont.)	Using IM is completely compatible with my current situation.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		I think that using IM fits well with the way I like to communicate.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		Using IM fits into my communication style.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
	Microsoft's Windows 3.1 software package	If I were to adopt Windows, it would be compatible with most aspects of my work.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
		If I were to adopt Windows, it would fit my work style.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
		If I were to adopt Windows, it would fit well with the way I like to work.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
	Mobile Business (m-business)	Selling over the mobile platform is compatible with your organization current selling process.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Buying over the mobile platform is compatible with your organization current procurement process.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Conducting transaction over the mobile platform is compatible with existing distribution channels.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Doing m-business is compatible with your organization corporate culture.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		M-business is compatible with existing information infrastructure.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		M-business is compatible with my firm's existing experience with similar systems.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
	Online Services	At the time I subscribed, I felt this online service would fit well with my knowledge base.	Likert 1-7	(Parthasarathy & Bhattacherjee, 1998)
		At the time I subscribed, I felt this online service would be easy for me to adjust to.	Likert 1-7	(Parthasarathy & Bhattacherjee, 1998)

Constructo	Contexto	Indicadores	Escala	Referências
Compatibility (cont.)	Online Services (cont.)	At the time I subscribed, I felt this online service would fit my lifestyle very well.	Likert 1-7	(Parthasarathy & Bhattacherjee, 1998)
		At the time I subscribed, I felt this online service would fit my daily routine well.	Likert 1-7	(Parthasarathy & Bhattacherjee, 1998)
Complexity	Enterprise Resource Planning (ERP)	Our firm adopted ERP because we believed that it would not be difficult to understand the use of ERP.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because we believed that it would not be difficult to implement the business processes embedded in ERP.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because we believed that it would not be difficult to use ERP to integrate business processes across departments.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because we believed that it would not be difficult to manage the organization changes associated with the use of ERP.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
	Mobile Business (m-business)	My company believes that m-business is complex to use.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		My company believes that m-business development is a complex process.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
Observability				
Relative Advantage	e-Business	The degree to which your company expected e-business to help increase sales.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
		The degree to which your company expected e-business to help reduce costs.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
	e-Government	Using the web would enhance my efficiency in gathering information from the VA TAX.	Not Specified	(Carter & Belanger, 2005)
		Using the web would enhance my efficiency in interacting with the VA TAX.	Not Specified	(Carter & Belanger, 2005)
		Using the web would not make it easier to gather information from the VA TAX.	Not Specified	(Carter & Belanger, 2005)
		Using the web would make it easier to interact with the VA TAX.	Not Specified	(Carter & Belanger, 2005)
		Using the web would give me greater control over my interaction with the VA TAX.	Not Specified	(Carter & Belanger, 2005)
	Enterprise Resource Planning (ERP)	Our firm adopted ERP because we believed that using it (as compared to the system it supersedes) would improve the integration of business processes.	Likert 1-5	(Lai, Lai, & Lowry, 2016)

Constructo	Contexto	Indicadores	Escala	Referências
Relative Advantage (cont.)	Enterprise Resource Planning (ERP) (cont.)	Our firm adopted ERP because we believed that using it (as compared to the system it supersedes) would improve operations efficiency.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because we believed that using it (as compared to the system it supersedes) would reduce operations costs.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because we believed that using it (as compared to the system it supersedes) would standardize business processes.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because we believed that using it (as compared to the system it supersedes) would accelerate adoption of international best business practices.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because we believed that using it (as compared to the system it supersedes) would improve customer services.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because we believed that using it (as compared to the system it supersedes) would improve management controls.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because we believed that using it (as compared to the system it supersedes) would improve competitive competencies.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
	Instant messaging (IM) systems	Using IM improves my performance when communicating with my friends.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		Using IM increases my productivity when communicating with my friends.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		Using IM enhances my effectiveness when communicating with my friends.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		Using IM enables me to accomplish tasks more quickly.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		Overall, using IM improves communication with my friends.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		Overall, I find using IM to be advantageous when communicating with my friends.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)

Constructo	Contexto	Indicadores	Escala	Referências
Relative Advantage (cont.)	Microsoft's Windows 3.1 software package	If I were to adopt Windows, it would enable me to accomplish my tasks more quickly.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
		If I were to adopt Windows, the quality of my work would improve.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
		If I were to adopt Windows, it would enhance my effectiveness on the job.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
		If I were to adopt Windows, it would make my job easier.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
	Mobile Business (m-business)	Please rate the degree to which your organization expected m-business to help increase sales.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Please rate the degree to which your organization expected m-business to help reduce costs.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		My company expects m-business to reduce paperwork.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		My company expects m-business to help quick data capture and analysis.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Does the adoption of mobile technology affect the value of the brand and partnership?	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
Trialability	Broadband Internet	Before deciding on whether or not to use broadband Internet I would be able to use it on a trial basis.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Before deciding on whether or not to use broadband Internet I would be able to try it out properly.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Before deciding on whether or not to use broadband Internet I would be permitted to use it long enough to see what it can do.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Before deciding on whether or not to use broadband Internet I would be able to try its various uses.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Before deciding on whether or not to use broadband Internet I know a place where I would be able to try it out.	Not Specified	(Oh, Ahn, & Kim, 2003)
	Microsoft's Windows 3.1 software package	Before deciding on whether or not to adopt Windows, I would be able to use it on a trial basis.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
		Before deciding on whether or not to adopt Windows, I would be able to properly try it out.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)

Constructo	Contexto	Indicadores	Escala	Referências
Trialability (cont.)	Microsoft's Windows 3.1 software package (cont.)	I would be permitted to use Windows on a trial basis long enough to see what it can do.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
Adoption Decision	e-Government	Is your organization using the e-Government services for the following activities? If not, when do you intend to use it? (a) Ask questions online; (b) Download forms; (c) File applications online; (d) Check validity status; (e) Tender/bidding/handling of transactions online.	"Already Using it", "in =< 1 yrs", "in 1 < yrs =< 3", "in 3 < yrs =< 5", "in 5 < yrs =< 10", "> 10 yrs"	(Tung & Rieck, 2005)
Competitive Intensity	Enterprise Resource Planning (ERP)	Price competition in our business is severe.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Competition in our business is intense.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		We are in a business with very aggressive competitors.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
Competitive Pressure	Mobile Business (m-business)	My company experienced competitive pressure to implement m-business.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		My company would have experienced a competitive disadvantage if m-business had not been adopted.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Degree to which the ICT influences the competition in your industry.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Degree affected by competitors in the local market.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Degree affected by competitors in the national market.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
Costs	e-Business	Costs of implementing Internet-based online sales (including hardware, software, training, organizational restructuring, business process reengineering).	Direct Answer	(Zhu, Dong, Xu, & Kraemer, 2006)
		Costs of implementing Internet-based online procurement (including hardware, software, training, organizational restructuring, business process reengineering).	Direct Answer	(Zhu, Dong, Xu, & Kraemer, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Ease of Use	Online Services	At the time I subscribed, I felt this online service would be hard to learn.	Likert 1-7	(Parthasarathy & Bhattacherjee, 1998)
		At the time I subscribed, I felt this online service would be quite complicated to master.	Likert 1-7	(Parthasarathy & Bhattacherjee, 1998)
		At the time I subscribed, I felt this online service would be difficult to use.	Likert 1-7	(Parthasarathy & Bhattacherjee, 1998)
		At the time I subscribed, I felt this online service would have a complex, hard-to-learn system.	Likert 1-7	(Parthasarathy & Bhattacherjee, 1998)
E-Business Usage	e-Business	Percentage of sales to businesses conducted online.	Percentage	(Zhu, Dong, Xu, & Kraemer, 2006)
		Percentage of sales to consumers conducted online.	Percentage	(Zhu, Dong, Xu, & Kraemer, 2006)
		Percentage of customer services conducted online.	Percentage	(Zhu, Dong, Xu, & Kraemer, 2006)
		Percentage of procurement conducted online.	Percentage	(Zhu, Dong, Xu, & Kraemer, 2006)
Environmental Uncertainty	Enterprise Resource Planning (ERP)	Our firm operates in a high turbulent market environment.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our customers frequently change their preferences.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm is unable to reduce market uncertainty.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm is unable to respond to market opportunities.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm operates in a high turbulent technological environment.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
External Pressure	e-Government	Please rate the pressure placed on your organization to adopt the use of e-Government services by your competitors.	Scale 1 to 7, No Pressure at All to Extreme Pressure	(Tung & Rieck, 2005)
		Please rate the pressure placed on your organization to adopt the use of e-Government services by industry sources (such as trade associations).	Scale 1 to 7, No Pressure at All to Extreme Pressure	(Tung & Rieck, 2005)

Constructo	Contexto	Indicadores	Escala	Referências
External Pressure (cont.)	e-Government (cont.)	Please rate the pressure placed on your organization to adopt the use of e-Government services by various governmental agencies.	Scale 1 to 7, No Pressure at Al" to Extreme Pressure	(Tung & Rieck, 2005)
		How often does your organization receive information regarding the adoption of e-Government services from sources outside your organization (such as industry associations, professional associations, or trade newsletters)?	Scale 1 to 7, Never to Very Often	(Tung & Rieck, 2005)
		How often does your organization receive information regarding the adoption of e-Government services from various governmental agencies?	Scale 1 to 7, Never to Very Often	(Tung & Rieck, 2005)
Frequency Imitation	Enterprise Resource Planning (ERP)	Our firm adopted ERP because most firms in my industry have already adopted ERP.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because most of our customers have already adopted ERP.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because most of our suppliers have already adopted ERP.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because most of our competitors have already adopted ERP.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
Image	e-Government	People who use the web to gather information from the VA TAX have a high profile.	Not Specified	(Carter & Belanger, 2005)
		People who use VA TAX services on the web have a high profile.	Not Specified	(Carter & Belanger, 2005)
		People who use the web to gather information from the VA TAX have more prestige than those who do not.	Not Specified	(Carter & Belanger, 2005)
		People who use VA TAX services on the web have less prestige than those who do not.	Not Specified	(Carter & Belanger, 2005)
		Interacting with the VA TAX over the web enhances a person's social status.	Not Specified	(Carter & Belanger, 2005)
	Microsoft's Windows 3.1 software package	If I were to adopt Windows, it would give me high status in the organization.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
		If I were to adopt Windows, I would have more prestige in the organization than people who have not yet adopted it.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
		Having Windows is a status symbol in my organization.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
Impact on Downstream Sales	e-Business	Sales increased.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
		Sales area widened.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Impact on Downstream Sales (cont.)	e-Business (cont.)	Customer service improved.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
Impact on Internal Operations	e-Business	Internal processes more efficient.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
		Employee productivity increased.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
		Operational costs decreased.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
	Mobile Business (m-business)	Making internal operations more efficient (example: speed up processing, reduce bottlenecks, reduce errors, notification, control emergencies).	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Increasing staff productivity.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Facilitating communication among employees.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		The compression of business processes.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		The organizational flexibility.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Making the corporate systems and information accessible from any location.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Increasing control.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		The staff motivation increasing.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Reducing the number of employees.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Improving decision making.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Reducing administration workload.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)

Constructo	Contexto	Indicadores	Escala	Referências
Impact on Internal Operations (cont.)	Mobile Business (m-business) (cont.)	Increasing organization profitability.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Improved employee effectiveness.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Improved employee learning.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Better information quality.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
Impact on Marketing and Sales	Mobile Business (m-business)	Please indicate the extent to which your mobile applications have impact in sales increasing.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Please indicate the extent to which your mobile applications have impact in widening sales area.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Please indicate the extent to which your mobile applications have impact in product and service innovation improvement.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Please indicate the extent to which your mobile applications have impact in customer service improvement.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Please indicate the extent to which your mobile applications have impact in customer satisfaction increasing.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Please indicate the extent to which your mobile applications have impact in increasing the convenience to customers.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Please indicate the extent to which your mobile applications have impact in facilitating the communication with customers.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
Impact on Procurement	Mobile Business (m-business)	Inventory costs reduction.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Improving the coordination with suppliers.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Decreasing the procurement costs.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Facilitate inventory management.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)

Constructo	Contexto	Indicadores	Escala	Referências
Impact on Procurement (cont.)	Mobile Business (m-business) (cont.)	Facilitating communication with suppliers.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
Impact on Upstream Coordination	e-Business	Coordination with suppliers improved.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
		Procurement costs decreased.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
		Inventory costs decreased.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
Management Profile	e-Government	My organization's management personnel has taken part in the following activities: (a) Attended computer classes relating to the Internet; (b) Used Internet services at home; (c) Use Internet services at work; (d) Have formal qualifications in the use and operations of a computer relating to the Internet.	Scale 0-1, No-Yes	(Tung & Rieck, 2005)
Managerial Obstacles	Mobile Business (m-business)	Integrating the mobile platform into your overall strategy and business process.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Lacking staff with m-business expertise.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Insufficient top-management support.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Unfriendly operating platform or interface.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
M-Business Impact on Firm Performance	Mobile Business (m-business)	In terms of its business impacts on the organization, the m-business system has been a success.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		M-business has seriously improved my organization's overall business performance.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		From the perspective of my organization, the costs of m-business outweigh the benefits.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		M-business has had a significant positive effect on my organization.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)

Constructo	Contexto	Indicadores	Escala	Referências
M-Business Usage	Mobile Business (m-business)	Check the box describing the functionalities available in mobile devices in your value chain process (check as many as apply): providing information mobile, making sales mobile, providing services mobile, making purchases mobile, workflow, product searches and comparisons by consumers post-purchase customer support, delivery tracking system, mobile banking or mobile micropayments, mobile brokerage, target advertising using demographic and current location of users information, collect information about user needs, providing services to user proactively, asset management, job dispatch, CRM, data collection; stock/inventory management; wireless data on resource availability; fleet management, decision support system.	Selection	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Please rate the extent to which your mobile business support employees to work independently of corporate office.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Please rate the extent to which your mobile business support employees to work immediately when necessary.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Please rate the extent to which your internal process are conducted on the mobile platform.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Please rate the extent to which your consumer sales activities are supported by the mobile platform.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Please rate the extent to which your business sales activities are supported by the mobile platform.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Please rate the extent to which your procurement activities are supported by the mobile platform.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Please rate the extent to which your consumer services activities are supported by the mobile platform.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
Mobile Environment	Mobile Business (m-business)	There is adequate availability of bandwidth on mobile networks.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		There is adequate availability of mobile client devices.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		There is adequate availability of security data standards for mobile applications.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)

Constructo	Contexto	Indicadores	Escala	Referências
Mobile Environment (cont.)	Mobile Business (m-business) (cont.)	There is adequate adoption of cellular standards by your country.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		There is adequate availability of mobile applications software packages.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		There is a cost-efficient mobile platform available in the market.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
Network Externality (Use of Complementary Products)	Online Services	At the time I subscribed to this service: I saw other people using books/manuals about this service.	Likert 1-7	(Parthasarathy & Bhattacherjee, 1998)
		At the time I subscribed to this service: I found at least one book or tutorial describing how to use the service, in addition to the original start-up kit.	Likert 1-7	(Parthasarathy & Bhattacherjee, 1998)
		At the time I subscribed to this service: I found books/software about this on-line service that made it easier and quicker to learn thecommands.	Likert 1-7	(Parthasarathy & Bhattacherjee, 1998)
		At the time I subscribed to this service: I could rely on books and/or tutorials to reduce the complexity of using the system.	Likert 1-7	(Parthasarathy & Bhattacherjee, 1998)
		At the time I subscribed to this service: I could benefit by books/tutorials that made it easier to learn the commands.	Likert 1-7	(Parthasarathy & Bhattacherjee, 1998)
Outcome Imitation	Enterprise Resource Planning (ERP)	Our firm adopted ERP because other firms that have adopted ERP in my industry are very effective in their management.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because other firms that have adopted ERP in my industry have very effective internal communication systems.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because other firms that have adopted ERP in my industry are very profitable.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because other firms that have adopted ERP in my industry maintain very good relationships with their customers.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because other firms that have adopted ERP in my industry maintain very good relationships with their business partners.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because other firms that have adopted ERP in my industry have very high market share.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because other firms that have adopted ERP in my industry have very high cost savings.	Likert 1-5	(Lai, Lai, & Lowry, 2016)

Constructo	Contexto	Indicadores	Escala	Referências
Partner Pressure	Mobile Business (m-business)	How important was the following to your organization's decision to begin using the m-business: Customers demand it.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		How important was the following to your organization's decision to begin using the m-business: To improve coordination between suppliers and customers.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		How important was the following to your organization's decision to begin using the m-business: Suppliers require it.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
Perceived Benefits	e-Government	Please rate the importance of achieving each of the following benefits of using e-Government services in terms of your organization's decision whether or not to adopt e-Government services: (a) Paper reduction; (b) Equivalent success with other organizations in the industry; (c) Reduced communication cost; (d) Improved accuracy; (e) Enhanced ability to compete; (f) Availability of forms online; (g) Filing applications online; (h) Tendering/bidding projects/jobs online; (i) Submit CPF contribution details; (j) Check validity status of various passes/permits online; (k) Availability of answers to queries online; (l) Faster approval of applications online; (m) Reduced errors in filling application forms.	Scale 1 to 7, Not at all Important to Extremely Important	(Tung & Rieck, 2005)
Replacement Versus Disenchantment Discontinuance	Online Services	Please CHECK the one scenario that best identifies the MAIN REASON that you ended your subscription: I decided to discontinue this service and to subscribe to another service that was superior, even though I was not particularly dissatisfied with this service; I was dissatisfied with this service and have not yet subscribed to another; was dissatisfied with the service, began to look for others, and found the one I now subscribe to.	Selection	(Parthasarathy & Bhattacherjee, 1998)
Result Demonstrability	Broadband Internet	Before deciding on whether or not to use broadband Internet I have difficulty explaining why adopting broadband Internet may be beneficial.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Before deciding on whether or not to use broadband Internet I could communicate to others the pros and cons of adopting broadband Internet.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Before deciding on whether or not to use broadband Internet I have no difficulty telling others about the results of adopting broadband Internet.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Before deciding on whether or not to use broadband Internet I have difficulty telling whether it is good or bad to adopt broadband Internet.	Not Specified	(Oh, Ahn, & Kim, 2003)

Constructo	Contexto	Indicadores	Escala	Referências
Result Demonstrability (cont.)	Microsoft's Windows 3.1 software package	I have difficulty explaining why adopting Windows may or may not be beneficial.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
		I could communicate to others the pros and cons of adopting Windows.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
		I have no difficulty telling others about the results of adopting Windows.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
Security Concern	e-Business	The degree to which your company is concerned about the security of data and transactions over the Internet.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
		The degree to which your customers are concerned about the security of data and privacy over the Internet.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
Sensitivity to Cost Factors	e-Government	Information technology can be used for a number of objectives. To what extent is information technology important for the fulfillment of the following objectives in your organization? (a) Personnel reduction; (b) Operational costs reduction; (c)Productivity improvements.	Scale 1 to 7, Not at all Important to Extremely Important	(Tung & Rieck, 2005)
Social Influences	e-Government	In the Internet-savvy age, firms that adopt e-Government services are perceived to be more attractive to prospective investors.	Scale 1 to 7, Strongly Disagree to Agree	(Tung & Rieck, 2005)
		Society's perception towards my organization will influence the adoption of e-Government services in my organization.	Scale 1 to 7, Strongly Disagree to Agree	(Tung & Rieck, 2005)
		In my industry, the adoption of e-Government services is helpful in allowing an organization to remain competitive.	Scale 1 to 7, Strongly Disagree to Agree	(Tung & Rieck, 2005)
Sources of Influence (External Versus Interpersonal)	Online Services	How much did each of the following source influence you to subscribe to [this] service? Please make sure that the total equals 100%: Articles, reviews, advertising, or other activities of the company: [External influence]; Opinions of friends, colleagues, relatives, or others: [Interpersonal influence]; My own personal experience and general computer knowledge: [Other influence].	Percentage	(Parthasarathy & Bhattacherjee, 1998)

Constructo	Contexto	Indicadores	Escala	Referências
Strategic Importance of IT	e-Government	Information technology can be used for a number of objectives. To what extent is information technology important for the fulfillment of the following objectives in your organization? (d) Improved access to information; (e) Improved quality of decision making; (f) Improved competitiveness; (g) Improved service to customers.	Scale 1 to 7, Not at all Important to Extremely Important	(Tung & Rieck, 2005)
Technology Competence	Mobile Business (m-business)	Approximately how many of the following mobile devices are currently in use in your organization? Mobile phones/SmartPhones/RFID (tags readers)/Laptop/TabletPC/Netbook/Kiosks/Vehicle-mounted mobile technologies	Direct Answer	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Approximately how many IT professionals are located in your organization?	Direct Answer	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Please check the box describing technologies used in your organization (check as many as apply): have a public website/have a public website with transactional features/Internet/Extranet/Intranet/ mobile Internet/have the necessary software for implementing mobile business apllications/WLAN/ VoIP.	Selection	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
Technology Integration Technology Integration (cont.)	Mobile Business (m-business) Mobile Business (m-business) (cont.)	Please rate the extent to which your mobile applications are electronically integrated with your internal databases and information systems.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
		Please rate the extent to which your company's databases and information systems are electronically integrated with those of your suppliers and business customers.	Scale 1 to 5	(Picoto, Bélanger, & Palma-Dos-Reis, 2014)
Technology Readiness	Enterprise Resource Planning (ERP)	Total number of personal computers was sufficient for employee's daily use.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Related technologies had been used.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		The percentage of the number of IT professional over the total number of employees.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
Top Management Belief	Enterprise Resource Planning (ERP)	The senior management of our firm believes that ERP has the potential to provide significant business benefits to the firm.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		The senior management of our firm believes that ERP will create a significant competitive arena for firms.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		The senior management of our firm believes that it is NOT necessary to use ERP to conduct business activities.	Likert 1-5	(Lai, Lai, & Lowry, 2016)

Constructo	Contexto	Indicadores	Escala	Referências
Trait Imitation	Enterprise Resource Planning (ERP)	Our firm adopted ERP because other firms that have adopted ERP in my industry are very large.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because other firms that have adopted ERP in my industry are leading companies.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because other firms that have adopted ERP in my industry are very successful.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
		Our firm adopted ERP because other firms that have adopted ERP in my industry are favorably perceived by others in the same industry.	Likert 1-5	(Lai, Lai, & Lowry, 2016)
Usefulness	Online Services	At the time I subscribed, I felt this online service would save me time/effort over other means of performing the same tasks.	Likert 1-7	(Parthasarathy & Bhattacherjee, 1998)
		At the time I subscribed, I felt this online service would enable me to perform many tasks better than through other means.	Likert 1-7	(Parthasarathy & Bhattacherjee, 1998)
		At the time I subscribed, I felt this online service would provide a greater value than other ways of performing the same task.	Likert 1-7	(Parthasarathy & Bhattacherjee, 1998)
		At the time I subscribed, I felt this online service would be better than other ways of performing the same activities.	Likert 1-7	(Parthasarathy & Bhattacherjee, 1998)
Utilization	Online Services	Typically, how often did you use this service? [Frequency of use] Less than once a month/Once a month/Once a week/2–3 times a week/Most days.	Selection	(Parthasarathy & Bhattacherjee, 1998)
		Typically, how much time did you spend online each time you logged on? [Duration of use] Less than 15 minutes/15–20 minutes/30–60 minutes/1–2 hours/ Over 2 hours;	Selection	(Parthasarathy & Bhattacherjee, 1998)
Visibility	Broadband Internet	Before deciding on whether or not to use broadband Internet I see using broadband Internet on many computers around.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Before deciding on whether or not to use broadband Internet I have seen many people using broadband Internet around.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Before deciding on whether or not to use broadband Internet I do not see many people using broadband Internet around.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Before deciding on whether or not to use broadband Internet I have seen using broadband Internet around.	Not Specified	(Oh, Ahn, & Kim, 2003)

C - Constructos e Indicadores do Motivational Model

A presente tabela contém todos os constructos e indicadores identificados relacionados com o *Motivational Model.*

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Ease of Use	Chartmaster and Pendraw	Learning to operate Chart-Master (Pendraw) would be easy for me.	Scale 1 to 7, Likely/Unlikely	(Davis, Bagozzi, & Warshaw, 1992)
		I would find it easy to get Chart-Master (Pendraw) to do what I want it to do.	Scale 1 to 7, Likely/Unlikely	(Davis, Bagozzi, & Warshaw, 1992)
		It would be easy for me to become skillful at using Chart-Master (Pendraw).	Scale 1 to 7, Likely/Unlikely	(Davis, Bagozzi, & Warshaw, 1992)
		I would find Chart-Master (Pendraw) easy to use.	Scale 1 to 7, Likely/Unlikely	(Davis, Bagozzi, & Warshaw, 1992)
	WriteOne	Learning to operate WriteOne would be easy for me.	Scale 1 to 7, Likely/Unlikely	(Davis, Bagozzi, & Warshaw, 1992)
		I would find it easy to get WriteOne to do what I want it to do.	Scale 1 to 7, Likely/Unlikely	(Davis, Bagozzi, & Warshaw, 1992)
		It would be easy for me to become skillful at using WriteOne.	Scale 1 to 7, Likely/Unlikely	(Davis, Bagozzi, & Warshaw, 1992)
		I would find WriteOne easy to use.	Scale 1 to 7, Likely/Unlikely	(Davis, Bagozzi, & Warshaw, 1992)
Perceived Enjoyment	Chartmaster and Pendraw	I would find using Chart-Master (Pendraw) to be enjoyable (likely/unlikely).	Scale 1 to 7	(Davis, Bagozzi, & Warshaw, 1992)
		Using Chart-Master (Pendraw) would be (unpleasant/pleasant).	Scale 1 to 7	(Davis, Bagozzi, & Warshaw, 1992)
		I would have fun using Chart-Master (Pendraw) (likely/unlikely).	Scale 1 to 7	(Davis, Bagozzi, & Warshaw, 1992)
	Microcomputer	Using a microcomputer in my job is: pleasant - unpleasant.	Scale 1 to 7	(Igbaria, Parasuraman, & Baroudi, 1996)
		Using a microcomputer in my job is: enjoyment - frustrating.	Scale 1 to 7	(Igbaria, Parasuraman, & Baroudi, 1996)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Enjoyment (cont.)	Microcomputer (cont.)	Using a microcomputer in my job is: enjoyable - unenjoyable.	Scale 1 to 7	(Igbaria, Parasuraman, & Baroudi, 1996)
	WriteOne	I find using WriteOne to be enjoyable (likely/unlikely).	Scale 1 to 7	(Davis, Bagozzi, & Warshaw, 1992)
		The actual process of using WriteOne is (unpleasant/pleasant).	Scale 1 to 7	(Davis, Bagozzi, & Warshaw, 1992)
		I have fun using WriteOne (likely/unlikely).	Scale 1 to 7	(Davis, Bagozzi, & Warshaw, 1992)
Perceived Output Quality	Chartmaster and Pendraw	Assuming I were to use Chartmaster (Pendraw) the quality of the output I would get would be high (likely/unlikely).	Scale 1 to 7	(Davis, Bagozzi, & Warshaw, 1992)
		Using Chart-Master (Pendraw), the effectiveness of the finished product would be: low/high.	Scale 1 to 7	(Davis, Bagozzi, & Warshaw, 1992)
		The charts and graphs I would make with Chart-Master (Pendraw) would be professional looking (likely/unlikely).	Scale 1 to 7	(Davis, Bagozzi, & Warshaw, 1992)
Perceived Usefulness	Chartmaster and Pendraw	Using Chart-Master (Pendraw) would improve my job performance.	Scale 1 to 7, Likely/Unlikely	(Davis, Bagozzi, & Warshaw, 1992)
		Using Chart-Master (Pendraw) in my job would increase my productivity.	Scale 1 to 7, Likely/Unlikely	(Davis, Bagozzi, & Warshaw, 1992)
		Using Chart-Master (Pendraw) would enhance my effectiveness on the job.	Scale 1 to 7, Likely/Unlikely	(Davis, Bagozzi, & Warshaw, 1992)
		I would find Chart-Master (Pendraw) useful in my job.	Scale 1 to 7, Likely/Unlikely	(Davis, Bagozzi, & Warshaw, 1992)
	Microcomputer	Using a microcomputer improves my productivity on the job.	Likert 1-7, Strongly Disagree to Agree	(Igbaria, Parasuraman, & Baroudi, 1996)
		Using a microcomputer helps me make better decisions by giving me access to higher quality information.	Likert 1-7, Strongly Disagree to Agree	(Igbaria, Parasuraman, & Baroudi, 1996)
		Using a computer allows me to be more innovative by providing the opportunities for more creative analysis and outputs.	Likert 1-7, Strongly Disagree to Agree	(Igbaria, Parasuraman, & Baroudi, 1996)
		Using a microcomputer gives me the opportunity to enhance my managerial image.	Likert 1-7, Strongly Disagree to Agree	(Igbaria, Parasuraman, & Baroudi, 1996)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Usefulness (cont.)	WriteOne	Using WriteOne would improve my performance in the MBA program.	Scale 1 to 7, Likely/Unlikely	(Davis, Bagozzi, & Warshaw, 1992)
		Using WriteOne in the MBA program would increase my productivity.	Scale 1 to 7, Likely/Unlikely	(Davis, Bagozzi, & Warshaw, 1992)
		Using WriteOne would enhance my effectiveness in the MBA program.	Scale 1 to 7, Likely/Unlikely	(Davis, Bagozzi, & Warshaw, 1992)
		I would find WriteOne useful in the MBA program.	Scale 1 to 7, Likely/Unlikely	(Davis, Bagozzi, & Warshaw, 1992)
Task Importance	Chartmaster and Pendraw	Numeric charts are charts or graphs thar are used to present numerical information in a visual format and include pie charts, bar graphs, line charts, and scatter charts. In my job, numeric charts are: unimportant/important and relevant/irrelevant.	Scale 1 to 7	(Davis, Bagozzi, & Warshaw, 1992)
Usage	WriteOne	At the present time, I consider myself to be a (frequent/infrequent) user of WriteOne.	Scale 1 to 7	(Davis, Bagozzi, & Warshaw, 1992)
		I currently use WriteOne not at all, less than once a week, about once a week, 2 or 3 times a week, 4 to 6 times a week, about once a day, or several times a day.	Scale 1 to 7	(Davis, Bagozzi, & Warshaw, 1992)
Usage Intentions	Chartmaster and Pendraw	Assuming Chartmaster (Pendraw) would be available on my job, I predict that I would use it on a regular basis in the future.	Scale 1 to 7, Likely/Unlikely	(Davis, Bagozzi, & Warshaw, 1992)
	WriteOne	I presently intend to actually use WriteOne regularly in the MBA Program.	Scale 1 to 7, Likely/Unlikely	(Davis, Bagozzi, & Warshaw, 1992)
Organizational Support	Microcomputer	Management is really keen to see that we are happy using our microcomputers.	Scale 1 to 5, Strongly Disagree to Agree	(Igbaria, Parasuraman, & Baroudi, 1996)
		Management has provided most of the necessary help and resources to get us used to the microcomputer quickly.	Scale 1 to 5, Strongly Disagree to Agree	(Igbaria, Parasuraman, & Baroudi, 1996)
		I am always supported and encouraged by my boss to use the microcomputer in my job.	Scale 1 to 5, Strongly Disagree to Agree	(Igbaria, Parasuraman, & Baroudi, 1996)
		I am convinced that management is sure as to what benefits can be achieved with the use of microcomputers.	Scale 1 to 5, Strongly Disagree to Agree	(Igbaria, Parasuraman, & Baroudi, 1996)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Complexity	Microcomputer	Using a microcomputer can take up too much of my time in performing many tasks.	Likert 1-7, Strongly Disagree to Agree	(Igbaria, Parasuraman, & Baroudi, 1996)
		When I use a microcomputer, I find it difficult to integrate the work on the computer into my existing work.	Likert 1-7, Strongly Disagree to Agree	(Igbaria, Parasuraman, & Baroudi, 1996)
		Using a microcomputer exposes me to the vulnerability of computer breakdown and loss of data.	Likert 1-7, Strongly Disagree to Agree	(Igbaria, Parasuraman, & Baroudi, 1996)
Social Pressure	Microcomputer	Most people who are important to me in my job think I should be using the microcomputer regularly in my job.	Likert 1-7, Strongly Disagree to Agree	(Igbaria, Parasuraman, & Baroudi, 1996)

D - Constructos e Indicadores da Social Cognitive Theory

A presente tabela contém todos os constructos e indicadores identificados relacionados com a *Social Cognitive Theory.*

Constructo	Contexto	Indicadores	Escala	Referências
Affect	Computer	I like working with computers.	Scale 1 to 5	(Compeau & Higgins, 1995b; Compeau, Higgins, & Huff, 1999)
		Once I get working on the computer, I find it hard to stop.	Scale 1 to 5	(Compeau & Higgins, 1995b; Compeau, Higgins, & Huff, 1999)
		I look forward to those aspects of my job that require me to use a computer.	Scale 1 to 5	(Compeau, Higgins, & Huff, 1999)
		Using a computer is frustrating for me.	Scale 1 to 5	(Compeau, Higgins, & Huff, 1999)
		I get bored quickly when working on a computer.	Scale 1 to 5	(Compeau, Higgins, & Huff, 1999)
Anxiety	Computer	I feel apprehensive about using computer.	Scale 1 to 5	(Compeau & Higgins, 1995b; Compeau, Higgins, & Huff, 1999)
		It scares me to think that I could cause the computer to destroy a large amount of information by hitting the wrong key.	Scale 1 to 5	(Compeau, Higgins, & Huff, 1999)
		I hesitate to use a computer for fear of making mistakes I cannot correct.	Scale 1 to 5	(Compeau, Higgins, & Huff, 1999)
		Computers are somewhat intimidating to me.	Scale 1 to 5	(Compeau, Higgins, & Huff, 1999)
Computer Self-efficacy	Software Package	I could complete the job using the software package if there was someone giving me step by step instructions.	Scale 1 to 10, Not at all Confident to Totally Confident	(Compeau & Higgins, 1995a, 1995b)
		I could complete the job using the software package if there was no one around to tell me what to do as I go.	Scale 1 to 10, Not at all Confident to Totally Confident	(Compeau & Higgins, 1995a, 1995b; Compeau, Higgins, & Huff, 1999)
		I could complete the job using the software package if I had only the software manuals for reference.	Scale 1 to 10, Not at all Confident to Totally Confident	(Compeau & Higgins, 1995a, 1995b; Compeau, Higgins, & Huff, 1999)
		I could complete the job using the software package if I had seen someone else using it before trying it myself.	Scale 1 to 10, Not at all Confident to Totally Confident	(Compeau & Higgins, 1995a, 1995b; Compeau, Higgins, & Huff, 1999)

Constructo	Contexto	Indicadores	Escala	Referências
Computer Self-efficacy (cont.)	Software Package (cont.)	I could complete the job using the software package if I could call someone for help if I got stuck.	Scale 1 to 10, Not at all Confident to Totally Confident	(Compeau & Higgins, 1995a, 1995b; Compeau, Higgins, & Huff, 1999)
		I could complete the job using the software package if someone else had helped me get started.	Scale 1 to 10, Not at all Confident to Totally Confident	(Compeau & Higgins, 1995a, 1995b; Compeau, Higgins, & Huff, 1999)
		I could complete the job using the software package if I had a lot of time to complete the job for which the software was provided.	Scale 1 to 10, Not at all Confident to Totally Confident	(Compeau & Higgins, 1995a, 1995b; Compeau, Higgins, & Huff, 1999)
		I could complete the job using the software package if I had just the built-in help facility for assistance.	Scale 1 to 10, Not at all Confident to Totally Confident	(Compeau & Higgins, 1995a, 1995b; Compeau, Higgins, & Huff, 1999)
		I could complete the job using the software package if someone showed me how to do it first.	Scale 1 to 10, Not at all Confident to Totally Confident	(Compeau & Higgins, 1995a, 1995b; Compeau, Higgins, & Huff, 1999)
		I could complete the job using the software package if I had never used a package.	Scale 1 to 10, Not at all Confident to Totally Confident	(Compeau & Higgins, 1995a, 1995b)
		I could complete the job using the software package if I had used similar packages before the same job.	Scale 1 to 10, Not at all Confident to Totally Confident	(Compeau & Higgins, 1995a, 1995b)
		I could complete the job using the software if I had never used a package like it before.	Scale 1 to 10, Not at all Confident to Totally Confident	(Compeau, Higgins, & Huff, 1999)
		I could complete the job using the software if I had used similar packages before this one to do the same job.	Scale 1 to 10, Not at all Confident to Totally Confident	(Compeau, Higgins, & Huff, 1999)
Encouragement by Others	Computer	The extent to which their use of computers was encouraged by their peers in their work organization.	Scale 1 to 5	(Compeau & Higgins, 1995b)
		The extent to which their use of computers was encouraged by their peers in other organization.	Scale 1 to 5	(Compeau & Higgins, 1995b)
		The extent to which their use of computers was encouraged by their family.	Scale 1 to 5	(Compeau & Higgins, 1995b)
		The extent to which their use of computers was encouraged by their friends.	Scale 1 to 5	(Compeau & Higgins, 1995b)

Constructo	Contexto	Indicadores	Escala	Referências
Encouragement by Others (cont.)	Computer (cont.)	The extent to which their use of computers was encouraged by their manager.	Scale 1 to 5	(Compeau & Higgins, 1995b)
		The extent to which their use of computers was encouraged by other management.	Scale 1 to 5	(Compeau & Higgins, 1995b)
		The extent to which their use of computers was encouraged by their subordinates.	Scale 1 to 5	(Compeau & Higgins, 1995b)
Others' Use	Computer	The extent to which their peers in their work organization actually used computers.	Scale 1 to 5	(Compeau & Higgins, 1995b)
		The extent to which their peers in other organization actually used computers.	Scale 1 to 5	(Compeau & Higgins, 1995b)
		The extent to which their family actually used computers.	Scale 1 to 5	(Compeau & Higgins, 1995b)
		The extent to which their friends actually used computers.	Scale 1 to 5	(Compeau & Higgins, 1995b)
		The extent to which their manager actually used computers.	Scale 1 to 5	(Compeau & Higgins, 1995b)
		The extent to which other management actually used computers.	Scale 1 to 5	(Compeau & Higgins, 1995b)
		The extent to which their subordinates actually used computers.	Scale 1 to 5	(Compeau & Higgins, 1995b)
Outcome Expectations (Performance)	Computer	If I use a computer I will be better organized.	Scale 1 to 5, Very Unlikely to Very Likely	(Compeau & Higgins, 1995a; Compeau, Higgins, & Huff, 1999)
		If I use a computer I will increase my effectiveness on the job.	Scale 1 to 5, Very Unlikely to Very Likely	(Compeau & Higgins, 1995a; Compeau, Higgins, & Huff, 1999)
		If I use a computer I will spend less time on routine job tasks.	Scale 1 to 5, Very Unlikely to Very Likely	(Compeau & Higgins, 1995a; Compeau, Higgins, & Huff, 1999)
		If I use a computer I will increase the quality of output of my job.	Scale 1 to 5, Very Unlikely to Very Likely	(Compeau & Higgins, 1995a; Compeau, Higgins, & Huff, 1999)
		If I use a computer I will increase the quantity of output for the same amount of effort	Scale 1 to 5, Very Unlikely to Very Likely	(Compeau & Higgins, 1995a; Compeau, Higgins, & Huff, 1999)
		If I use a computer I will be less reliant on clerical support staff.	Scale 1 to 5, Very Unlikely to Very Likely	(Compeau & Higgins, 1995a; Compeau, Higgins, & Huff, 1999)

Constructo	Contexto	Indicadores	Escala	Referências
Outcome Expectations (Personal)	Computer	If I use a computer my co-workers will perceive me as competent.	Scale 1 to 5, Very Unlikely to Very Likely	(Compeau & Higgins, 1995a; Compeau, Higgins, & Huff, 1999)
		If I use a computer I will increase my sense of accomplishment.	Scale 1 to 5, Very Unlikely to Very Likely	(Compeau & Higgins, 1995a; Compeau, Higgins, & Huff, 1999)
		If I use a computer I will increase my chances of obtaining a promotion.	Scale 1 to 5, Very Unlikely to Very Likely	(Compeau & Higgins, 1995a; Compeau, Higgins, & Huff, 1999)
		If I use a computer I will be seen as higher in status by my peers.	Scale 1 to 5, Very Unlikely to Very Likely	(Compeau & Higgins, 1995a; Compeau, Higgins, & Huff, 1999)
		If I use a computer I will increase my chances of getting a raise.	Scale 1 to 5, Very Unlikely to Very Likely	(Compeau & Higgins, 1995a; Compeau, Higgins, & Huff, 1999)
Support	Computer	The extent to which assistance was available in terms of equipment selection.	Scale 1 to 5	(Compeau & Higgins, 1995b)
		The extent to which assistance was available in terms of hardware difficulties.	Scale 1 to 5	(Compeau & Higgins, 1995b)
		The extent to which assistance was available in terms of software difficulties.	Scale 1 to 5	(Compeau & Higgins, 1995b)
		The extent to which assistance was available in terms of specialized instruction.	Scale 1 to 5	(Compeau & Higgins, 1995b)
		The extent to which their coworkers were a source of assistance in overcoming difficulties.	Scale 1 to 5	(Compeau & Higgins, 1995b)
		Their perception of the organization's overall support for computer.	Scale 1 to 5	(Compeau & Higgins, 1995b)
Usage	Computer	Frequency of use at work.	Direct Answer	(Compeau, Higgins, & Huff, 1999)
		Duration of use at work.	Direct Answer	(Compeau, Higgins, & Huff, 1999)
		Duration of use at home on weekdays.	Direct Answer	(Compeau, Higgins, & Huff, 1999)
		Duration of use at home on weekends.	Direct Answer	(Compeau, Higgins, & Huff, 1999)
Adaptive Use Intention	Virtual Worlds (VWs)	Given a chance, I intend to use virtual world for collaborative tasks in my workplace in the future.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		Given a chance, I predict that I will frequently use virtual world in the future for collaborative tasks in my workplace.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)

Constructo	Contexto	Indicadores	Escala	Referências
Adaptive Use Intention (cont.)	Virtual Worlds (VWs) (cont.)	I will strongly recommend others in my workplace to use virtual world for collaborative tasks.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I foresee the use of virtual world for collaborations and information sharing in my workplace in the near future.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
Cognitive Absorption (Control)	Virtual Worlds (VWs)	When using virtual world, I feel in control.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I feel that I have control over my interaction with members on virtual world.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		The virtual world allows me to control my computer interaction.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
Cognitive Absorption (Curiosity)	Virtual Worlds (VWs)	Using the virtual world excites my curiosity.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		Interacting with the virtual world makes me curious.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		Using the virtual world arouses my imagination.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
Cognitive Absorption (Focused Immersion)	Virtual Worlds (VWs)	I feel while using the virtual world I am able to block out most other distractions.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I feel while using the virtual world, I am absorbed in what I am doing.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I feel while on the virtual world, I am immersed in the task I am performing.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I feel while on the virtual world, I do not get diverted very easily.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
Cognitive Absorption (Heightened Enjoyment)	Virtual Worlds (VWs)	I feel that when using virtual world, I have fun interacting.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I feel that when using virtual world, I have a lot of enjoyment.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I enjoy using the virtual world.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I do not get bored using the virtual world.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
Cognitive Absorption (Temporal Dissociation)	Virtual Worlds (VWs)	I feel time appears to go by very quickly when I am using the virtual world.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I feel sometimes I lose track of time when I am using the virtual world.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I feel time flies when I am using the virtual world.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)

Constructo	Contexto	Indicadores	Escala	Referências
Cognitive Absorption (Temporal Dissociation) (cont.)	Virtual Worlds (VWs) (cont.)	Most times when I get on to the virtual world, I end up spending more time that I had planned.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I often spend more time on the virtual world than I had intended.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
Compatibility	Virtual Worlds (VWs)	I believe that using virtual world would be compatible with my collaborative tasks.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I believe that using virtual world would fit my lifestyle.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I believe that using virtual world would fit well with the way I like to collaborate or share information.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
Disposition to Trust	Virtual Worlds (VWs)	I generally trust other people.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I generally count on other people.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I generally have faith in humanity.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I generally feel that people are generally reliable.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I generally trust other people unless they give me reason not to.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
Familiarity	Virtual Worlds (VWs)	I am familiar with virtual world.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I am familiar with the process of interacting with members on virtual world.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I am familiar with the members on virtual world.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I am familiar with the process of collaborating on virtual world.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I am familiar with the process of inquiring about the members on virtual world.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
Perceived Ease of Use	Virtual Worlds (VWs)	Learning to use virtual world would be easy for me.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		It would be easy to get virtual world to do what I want it to do.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		My interaction with virtual world would be clear and understandable.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		It would be easy for me to become skilful at using virtual world.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		Overall, I would find virtual world easy to use.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Innovativeness	Virtual Worlds (VWs)	If I hear about a new information technology, I look for ways to experiment with it.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		Among my peers, I am usually the first to try out new information technologies.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I like to experiment with new information technologies.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		In general, I am not hesitant to try out new technologies.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
Perceived Playfulness	Virtual Worlds (VWs)	When using the virtual world, I perceive to be spontaneous.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		When using the virtual world, I perceive to be imaginative.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		When using the virtual world, I perceive to be flexible.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		When using the virtual world, I perceive to be creative.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		When using the virtual world, I perceive to be playful.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		When using the virtual world, I perceive to be original.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		When using the virtual world, I perceive to be inventive.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
Perceived Usefulness	Virtual Worlds (VWs)	Using virtual world would enable me to accomplish collaboration tasks more quickly.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		Using virtual world for collaboration tasks would improve my performance.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		Using virtual world for collaboration tasks would enhance my effectiveness.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		Using virtual world would make it easier for me to carry out collaboration tasks.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		Overall, I find that virtual world is useful for collaboration tasks.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
User Trust	Virtual Worlds (VWs)	I trust virtual world to be reliable.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I trust virtual world to be secure.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I believe the virtual world to be trustworthy.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)
		I trust the virtual world.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)

Constructo	Contexto	Indicadores	Escala	Referências
User Trust (cont.)	Virtual Worlds (VWs) (cont.)	Even if the virtual world is not monitored, I'd trust them to do the job correctly.	Likert 1-7	(Chandra, Srivastava, & Theng, 2012)

E - Constructos e Indicadores do Task-Technology Fit

A presente tabela contém todos os constructos e indicadores identificados relacionados com a *Task-Technology Fit.*

Constructo	Contexto	Indicadores	Escala	Referências
Individual Characteristics				
Performance Impacts	Enterprise Resource Planning (ERP)	The ERP system helps me be more effective.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		The ERP system has a positive impact on my productivity in my job.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		The ERP is an important aid to me in the performance of my job.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
	Knowledge Management Technologies	The efficiency of the operations in my work.	Scale 1 to 7, Very Low to Very High	(Teo & Men, 2008)
		The adherence to plan and budgets of my work.	Scale 1 to 7, Very Low to Very High	(Teo & Men, 2008)
		The amount of work I produce.	Scale 1 to 7, Very Low to Very High	(Teo & Men, 2008)
		Effectiveness of my interaction with people from other projects, teams or units.	Scale 1 to 7, Very Low to Very High	(Teo & Men, 2008)
		The quality of my work.	Scale 1 to 7, Very Low to Very High	(Teo & Men, 2008)
		The ability to meet the goals of my work.	Scale 1 to 7, Very Low to Very High	(Teo & Men, 2008)
Task Characteristics	Groupware System	Individual communication with each team member (e.g., through email systems).	Likert 1-7, Extremely Large Extent to Extremely Small Extent	(Yang, Kang, Oh, & Kim, 2013)
		Communication and discussion with a number of team members at the same time (e.g., through bulletin board).	Likert 1-7, Extremely Large Extent to Extremely Small Extent	(Yang, Kang, Oh, & Kim, 2013)

Constructo	Contexto	Indicadores	Escala	Referências
Task Characteristics (cont.)	Groupware System (cont.)	Attainment, sharing, and assessment of knowledge and information.	Likert 1-7, Extremely Large Extent to Extremely Small Extent	(Yang, Kang, Oh, & Kim, 2013)
		Documentation and systematic management and retention of documents.	Likert 1-7, Extremely Large Extent to Extremely Small Extent	(Yang, Kang, Oh, & Kim, 2013)
		Workflow management (setting the task procedure by assigning roles and sequences).	Likert 1-7, Extremely Large Extent to Extremely Small Extent	(Yang, Kang, Oh, & Kim, 2013)
		Personal Scheduling.	Likert 1-7, Extremely Large Extent to Extremely Small Extent	(Yang, Kang, Oh, & Kim, 2013)
Task-Technology Fit	Wiki Systems	The functionalities of the wiki tool were very compatible with the task.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		The functionalities of the wiki tool made the task easy.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		Using the wiki tool fit with the way I work.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		Using the wiki tool fit with my educational practice.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		In general, the functionalities of the wiki tool were best fit to the task.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
Technology Characteristics	Groupware System	Individual communication with each team member (e.g., through email systems).	Likert 1-7, Extremely Large Extent to Extremely Small Extent	(Yang, Kang, Oh, & Kim, 2013)
		Communication and discussion with a number of team members at the same time (e.g., through bulletin board).	Likert 1-7, Extremely Large Extent to Extremely Small Extent	(Yang, Kang, Oh, & Kim, 2013)
		Attainment, sharing, and assessment of knowledge and information.	Likert 1-7, Extremely Large Extent to Extremely Small Extent	(Yang, Kang, Oh, & Kim, 2013)
		Documentation and systematic management and retention of documents.	Likert 1-7, Extremely Large Extent to Extremely Small Extent	(Yang, Kang, Oh, & Kim, 2013)

Constructo	Contexto	Indicadores	Escala	Referências
Technology Characteristics (cont.)	Groupware System (cont.)	Workflow management (setting the task procedure by assigning roles and sequences).	Likert 1-7, Extremely Large Extent to Extremely Small Extent	(Yang, Kang, Oh, & Kim, 2013)
		Personal Scheduling.	Likert 1-7, Extremely Large Extent to Extremely Small Extent	(Yang, Kang, Oh, & Kim, 2013)
Utilization	Enterprise Resource Planning (ERP)	Currently, I cannot accomplish my tasks without the ERP systems.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		If I have a choice to use any systems to perform my tasks, I still prefer to use the current system I use.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
	Knowledge Management Technologies	On the average, how frequently do you use the Kportal in your company? Never/almost never; Less than once a month; A few times a month; A few times a week; About once a day; Several times a day.	Selection	(Teo & Men, 2008)
		On the average, how much time do you spend per week using the K-portal in your company? Never/almost never; Less than 1 h; 1–2 h; 2–4 h; 4–7 h; More than 7 h.	Selection	(Teo & Men, 2008)
		Searching/retrieving knowledge.	Scale 1 to 7, Not at All to a Great Extent	(Teo & Men, 2008)
		Synthesizing, summarizing or analyzing available knowledge.	Scale 1 to 7, Not at All to a Great Extent	(Teo & Men, 2008)
		Collaborating with colleagues for knowledge purpose.	Scale 1 to 7, Not at All to a Great Extent	(Teo & Men, 2008)
A Priori Attitudes	Microsoft Word and Microsoft Visio	Using the tool for creating a flowchart is a bad/good idea.	Not Specified	(Sarker & Valacich, 2010)
		Using the tool for creating a flowchart is a foolish/wise idea.	Not Specified	(Sarker & Valacich, 2010)
		I like/dislike the idea of using the tool for creating a flowchart.	Not Specified	(Sarker & Valacich, 2010)
		Using the tool for creating a flowchart is unpleasant/pleasant.	Not Specified	(Sarker & Valacich, 2010)
Authorization	Enterprise Resource Planning (ERP)	Data that would be useful to me are unavailable because I don't have the right authorization.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Authorization (cont.)	Enterprise Resource Planning (ERP) (cont.)	Getting authorization to access data that would be useful in my job is time consuming and difficult.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
Awareness of Local Contexts	Wiki Systems	When making the decision to adopt this wiki tool, I thought about how this wiki tool might help my study.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		When making the decision to adopt this wiki tool, I thought about how this wiki tool might change the way my study was done.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		When making the decision to adopt this wiki tool, I thought about how this wiki tool may be compatible with my assignment requirements.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
Cognizance of Alternative Technologies	Wiki Systems	I attended to alternative views regarding the wiki tool before making the adoption decision.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		I was aware of other tools than this wiki tool before deciding to adopt it.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		I paid attention to equivalent tools to fulfill my needs before deciding to adopt this wiki tool.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		I thought about alternative tools to address my demands when deciding to adopt this wiki tool.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
Disconfirmation	Wiki Systems	Compared to my initial expectations, the ability of this wiki tool to improve my performance is _____.	Likert 1-7, Much worse than expected to Much better than expected	(Sun & Fang, 2016)
		Compared to my initial expectations, the ability of this wiki tool to increase my productivity is _____.	Likert 1-7, Much worse than expected to Much better than expected	(Sun & Fang, 2016)
		Compared to my initial expectations, the ability of this wiki tool to enhance my effectiveness is _____.	Likert 1-7, Much worse than expected to Much better than expected	(Sun & Fang, 2016)
		Compared to my initial expectations, the ability of this wiki tool to be useful for my work or study is _____.	Likert 1-7, Much worse than expected to Much better than expected	(Sun & Fang, 2016)

Constructo	Contexto	Indicadores	Escala	Referências
Documentation	Enterprise Resource Planning (ERP)	The content of the user manual is useful.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		The index of the user manual is useful.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		The user manual is current (up-to-date).	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		The user manual is complete.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		The user manual is easy to understand and follow.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
Ease of Use	Enterprise Resource Planning (ERP)	It is easy to learn how to use the ERP system.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		The ERP system I use is convenient and easy to use.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		The description of the functions/ commands displayed on screen is clear to me.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		The function/command names of the ERP are easy to remember.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
Engagement with the Technology	Wiki Systems	I was engaged in investigating this wiki tool when making the adoption decision.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		I gathered factual information about this wiki tool before making the adoption decision.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		I got involved in exploring this wiki tool before I adopted it.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)

Constructo	Contexto	Indicadores	Escala	Referências
Environmental Uncertainty (Dynamism)	Data	Market activities of your key competitors.	Scale 1 to 7, Have become far more predictable to Have become far less predictable	(Karimi, Somers, & Gupta, 2004)
		The tastes and preferences of your customers in your principal industry.	Scale 1 to 7, Have become far more stable and predictable to Have become much harder to forecast	(Karimi, Somers, & Gupta, 2004)
		Rate of innovation of new operating processes and new products or services in your principle industry.	Scale 1 to 7, Fallen dramatically to Dramatically increased	(Karimi, Somers, & Gupta, 2004)
Environmental Uncertainty (Heterogeneity)	Data	Needed diversity in your production methods and marketing tactics to cater to your different customers.	Scale 1 to 7, Diversity has dramatically decreased to Diversity has dramatically increased	(Karimi, Somers, & Gupta, 2004)
Environmental Uncertainty (Hostility)	Data	Your principal industry's downswings and upswings.	Scale 1 to 7, Have become far more predictable to Have become far less predictable	(Karimi, Somers, & Gupta, 2004)
		Market activities of your key competitors. (1=have become far more hostile; 4 = no change; 7 = have become far less hostile).	Scale 1 to 7, Have become far more hostile to Have become far less hostile	(Karimi, Somers, & Gupta, 2004)
		Market activities of your key competitors. (1= now affect the firm in far fewer areas; 4 = no change; 7 = now affect the firm in many areas, e.g., pricing, delivery, etc.).	Scale 1 to 7, Now affect the firm in far fewer areas to Now affect the firm in many areas, e.g., pricing, delivery, etc.).	(Karimi, Somers, & Gupta, 2004)

Constructo	Contexto	Indicadores	Escala	Referências
Group Valence	Microsoft Word and Microsoft Visio	To what extent does your group have a positive orientation toward the tool?	Not Specified	(Sarker & Valacich, 2010)
		To what extent does your group have a good feeling about the tool?	Not Specified	(Sarker & Valacich, 2010)
		To what extent does your group consider the tool acceptable for use?	Not Specified	(Sarker & Valacich, 2010)
		Indicate the extent of attractiveness of using the tool to your group?	Not Specified	(Sarker & Valacich, 2010)
Group's Perceptions About the Complexity of the Technology	Microsoft Word and Microsoft Visio	To what extent was the tool difficult for your group to use?	Not Specified	(Sarker & Valacich, 2010)
		To what extent are the features of the tool overly sophisticated?	Not Specified	(Sarker & Valacich, 2010)
Group's Perceptions About the Task-Technology Fit	Microsoft Word and Microsoft Visio	Did you find the tool appropriate for the flowcharting task that your group was performing?	Not Specified	(Sarker & Valacich, 2010)
		Was the flowchart displayed in a readable and understandable format by the tool?	Not Specified	(Sarker & Valacich, 2010)
		Was the flowchart presented in a readable and useful format by the tool?	Not Specified	(Sarker & Valacich, 2010)
		Were the flowcharting symbols easily available within the tool?	Not Specified	(Sarker & Valacich, 2010)
		Were there too many flowcharting symbols available within the tool making it hard to understand which one to use in creating your own flowchart?	Not Specified	(Sarker & Valacich, 2010)
Group's Strength of Adoption of the Technology	Microsoft Word and Microsoft Visio	To what extent was your group convinced about using the above tool?	Not Specified	(Sarker & Valacich, 2010)
		To what extent is your group committed to the use of the above tool?	Not Specified	(Sarker & Valacich, 2010)
		To what extent does your group plan to regularly use the above tool?	Not Specified	(Sarker & Valacich, 2010)
Groupware Use	Groupware System	Overall dependency on groupware.	Likert 1-7, Extremely Large Extent to Extremely Small Extent	(Yang, Kang, Oh, & Kim, 2013)
		Average duration of use per day.	Likert 1-7, rarely/less than 30 minutes/0.5~1 hour/1~2 hours/2~3 hours/3~4 hours/more than 4 hours	(Yang, Kang, Oh, & Kim, 2013)

Constructo	Contexto	Indicadores	Escala	Referências
Groupware Use (cont.)	Groupware System (cont.)	Average frequency of use per day.	Likert 1-7, rarely/once a day/2~4 times a day/4~6 times a day/6~8 times a day/8~10 times a day/more than 10 times	(Yang, Kang, Oh, & Kim, 2013)
Individual Adaptation Behaviors	Not Specified	I communicated with colleagues in order to better understand how this system operates.	Scale 0 to 10, Disagree to Agree	(Barki, Titah, & Boffo, 2007)
		I communicated with IT specialists in order to better understand how this system operates.	Scale 0 to 10, Disagree to Agree	(Barki, Titah, & Boffo, 2007)
		I researched, on my own initiative, in order to increase my knowledge and my mastery of this system.	Scale 0 to 10, Not at all to Very Much	(Barki, Titah, & Boffo, 2007)
		I explored several information sources, on my own initiative, concerning this system.	Scale 0 to 10, Not at all to Very Much	(Barki, Titah, & Boffo, 2007)
		How much effort (in time and energy) did you spend to (disagree to agree) learn about this system?	Scale 0 to 10, a Little to a Lot	(Barki, Titah, & Boffo, 2007)
		I invested much effort (in time and energy) in order to better use this system.	Scale 0 to 10, a Little to a Lot	(Barki, Titah, & Boffo, 2007)
Individual Performance Impact (Performance Impact of Computer Systems)	Not Specified	The company computer environment has a large, positive impact on my effectiveness and productivity in my job.	Not Specified	(Goodhue & Thompson, 1995)
		IS computer systems and services are an important and valuable aid to me in the performance of my job.	Not Specified	(Goodhue & Thompson, 1995)
Individual performance improvement after groupware adoption	Groupware System	Time reduction in task completion.	Likert 1-7, Extremely Large Extent to Extremely Small Extent	(Yang, Kang, Oh, & Kim, 2013)
		Easier task execution.	Likert 1-7, Extremely Large Extent to Extremely Small Extent	(Yang, Kang, Oh, & Kim, 2013)
		Capability enhancement in executing tasks.	Likert 1-7, Extremely Large Extent to Extremely Small Extent	(Yang, Kang, Oh, & Kim, 2013)

Constructo	Contexto	Indicadores	Escala	Referências
Intention to Continue	Wiki Systems	I intend to use this wiki tool in the near future.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		I plan to use this wiki tool in the near future.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		I predict that I will use this wiki tool in the near future.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
Intention to Use	Wiki Systems	I plan to use this wiki tool for my study.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		I intend to use this wiki tool for my future work.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		It is very likely that I will use this wiki tool in the near future.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
Internal Self-efficacy	Wiki Systems	I could use this wiki tool to facilitate my work if there was no one around to tell me what to do.	Likert 1-10, Not at all confident to Totally confident	(Sun & Fang, 2016)
		I could use this wiki tool to facilitate my work if I had never used a wiki system like it before.	Likert 1-10, Not at all confident to Totally confident	(Sun & Fang, 2016)
		I could use this wiki tool to facilitate my work if I had only the online help for reference.	Likert 1-10, Not at all confident to Totally confident	(Sun & Fang, 2016)
Intra-group Conflict	Microsoft Word and Microsoft Visio	To what extent did you and the other party disagree over alternatives?	Not Specified	(Sarker & Valacich, 2010)
		To what extent was the conflict you and the other party experienced directly related to the task?	Not Specified	(Sarker & Valacich, 2010)
		To what extent did you and the other party debate over some of the alternatives?	Not Specified	(Sarker & Valacich, 2010)
		To what extent did you and the other party advocate different points of view?	Not Specified	(Sarker & Valacich, 2010)
		To what extent were the differences you and the other party experienced task-related?	Not Specified	(Sarker & Valacich, 2010)
		To what extent did you and the other party disagree over alternative solutions proposed?	Not Specified	(Sarker & Valacich, 2010)
Perceived Individual Benefits	Not Specified	Knowledge gained using this system will be helpful to me with other systems in the future.	Scale 0 to 10, Disagree to Agree	(Barki, Titah, & Boffo, 2007)
		Using this system allows me to be more efficient at my job.	Scale 0 to 10, Disagree to Agree	(Barki, Titah, & Boffo, 2007)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Individual Benefits (cont.)	Not Specified (cont.)	Knowing how to use this system makes me more marketable.	Scale 0 to 10, Disagree to Agree	(Barki, Titah, & Boffo, 2007)
Perceived Organizational Benefits	Not Specified	Overall, the benefits of this system for my organization are.	Scale 0 to 10, Low to High	(Barki, Titah, & Boffo, 2007)
		This system improved the operations of my organization.	Scale 0 to 10, Disagree to Agree	(Barki, Titah, & Boffo, 2007)
		This system improved the performance of my organization.	Scale 0 to 10, Not at all to Very Much	(Barki, Titah, & Boffo, 2007)
Perceived Usefulness (Adoption)	Wiki Systems	I think this wiki tool would allow me to accomplish my study assignments more quickly.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		Using this wiki tool could help improve the quality of my study.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		This wiki tool would give me greater control over my study.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		Using this wiki tool would enhance my effectiveness in my study.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
Perceived Usefulness (Post-adoption)	Wiki Systems	Using this wiki tool helps me accomplish tasks more quickly.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		Using this wiki tool improves the quality of the work I do.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		Using this wiki tool gives me greater control over my work.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		Using this wiki tool enhances my effectiveness in my work.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
Prior experience	Wiki Systems	How long have you been using PBworks/Google Sites?	Never used it before, less than 3 months, 3 to less than 6 months, 6 to less than 12 months, 1 to less than 2 years, 2 years or more	(Sun & Fang, 2016)

Constructo	Contexto	Indicadores	Escala	Referências
Satisfaction	Wiki Systems	All things considered, I am_____ with my use of this wiki tool.	Scaled 1 to 7, Extremely Displeased to Extremely Pleased	(Sun & Fang, 2016)
		All things considered, I am_____ with my use of this wiki tool.	Scaled 1 to 7, Extremely frustrated to Extremely content	(Sun & Fang, 2016)
		All things considered, I am_____ with my use of this wiki tool.	Scaled 1 to 7, Extremely Terrible to Extremely Delighted	(Sun & Fang, 2016)
		All things considered, I am_____ with my use of this wiki tool.	Scaled 1 to 7, Extremely Dissatisfied to Extremely satisfied	(Sun & Fang, 2016)
Satisfaction (Process Satisfaction)	Microsoft Word and Microsoft Visio	How would you describe your group's problem-solving process? Confusing/Understandable.	Not Specified	(Sarker & Valacich, 2010)
		How would you describe your group's problem-solving process? (efficient/ inefficient).	Not Specified	(Sarker & Valacich, 2010)
		How would you describe your group's problem-solving process? Coordinated/ Uncoordinated.	Not Specified	(Sarker & Valacich, 2010)
		How would you describe your group's problem-solving process? Fair/Unfair.	Not Specified	(Sarker & Valacich, 2010)
		How would you describe your group's problem-solving process? Satisfying/ Unsatisfying.	Not Specified	(Sarker & Valacich, 2010)
Satisfaction (Solution Satisfaction)	Microsoft Word and Microsoft Visio	To what extent do you feel personally responsible for the correctness of the group solution?	Not Specified	(Sarker & Valacich, 2010)
		To what extent does the final solution reflect your inputs?	Not Specified	(Sarker & Valacich, 2010)
		To what extent are you confident that the group solution is correct?	Not Specified	(Sarker & Valacich, 2010)
		To what extent do you feel committed to the group's solution?	Not Specified	(Sarker & Valacich, 2010)
		How satisfied or dissatisfied are you with the quality of your group's solution?	Not Specified	(Sarker & Valacich, 2010)
Satisfaction with IS (Accessibility)	Data	I can get data quickly and easily when I need to.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		It is easy to get access to data that I need.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)

Constructo	Contexto	Indicadores	Escala	Referências
Satisfaction with IS (Compatibility)	Data	When it is necessary to compare or aggregate data from two or more different sources, there may be unexpected or difficult inconsistencies.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		There are times when supposedly equivalent data from two different sources is inconsistent.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		Sometimes it is difficult or impossible to compare or aggregate data from two different sources because the data is defined differently.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
Satisfaction with IS (Confusion)	Data	There are so many different systems or files, each with slightly different data, that is hard to understand which one to use in a given situation.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		The data are stored in so many different places and in so many forms, it is hard to know how to use it effectively.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
Satisfaction with IS (Ease of Use of Hardware and Software)	Data	It is easy to learn how to use the computer systems that give me access to data.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		The computer systems that give me access to the data are convenient and easy to use.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
Satisfaction with IS (Flexibility)	Data	Our computer systems are too inflexible to be able to respond to my changing needs for data.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		When business requirements change, it is easy to change the selection and format of data made available by our computer systems.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		I am not getting as quick a turnaround as I need on requests for new reports or data.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
Satisfaction with IS (Locatability)	Data	It is easy to locate corporate or divisional data on a particular issue, even if I have not used that data before.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		It is easy to find out what data the corporation maintains on a given subject.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		Ease of determining what data is available and where.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
Satisfaction with IS (System Reliability)	Data	The data is subject to frequent system problems and crashes.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)

Constructo	Contexto	Indicadores	Escala	Referências
Satisfaction with IS (System Reliability) (cont.)	Data (cont.)	I can count on the system to be "up" and available when I need it.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		The computer systems I use are subjected to unexpected or inconvenient down times, which makes it harder to do my work.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
Satisfaction with IS support (Assistance)	Data	I am getting the help I need in accessing and understanding the data.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		It is easy to get assistance when I am having trouble finding or using data.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
Satisfaction with IS support (Authorization)	Data	Data that would be useful to me is unavailable because I do not have the right authorization.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		Getting authorization to access data that would be useful in my job is time consuming and difficult.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		Data are safeguarded from unauthorized changes or use.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
Satisfaction with IS support (Training)	Data	There is not enough training on how to find, understand, access, or use corporate or divisional data.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		I am getting the training I need to be able to use corporate or divisional data effectively in my job.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
Support	Enterprise Resource Planning (ERP)	I am satisfied with the amount of support provided by vendor or other sources.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		I am satisfied with the availability of information systems staff for consultation.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
System Quality (Accuracy)	Enterprise Resource Planning (ERP)	The system is accurate.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		I am satisfied with the accuracy of the system.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
System Quality (Content)	Enterprise Resource Planning (ERP)	The ERP system provides the precise information I need.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		The information contents provided by the ERP system meet my needs.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		The ERP system provides reports that seem to be exactly what I need.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		The ERP system provides sufficient information to my needs.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
System Quality (Currency)	Enterprise Resource Planning (ERP)	The data provide by the ERP system is up-to-date enough for my purposes.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
System Quality (Format)	Enterprise Resource Planning (ERP)	The output is presented in a useful format.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		The information is clear.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
System Quality (Functionality)	Enterprise Resource Planning (ERP)	The ERP system provides complete features I need.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		I am satisfied with the speed of interacting with the system.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		It is easy to detect possible errors in the ERP systems.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		It is easy to correct errors that happen in the ERP systems.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		It is easy to change the output format.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
System Quality (Meaning)	Enterprise Resource Planning (ERP)	The exact definition of data fields relating to my tasks is easy to find out.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
System Quality (Right data)	Enterprise Resource Planning (ERP)	The ERP system available to me is missing critical data that are very useful to me in my job.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
System Quality (Right Level of Detail)	Enterprise Resource Planning (ERP)	The ERP system maintains data at an appropriate level of detail for my group's tasks.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
System Quality (Timeliness)	Enterprise Resource Planning (ERP)	The ERP system provides me the information I need in a timely manner.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
System Reliability	Enterprise Resource Planning (ERP)	The ERP system I use is subjected to unexpected or inconvenient down times which makes it harder to do my work.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
		The ERP system I use is subject to frequent system problems and crashes.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)
Task Characteristics (Interdependence)	Data	The problems I deal with frequently involve more than one business function.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		The business problems I deal with frequently involve more than one organization group.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
Task Characteristics (Knowledge Tacitness)	Knowledge Management Technologies	The knowledge required for my task is easy to comprehensively document in manuals or reports.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Teo & Men, 2008)
		The knowledge required for my task is easy to comprehensively understand from written documents.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Teo & Men, 2008)
		The knowledge required for my task is easy to precisely communicate through written documents.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Teo & Men, 2008)
		The knowledge required for my task is easy to communicate without personal experience.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Teo & Men, 2008)

Constructo	Contexto	Indicadores	Escala	Referências
Task Characteristics (Nonroutineness)	Data	I frequently deal with ad hoc, nonroutine business problems.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		I frequently deal with ill-defined business problems.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		Frequently, the business problems I work on involve answering questions that have never been asked in quite that form before.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		Frequently, in the mindset of using data to address some issue, I may decide to restate the problem and access slightly different data than I had at first planned.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
Task Characteristics (Task Equivocality)	Not Specified	I frequently deal with ill-defined business problems.	Not Specified	(Goodhue & Thompson, 1995)
		I frequently deal with ad-hoc, non-routine business problems.	Not Specified	(Goodhue & Thompson, 1995)
		Frequently the business problems I work on involve answering questions that have never been asked in quite that form before.	Not Specified	(Goodhue & Thompson, 1995)
Task Characteristics (Task Interdependence)	Knowledge Management Technologies	My work is often completed with staff from other departments.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Teo & Men, 2008)
		My work often involves sharing knowledge or information with other departments.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Teo & Men, 2008)
		The results of my work are dependent on the efforts of people from within my department.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Teo & Men, 2008)
		The knowledge and information I need is often subject to change.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Teo & Men, 2008)
		My work often involves using knowledge or information from other departments.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Teo & Men, 2008)
		The results of my work are dependent on the efforts of people from other departments.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Teo & Men, 2008)

Constructo	Contexto	Indicadores	Escala	Referências
Task Characteristics (Task Interdependence) (cont.)	Not Specified	The business problems I deal with frequently involve more than one business function.	Not Specified	(Goodhue & Thompson, 1995)
		The problems I deal with frequently involve more than one business function.	Not Specified	(Goodhue & Thompson, 1995)
Task Characteristics (Variety)	Data	Frequently, my need for information arises on an irregular schedule and is not predictable in advance.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		There is a great deal of variety in the problems, issues, or questions for which I need data in my work.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		Frequently, it is necessary to spend a fair amount of time thinking about how best to address a business problem before I begin an analysis.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		Frequently, after I see what data are available or what the data say, I change my view of the problem and of what data are needed.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
Task-Technology Adaptation Behaviors	Not Specified	How much effort (in time and energy) did you spend recommending or suggesting improvements to this system's functionalities.	Scale 0 to 10, a Little to a Lot	(Barki, Titah, & Boffo, 2007)
		How much effort (in time and energy) did you spend recommending or suggesting improvements to this system's interface.	Scale 0 to 10, a Little to a Lot	(Barki, Titah, & Boffo, 2007)
		How much effort (in time and energy) did you spend recommending or suggesting improvements to this system's hardware.	Scale 0 to 10, a Little to a Lot	(Barki, Titah, & Boffo, 2007)
		How much effort (in time and energy) did you spend recommending or suggesting modifications to your tasks so that they better fit this system.	Scale 0 to 10, a Little to a Lot	(Barki, Titah, & Boffo, 2007)
		How much effort (in time and energy) did you spend recommending or suggesting modifications to this system so that it better fits your tasks.	Scale 0 to 10, a Little to a Lot	(Barki, Titah, & Boffo, 2007)
		Overall, how much effort (in time and energy) did you spend so that your system and your business processes fit each other?	Scale 0 to 10, a Little to a Lot	(Barki, Titah, & Boffo, 2007)
		Overall, how much effort (in time and energy) did you spend so that your system and your business processes would be in harmony with each other?	Scale 0 to 10, a Little to a Lot	(Barki, Titah, & Boffo, 2007)

Constructo	Contexto	Indicadores	Escala	Referências
Task-Technology Fit (Authorization)	Not Specified	Data that would be useful to me is unavailable because I don't have the right authorization.	Not Specified	(Goodhue & Thompson, 1995)
		Getting authorization to access data that would be useful in my job is time consuming and difficult.	Not Specified	(Goodhue & Thompson, 1995)
Task-Technology Fit (Compatibility)	Not Specified	There are times when I find that supposedly equivalent data from two different sources is inconsistent.	Not Specified	(Goodhue & Thompson, 1995)
		Sometimes it is difficult for me to compare or consolidate data from two different sources because the data is defined differently.	Not Specified	(Goodhue & Thompson, 1995)
		When it's necessary to compare or consolidate data from different sources, I find that there may be unexpected or difficult inconsistencies.	Not Specified	(Goodhue & Thompson, 1995)
Task-Technology Fit (Ease of Use /Training /Training)	Not Specified	There is not enough training for me or my staff on how to find, understand, access or use the company computer systems.	Not Specified	(Goodhue & Thompson, 1995)
		I am getting the training I need to be able to use company computer systems, languages, procedures and data effectively.	Not Specified	(Goodhue & Thompson, 1995)
Task-Technology Fit (Ease of Use /Training/Ease of Use of Hardware & Software)	Not Specified	It is easy to learn how to use the computer systems I need.	Not Specified	(Goodhue & Thompson, 1995)
		The computer systems I use are convenient and easy to use.	Not Specified	(Goodhue & Thompson, 1995)
Task-Technology Fit (Locatability)	Not Specified	It is easy to find out what data the corporation maintains on a given subject.	Not Specified	(Goodhue & Thompson, 1995)
		It is easy to locate corporate or divisional data on a particular issue, even if I haven't used that data before.	Not Specified	(Goodhue & Thompson, 1995)
Task-Technology Fit (Locatability/Meaning)	Not Specified	The exact definition of data fields relating to my tasks is easy to find out.	Not Specified	(Goodhue & Thompson, 1995)
		On the reports or systems I deal with, the exact meaning of the data elements is either obvious, or easy to find out.	Not Specified	(Goodhue & Thompson, 1995)
Task-Technology Fit (Pro-	Not Specified	IS, to my knowledge, meets its production schedules such as report delivery and running scheduled jobs.	Not Specified	(Goodhue & Thompson, 1995)

Constructo	Contexto	Indicadores	Escala	Referências
duction Timeliness/Timeliness	Not Specified (cont.)	Regular IS activities (such as printed report delivery or running scheduled jobs) are completed on time.	Not Specified	(Goodhue & Thompson, 1995)
Task-Technology Fit (Quality/Currency)	Not Specified	I can't get data that is current enough to meet my business needs.	Not Specified	(Goodhue & Thompson, 1995)
		The data is up to date enough for my purposes.	Not Specified	(Goodhue & Thompson, 1995)
Task-Technology Fit (Quality/Right Data)	Not Specified	The data maintained by the corporation or division is pretty much what I need to carry out my tasks.	Not Specified	(Goodhue & Thompson, 1995)
		The computer systems available to me are missing critical data that would be very useful to me in my job.	Not Specified	(Goodhue & Thompson, 1995)
Task-Technology Fit (Quality/Right Level of Detail)	Not Specified	The company maintains data at an appropriate level of detail for my group's tasks.	Not Specified	(Goodhue & Thompson, 1995)
		Sufficiently detailed data is maintained by the corporation.	Not Specified	(Goodhue & Thompson, 1995)
Task-Technology Fit (Relationship with Users/Consulting)	Not Specified	Based on my previous experience I would use IS technical and business planning consulting services in the future if I had a need.	Not Specified	(Goodhue & Thompson, 1995)
		I am satisfied with the level of technical and business planning consulting expertise I receive from IS.	Not Specified	(Goodhue & Thompson, 1995)
Task-Technology Fit (Relationship with Users/IS Interest and Dedication)	Not Specified	IS takes my business group's business problems seriously.	Not Specified	(Goodhue & Thompson, 1995)
		IS takes a real interest in helping me solve my business problems.	Not Specified	(Goodhue & Thompson, 1995)
Task-Technology Fit (Relationship with Users/IS Performance)	Not Specified	IS delivers agreed-upon solutions to support my business needs.	Not Specified	(Goodhue & Thompson, 1995)
Task-Technology Fit (Relationship with Users/IS Understanding of Business)	Not Specified	The IS people we deal with understand the day-to-day objectives of my work group and its mission within our company.	Not Specified	(Goodhue & Thompson, 1995)
		My work group feels that IS personnel can communicate with us in familiar business terms that are consistent.	Not Specified	(Goodhue & Thompson, 1995)
Task-Technology Fit (Relationship with Users/Responsiveness)	Not Specified	It often takes too long for IS to communicate with me on my requests.	Not Specified	(Goodhue & Thompson, 1995)
		I generally know what happens to my request for IS services or assistance or whether it is being acted upon.	Not Specified	(Goodhue & Thompson, 1995)

Constructo	Contexto	Indicadores	Escala	Referências
Task-Technology Fit (Relationship with Users/Responsiveness) (cont.)	Not Specified (cont.)	When I make a request for service or assistance, IS normally responds to my request in a timely manner.	Not Specified	(Goodhue & Thompson, 1995)
Task-Technology Fit (Systems Reliability)	Not Specified	I can count on the system to be "up" and available when I need it.	Not Specified	(Goodhue & Thompson, 1995)
		The computer systems I use are subject to unexpected or inconvenient down times which makes it harder to do my work.	Not Specified	(Goodhue & Thompson, 1995)
		The computer systems I use are subject to frequent problems and crashes.	Not Specified	(Goodhue & Thompson, 1995)
Technological Novelty Seeking	Wiki Systems	I paid attention to differences of this new technology from any other technology I previously used.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		I tended to figure out how this wiki tool was unique in relation to the tools that I am currently using (word processing tool).	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
		I was mindful about how this wiki tool differed from similar tools (e.g., word processing tool) I had used.	Likert 1-7, Strongly Disagree to Agree	(Sun & Fang, 2016)
Technology Characteristics (Compatibility)	Knowledge Management Technologies	Using the K-portal is compatible with my work.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Teo & Men, 2008)
		Using the K-portal is completely compatible with my current situation.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Teo & Men, 2008)
		I think that using the K-portal fits well the way I like to work.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Teo & Men, 2008)
		Using the K-portal fits into my work style.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Teo & Men, 2008)
Technology Characteristics (Output Quality/Completeness)	Knowledge Management Technologies	How you feel about the knowledge content provided by the K-portal in your company.	Scale 1 to 7, Incomplete to Complete	(Teo & Men, 2008)
		How you feel about the knowledge content provided by the K-portal in your company.	Scale 1 to 7, Inconsistent to Consistent	(Teo & Men, 2008)
		How you feel about the knowledge content provided by the K-portal in your company.	Scale 1 to 7, Insufficient to Sufficient	(Teo & Men, 2008)

Constructo	Contexto	Indicadores	Escala	Referências
Technology Characteristics (Output Quality/Completeness) (cont.)	Knowledge Management Technologies (cont.)	How you feel about the knowledge content provided by the K-portal in your company.	Scale 1 to 7, Inadequate to Adequate	(Teo & Men, 2008)
Technology Characteristics (Output Quality/Relevancy)	Knowledge Management Technologies	How you feel about the knowledge content provided by the K-portal in your company.	Scale 1 to 7, Useless to Useful	(Teo & Men, 2008)
		How you feel about the knowledge content provided by the K-portal in your company.	Scale 1 to 7, Irrelevant to Relevant	(Teo & Men, 2008)
		How you feel about the knowledge content provided by the K-portal in your company.	Scale 1 to 7, Hazy to Clear	(Teo & Men, 2008)
		How you feel about the knowledge content provided by the K-portal in your company.	Scale 1 to 7, Bad to Good	(Teo & Men, 2008)
Technology Interaction Behaviors	Not Specified	I use this system (or application) to solve various problems.	Scale 0 to 10, Not at all to Very Much	(Barki, Titah, & Boffo, 2007)
		I use this system (or application) to justify my decisions.	Scale 0 to 10, Not at all to Very Much	(Barki, Titah, & Boffo, 2007)
		I use this system (or application) to exchange with other people.	Scale 0 to 10, Not at all to Very Much	(Barki, Titah, & Boffo, 2007)
		I use this system (or application) to plan or follow up on my tasks.	Scale 0 to 10, Not at all to Very Much	(Barki, Titah, & Boffo, 2007)
		I use this system (or application) to coordinate activities with others.	Scale 0 to 10, Not at all to Very Much	(Barki, Titah, & Boffo, 2007)
		I use this system (or application) to serve customers.	Scale 0 to 10, Not at all to Very Much	(Barki, Titah, & Boffo, 2007)
		For accomplishing my tasks, this system is essential.	Scale 0 to 10, Not at all to Very Much	(Barki, Titah, & Boffo, 2007)
		When you perform a task that you know the system supports, what percentage of time do you use the system?	Percentage	(Barki, Titah, & Boffo, 2007)
Training	Enterprise Resource Planning (ERP)	There is not enough training for me or my staff on how to find, understand, access or use the ERP system.	Likert 1-7, Strongly Disagree to Agree	(Kositanurit, Ngwenyama, & Osei-Bryson, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
User Satisfaction (Accuracy)	Data	The data that I use or would like to use are accurate enough for my purposes.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		There are accuracy problems in the data I use or need.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
User Satisfaction (Currency)	Data	I cannot get data current enough to meet my needs.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		I need some data on the up-to-the-minute status of operations or events but cannot get it.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		The data is up-to-date enough for my purposes.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
User Satisfaction (Meaning)	Data	On the reports or systems I deal with, the exact meaning of data elements is either obvious or easy to find.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		The exact definition of data fields relating to my tasks is easy to find out.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		Data dictionaries or data directories are useful to me in locating or understanding the meaning of corporate or divisional data.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
User Satisfaction (Presentation)	Data	The data that I need is displayed in a readable and understandable form.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		The data is presented in a readable and usefuls format.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
User Satisfaction (The Right Data)	Data	The computer systems available to me are missing critical data that would be very useful to me in my job.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		The data maintained by the corporation or division is exactly what I need to carry out my tasks.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		It is more difficult to do my job effectively because some of the data I need is not available.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
User Satisfaction (The Right Level of Detail)	Data	Sufficiently detailed data is maintained by the corporation or division.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)
		The company maintains data at an appropriate level of detail for my purposes.	Scale 1 to 7, Strongly Disagree to Agree	(Karimi, Somers, & Gupta, 2004)

Constructo	Contexto	Indicadores	Escala	Referências
Voluntariness	Microsoft Word and Microsoft Visio	The group's use of the flowcharting tool was voluntary.	Scale 1 to 7, Mandatory Setting to Voluntary Setting	(Sarker & Valacich, 2010)

F - Constructos e Indicadores do Technology Acceptance Model

A presente tabela contém todos os constructos e indicadores identificados relacionados com o *Technology Acceptance Model.*

Constructo	Contexto	Indicadores	Escala	Referências
Actual System Use				
Attitude Towards Use	Broadband Internet	Using broadband Internet is a good idea.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Using broadband Internet is unpleasant.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Using broadband Internet is beneficial.	Not Specified	(Oh, Ahn, & Kim, 2003)
	e-Learning System	Using the e-learning system is a good idea.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		The e-learning system provides an attractive learning environment.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		Overall, I like using the e-learning system.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
	Human Resources Information System	Using the <system> will be a bad/good idea (Strongly disagree...Strongly agree).	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Goyal, 2010)
		The <system> will make work more interesting (Strongly disagree...Strongly agree).	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Goyal, 2010)
		Working with the <system> will be fun (Strongly disagree...Strongly agree).	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Goyal, 2010)
		I would like working with the <system> (Strongly disagree...Strongly agree).	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Goyal, 2010)
	Instantaneous Voice Communication Service	Using PTT is: Wise –Foolish.	Likert 1-5	(Dickinger, Arami, & Meyer, 2008)
		Using PTT is: Good –Bad.	Likert 1-5	(Dickinger, Arami, & Meyer, 2008)
		Using PTT is: Favourable –Unfavourable	Likert 1-5	(Dickinger, Arami, & Meyer, 2008)

Constructo	Contexto	Indicadores	Escala	Referências
Behavioral Intention	Cellular Phone m-services	Assuming that I have access to the mobile services, I intend to use them.	Likert 1-7, Strongly Disagree to Agree	(Wang, Lin, & Luarn, 2006)
		I intend to increase my use of mobile services in the future.	Likert 1-7, Strongly Disagree to Agree	(Wang, Lin, & Luarn, 2006)
	Computer Banking System (CBS)	I intend to continue using CBS in the next 6 months.	Likert 1-7, Strongly Disagree to Agree	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
		I intend to continue using CBS to perform my job functions in the next 6 months.	Likert 1-7, Strongly Disagree to Agree	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
		I intend to use CBS frequently in the next 6 months.	Likert 1-7, Strongly Disagree to Agree	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
	Digital Library	Assuming that I have access to the E-library, I intend to use it.	Likert 1-7, Strongly Disagree to Agree	(Hong, Thong, Wong, & Tam, 2001)
		I intend to increase my use of the E-library in the future.	Likert 1-7, Strongly Disagree to Agree	(Hong, Thong, Wong, & Tam, 2001)
	Enterprise Resource Planning (ERP)	I intend to check the information in the ERP system frequently.	Likert 0-10, Completely Disagree to Agree	(Hwang, 2005)
		I intend to download reports from the ERP system frequently.	Likert 0-10, Completely Disagree to Agree	(Hwang, 2005)
		I intend to get the information regarding our business using the ERP system frequently.	Likert 0-10, Completely Disagree to Agree	(Hwang, 2005)
	Not Specified	Assuming I had access to the system, I intend to use it.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
		Given that I had access to the system, I predict that I would use it.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
		I plan to use the system in the next <n> months.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
	Telemedicine Technology	I intend to use telemedicine technology for patient care as often as needed.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002)

Constructo	Contexto	Indicadores	Escala	Referências
Behavioral Intention (cont.)	Telemedicine Technology (cont.)	Whenever possible, I intend not to use telemedicine technology for patient care.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002)
		To the extent possible, I would use telemedicine technology in my patient care frequently.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002)
Behavioral Intention to Use	Computer and PDA	I intend to use a PC during my studies.	Not Specified	(Srite & Karahanna, 2006)
		I intend to use a PC frequently during my studies.	Not Specified	(Srite & Karahanna, 2006)
	Human Resources Information System	I intend to continue using the <system>.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
		I predict I would continue using the <system>.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
		I plan to continue using the <system>.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
	Interactive online help desk system and multimedia system for property management	Assuming I had access to the system, I intend to use it.	Likert 1-7	(Venkatesh, 2000)
		Given that I had access to the system, I predict that I would use it.	Likert 1-7	(Venkatesh, 2000)
	Microsoft Word	I always try to use Microsoft Word to do a task whenever it has a feature to help me perform it.	Likert 1-7, Strongly Disagree to Agree	(Chau, 1996)
		I always try to use Microsoft Word in as many cases/occasions as possible.	Likert 1-7, Strongly Disagree to Agree	(Chau, 1996)
Computer Anxiety	Interactive online help desk system and multimedia system for property management	Computers do not scare me at all.	Likert 1-7	(Venkatesh, 2000)
		Working with a computer makes me nervous.	Likert 1-7	(Venkatesh, 2000)
		I do not feel threatened when others talk about computers.	Likert 1-7	(Venkatesh, 2000)
		It wouldn't bother me to take computer courses.	Likert 1-7	(Venkatesh, 2000)
		Computers make me feel uncomfortable.	Likert 1-7	(Venkatesh, 2000)

Constructo	Contexto	Indicadores	Escala	Referências
Computer Anxiety (cont.)	Interactive online help desk system and multimedia system for property management (cont.)	I feel atease in a computer class.	Likert 1-7	(Venkatesh, 2000)
		I get a sinking feeling when I think of trying to use a computer.	Likert 1-7	(Venkatesh, 2000)
		I feel comfortable working with a computer.	Likert 1-7	(Venkatesh, 2000)
		Computers make me feel uneasy.	Likert 1-7	(Venkatesh, 2000)
	Not Specified	Computers do not scare me at all.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
		Working with a computer makes me nervous.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
		Computers make me feel uncomfortable.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
		Computers make me feel uneasy.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
Computer Playfulness	Interactive online help desk system and multimedia system for property management	The following questions ask you how you would characterize yourself when you use computers: spontaneous/ unimaginative/ flexible/ creative/ playful/ unoriginal/ uninventive	Likert 1-7	(Venkatesh, 2000)
	Mobile Devices	Spontaneous	Scale 1-7, Inaccuratey to Very Accurate	(Wakefield & Whitten, 2006)
		Imaginative	Scale 1-7, Inaccuratey to Very Accurate	(Wakefield & Whitten, 2006)
		Flexible	Scale 1-7, Inaccuratey to Very Accurate	(Wakefield & Whitten, 2006)
		Creative	Scale 1-7, Inaccuratey to Very Accurate	(Wakefield & Whitten, 2006)
		Playful	Scale 1-7, Inaccuratey to Very Accurate	(Wakefield & Whitten, 2006)
		Original	Scale 1-7, Inaccuratey to Very Accurate	(Wakefield & Whitten, 2006)
		Inventive	Scale 1-7, Inaccuratey to Very Accurate	(Wakefield & Whitten, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Computer Playfulness (cont.)	Not Specified	The following questions ask you how you would characterize yourself when you use computers: spontaneous; creative; playful; unoriginal.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
Computer Self-efficacy	Digital Library	I could complete the job using the software package if there was no one around to tell me what to do as I go.	Likert 1-7, Not al All Confident to Totally Confident	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		I could complete the job using the software package if I had only the software manuals for reference.	Likert 1-7, Not al All Confident to Totally Confident	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		I could complete the job using the software package if I had seen someone else using it before trying it myself.	Likert 1-7, Not al All Confident to Totally Confident	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		I could complete the job using the software package if I could call someone for help if I got stuck.	Likert 1-7, Not al All Confident to Totally Confident	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		I could complete the job using the software package if someone else had helped me get started.	Likert 1-7, Not al All Confident to Totally Confident	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		I could complete the job using the software package if I had a lot of time to complete the job for which the software was provided.	Likert 1-7, Not al All Confident to Totally Confident	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		I could complete the job using the software package if I had just the built-in help facility for assistance.	Likert 1-7, Not al All Confident to Totally Confident	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		I could complete the job using the software package if someone showed me how to do it first.	Likert 1-7, Not al All Confident to Totally Confident	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
	e-Learning System	I could complete my learning activities using the e-learning system if I had never used a system like it before.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I could complete my learning activities using the e-learning system if I had only the system manuals for reference.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I could complete my learning activities using the e-learning system if I had seen someone else using it before trying it myself.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
	Not Specified	I could complete the job using a software package if there was no one around to tell me what to do as I go.	Guttman 1-10	(Venkatesh & Bala, 2008)

Constructo	Contexto	Indicadores	Escala	Referências
Computer Self-efficacy (cont.)	Not Specified (cont.)	I could complete the job using a software package if I had just the built-in help facility for assistance.	Guttman 1-10	(Venkatesh & Bala, 2008)
		I could complete the job using a software package if someone showed me how to do it first.	Guttman 1-10	(Venkatesh & Bala, 2008)
		I could complete the job using a software package if I had used similar packages before this one to do the same job.	Guttman 1-10	(Venkatesh & Bala, 2008)
Experience				
External Variables				
Image	Not Specified	People in my organization who use the system have more prestige than those who do not.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000)
		People in my organization who use the system have a high profile.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
		Having the system is a status symbol in my organization.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
	Smart Card	Merchants who use the Exact card sytem have more prestige than those who do not.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		Merchants who use the Exact card system have a higher profile than those who do not.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		Having na Exact card system is a status symbol among the merchants I know.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
Intention to Use (Use)	Agile Web Portal	I predict that I will use the new features when they become available.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		I intend to use the new features when they become available.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
	B2C net-enabled commerce	Given the chance, I intend to use Bizrate.com Website in my future online shopping of the product.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
		Given the chance, I predict that I would use Bizrate.com Website in my future online shopping of the product.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Intention to Use (Use) (cont.)	B2C net-enabled commerce (cont.)	It is likely that I use Bizrate.com Website in my future online shopping of the product.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
	Barcode Scanner and Radio Frequency Identification (RFID) Reader	I would use mobile shopping to shop in the store.	Scale 1 to 7	(Venkatesh, Aloysius, Hoehle, & Burton, 2017)
		I intend to use mobile shopping the next time I see it in the store.	Scale 1 to 7	(Venkatesh, Aloysius, Hoehle, & Burton, 2017)
		I will not use mobile shopping the next time I see the system in the store.	Scale 1 to 7	(Venkatesh, Aloysius, Hoehle, & Burton, 2017)
	Digital Library	Assuming that I have access to the digital library, I intend to use it.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		I intend to increase my use of the digital library in the future.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
	e-Government	I would use the web for gathering information from VA TAX.	Not Specified	(Carter & Belanger, 2005)
		I would use VA TAX services provided over the web.	Not Specified	(Carter & Belanger, 2005)
		Interacting with the VA TAX over the web is something that I would do.	Not Specified	(Carter & Belanger, 2005)
		I would not hesitate to provide information to the VA TAX website.	Not Specified	(Carter & Belanger, 2005)
		I would use the web to inquire about VA TAX services.	Not Specified	(Carter & Belanger, 2005)
	e-Learning System	I will use the e-learning system on a regular basis in the future.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I will frequently use the e-learning system in the future.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I will strongly recommend others to use the e-learning system.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)

Constructo	Contexto	Indicadores	Escala	Referências
Intention to Use (Use) (cont.)	Instantaneous Voice Communication Service	I will use PTT in the future.	Likert 1-5	(Dickinger, Arami, & Meyer, 2008)
		If I buy a new mobile handset, I will pay attention to PTT capability of the handset.	Likert 1-5	(Dickinger, Arami, & Meyer, 2008)
		If I change the mobile operator, I will ensure that they offer PTT.	Likert 1-5	(Dickinger, Arami, & Meyer, 2008)
	Telemedicine Technology	I intend to use telemedicine technology in my patient care and management when it becomes available in my department or hospital.	Likert 1-7, Strongly Disagree to Agree	(Hu, Chau, Liu Sheng, & Tam, 1999)
		I intend to use telemedicine technology to provide health-care services to patients as often as needed.	Likert 1-7, Strongly Disagree to Agree	(Hu, Chau, Liu Sheng, & Tam, 1999)
		I intend not to use telemedicine technology in my patient care and management routinely.	Likert 1-7, Strongly Disagree to Agree	(Hu, Chau, Liu Sheng, & Tam, 1999)
		Whenever possible, I intend not to use telemedicine technology in my patient care and management.	Likert 1-7, Strongly Disagree to Agree	(Hu, Chau, Liu Sheng, & Tam, 1999)
		To the extent possible, I would use telemedicine to do different things, clinical or nonclinical.	Likert 1-7, Strongly Disagree to Agree	(Hu, Chau, Liu Sheng, & Tam, 1999)
		To the extent possible, I would use telemedicine in my patient care and management frequently.	Likert 1-7, Strongly Disagree to Agree	(Hu, Chau, Liu Sheng, & Tam, 1999)
	Lotus Domino Discussion Database	I always try to use Discussion Database to do a task whenever it has a feature to help me perform it.	Likert 1-7, Strongly Disagree to Agree	(Lou, Luo, & Strong, 2000)
		I always try to use Discussion Database in as many cases/occasions as possible.	Likert 1-7, Strongly Disagree to Agree	(Lou, Luo, & Strong, 2000)
	Mobile Technologies	I intend to use mobile systems in the future.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)
		I expect mobile systems to make my work more convenient.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)
		I will frequently use mobile systems in the future.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)
		I will strongly recommend others to use mobile systems.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)

Constructo	Contexto	Indicadores	Escala	Referências
Intention to Use (Use) (cont.)	Not Specified	Assuming I had access to the system, I intend to use it.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000; Venkatesh & Morris, 2000)
		Given that I had access to the system, I predict that I would use it.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000; Venkatesh & Morris, 2000)
Job Relevance	Not Specified	In my job, usage of the system is important.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000)
		In my job, usage of the system is relevant.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000)
		The use of the system is pertinent to my various job-related tasks.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
Objective Usability				
Output Quality	Not Specified	The quality of the output I get from the system is high.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000)
		I have no problem with the quality of the system's output.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000)
		I rate the results from the system to be excellent.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
Perceived Ease of Use	Agile Web Portal	Learning to use the upgrades of The System is easy for me.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		My interaction with the upgrades of The System is clear and understandable.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		I find the upgrades of The System easy to use.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Ease of Use (cont.)	B2C net-enabled commerce	My interaction with Bizrate.com Website was clear and understandable.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
		Interacting with Bizrate.com Website did not require a lot of mental effort.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
		I found Bizrate.com Website easy to use.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
		I was able to easily locate the information that I needed in Bizrate.com Website.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
	Barcode Scanner and Radio Frequency Identification (RFID) Reader	My interaction with mobile shopping in the store was clear and understandable.	Scale 1 to 7	(Venkatesh, Aloysius, Hoehle, & Burton, 2017)
		It was easy for me to become skillful at using mobile shopping in the store.	Scale 1 to 7	(Venkatesh, Aloysius, Hoehle, & Burton, 2017)
		I found mobile shopping easy to use in the store.	Scale 1 to 7	(Venkatesh, Aloysius, Hoehle, & Burton, 2017)
		Learning to operate mobile shopping in the store was easy for me.	Scale 1 to 7	(Venkatesh, Aloysius, Hoehle, & Burton, 2017)
	Broadband Internet	Learning to operate broadband Internet is easy for me.	Not Specified	(Oh, Ahn, & Kim, 2003)
		It is easy to perform work using broadband Internet.	Not Specified	(Oh, Ahn, & Kim, 2003)
		I clearly understand how to use broadband Internet.	Not Specified	(Oh, Ahn, & Kim, 2003)
		I find broadband Internet inflexible to interact with.	Not Specified	(Oh, Ahn, & Kim, 2003)
		It is not easy for me to become skilful in using broadband Internet.	Not Specified	(Oh, Ahn, & Kim, 2003)
		I find broadband Internet easy to use.	Not Specified	(Oh, Ahn, & Kim, 2003)
	Cellular Phone m-services	Learning to use mobile services is easy for me.	Likert 1-7, Strongly Disagree to Agree	(Wang, Lin, & Luarn, 2006)
		It would be easy for me to become skilful at using mobile services.	Likert 1-7, Strongly Disagree to Agree	(Wang, Lin, & Luarn, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Ease of Use (cont.)	Cellular Phone m-services (cont.)	I would find mobile services easy to use.	Likert 1-7, Strongly Disagree to Agree	(Wang, Lin, & Luarn, 2006)
	Computer	Learning to use computers is easy for me.	Scale 1 to 5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		I find it easy to get computers to do what I want them to do.	Scale 1 to 5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		It is easy for me to become skillful at using computers.	Scale 1 to 5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		I find computers easy to use.	Scale 1 to 5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
	Computer and PDA	It is easy for me to become skillful in using computers.	Not Specified	(Srite & Karahanna, 2006)
		I find computers easy to use.	Not Specified	(Srite & Karahanna, 2006)
		I find it easy to get a computer to do what I want it to do.	Not Specified	(Srite & Karahanna, 2006)
		Learning to operate a computer is easy for me.	Not Specified	(Srite & Karahanna, 2006)
	Computer Banking System (CBS)	My interaction with CBS has been clear and understandable.	Likert 1-7, Strongly Disagree to Agree	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
		It is easy to get CBS to do what I want it to do.	Likert 1-7, Strongly Disagree to Agree	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
		Overall, CBS is easy to use.	Likert 1-7, Strongly Disagree to Agree	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
		Learning to operate CBS was easy for me.	Likert 1-7, Strongly Disagree to Agree	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
		Interacting with CBS does not require a lot of my mental effort.	Likert 1-7, Strongly Disagree to Agree	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Ease of Use (cont.)	Computer Physician Order Entry (CPOE) System	Using the new system is simple.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		One becomes quickly comfortable in using the new system.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		Overall, the new system is easy to use.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		Learning how to use the new system is easy.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
	Customer Relationship Management (CRM) System	Learning to operate the CRM system is easy for me.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		I find it easy to get the CRM system to do what I want it to do.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		I find the CRM system easy to use.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		I find the CRM system to be flexible to interact with.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		My interaction with the CRM system is clear and understandable.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		It is easy for me to become skillful at using the CRM system.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
	Digital Library	Learning to use the digital library is easy for me.	Likert 1-7, Strongly Disagree to Agree	(Hong, Thong, Wong, & Tam, 2001; Hong, Chan, Thong, Chasalow, & Dhillon, 2014)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Ease of Use (cont.)	Digital Library (cont.)	My interaction with the digital library is clear and understandable.	Likert 1-7, Strongly Disagree to Agree	(Hong, Thong, Wong, & Tam, 2001; Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		It would be easy for me to become skillful at using the digital library.	Likert 1-7, Strongly Disagree to Agree	(Hong, Thong, Wong, & Tam, 2001; Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		I would find the digital library easy to use.	Likert 1-7, Strongly Disagree to Agree	(Hong, Thong, Wong, & Tam, 2001; Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
	e-Government	Learning to interact with the VA TAX web site would be easy for me.	Not Specified	(Carter & Belanger, 2005)
		I believe interacting with the VA TAX web site would be a clear and understandable process.	Not Specified	(Carter & Belanger, 2005)
		I would find the VA TAX web site to be flexible to interact with.	Not Specified	(Carter & Belanger, 2005)
		It would be easy for me to become skilful at using the VA TAX web site.	Not Specified	(Carter & Belanger, 2005)
		I would find a VA TAX web site difficult to use.	Not Specified	(Carter & Belanger, 2005)
	e-Learning System	Interacting with the e-learning system does not require a lot of my mental effort.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I find the e-learning system to be easy to use.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		My interaction with the e-learning system is clear and understandable.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I find it easy to get the e-learning system to do what I want it to do.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
	Enterprise Resource Planning (ERP)	Learning to use the ERP system is easy for me.	Likert 0-10, Completely Disagree to Agree	(Hwang, 2005)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Ease of Use (cont.)	Enterprise Resource Planning (ERP) (cont.)	I find it easy to get the ERP system to do what I want it to do.	Likert 0-10, Completely Disagree to Agree	(Hwang, 2005)
		My interaction with the ERP system is clear and understandable.	Likert 0-10, Completely Disagree to Agree	(Hwang, 2005)
		I find the ERP system easy to use.	Likert 0-10, Completely Disagree to Agree	(Hwang, 2005)
	Human Resources Information System	My interaction with the new e-Recruiting system would be clear and understandable.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
		It would be easy for me to become skillful at using new e-Recruiting system.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
		Overall, I would find the new e-Recruiting system easy to use.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
		Learning to operate the new e-Recruiting system is easy for me.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
	Instantaneous Voice Communication Service	I find PTT easy to use.	Likert 1-5	(Dickinger, Arami, & Meyer, 2008)
		For me it is easy to learn how to operate PTT.	Likert 1-5	(Dickinger, Arami, & Meyer, 2008)
		PTT is easily clear and understandable.	Likert 1-5	(Dickinger, Arami, & Meyer, 2008)
	Interactive online help desk system and multimedia system for property management	My interaction with the system is clear and understandable.	Likert 1-7	(Venkatesh, 2000)
		Interacting with the system does not require a lot of my mental effort.	Likert 1-7	(Venkatesh, 2000)
		I find the system to be easy to use.	Likert 1-7	(Venkatesh, 2000)
		I find it easy to get the system to do what I want it to do.	Likert 1-7	(Venkatesh, 2000)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Ease of Use (cont.)	Lotus Domino Discussion Database	Learning to use Discussion Database is easy for me.	Likert 1-7, Strongly Disagree to Agree	(Lou, Luo, & Strong, 2000)
		I find it easy to get Discussion Database to do what I want it to do.	Likert 1-7, Strongly Disagree to Agree	(Lou, Luo, & Strong, 2000)
		My interaction with Discussion Database is clear and understandable.	Likert 1-7, Strongly Disagree to Agree	(Lou, Luo, & Strong, 2000)
		I find Discussion Database to be flexible to interact with.	Likert 1-7, Strongly Disagree to Agree	(Lou, Luo, & Strong, 2000)
		It is easy for me to become skillful at using Discussion Database.	Likert 1-7, Strongly Disagree to Agree	(Lou, Luo, & Strong, 2000)
		I find Discussion Database easy to use.	Likert 1-7, Strongly Disagree to Agree	(Lou, Luo, & Strong, 2000)
	Microsoft Access	Learning to operate the (task-related) platform portions of (system) is easy for me.	Not Specified	(Chin, Johnson, & Schwarz, 2008)
		I find it easy to get the (task-related) portions of (system) to do what I want it to do.	Not Specified	(Chin, Johnson, & Schwarz, 2008)
		My interaction with the (task-related) portions of (system) has been clear and understandable.	Not Specified	(Chin, Johnson, & Schwarz, 2008)
		I find the (task-related) portions of (system) to be flexible to interact with.	Not Specified	(Chin, Johnson, & Schwarz, 2008)
		It is easy for me to become skillful at using the (task-related) portions of (system).	Not Specified	(Chin, Johnson, & Schwarz, 2008)
		I find the (task-related) portions of (system) easy to use.	Not Specified	(Chin, Johnson, & Schwarz, 2008)
	Microsoft Word	Learning to operate Microsoft Word is easy for me.	Likert 1-7, Strongly Disagree to Agree	(Chau, 1996)
		I find it easy to get Microsoft Word to do what I wanf it to do.	Likert 1-7, Strongly Disagree to Agree	(Chau, 1996)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Ease of Use (cont.)	Microsoft Word (cont.)	My interaction with Microsoft Word is clear and understandable.	Likert 1-7, Strongly Disagree to Agree	(Chau, 1996)
		I find Microsoft Word to be flexible to interact with.	Likert 1-7, Strongly Disagree to Agree	(Chau, 1996)
		It is easy for me to become skillful at using Microsoft Word.	Likert 1-7, Strongly Disagree to Agree	(Chau, 1996)
		I find Microsoft Word easy to use.	Likert 1-7, Strongly Disagree to Agree	(Chau, 1996)
	Mobile Devices	Learning to operate a Blackberry would be easy for me.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		I would find it easy to get a Blackberry to do what I want it to do.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		My interaction with a Blackberry would be clear and understandable.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		I would find a Blackberry to be flexible to interact with.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		I would find a Blackberry easy to use.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		It would be easy for me to become skillful at using a Blackberry.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
	Mobile Technologies	Learning to operate mobile systems will be easy for me.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)
		I would consider mobile systems to be flexible in terms of interaction.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)
		It would be easy for me to become skilled in using mobile systems.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)
	Not Specified	My intention with the system is clear and understandable.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000; Venkatesh & Morris, 2000)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Ease of Use (cont.)	Not Specified (cont.)	Interacting with the system does not require a lot of my mental effort.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000; Venkatesh & Morris, 2000)
		I find the system to be easy to use.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000; Venkatesh & Morris, 2000)
		I find it easy to get the system to do what I want it to do.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000; Venkatesh & Morris, 2000)
	Remote Electronic Voting Systems (REVS)	A REVS that lets me vote at home, work, or other convenient place will be easy to learn to use in a short time period.	Likert 1-5, Strongly Disagree to Agree	(Yao & Murphy, 2007)
		A REVS that lets me vote at home, work, or other convenient place will not be difficult to operate.	Likert 1-5, Strongly Disagree to Agree	(Yao & Murphy, 2007)
		A REVS that lets me vote at home, work, or other convenient place will be easy to use.	Likert 1-5, Strongly Disagree to Agree	(Yao & Murphy, 2007)
	Short Message Service (SMS)	Learning to operate mobile phone messages is easy for me.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		It is easy for me to become skillful at using SMS.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		I find it easy to get SMS to do what I want it to do.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		I think using SMS is easy.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
	Smart Card	Learning to operate the Exact card system was wasy for me and my staff.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		My staff and I find it easy to get the Exact card system to do what we want it to do.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Ease of Use (cont.)	Smart Card (cont.)	Using the Exact card system is clear and understandble for me and my staff.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		My staff and I find the Exact card system to be flexible to use.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		It was easy for my staff and I to become skillful at using the Exact card system.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		My staff and I find the Exact card system easy to use.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
	Telemedicine Technology	Learning to operate telemedicine technology would not be easy for me.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002; Hu, Chau, Liu Sheng, & Tam, 1999)
		I would find it easy to get telemedicine technology to do what I need it to do in my patient care and management.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002; Hu, Chau, Liu Sheng, & Tam, 1999)
		It is not easy for me to become skillful in using telemedicine technology.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002; Hu, Chau, Liu Sheng, & Tam, 1999)
		I find telemedicine technology easy to use.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002)
		My interaction with telemedicine technology would be clear and understandable.	Likert 1-7, Strongly Disagree to Agree	(Hu, Chau, Liu Sheng, & Tam, 1999)
		I find telemedicine technology inflexible to interact with.	Likert 1-7, Strongly Disagree to Agree	(Hu, Chau, Liu Sheng, & Tam, 1999)
		I would find telemedicine technology easy to use.	Likert 1-7, Strongly Disagree to Agree	(Hu, Chau, Liu Sheng, & Tam, 1999)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Ease of Use (cont.)	Wireless Internet Services via Mobile Technology (WIMT)	My interaction with WIMD is clear and understandable.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
		Interacting with WIMD does not require a lot of my mental effort.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
		I find it easy to get WIMD to do what I want it to do.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
		Overall, I find WIMD easy to use.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
	World-Wide Web (WWW)	My interaction with the WWW is clear and understandable.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Agarwal & Prasad, 1998)
		I believe it would be easy to get the WWW to do what I want it to do.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Agarwal & Prasad, 1998)
		Overall, I believe the WWW would be easy to use.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Agarwal & Prasad, 1998)
		Learning to use the WWW would be easy for me.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Agarwal & Prasad, 1998)
	WriteOne	Learning to operate WriteOne would be easy for me.	Scale 1 to 7, Unlikely to Likely	(Davis, Bagozzi, & Warshaw, 1989)
		I would find it easy to get WriteOne to do what I want it to do.	Scale 1 to 7, Unlikely to Likely	(Davis, Bagozzi, & Warshaw, 1989)
		It would be easy for me to become skillful at using WriteOne.	Scale 1 to 7, Unlikely to Likely	(Davis, Bagozzi, & Warshaw, 1989)
		I would find WriteOne easy to use.	Scale 1 to 7, Unlikely to Likely	(Davis, Bagozzi, & Warshaw, 1989)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Enjoyment	e-Learning System	I find using the e-learning system to be enjoyable.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		The actual process of using the e-learning system is pleasant.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I have fun using the e-learning system.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
	Enterprise Resource Planning (ERP)	I have fun using the ERP system.	Likert 0-10, Completely Disagree to Agree	(Hwang, 2005)
		Using the ERP system is pleasant.	Likert 0-10, Completely Disagree to Agree	(Hwang, 2005)
		I find using the ERP system to be enjoyable.	Likert 0-10, Completely Disagree to Agree	(Hwang, 2005)
	Instantaneous Voice Communication Service	I enjoy using.	Likert 1-5	(Dickinger, Arami, & Meyer, 2008)
		I like to use new technologies.	Likert 1-5	(Dickinger, Arami, & Meyer, 2008)
	Interactive online help desk system and multimedia system for property management	I find using the system to be enjoyable.	Likert 1-7	(Venkatesh, 2000)
		The actual process of using the system is pleasant.	Likert 1-7	(Venkatesh, 2000)
		I have fun using the system.	Likert 1-7	(Venkatesh, 2000)
	Mobile Devices	I would have fun interacting with a Blackberry.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		Using a Blackberry would provide me with a lot of enjoyment.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		I would enjoy using a Blackberry.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		Using a Blackberry would bore me.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Enjoyment (cont.)	Not Specified	I find using the system to be enjoyable.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
		The actual process of using the system is pleasant.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
		I have fun using the system.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
	Short Message Service (SMS)	Using SMS brings much pleasure to me.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		I like sending and receiving interesting greeting and humorous short messages.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		Using SMS makes life fun.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		Using SMS makes me feel happy and relaxed.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		Using SMS is exciting.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
Perceived Usefulness	Agile Web Portal	Using the upgrades of The System enables me to accomplish tasks more quickly.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		Using the upgrades of The System increases my productivity.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		Overall, the upgrades of The System are useful in my job.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
	Barcode Scanner and Radio Frequency Identification (RFID) Reader	I found using mobile shopping in the store to be useful.	Scale 1 to 7	(Venkatesh, Aloysius, Hoehle, & Burton, 2017)
		Using mobile shopping in the store added value to my shopping experience.	Scale 1 to 7	(Venkatesh, Aloysius, Hoehle, & Burton, 2017)
		The experience of using mobile shopping in the store was useful to me.	Scale 1 to 7	(Venkatesh, Aloysius, Hoehle, & Burton, 2017)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Usefulness (cont.)	RFID (cont.)	I believe that the experience of using mobile shopping in the store added value to the overall service.	Scale 1 to 7	(Venkatesh, Aloysius, Hoehle, & Burton, 2017)
	Broadband Internet	Using broadband Internet enables me to finish my work more quickly.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Using broadband Internet cannot improve my work performance.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Using broadband Internet generally increases my productivity.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Using broadband Internet cannot enhance my work effectiveness.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Using broadband Internet makes my work easier.	Not Specified	(Oh, Ahn, & Kim, 2003)
		Using broadband Internet is not useful to my work.	Not Specified	(Oh, Ahn, & Kim, 2003)
	Cellular Phone m-services	Using mobile services would improve my performance in conducting transactions.	Likert 1-7, Strongly Disagree to Agree	(Wang, Lin, & Luarn, 2006)
		Using mobile services would make it easier for me to conduct transactions.	Likert 1-7, Strongly Disagree to Agree	(Wang, Lin, & Luarn, 2006)
		I would find mobile services useful in conducting my transactions.	Likert 1-7, Strongly Disagree to Agree	(Wang, Lin, & Luarn, 2006)
	Computer	Using computers improves my job performance.	Likert 1-5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		Using computers increases my productivity on the job.	Likert 1-5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		I find computers useful in my job.	Likert 1-5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		Using computers enhances my effectiveness on the job.	Likert 1-5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
	Computer and PDA	Using computers enhances my productivity in college.	Not Specified	(Srite & Karahanna, 2006)
		I find computers useful in my college activities.	Not Specified	(Srite & Karahanna, 2006)
		Using computers enhances my effectiveness in college.	Not Specified	(Srite & Karahanna, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Usefulness (cont.)	Computer and PDA (cont.)	Using computers improves my performance in college.	Not Specified	(Srite & Karahanna, 2006)
	Computer Banking System (CBS)	CBS enables me to accomplish tasks more quickly.	Likert 1-7, Strongly Disagree to Agree	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
		CBS has improved the quality of the work I do.	Likert 1-7, Strongly Disagree to Agree	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
		CBS makes it easier to do my job.	Likert 1-7, Strongly Disagree to Agree	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
		CBS has enhanced my effectiveness on the job.	Likert 1-7, Strongly Disagree to Agree	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
		CBS has improved my productivity.	Likert 1-7, Strongly Disagree to Agree	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
		CBS gives me greater control over my job.	Likert 1-7, Strongly Disagree to Agree	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
	Computer Physician Order Entry (CPOE) System	I can accomplish my tasks very rapidly by consulting the information contained in the new system.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		Using the new system makes me more efficient in my work.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		The new system has improved the quality of my work as a doctor.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		Following the new system's implementation in my clinic, accessing the contents of my patients' files has become much easier.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
	Customer Relationship Management (CRM) System	Using the CRM system in my job will increase my productivity.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		Using the CRM system will enhance my effectiveness on the job.	Scale 1 to 7, Strongly Disagree to Agree	(Karahanna, Agarwal, & Angst, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Usefulness (cont.)	Customer Relationship Management (CRM) System (cont.)	Using the CRM system will make it easier to do my job.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		Using the CRM system will improve my job performance.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
	Digital Library	Using the digital library would enable me to accomplish my study more effectively.	Likert 1-7, Strongly Disagree to Agree	(Hong, Thong, Wong, & Tam, 2001; Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		Using the digital library would improve my performance in my study.	Likert 1-7, Strongly Disagree to Agree	(Hong, Thong, Wong, & Tam, 2001; Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		Using the digital library would make it easier for me to do my assignments and prepare for the examination.	Likert 1-7, Strongly Disagree to Agree	(Hong, Thong, Wong, & Tam, 2001; Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		I would find the digital library useful in my study.	Likert 1-7, Strongly Disagree to Agree	(Hong, Thong, Wong, & Tam, 2001; Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
	e-Government	The VA TAX web site would enable me to complete transactions with VA TAX more quickly.	Not Specified	(Carter & Belanger, 2005)
		I think the VA TAX web site would provide a valuable service for me.	Not Specified	(Carter & Belanger, 2005)
		The content of the VA TAX web site would be useless to me.	Not Specified	(Carter & Belanger, 2005)
		The VA TAX web site would enhance my effectiveness in searching for and using VA TAX services.	Not Specified	(Carter & Belanger, 2005)
		I would find the VA TAX web site useful.	Not Specified	(Carter & Belanger, 2005)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Usefulness (cont.)	e-Learning System	Using the e-learning system improves my learning performance.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		Using the e-learning system enhances my learning effectiveness.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		Using the e-learning system gives me greater control over learning.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I find the e-learning system to be useful in my learning.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
	Enterprise Resource Planning (ERP)	Using the ERP system would improve my performance in my job.	Likert 0-10, Completely Disagree to Agree	(Hwang, 2005)
		Using the ERP system would increase my productivity in my job.	Likert 0-10, Completely Disagree to Agree	(Hwang, 2005)
		Using the ERP system would enhance my effectiveness in my job.	Likert 0-10, Completely Disagree to Agree	(Hwang, 2005)
		I find the ERP system would be useful in my job.	Likert 0-10, Completely Disagree to Agree	(Hwang, 2005)
	Human Resources Information System	Overall, I would find the new e-Recruiting system useful in my job.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
		Using the new e-Recruiting system enables me to accomplish tasks more quickly.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
		Using the new e-Recruiting system increases my productivity.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
		If I use the new e-Recruiting system, I will increase my chances of getting a raise.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
		I would find the <system> useful in my job (Strongly disagree...Strongly agree).	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Goyal, 2010)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Usefulness (cont.)	Human Resources Information System (cont.)	Using the <system> in my job would enable me to accomplish tasks more quickly (Strongly disagree...Strongly agree).	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Goyal, 2010)
		Using the <system> would increase my productivity (Strongly disagree...Strongly agree).	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Goyal, 2010)
		Using the <system> would improve my job performance (Strongly disagree...Strongly agree).	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Goyal, 2010)
	Instantaneous Voice Communication Service	PTT helps me to accomplish my task more quickly.	Likert 1-5	(Dickinger, Arami, & Meyer, 2008)
		PTT is useful for me.	Likert 1-5	(Dickinger, Arami, & Meyer, 2008)
		PTT is valuable for my communication effectiveness.	Likert 1-5	(Dickinger, Arami, & Meyer, 2008)
	Interactive online help desk system and multimedia system for property management	Using the system improves my performance in my job.	Likert 1-7	(Venkatesh, 2000)
		Using the system in my job increases my productivity.	Likert 1-7	(Venkatesh, 2000)
		Using the system enhances my effectiveness in my job.	Likert 1-7	(Venkatesh, 2000)
		I find the system to be useful in my job.	Likert 1-7	(Venkatesh, 2000)
	Lotus Domino Discussion Database	Using Discussion Database enables me to accomplish tasks more quickly.	Likert 1-7, Strongly Disagree to Agree	(Lou, Luo, & Strong, 2000)
		Using Discussion Database improves my performance in the course.	Likert 1-7, Strongly Disagree to Agree	(Lou, Luo, & Strong, 2000)
		Using Discussion Database improves my productivity.	Likert 1-7, Strongly Disagree to Agree	(Lou, Luo, & Strong, 2000)
		Using Discussion Database enhance my effectiveness in learning.	Likert 1-7, Strongly Disagree to Agree	(Lou, Luo, & Strong, 2000)
		Using Discussion Database makes it easier for me to learn.	Likert 1-7, Strongly Disagree to Agree	(Lou, Luo, & Strong, 2000)
		I find Discussion Database useful for my learning.	Likert 1-7, Strongly Disagree to Agree	(Lou, Luo, & Strong, 2000)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Usefulness (cont.)	Microsoft Access	Using (system) as a (technology type) enables me to (accomplish tasks) more quickly.	Not Specified	(Chin, Johnson, & Schwarz, 2008)
		Using (system) improves my (ability to accomplish task).	Not Specified	(Chin, Johnson, & Schwarz, 2008)
		Using (system) as a (technology type) increases my productivity.	Not Specified	(Chin, Johnson, & Schwarz, 2008)
		Using (system) enhances my effectiveness in (accomplishing task).	Not Specified	(Chin, Johnson, & Schwarz, 2008)
		Using (system) makes it easier to do my (task).	Not Specified	(Chin, Johnson, & Schwarz, 2008)
		I find (system) useful in my (task completion).	Not Specified	(Chin, Johnson, & Schwarz, 2008)
	Mobile Devices	Using a Blackberry would enable me to accomplish tasks more quickly.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		Using a Blackberry would improve my job performance.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		Using a Blackberry in my job would increase my productivity.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		Using a Blackberry would enhance my effectiveness on the job.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		Using a Blackberry would make it easier for me to do my job.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		I would find a Blackberry useful in my job.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
	Not Specified	Using the system improves my performance in my job.	Likert 1-5 and 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000; Venkatesh & Morris, 2000)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Usefulness (cont.)	Not Specified (cont.)	Using the system in my job increases my productivity.	Likert 1-5 and 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000; Venkatesh & Morris, 2000)
		Using the system enhances my effectiveness in my job.	Likert 1-5 and 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000; Venkatesh & Morris, 2000)
		I find the system to be useful in my job.	Likert 1-5 and 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000; Venkatesh & Morris, 2000)
	Short Message Service (SMS)	SMS is very useful.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		SMS allows me to conveniently and quickly communicate with others.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		SMS improves the efficiency of my communication with others.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		SMS allows me to understand more information about the world and others.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		I think SMS is indispensable in my life.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
	Smart Card	Using the Exact card system enables me and my staff to process payments more quickly.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		Using the Exact card system improves the job performance of me and my staff.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		Using the Exact card system increases the productivity of me and my staff.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Usefulness (cont.)	Smart Card (cont.)	Using the Exact card system enhances the on-the-job effectiveness of me and my staff.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		Using the Exact card system makes it easier for me and my staff to do our jobs.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		My staff and I find the Exact card system useful to us in our jobs.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
	Telemedicine Technology	Using telemedicine technology cannot improve my patient care and management.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002; (Hu, Chau, Liu Sheng, & Tam, 1999))
		Using telemedicine technology cannot enhance my effectiveness in patient care and management.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002)
		Using telemedicine technology can make my patient care and management easier.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002; (Hu, Chau, Liu Sheng, & Tam, 1999))
		I would find telemedicine technology not useful for my patient care and management.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002; (Hu, Chau, Liu Sheng, & Tam, 1999))
		Using telemedicine can enable me to complete patient care more quickly.	Likert 1-7, Strongly Disagree to Agree	(Hu, Chau, Liu Sheng, & Tam, 1999)
		Using telemedicine can increase my productivity in patient care.	Likert 1-7, Strongly Disagree to Agree	(Hu, Chau, Liu Sheng, & Tam, 1999)
		Using telemedicine cannot enhance my service effectiveness.	Likert 1-7, Strongly Disagree to Agree	(Hu, Chau, Liu Sheng, & Tam, 1999)
	Wireless Internet Services via Mobile Technology (WIMT)	Use of WIMD can decrease the time needed for my work/study/life tasks.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
		Use of WIMD can significantly increase the quality or output of my life.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
		Use of WIMD can increase the effectiveness of my performance.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Usefulness (cont.)	Wireless Internet Services via Mobile Technology (WIMT) (cont.)	Use of WIMD can increase the quality of output for the same amount of effort.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
		Considering all tasks, the use of WIMD could assist my work/study/life.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
		Overall, I find WIMD useful in my daily life.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
	World-Wide Web (WWW)	Using the WWW would make it easier to do my work.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Agarwal & Prasad, 1998)
		Using the WWW would help me to accomplish tasks more quickly.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Agarwal & Prasad, 1998)
		Using the WWW would improve the quality of the work I do.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Agarwal & Prasad, 1998)
		Using the WWW would give me greater control over my work.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Agarwal & Prasad, 1998)
		Using the WWW would enhance my effectiveness in the MBA program and/or my job.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Agarwal & Prasad, 1998)
	WriteOne	Using WriteOne would improve my performance in the MBA program.	Scale 1 to 7, Unlikely to Likely	(Davis, Bagozzi, & Warshaw, 1989)
		Using WriteOne in the MBA program would increase my productivity.	Scale 1 to 7, Unlikely to Likely	(Davis, Bagozzi, & Warshaw, 1989)
		Using WriteOne would enhance my effectiveness in the MBA program.	Scale 1 to 7, Unlikely to Likely	(Davis, Bagozzi, & Warshaw, 1989)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Usefulness (cont.)	WriteOne (cont.)	I would find WriteOne useful in the MBA program.	Scale 1 to 7, Unlikely to Likely	(Davis, Bagozzi, & Warshaw, 1989)
Perceptions of External Control	Interactive online help desk system and multimedia system for property management	I have control over using the system.	Likert 1-7	(Venkatesh, 2000)
		I have the resources necessary to use the system.	Likert 1-7	(Venkatesh, 2000)
		I have the knowledge necessary to use the system.	Likert 1-7	(Venkatesh, 2000)
		Given the resources, opportunities and knowledge it takes to use the system, it would be easy for me to use the system.	Likert 1-7	(Venkatesh, 2000)
		The system is not compatible with other systems I use.	Likert 1-7	(Venkatesh, 2000)
	Not Specified	I have control over using the system.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
		I have the resources necessary to use the system.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
		Given the resources, opportunities and knowledge it takes to use the system, it would be easy for me to use the system.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
		The system is not compatible with other systems I use.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
Result Demonstrability	Not Specified	I have no difficulty telling others about the results of using the system.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000)
		I believe I could communicate to others the consequences of using the system.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000)
		The results of using the system are apparent to me.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000)
		I would have difficulty explaining why using the system may or may not be beneficial.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000)
	Smart Card	My staffand I would have no difficulty telling others about our experience using the Exact card system.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)

Constructo	Contexto	Indicadores	Escala	Referências
Result Demonstrability (cont.)	Smart Card (cont.)	My staff and I could communicate to others the consequences of using the Exact card system.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		The impact of using the Exact card system is apparent to my staff and me.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
Subjective Norm	Computer and PDA	My relatives think that I should use a computer.	Not Specified	(Srite & Karahanna, 2006)
		My friends believe I should use a computer.	Not Specified	(Srite & Karahanna, 2006)
		My professors think I should use a computer.	Not Specified	(Srite & Karahanna, 2006)
		I believe that my classmates at college will think I should use a computer.	Not Specified	(Srite & Karahanna, 2006)
	Computer Banking System (CBS)	People who influence my behaviour think that I should use CBS.	Likert 1-7, Strongly Disagree to Agree	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
		People who are important to me think that I should use CBS.	Likert 1-7, Strongly Disagree to Agree	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
	Not Specified	People who influence my behavior think that I should use the system.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000; Venkatesh & Morris, 2000)
		People who are important to me think that I should use the system.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000; Venkatesh & Morris, 2000)
		The senior management of this business has been helpful in the use of the system.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
		In general, the organization has supported the use of the system.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)

Constructo	Contexto	Indicadores	Escala	Referências
Subjective Norm (cont.)	Not Specified (cont.)	People who influence my behavior (e.g., coworkers, supervisors, clients) think that I should use the IS.	Likert 1-5, Strongly Disagree to Agree	(Bhattacherjee & Lin, 2015)
		People who are important to me (e.g., coworkers, supervisors, clients) think that I should use the IS.	Likert 1-5, Strongly Disagree to Agree	(Bhattacherjee & Lin, 2015)
		People who influence my behavior (e.g., coworkers, supervisors, clients) would welcome my use of the IS in my work.	Likert 1-5, Strongly Disagree to Agree	(Bhattacherjee & Lin, 2015)
Usage Behavior	Computer	On average, how frequently do you use a computer for job-related work? Less than once a month; Once a month; A few times a month; A few times a week; About once a day; Several times a day.	Selection	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		On average, how much time do you spend per day using a computer for job-related work? Almost never; Less than 1/2 hour; From 1/2 hour to 1 hour; 1-2 hours; 2-3 hours; More than 3 hours.	Selection	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		For the following specific job tasks, please indicate whether you use a computer to perform each task. Producing report; Letters and memos; Data storage/retrieval; Making decisions; Analyzing trends; Planning/forecasting; Analyzing problems/alternatives; Budgeting; Controlling and guiding activities; Electronic communications with others.	Selection	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		Please indicate whether you use any of the following computer software. Spreadsheets (e.g. Excel, Lotus 1-2-3); Word processing (e.g., Word); Database (e.g., dBase); Statistical analysis; Electronic mail; Programming languages (e.g., COBOL); Graphics; Application packages (e.g., accounting or payroll packages).	Selection	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
Use Behavior	Not Specified	On average, how much time do you spend on the system each day?	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008)
Voluntariness	Not Specified	My use of the system is voluntary.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000)
		My supervisor does not require me to use the system.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000)
		Although it might be helpful, using the system is certainly not compulsory in my job.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh & Bala, 2008; Venkatesh & Davis, 2000)

Constructo	Contexto	Indicadores	Escala	Referências
Voluntariness (cont.)	Smart Card	My business' use of the Exact card system was voluntary.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		Although suggested to my business, using the Exact card system was not compulsory.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
Accuracy	Remote Electronic Voting Systems (REVS)	A REVS that lets me vote at home, work, or other convenient place will Improve the efficiency of recording and counting ballots.	Likert 1-5, Strongly Disagree to Agree	(Yao & Murphy, 2007)
		A REVS that lets me vote at home, work, or other convenient place will reduce the incidence of errors when transferring data to a central location.	Likert 1-5, Strongly Disagree to Agree	(Yao & Murphy, 2007)
		A REVS that lets me vote at home, work, or other convenient place will reduce the incidence of ballot counting errors.	Likert 1-5, Strongly Disagree to Agree	(Yao & Murphy, 2007)
Actual Usage	e-Learning System	I have accessed the program information pages on the e-learning system.	Likert 1-7, Never to More than once a day	(Cheng, 2011)
		I have accessed the news pages on the e-learning system.	Likert 1-7, Never to More than once a day	(Cheng, 2011)
		I have accessed the study units on the e-learning system.	Likert 1-7, Never to More than once a day	(Cheng, 2011)
	Short Message Service (SMS)	How many short messages do you send during a month?	Selection	(Y. B. Lu, Deng, & Wang, 2010)
		How frequently do you use the SMS?	Selection	(Y. B. Lu, Deng, & Wang, 2010)
Asset Specificity	B2C net-enabled commerce	For the purchase of this product, there is an online store(s) that takes less effort to order than other online stores.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
		For the purchase of this product, there is an online store(s) that I am more comfortable with than other online stores.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
		For the purchase of this product, there is an online store(s) that takes less time to order than other online stores.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
Attitude	Computer Banking System (CBS)	All things considered my continuing to use CBS in my job is:	Extremely Negative to Extremely Positive	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)

Constructo	Contexto	Indicadores	Escala	Referências
Attitude (cont.)	Computer Banking System (CBS) (cont.)	All things considered my continuing to use CBS in my job is:	Extremely Good to Extremely Bad	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
		All things considered my continuing to use CBS in my job is:	Extremely Harmful to Extremely Beneficial	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
		All things considered my continuing to use CBS in my job is:	Extremely Pleasant to Extremely Unpleasant	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
	Human Resources Information System	Using the new e-Recruiting system is a good idea.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
		Using the new e-Recruiting system is a wise idea.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
		Using the new e-Recruiting system is pleasant.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
	Telemedicine Technology	Using telemedicine technology in patient care and management is a good idea.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002; Hu, Chau, Liu Sheng, & Tam, 1999)
		Using telemedicine technology in patient care and management is unpleasant.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002; Hu, Chau, Liu Sheng, & Tam, 1999)
		Using telemedicine technology is beneficial to my patient care and management.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002; Hu, Chau, Liu Sheng, & Tam, 1999)
Availability	Remote Electronic Voting Systems (REVS)	A REVS that lets me vote at home, work, or other convenient place will be widely distributed, with just five minutes to the nearest REVS machine.	Likert 1-5, Strongly Disagree to Agree	(Yao & Murphy, 2007)
		A REVS that lets me vote at home, work, or other convenient place will be available at any convenient place.	Likert 1-5, Strongly Disagree to Agree	(Yao & Murphy, 2007)
		A REVS that lets me vote at home, work, or other convenient place will be easily found by voters at public places.	Likert 1-5, Strongly Disagree to Agree	(Yao & Murphy, 2007)

Constructo	Contexto	Indicadores	Escala	Referências
Cognitive Absorption	e-Learning System	Most times when I get on to the e-learning system, I end up spending more time than I had planned.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		While using the e-learning system, I am absorbed in what I am doing.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I enjoy using the e-learning system.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
	Mobile Devices	Time would appear to go by very quickly when I am using a Blackberry.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		Sometimes I would lose track of time when I am using a Blackberry.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		I would spend more time using a Blackberry than I had intended.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		Most times that I use a Blackberry, I would end up spending more time than I planned.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		Time would fly when I used a Blackberry.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		While using a Blackberry, I would be able to block out most other distractions.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		While using a Blackberry, I would be absorbed in what I am doing.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		While using a Blackberry, I would get distracted by other things very easily.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		While using a Blackberry, my attention would not get diverted very easily.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		While using a Blackberry, I would be immersed in the task I am performing.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		Using a Blackberry would arouse my imagination.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		Interacting with a Blackberry would make me curious.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Cognitive Absorption (cont.)	Mobile Devices (cont.)	Using a Blackberry would excite my curiosity.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		When using a Blackberry I would feel in control.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		I would feel that I have no control over my interaction with a Blackberry.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		A Blackberry would allow me to control my interaction with the technology.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
Cognitive Absorption (Control)	Computer Physician Order Entry (CPOE) System	I am in complete control of how I use the new system.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		I am a capable user of the new system's different functionalities.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		When I use the new system, I frequently make mistakes.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
Cognitive Absorption (Curiosity)	Computer Physician Order Entry (CPOE) System	Using the new system awakens my interest.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		Interacting with the new system makes me curious about it.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		Interacting with the new system makes me curious about health informatics in general.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
Cognitive Absorption (Focused Immersion)	Computer Physician Order Entry (CPOE) System	When I use the new system I can concentrate on what needs to be done.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		When I interact with the new system I am absorbed in the task I am working on.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		Most of the time I do not get distracted from my task when using the new system.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
Cognitive Absorption (Heightened Enjoyment)	Computer Physician Order Entry (CPOE) System	Using the new system is enjoyable.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		Using the new system gives me pleasure.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		Using the new system bores me a lot.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)

Constructo	Contexto	Indicadores	Escala	Referências
Cognitive Absorption (Temporal Dissociation)	Computer Physician Order Entry (CPOE) System	Time passes very quickly when I use the new system.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		At times I am not aware of the passage of time when I use the new system.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		Frequently I end up spending more time using the new system than initially planned.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
Comfort with Changes	Agile Web Portal	I feel comfortable with the changes resulting from the upgrades of The System.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		The continuous pace of upgrades of The System does not bother me.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
Communication Effectiveness	Short Message Service (SMS)	I like using SMS to communicate information.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		I feel using SMS I can express myself more implicitly.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		Using SMS allows me to have a variety of ways to communicate with others.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		I don't like making my communication exposed (through voice) when other people are present.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		SMS can be used anytime and anywhere for convenient communication.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
Compatibility	Smart Card	Using the Exact card system is compatible with all aspects of my business' sales transactions.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		I think that using the Exact card system fits well with the way my staff and I like to receive payment for goods and services.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		Using the Exact card system fits with our business' work style.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)

Constructo	Contexto	Indicadores	Escala	Referências
Compatibility (cont.)	Telemedicine Technology	Using telemedicine technology fits with the way I work.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002)
		Using telemedicine technology does not fit with my practice preferences.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002)
		Using telemedicine technology fits with my service needs.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002)
	World-Wide Web (WWW)	Using the WWW would be compatible with all aspects of my work.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Agarwal & Prasad, 1998)
		I think that using the WWW would fit well with the way I like to work.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Agarwal & Prasad, 1998)
		Using the WWW would fit into my workstyle.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Agarwal & Prasad, 1998)
Compatibility with Existing Practices	Customer Relationship Management (CRM) System	Using the CRM system requires a change in the way that I currently conduct my job.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		Using the CRM system is compatible with most aspects of the way I typically conduct my job.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		Using the CRM system would force me to change my existing method of conducting my job.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		To use the CRM system, I don't have to change anything I currently do.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		Using the CRM system does not require significant changes in my existing work routine.	Scale 1 to 7, Strongly Disagree to Agree	(Karahanna, Agarwal, & Angst, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Compatibility with Preferred Work Style	Customer Relationship Management (CRM) System	Using the CRM system fits my preferred routine for conducting my job.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		The CRM system enables me to work in the way I prefer.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		Using the CRM system fits well with the way I like to work.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		Using the CRM system fits my preferred method for doing my job.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
Compatibility with Prior Experience	Customer Relationship Management (CRM) System	Using the CRM system is compatible with my past computer experience.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		Using the CRM system is different from using other software I have used in the past	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		Using the CRM system is a new experience for me.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		Using the CRM system is not similar to anything that I've done before.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		Using the CRM system is different from other experiences I have had.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		Using the CRM system is a new business experience for me.	Scale 1 to 7, Strongly Disagree to Agree	(Karahanna, Agarwal, & Angst, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Compatibility with Values	Customer Relationship Management (CRM) System	Use of the CRM system is consistent with the way I think business should be conducted.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		Using the CRM system runs counter to my own values.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		Using the CRM system does not fit the way I view the world.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		Using the CRM system goes against what I believe computers should be used for.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		Using the CRM system is not appropriate for a person with my values regarding the role of computers.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
		Using the CRM system runs counter to my values about how to conduct my job.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Karahanna, Agarwal, & Angst, 2006)
Consistency	Agile Web Portal	The layout of the text in the upgrades is consistent with existing pages in The System.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		The fonts and design of labels of the upgrades are consistent with existing ones in The System.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		Overall, the layout of The System has been consistent throughout the upgrades that have been taking place.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
Content Quality	e-Learning System	I search and share the related course content from the e-learning system to help my learning.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		Content on the e-learning system is updated on a regular basis.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)

Constructo	Contexto	Indicadores	Escala	Referências
Content Quality (cont.)	e-Learning System (cont.)	The e-learning system often provides the updated information.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
Continuance Behavior	Not Specified	What percentage of your clients do you serve using the system?	Percentage	(Bhattacherjee & Lin, 2015)
		What percentage of your working hours do you spend on using the IS?	Percentage	(Bhattacherjee & Lin, 2015)
		What percentage of your workload do you deal with using the IS?	Percentage	(Bhattacherjee & Lin, 2015)
Continuance Intention	Not Specified	I intend to continue using the IS rather than discontinue its use.	Likert 1-5, Strongly Disagree to Agree	(Bhattacherjee & Lin, 2015)
		My intentions are to continue using the IS rather than manual processing or other alternative means.	Likert 1-5, Strongly Disagree to Agree	(Bhattacherjee & Lin, 2015)
		I plan to continue using the IS in my job.	Likert 1-5, Strongly Disagree to Agree	(Bhattacherjee & Lin, 2015)
Customization	Agile Web Portal	The upgrades of The System allow me to have more customized contents (e.g., selected news).	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		The upgrades of The System allow me to have a more customized interface.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
Disconfirmation	Not Specified	Comparing my initial expectations about the IS with my actual usage experience, I found that The IS improved my sales performance better than I initially expected.	Likert 1-4	(Bhattacherjee & Lin, 2015)
		Comparing my initial expectations about the IS with my actual usage experience, I found that The IS increased my personal productivity better than I initially expected.	Likert 1-4	(Bhattacherjee & Lin, 2015)
		Comparing my initial expectations about the IS with my actual usage experience, I found that The IS enhanced my job effectiveness better than I initially expected.	Likert 1-4	(Bhattacherjee & Lin, 2015)
		Comparing my initial expectations about the IS with my actual usage experience, I found that The IS was more helpful for my job than I initially expected.	Likert 1-4	(Bhattacherjee & Lin, 2015)
External Computing Support	Computer	A specific person (or group) is available for assistance with hardware difficulties.	Likert 1-5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		A specific person (or group) is available for assistance with software difficulties.	Likert 1-5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)

Constructo	Contexto	Indicadores	Escala	Referências
External Computing Support (cont.)	Computer (cont.)	Specialized instruction and education concerning software is available to me.	Likert 1-5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		Guidance is available to me in the selection of hardware, software, printers, and other equipment.	Likert 1-5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
External Influence	e-Learning System	I read/see news reports that using the e-learning system is a good way of learning.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		Expert opinions depict a positive sentiment for using the e-learning system.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		Mass media reports convince me to use the e-learning system.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
External Training	Computer	Operation systems.	Scale 1 to 5, Never to Very Great Extent	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		Spreadsheets.	Scale 1 to 5, Never to Very Great Extent	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		Word processing.	Scale 1 to 5, Never to Very Great Extent	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		Application packages (e.g., accounting or payroll packages).	Scale 1 to 5, Never to Very Great Extent	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
Habit	Not Specified	Using the IS has become automatic to me.	Likert 1-5, Strongly Disagree to Agree	(Bhattacherjee & Lin, 2015)
		Using the IS comes naturally to me.	Likert 1-5, Strongly Disagree to Agree	(Bhattacherjee & Lin, 2015)
		When faced with a particular task, using the IS is an obvious choice for me.	Likert 1-5, Strongly Disagree to Agree	(Bhattacherjee & Lin, 2015)
		I have a habit of using the IS.	Likert 1-5, Strongly Disagree to Agree	(Bhattacherjee & Lin, 2015)
Individualism/Collectivism	Computer and PDA	Being accepted as a member of a group is more important than having autonomy and independence.	Not Specified	(Srite & Karahanna, 2006)
		Being accepted as a member of a group is more important than being independent.	Not Specified	(Srite & Karahanna, 2006)
		Group success is more important than individual success.	Not Specified	(Srite & Karahanna, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Individual-ism/Collec-tivism (cont.)	Computer and PDA (cont.)	Being loyal to a group is more important than individual gain.	Not Specified	(Srite & Karahanna, 2006)
		Individual rewards are not as important as group welfare.	Not Specified	(Srite & Karahanna, 2006)
		It is more important for a manager to encourage loyalty and a sense of duty in subordinates than it is to encourage individual initiative.	Not Specified	(Srite & Karahanna, 2006)
Information Credibility	B2C net-enabled commerce	In choosing a particular online retailer, the information provided by Bizrate.com was:	Not Dependable-Dependable	(Son, Kim, & Riggins, 2006)
		In choosing a particular online retailer, the information provided by Bizrate.com was:	Not Credible-Credible	(Son, Kim, & Riggins, 2006)
		In choosing a particular online retailer, the information provided by Bizrate.com was:	Not Trustworthy-Trustworthy	(Son, Kim, & Riggins, 2006)
Intentions	Mobile Devices	It is very likely that I would use the Blackberry.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		I will use the Blackberry the next time I need a PDA.	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
		I will definitely try a Blackberry	Scale 1–7, Strongly Disagree to Agree	(Wakefield & Whitten, 2006)
Intentions to Adopt	Smart Card	Once the trial period is over, I will be interested in continuing to use a smart card payment system in my business.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		Once the trial period is over, I will arrange to permanently adopt a smart card payment system as soon as possible.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		Once the trial period is over, I won't see much need to continue to use a smart card payment system in my business.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		Once the trail period is over, I will recommend that my fellow merchants get a smart card payment system.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
	Wireless Internet Services via Mobile Technology (WIMT)	Assuming I have access to WIMD, I intend to adopt it.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
		Given that I have access to WIMD, I predict that I would adopt it.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)

Constructo	Contexto	Indicadores	Escala	Referências
Intention to Participate	Remote Electronic Voting Systems (REVS)	If web-based voting were available, would you use it.	Likert 1-5, Strongly Disagree to Agree	(Yao & Murphy, 2007)
		If telephone voting were available, would you use it.	Likert 1-5, Strongly Disagree to Agree	(Yao & Murphy, 2007)
Internal Computing Support	Computer	A specific person (or group) is available for assistance with hardware difficulties.	Likert 1-5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		A specific person (or group) is available for assistance with software difficulties.	Likert 1-5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		Specialized instruction and education conceming software is avaiiabie to me.	Likert 1-5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		Guidance is available to me in the selection of hardware, software, printers, and other equipment.	Likert 1-5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
Internal Training	Computer	Operation systems.	Scale 1 to 5, Never to Very Great Extent	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		Spreadsheets.	Scale 1 to 5, Never to Very Great Extent	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		Word processing.	Scale 1 to 5, Never to Very Great Extent	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		Application packages (e.g., accounting or payroll packages).	Scale 1 to 5, Never to Very Great Extent	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
Internet Self-efficacy	e-Learning System	I feel confident in the e-learning system finding information and downloading files.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I feel confident in the e-learning system attaching files to emails.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I feel confident in the e-learning system exchanging messages with other users in discussion forums.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I feel confident in the e-learning system posting messages on a bulletin board.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
Interpersonal Influence	e-Learning System	My supervisor thinks that I should use the e-learning system.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		My colleagues think that I should use the e-learning system.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)

Constructo	Contexto	Indicadores	Escala	Referências
Interpersonal Influence (cont.)	e-Learning System (cont.)	My friends think that I should use the e-learning system.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
Job Satisfaction	Human Resources Information System	Overall, I am satisfied with my job.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
		I am satisfied with the way I work at the moment.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
		I am satisfied with the important aspects of my job.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
Knowledge of Search Domain	Digital Library	I am familiar with the subject domain that I search for on the E-library.	Likert 1-7, Strongly Disagree to Agree	(Hong, Thong, Wong, & Tam, 2001)
		I am knowledgeable in the topic to search for on the E-library.	Likert 1-7, Strongly Disagree to Agree	(Hong, Thong, Wong, & Tam, 2001)
Learning Goal Orientation	e-Learning System	I look for opportunities to develop my work ability.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I learn to develop my work ability.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I enjoy challenging environment.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I prefer to work in situations.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I prefer to develop competence through expanding my work ability.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I prefer to develop competence through mastering challenging situations.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
Management Support	Computer	Management is aware of the benefits that can be achieved with the use of computers.	Scale 1 to 5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		Management always supports and encourages the use of computers for job-related work.	Scale 1 to 5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		Management provides most of the necessary help and resources to enable people to use computers.	Scale 1 to 5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)

Constructo	Contexto	Indicadores	Escala	Referências
Management Support (cont.)	Computer (cont.)	Management is really keen to see that people are happy with using computers.	Scale 1 to 5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		Management provides good access to hardware resources when people need them.	Scale 1 to 5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
		Management provides good access to various types of software when people need them.	Scale 1 to 5, Strongly Disagree to Agree	(Igbaria, Zinatelli, Cragg, & Cavaye, 1997)
Masculinity/Femininity	Computer and PDA	It is preferable to have a man in high level position rather than a woman.	Not Specified	(Srite & Karahanna, 2006)
		There are some jobs in which a man can always do better than a woman.	Not Specified	(Srite & Karahanna, 2006)
		It is more important for men to have a professional career than it is for women to have a professional career.	Not Specified	(Srite & Karahanna, 2006)
		Solving organizational problems requires the active forcible approach which is typical of men.	Not Specified	(Srite & Karahanna, 2006)
		Women do not value recognition and promotion in their work as much as men do.	Not Specified	(Srite & Karahanna, 2006)
Media Fit (Information Exchange)	Mobile Technologies	Mobile communication systems are the proper media for: Exchanging information.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)
		Mobile communication systems are the proper media for: Retrieving information.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)
Media Fit (Solve Problems)	Mobile Technologies	Mobile communication systems are the proper media for: Decision-making.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)
		Mobile communication systems are the proper media for: Gaining an overview of the situation.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)
		Mobile communication systems are the proper media for: Asking questions.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)
		Mobile communication systems are the proper media for: Solving problems.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)
Mobility	Remote Electronic Voting Systems (REVS)	A REVS that lets me vote at home, work, or other convenient place will save me from having to wait in line to vote.	Likert 1-5, Strongly Disagree to Agree	(Yao & Murphy, 2007)
		A REVS that lets me vote at home, work, or other convenient place will save me time driving to a polling location.	Likert 1-5, Strongly Disagree to Agree	(Yao & Murphy, 2007)

Constructo	Contexto	Indicadores	Escala	Referências
Mobility (cont.)	REVS (cont.)	A REVS that lets me vote at home, work, or other convenient place will not require voters to go to a specific polling location.	Likert 1-5, Strongly Disagree to Agree	(Yao & Murphy, 2007)
Network Externality	e-Learning System	Most employees in my office use the e-learning system frequently.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		Most employees in my department use the e-learning system frequently.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		Most employees in my company use the e-learning system frequently.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
Peer Influence	Telemedicine Technology	People who influence my clinical behavior think that I should use telemedicine technology.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002)
		People who are important to my health-care services think that I should not use telemedicine technology.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002)
		People who are important in assessing my patient care and management think that I should not use telemedicine technology.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002)
Perceived Behavioral Control	Computer Banking System (CBS)	I am able to use CBS.	Likert 1-7, Strongly Disagree to Agree	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
		I have the resources, and the knowledge, and the ability to use CBS.	Likert 1-7, Strongly Disagree to Agree	(Brown, Massey, Montoya-Weiss, & Burkman, 2002)
Perceived Credibility	Cellular Phone m-services	Using mobile services would not divulge my personal information.	Not Specified	(Wang, Lin, & Luarn, 2006)
		I would find mobile services secure in conducting my transactions.	Not Specified	(Wang, Lin, & Luarn, 2006)
Perceived Critical Mass	Lotus Domino Discussion Database	Most students in my class used Discussion Database frequently.	Likert 1-7, Strongly Disagree to Agree	(Lou, Luo, & Strong, 2000)
		Most students in my group used Discussion Database frequently.	Likert 1-7, Strongly Disagree to Agree	(Lou, Luo, & Strong, 2000)
Perceived Effectiveness	B2C net-enabled commerce	Using Bizrate.com Website improved the quality of my decision making in online shopping of the product.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
		Using Bizrate.com Website gave me greater control over online shopping of the product.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
		Using the Website enabled me to make a more informed decision in shopping the product online.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Effectiveness (cont.)	B2C net-enabled commerce	I believe that using Bizrate.com Website is a more effective way of shopping the product online.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
Perceived Efficiency	B2C net-enabled commerce	Without using Bizrate.com Website, I would have to spend more time to find out who are selling the product online.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
		Without using Bizrate.com Website, I would have to spend more effort to find out who are selling the product online.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
		Without using Bizrate.com Website, I would have to visit many Websites to find out who are selling the product online.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
Perceived Financial Resources	Cellular Phone m-services	Financial resource (e.g. to pay for communication time, subscription, and/or service) is not a barrier for me in using mobile services.	Likert 1-7, Strongly Disagree to Agree	(Wang, Lin, & Luarn, 2006)
		I have enough financial resources (e.g. to pay for communication time, subscription, and/or service) for using mobile services.	Likert 1-7, Strongly Disagree to Agree	(Wang, Lin, & Luarn, 2006)
Perceived Long-term Usefulness	Microsoft Word	Knowledge of Microsoft Word can increase my flexibility of changing jobs.	Likert 1-7, Strongly Disagree to Agree	(Chau, 1996)
		Knowledge of Microsoft Word can increase the opportunity for more meaningful work.	Likert 1-7, Strongly Disagree to Agree	(Chau, 1996)
		Knowledge of Microsoft Word can increase the opportunity for preferred future job assignments.	Likert 1-7, Strongly Disagree to Agree	(Chau, 1996)
		Knowledge of Microsoft Word can increase the opportunity to gain job security.	Likert 1-7, Strongly Disagree to Agree	(Chau, 1996)
Perceived Near-term Usefulness	Microsoft Word	Using Microsoft Word can enable me to accomplish tasks more quickly.	Likert 1-7, Strongly Disagree to Agree	(Chau, 1996)
		Using Microsoft Word can improve my job performance.	Likert 1-7, Strongly Disagree to Agree	(Chau, 1996)
		Using Microsoft Word can make it easier to do my job.	Likert 1-7, Strongly Disagree to Agree	(Chau, 1996)
		Using Microsoft Word in my job can increase my productivity.	Likert 1-7, Strongly Disagree to Agree	(Chau, 1996)
		Using Microsoft Word can enhance my effectiveness on the job.	Likert 1-7, Strongly Disagree to Agree	(Chau, 1996)
		I find Microsft Word useful in my job.	Likert 1-7, Strongly Disagree to Agree	(Chau, 1996)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Network Externalities	Short Message Service (SMS)	From my observations, the number of SMS users is large.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		Many of my friends and relatives frequently use SMS.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		I have many opportunities to use SMS.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		In my opinion, many mobile phone users frequently use SMS.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		There are various types of SMS.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		In my opinion, as a communication tool, SMS is as common as other ways of communication (e.g., face-to-face and phone conversation).	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
Perceived Performance	e-Learning System	I successfully use the e-learning system to enhance my job effectiveness.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I successfully use the e-learning system to perform my job.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		I am satisfied with the effect of using the e-learning system on my job performance.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
Perceived Resources	Broadband Internet	I have the resources, opportunities and knowledge for using broadband Internet.	Not Specified	(Oh, Ahn, & Kim, 2003)
		I would be able to use broadband Internet if I wanted to.	Not Specified	(Oh, Ahn, & Kim, 2003)
		I have access to the resources I would need for using broadband Internet.	Not Specified	(Oh, Ahn, & Kim, 2003)
		There are no barriers to my using broadband Internet.	Not Specified	(Oh, Ahn, & Kim, 2003)
Perceived Service Cost	Short Message Service (SMS)	I think the equipment cost of using SMS is expensive.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		I think the access cost of using SMS is expensive.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)
		I think the transaction fee of using SMS is expensive.	Likert 1-7, Strongly Disagree to Agree	(Y. B. Lu, Deng, & Wang, 2010)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Technology Control	Telemedicine Technology	I would have the ability to use telemedicine technology in my patient care and management.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002)
		Using telemedicine technology would be entirely within my control.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002)
		I would not have the knowledge to make use of telemedicine technology in my patient care and management.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002)
		I would have the resources (including training) to make use of telemedicine technology in my patient care and management.	Likert 1-7, Strongly Disagree to Agree	(Chau & Hu, 2002)
Perceived Usefulness (Productivity)	Mobile Technologies	Using mobile systems in my job would enable me to accomplish tasks more quickly.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)
		Using mobile systems in my job would increase my productivity.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)
		Using mobile systems would make it easier to do my job.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)
Perceived Usefulness (Resource Advantage)	Mobile Technologies	I would consider mobile systems useful in my job.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)
		Mobile communication systems are a nice supplement to existing systems.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)
		Mobile systems have many advantages over other systems.	Likert 1-7	(Bouwman & Van De Wijngaert, 2009)
Perceived Voluntariness of Use	Interactive online help desk system and multimedia system for property management	My superiors expect me to use the system.	Likert 1-7	(Venkatesh, 2000)
		My use of the system is voluntary.	Likert 1-7	(Venkatesh, 2000)
		My supervisor does not require me to use the system.	Likert 1-7	(Venkatesh, 2000)
		Although it might be helpful, using the system is certainly not compulsory in my job.	Likert 1-7	(Venkatesh, 2000)
Perceptions of Internal Control	Interactive online help desk system and multimedia system for property management	I could complete the job using a software package if there was no one around to tell me what to do as I go.	Guttman 1-10	(Venkatesh, 2000)
		I could complete the job using a software package if I had never used a package like it before.	Guttman 1-10	(Venkatesh, 2000)
		I could complete the job using a software package if I had only the software manuals for reference.	Guttman 1-10	(Venkatesh, 2000)
		I could complete the job using a software package if I had seen someone else using it before trying it myself.	Guttman 1-10	(Venkatesh, 2000)

Constructo	Contexto	Indicadores	Escala	Referências
Perceptions of Internal Control (cont.)	Interactive online help desk system and multimedia system for property management (cont.)	I could complete the job using a software package if I could call someone for help if I got stuck.	Guttman 1-10	(Venkatesh, 2000)
		I could complete the job using a software package if someone else had helped me get started.	Guttman 1-10	(Venkatesh, 2000)
		I could complete the job using a software package if I had a lot of time to complete the job for which the software was provided.	Guttman 1-10	(Venkatesh, 2000)
		I could complete the job using a software package if I had just the built-in help facility for assistance.	Guttman 1-10	(Venkatesh, 2000)
		I could complete the job using a software package if someone showed me how to do it first.	Guttman 1-10	(Venkatesh, 2000)
		I could complete the job using a software package if I had used similar packages before this one to do the same job.	Guttman 1-10	(Venkatesh, 2000)
Personal Innovativeness	Agile Web Portal	If I heard about a new information technology, I would look for ways to experiment with it.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		Among my peers, I am usually the first to try out new information technologies.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		I like to experiment with new information technologies.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
Personal Innovativeness In Information Technology	Wireless Internet Services via Mobile Technology (WIMT)	If I heard about a new information technology, I would look for ways to experiment with it.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
		Among my peers, I am usually the first to explore new information technologies.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
		I like to experiment with new information technologies.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
		In general, I am hesitant to try out new information technologies.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
Power Distance	Computer and PDA	Managers should make most decisions without consulting subordinates	Not Specified	(Srite & Karahanna, 2006)
		Managers should not ask subordinates for advice, because they might appear less powerful.	Not Specified	(Srite & Karahanna, 2006)
		Decision making power should stay with top management in the organization and not be delegated to lower level employees.	Not Specified	(Srite & Karahanna, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Power Distance (cont.)	Computer and PDA (cont.)	Employees should not question their manager's decisions.	Not Specified	(Srite & Karahanna, 2006)
		A manager should perform work which is difficult and important and delegate tasks which are repetitive and mundane to subordinates.	Not Specified	(Srite & Karahanna, 2006)
		Higher level managers should receive more benefits and privileges than lower level managers and professional staff.	Not Specified	(Srite & Karahanna, 2006)
		Managers should be careful not to ask the opinions of subordinates too frequently, otherwise the manager might appear to be weak and incompetent.	Not Specified	(Srite & Karahanna, 2006)
Predicted Usage	Microsoft Access	If the choice of a (technology type) platform were up to me, it would likely be (system).	Not Specified	(Chin, Johnson, & Schwarz, 2008)
		If I need to (accomplish task) and the choice was up to me, I would expect to use (system) as a (task-related) platform.	Not Specified	(Chin, Johnson, & Schwarz, 2008)
		If asked, I would likely recommend (system) as a (task-related) platform.	Not Specified	(Chin, Johnson, & Schwarz, 2008)
		For future (task-oriented) tasks that are totally within my control, I would probably use (system) as a (task-oriented) platform.	Not Specified	(Chin, Johnson, & Schwarz, 2008)
Prior Computer Experience	Not Specified	How many years of experience do you have using computers in general?	Direct Answer	(Venkatesh & Morris, 2000)
Privacy	Remote Electronic Voting Systems (REVS)	A REVS that lets me vote at home, work, or other convenient place will prevent tracing ballots to specific voters.	Likert 1-5, Strongly Disagree to Agree	(Yao & Murphy, 2007)
		A REVS that lets me vote at home, work, or other convenient place will prevent others from seeing whom I vote for.	Likert 1-5, Strongly Disagree to Agree	(Yao & Murphy, 2007)
		A REVS that lets me vote at home, work, or other convenient place will protect voters' identification information.	Likert 1-5, Strongly Disagree to Agree	(Yao & Murphy, 2007)
Product Involvement	B2C net-enabled commerce	In general, I have strong interest in this product.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
		This product is very important to me.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Product Involvement (cont.)	B2C net-enabled commerce	This product matters a lot to me.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
Psychological Ownership of Information Technology	Computer Physician Order Entry (CPOE) System	I personally invested a lot in the implementation of the new system in my clinic.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		When I think about it, I see a part of myself in the new system.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		I feel the new system belongs to all the doctors in my clinic.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		I feel a high level of ownership toward the new system.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		I hardly think of the new system as being my own system .	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		I see myself as a champion of the new system in my clinic.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
		I configured the functionalities of the new system to better align it with my medical practice.	Likert 0-10, Not at all to a Lot	(Barki, Paré, & Sicotte, 2008)
Relative Advantage	Smart Card	Using the Exact card system improves the quality of the sales transactions my staff and I conduct in our business.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		Using the Exact card system gives me and my staff greater control over our business' sales transactions.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
Relevance	Agile Web Portal	The features offered by the upgrades of The System relate well to my work.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		The upgrades of The System provide needed functions for my work.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
	Digital Library	The resources in the digital library relate well to my study needs.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		The digital library has enough resources for my study needs.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)

Constructo	Contexto	Indicadores	Escala	Referências
Relevance (cont.)	Digital Library (cont.)	The resources in the E-library relate well to my study.	Likert 1-7, Strongly Disagree to Agree	(Hong, Thong, Wong, & Tam, 2001)
		The E-library has enough resources for my study.	Likert 1-7, Strongly Disagree to Agree	(Hong, Thong, Wong, & Tam, 2001)
Risk Awareness	B2C net-enabled commerce	Using Bizrate.com Website made me aware of the level of risk associated with purchasing the product from an online retailer.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
		Using Bizrate.com Website made me aware of whether significant potential for loss would be associated with purchasing the product from an online retailer.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
		Using Bizrate.com Website made me aware of whether I would confront a negative situation by purchasing the product from an online retailer.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
Satisfaction	Not Specified	How do you feel about your overall experience of IS usage.	Scale 1 to 5, Very Dissatisfied to Very Satisfied	(Bhattacherjee & Lin, 2015)
		How do you feel about your overall experience of IS usage.	Scale 1 to 5, Very Displeased to Very Pleased	(Bhattacherjee & Lin, 2015)
		How do you feel about your overall experience of IS usage.	Scale 1 to 5, Very Frustrated to Very Contented	(Bhattacherjee & Lin, 2015)
		How do you feel about your overall experience of IS usage.	Scale 1 to 5, Absolutely Terrible to Absolutely Delighted	(Bhattacherjee & Lin, 2015)
Screen Design	Digital Library	The E-library commands are well depicted by buttons and symbols.	Likert 1-7, Strongly Disagree to Agree	(Hong, Thong, Wong, & Tam, 2001)
		The layout of the E-library screens is clear and consistent.	Likert 1-7, Strongly Disagree to Agree	(Hong, Thong, Wong, & Tam, 2001)
Screen Layout	Digital Library	The digital library commands are well depicted by buttons and symbols.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		Layout of the digital library screens is clear and consistent.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)

Constructo	Contexto	Indicadores	Escala	Referências
Self-efficacy	Cellular Phone m-services	I could conduct my transactions using the mobile service system if I had just the built-in help facility for assistance.	Likert 1-7, Not al All Confident to Totally Confident	(Wang, Lin, & Luarn, 2006)
		I could conduct my transactions using the mobile service system if I had seen someone else using it before trying it myself.	Likert 1-7, Not al All Confident to Totally Confident	(Wang, Lin, & Luarn, 2006)
		I could conduct my transactions using the mobile service system if someone showed me how to do it first.	Likert 1-7, Not al All Confident to Totally Confident	(Wang, Lin, & Luarn, 2006)
Social Influence	Wireless Internet Services via Mobile Technology (WIMT)	People around me who use WIMD have more prestige than those who do not.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
		People who use WIMD have a high profile.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
		Using WIMD is considered a status symbol among my friends.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
		People who influence my behavior think that I should use WIMD.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
		My friends think that I should use WIMD.	Likert 0-7, No Reply to Agree	(J. Lu, Yao, & Yu, 2005)
Social Norm	Instantaneous Voice Communication Service	I would use PTT if my friends use it.	Likert 1-5	(Dickinger, Arami, & Meyer, 2008)
		I would use PTT if my family uses it.	Likert 1-5	(Dickinger, Arami, & Meyer, 2008)
		I think my friends find PTT good.	Likert 1-5	(Dickinger, Arami, & Meyer, 2008)
System Functionality	e-Learning System	The e-learning system allows learner control over his or her learning activity.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		The e-learning system offers multimedia (audio, video, and text) types of course content.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		The e-learning system provides a means for taking tests and turning in assignments.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		The e-learning system can present course material in a well-organized and readable format.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)

Constructo	Contexto	Indicadores	Escala	Referências
System Interactivity	e-Learning System	The e-learning system enables interactive communication between instructor and learners.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		The e-learning system enables interactive communication among learners.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		The communicational tools in the e-learning system are effective (email, bulletin board, chat room, etc.).	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
System Response	e-Learning System	When you are using the e-learning system, system response is fast.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		In general, the response time of the e-learning system is consistent.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
		In general, the response time of the e-learning system is reasonable.	Likert 1-7, Strongly Disagree to Agree	(Cheng, 2011)
System Use	Computer Physician Order Entry (CPOE) System	Are you an intensive user of the new system?	Likert 0-10, Not at all to Very Much	(Barki, Paré, & Sicotte, 2008)
		How frequently do you use the new system?	Likert 0-10, Never to Frequently	(Barki, Paré, & Sicotte, 2008)
		For what percentage of your patients do you consult or use the new system?	Likert 0-10, a Minimal Percentage to All of Them	(Barki, Paré, & Sicotte, 2008)
Terminology	Digital Library	I understand the terms used throughout the digital library.	Likert 1-7, Strongly Disagree to Agree	(Hong, Thong, Wong, & Tam, 2001; Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		The use of terms throughout the digital library is consistent.	Likert 1-7, Strongly Disagree to Agree	(Hong, Thong, Wong, & Tam, 2001; Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
Timeliness	Agile Web Portal	The upgrades of The System enable faster responses to my requests.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		The upgrades improve the speed of The System.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)

Constructo	Contexto	Indicadores	Escala	Referências
Timeliness (cont.)	Digital Library	The response time of the digital library is satisfactory.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
		The digital library performs too slowly.	Likert 1-7, Strongly Disagree to Agree	(Hong, Chan, Thong, Chasalow, & Dhillon, 2014)
Trialability	Smart Card	Before deciding whether to use the Exact card system, my staff and I were able to properly try it out.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		My staff and I have had a great deal of opportunity to try the Exact card system in various situations. (e.g., a customer asks to pay for a purchase with a combination of Exact and cash).	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
Trust of State Government	e-Government	I think I can trust VA TAX.	Not Specified	(Carter & Belanger, 2005)
		The VA TAX can be trusted to carry out online transactions faithfully.	Not Specified	(Carter & Belanger, 2005)
		In my opinion, VA TAX is trustworthy.	Not Specified	(Carter & Belanger, 2005)
		I trust VA TAX to keep my best interests in mind.	Not Specified	(Carter & Belanger, 2005)
Trust of the Internet	e-Government	The internet has enough safeguards to make me feel comfortable using it to interact with the VA TAX online.	Not Specified	(Carter & Belanger, 2005)
		I feel assured that legal and technological structures adequately protect me from problems on the internet .	Not Specified	(Carter & Belanger, 2005)
		In general, the internet is now a robust and safe environment in which to transact with the VA TAX.	Not Specified	(Carter & Belanger, 2005)
Turnover Intention	Human Resources Information System	I think often about quitting my job at my current employer.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
		I intend to quit my actual job.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)
		I think about leaving my actual employer.	Likert 1-7, Strongly Disagree to Agree	(Maier, Laumer, Eckhardt, & Weitzel, 2013)

Constructo	Contexto	Indicadores	Escala	Referências
Uncertainty	B2C net-enabled commerce	It is risky for me to make a transaction with many of the online retailers.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
		There is significant potential for loss when making a transaction with many of the online retailers.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
		Many of the online retailers put me in a negative situation when I make a transaction with them.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
		Many of the online retailers do not securely handle my personal information, including credit card numbers.	Likert 1-7, Strongly Disagree to Agree	(Son, Kim, & Riggins, 2006)
Uncertainty Avoidance	Computer and PDA	Rules and regulations are important because they inform workers what the organization expects of them.	Not Specified	(Srite & Karahanna, 2006)
		Order and structure are very important in a work environment.	Not Specified	(Srite & Karahanna, 2006)
		It is important to have job requirements and instructions spelled out in detail so that people always know what they are expected to do.	Not Specified	(Srite & Karahanna, 2006)
		It is better to have a bad situation that you know about, than to have an uncertain situation which might be better.	Not Specified	(Srite & Karahanna, 2006)
		Providing opportunities to be innovative is more important than requiring standardized work procedures.	Not Specified	(Srite & Karahanna, 2006)
		People should avoid making changes because things could get worse.	Not Specified	(Srite & Karahanna, 2006)
	Enterprise Resource Planning (ERP)	It is important to have job requirements and instructions spelled out in detail so that employees always know what they are expected to do.	Likert 0-10, Completely Disagree to Agree	(Hwang, 2005)
		Rules and regulations are important because they inform employees what the organization expects of them.	Likert 0-10, Completely Disagree to Agree	(Hwang, 2005)
		Standard operating procedures are helpful to employees on the job.	Likert 0-10, Completely Disagree to Agree	(Hwang, 2005)
		Instructions for operations are important for employees on the job.	Likert 0-10, Completely Disagree to Agree	(Hwang, 2005)

Constructo	Contexto	Indicadores	Escala	Referências
Usage Intensity	Customer Relationship Management (CRM) System	During a typical day, how many minutes would you spend using the CRM system?	Selection, 0; 1–20; 20–60; 60–120; 120–180; > 180	(Karahanna, Agarwal, & Angst, 2006)
		How frequently do you access the CRM system?	Selection, Never; A few times a year; Monthly; Weekly; Daily; Nearly all the time	(Karahanna, Agarwal, & Angst, 2006)
Usage Intentions	World-Wide Web (WWW)	I intend to increase my use of the WWW for work in the future.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Agarwal & Prasad, 1998)
		For future work I would use the WWW.	Scale 1 to 7, Strongly Disagree to Strongly Agree	(Agarwal & Prasad, 1998)
Usage Scope	Customer Relationship Management (CRM) System	Of all features and functions available in the CRM system, what percentage would you estimate that you use on a fairly regular basis?	Percentage	(Karahanna, Agarwal, & Angst, 2006)
		Approximately, what percentage of all your client interactions are managed using the CRM system?	Percentage	(Karahanna, Agarwal, & Angst, 2006)
User Involvement	Computer Physician Order Entry (CPOE) System	As a tool for my work at the clinic, I consider the new system to be Useless vs Essential.	Scale 0 to 10	(Barki, Paré, & Sicotte, 2008)
		As a tool for my work at the clinic, I consider the new system to be Irrelevant vs Relevant.	Scale 0 to 10	(Barki, Paré, & Sicotte, 2008)
		As a tool for my work at the clinic, I consider the new system to be Means nothing vs Means a lot.	Scale 0 to 10	(Barki, Paré, & Sicotte, 2008)
		As a tool for my work at the clinic, I consider the new system to be Does not matter to me vs Matters to me.	Scale 0 to 10	(Barki, Paré, & Sicotte, 2008)
		As a tool for my work at the clinic, I consider the new system to be Trivial vs Fundamental.	Scale 0 to 10	(Barki, Paré, & Sicotte, 2008)
		As a tool for my work at the clinic, I consider the new system to be Of no concern to me vs Of great concern to me.	Scale 0 to 10	(Barki, Paré, & Sicotte, 2008)
		As a tool for my work at the clinic, I consider the new system to be Unimportant vs Very important.	Scale 0 to 10	(Barki, Paré, & Sicotte, 2008)

Constructo	Contexto	Indicadores	Escala	Referências
User Participation (Communication)	Computer Physician Order Entry (CPOE) System	Informal exchanges concerning the project with other users.	Likert 1-10, Strongly Disagree to Agree	(Barki, Paré, & Sicotte, 2008)
		Informal communication with project management.	Likert 1-10, Strongly Disagree to Agree	(Barki, Paré, & Sicotte, 2008)
		Idea and opinion exchanges concerning the project with other users.	Likert 1-10, Strongly Disagree to Agree	(Barki, Paré, & Sicotte, 2008)
		Discussions with other users regarding your concerns about the project.	Likert 1-10, Strongly Disagree to Agree	(Barki, Paré, & Sicotte, 2008)
		Debates with project management about your ideas and opinions on the project.	Likert 1-10, Strongly Disagree to Agree	(Barki, Paré, & Sicotte, 2008)
		Discussions with project management about your ideas and opinions on the project.	Likert 1-10, Strongly Disagree to Agree	(Barki, Paré, & Sicotte, 2008)
User Participation (Hands-on)	Computer Physician Order Entry (CPOE) System	Before the new system was deployed, you took part in Training other doctors who use the new system.	Likert 1-10, Strongly Disagree to Agree	(Barki, Paré, & Sicotte, 2008)
		Before the new system was deployed, you took part in Testing the new system's interface.	Likert 1-10, Strongly Disagree to Agree	(Barki, Paré, & Sicotte, 2008)
		Before the new system was deployed, you took part in Designing data input screens.	Likert 1-10, Strongly Disagree to Agree	(Barki, Paré, & Sicotte, 2008)
		Before the new system was deployed, you took part in Designing system outputs.	Likert 1-10, Strongly Disagree to Agree	(Barki, Paré, & Sicotte, 2008)
User Participation (Responsibility)	Computer Physician Order Entry (CPOE) System	Determining the new system's information requirements (needs analysis).	Likert 1-10, Strongly Disagree to Agree	(Barki, Paré, & Sicotte, 2008)
		The final decision regarding vendor and/or hardware and software selection.	Likert 1-10, Strongly Disagree to Agree	(Barki, Paré, & Sicotte, 2008)
		Managing of the project (objectives, schedule, budget).	Likert 1-10, Strongly Disagree to Agree	(Barki, Paré, & Sicotte, 2008)
		Making the project a success.	Likert 1-10, Strongly Disagree to Agree	(Barki, Paré, & Sicotte, 2008)
Visibility	Smart Card	In my community, I see many merchants using the Exact card system.	Likert 1-7, Strongly Disagree to Agree	(Plouffe, Hulland, & Vandenbosch, 2001)
		The Exact card system is not very visible in my community.	Likert 1-7, Strongly Disagree to Agree	

G - Constructos e Indicadores do Technology-Organization-Environment Framework

A presente tabela contém todos os constructos e indicadores identificados relacionados com a *Technology-Organization-Environment Framework.*

Constructo	Contexto	Indicadores	Escala	Referências
External Task Environment				
Organization				
Technology				
Competitive Pressure	e-Business	Percentage of competitors in your industry that have conducted Internet-based selling.	Percentage	(Zhu, Dong, Xu, & Kraemer, 2006)
		Percentage of competitors in your industry that have conducted Internet-based procurement and coordination.	Percentage	(Zhu, Dong, Xu, & Kraemer, 2006)
		Percentage of competitors in your industry that have conducted Internet-based services.	Percentage	(Zhu, Dong, Xu, & Kraemer, 2006)
Consumer Willingness	e-Business	% of the population using online shopping in each country.	Percentage	(Zhu, Kraemer, & Xu, 2003)
		% of the population using online banking in each country.	Percentage	(Zhu, Kraemer, & Xu, 2003)
		% of the population willing to use credit card payment for online shopping in each country.	Percentage	(Zhu, Kraemer, & Xu, 2003)
		% of the population willing to use e-cash payment for online shopping in each country.	Percentage	(Zhu, Kraemer, & Xu, 2003)
		Average annual online spending per capita in each country.	Percentage	(Zhu, Kraemer, & Xu, 2003)
E-business Know-How	e-Business	Do the executives in this establishment have sufficient know-how for implementing online procurement?	Direct Answer	(Zhu, Kraemer, & Xu, 2003)
		Do the executives in this establishment have sufficient know-how for implementing online selling?	Direct Answer	(Zhu, Kraemer, & Xu, 2003)
E-business Value (Impact on Commerce)	e-Business	Sales increased.	Likert 1-5	(Zhu, Kraemer, & Dedrick, 2004)
		Sales area widened.	Likert 1-5	(Zhu, Kraemer, & Dedrick, 2004)
		Customer service improved.	Likert 1-5	(Zhu, Kraemer, & Dedrick, 2004)
		International sales increased.	Likert 1-5	(Zhu, Kraemer, & Dedrick, 2004)
E-business Value (Impact on Coordination)	e-Business	Transaction costs with business partners decreased.	Likert 1-5	(Zhu, Kraemer, & Dedrick, 2004)
		Coordination with business partners or suppliers improved.	Likert 1-5	(Zhu, Kraemer, & Dedrick, 2004)

Constructo	Contexto	Indicadores	Escala	Referências
E-business Value (Impact on Internal Efficiency)	e-Business	Internal process more efficient.	Likert 1-5	(Zhu, Kraemer, & Dedrick, 2004)
		Staff productivity increased.	Likert 1-5	(Zhu, Kraemer, & Dedrick, 2004)
Environment Context (Competition Intensity)	e-Business	Degree affected by competitors in the local market.	Likert 1-5	(Zhu, Kraemer, & Dedrick, 2004)
		Degree affected by competitors nationwide.	Likert 1-5	(Zhu, Kraemer, & Dedrick, 2004)
		Degree affected by competitors worldwide.	Likert 1-5	(Zhu, Kraemer, & Dedrick, 2004)
Environment Context (Competitive Pressure)	e-Business	% of domestic establishments adopting Web marketing or online selling in each industry and each country.	Percentage	(Zhu, Kraemer, & Xu, 2003)
		% of domestic establishments adopting online procurement in each industry and each country.	Percentage	(Zhu, Kraemer, & Xu, 2003)
		% of European establishments adopting Web marketing or online selling in each industry.	Percentage	(Zhu, Kraemer, & Xu, 2003)
		% of European establishments adopting online procurement in each industry.	Percentage	(Zhu, Kraemer, & Xu, 2003)
Environment Context (Regulatory Environment)	e-Business	Government provided incentive.	Likert 1-5	(Zhu, Kraemer, & Dedrick, 2004)
		Required for government purchase.	Likert 1-5	(Zhu, Kraemer, & Dedrick, 2004)
		Business laws support electronic business.	Likert 1-5	(Zhu, Kraemer, & Dedrick, 2004)
		Legal protection for consumer purchase on the Internet.	Likert 1-5	(Zhu, Kraemer, & Dedrick, 2004)
Internet Penetration	e-Business	% of the population using the Internet in each country.	Percentage	(Zhu, Kraemer, & Xu, 2003)
		% of the population using email in each country.	Percentage	(Zhu, Kraemer, & Xu, 2003)
		% of households with PCs in each country.	Percentage	(Zhu, Kraemer, & Xu, 2003)
		% of households with Internet access in each country.	Percentage	(Zhu, Kraemer, & Xu, 2003)
Internet Skills	e-Business	% of employees who can send emails to internal addresses.	Scale 1 to 3, Majority to No one	(Zhu, Kraemer, & Xu, 2003)
		% of employees who can send emails to external addresses.	Scale 1 to 3, Majority to No one	(Zhu, Kraemer, & Xu, 2003)
		% of employees who can browse Internet sites.	Scale 1 to 3, Majority to No one	(Zhu, Kraemer, & Xu, 2003)
		% of employees who can browse Intranet sites.	Scale 1 to 3, Majority to No one	(Zhu, Kraemer, & Xu, 2003)

Constructo	Contexto	Indicadores	Escala	Referências
Internet Skills (cont.)	e-Business	% of employees who can communicate via video-conferencing.	Scale 1 to 3, Majority to No one	(Zhu, Kraemer, & Xu, 2003)
IT Infrastruc-ture	e-Business	If the establishment uses EDI.	Yes or No	(Zhu, Kraemer, & Xu, 2003)
		If the establishment has access to the Internet.	Yes or No	(Zhu, Kraemer, & Xu, 2003)
		If the establishment has an Intranet.	Yes or No	(Zhu, Kraemer, & Xu, 2003)
		If the establishment uses e-mail.	Yes or No	(Zhu, Kraemer, & Xu, 2003)
		If the establishment uses groupware tools.	Yes or No	(Zhu, Kraemer, & Xu, 2003)
		If the establishment has video-conferencing.	Yes or No	(Zhu, Kraemer, & Xu, 2003)
Organization Context (Finan-cial Resources)	e-Business	IT spending, as percentage of total revenue.	Percentage	(Zhu, Kraemer, & Dedrick, 2004)
		Web-based spending, as percentage of total reve-nue.	Percentage	(Zhu, Kraemer, & Dedrick, 2004)
Organization Context (Firm Size)	e-Business	Number of employees (log transformed).	Direct Answer	(Zhu, Kraemer, & Dedrick, 2004)
Organization Context (Global Scope)	e-Business	Multi-establishment.	Yes or No	(Zhu, Kraemer, & Dedrick, 2004)
		Establishment outside of country.	Yes or No	(Zhu, Kraemer, & Dedrick, 2004)
		Headquarters located outside of country.	Yes or No	(Zhu, Kraemer, & Dedrick, 2004)
		Percent of sales from outside country.	Yes or No	(Zhu, Kraemer, & Dedrick, 2004)
		Percent of purchase from outside country.	Yes or No	(Zhu, Kraemer, & Dedrick, 2004)
Organization Size	e-Business	Number of employees (log transformed).	Direct Answer	(Zhu, Dong, Xu, & Kraemer, 2006)
Partner Readi-ness	e-Business	The extent to which downstream customers have e-business systems ready to support Internet-based selling.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
		The extent to which upstream partners have e-business systems ready to support Internet-based procurement.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
		The extent to which e-business systems owned by trading partners are interoperable with yours.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
Technology Competence	e-Business	IT infrastructure: the strength of existing IT infra-structure, as measured by related technologies that your company has in place, including elec-tronic data interchange (EDI), intranet, extranet,lo-cal area network (LAN), wide area network (WAN).	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Technology Competence (cont.)	e-Business (cont.)	Internet skills: The extent to which the majority of your employees are capable of using the following applications: Web browser, intranet, online order processing.	Likert 1-5	(Zhu, Dong, Xu, & Kraemer, 2006)
		Skill development – Has your company done the following to help employees develop e-business skills (a) in-house training? (b) participating in IT training such as courses and seminars by third parties? (c) legitimizing certain work time for IT learning/training? (d) establishing self-learning or e-learning programs? (e) recruiting staff with special IT skills?	Selection	(Zhu, Dong, Xu, & Kraemer, 2006)
Technology Context (Technology Readiness)	e-Business	Technologies in use, measured by the number of items the establishment has in the following list: Use of e-mail; Web site accessible by public; Use of intranet; Use of extranet; Use of electronic data interchange (EDI); Use of electronic fund transfer; Use of call center;	Yes or No	(Zhu, Kraemer, & Dedrick, 2004)
		Front-end functionality, measured by the number of items the establishment has in the following list: Web site supports online services (filing applications, claims); Web site supports online transactions (payment, transfer); Web site supports account management; Web site provides online tools such as research, planning.	Yes or No	(Zhu, Kraemer, & Dedrick, 2004)
		Extent Web applications electronically integrated with back-office systems.	Likert 1-5	(Zhu, Kraemer, & Dedrick, 2004)
		Extent company databeses electronically integrated with suppliers and partners.	Likert 1-5	(Zhu, Kraemer, & Dedrick, 2004)

H - Constructos e Indicadores da Theory of Planned Behavior

A presente tabela contém todos os constructos e indicadores identificados relacionados com a *Theory of Planned Behavior.*

Constructo	Contexto	Indicadores	Escala	Referências
Attitude Towards the Behavior	Anti-Spyware	For me, cleaning spyware from my computer would be.	Scale 1 to 5, Very Bad Idea to Very Good Idea	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
		For me, preventing spyware from self-installing on my computer would be.	Scale 1 to 5, Very Bad Idea to Very Good Idea	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
		For me, protecting my computer from spyware would be.	Scale 1 to 5, Very Bad Idea to Very Good Idea	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
	Not Specified	All things considered, using the system is a foolish move...wise move.	Scale 0 to 10	(Titah & Barki, 2009)
		All things considered, using the system is a negative step...positive step.	Scale 0 to 10	(Titah & Barki, 2009)
		All things considered, using the system is a ineffective idea...effective idea.	Scale 0 to 10	(Titah & Barki, 2009)
		Using the system is a (bad/good) idea.	Scale 1 to 7	(Kim, 2009)
		Using the system is a (foolish/wise) idea.	Scale 1 to 7	(Kim, 2009)
		I (dislike/like) the idea of using the system.	Scale 1 to 7	(Kim, 2009)
		Using the system is (unpleasant/pleasant).	Scale 1 to 7	(Kim, 2009)
Behavior				
Intention	Anti-Spyware	I intend to periodically use anti-spyware applications to protect my computer from spyware.	Scale 1 to 5, Completely Disagree to Agree	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
		In the immediate future, I intend to customize my browser and computer settings to prevent the intrusion of spyware to my computer.	Scale 1 to 5, Completely Disagree to Agree	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
		I intend to periodically check my browser and computer settings to prevent the intrusion of spyware to my computer.	Scale 1 to 5, Completely Disagree to Agree	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
	Not Specified	I intend to continue using this system to solve various problems.	Scale 0 to 10, Not at All to Very Much	(Titah & Barki, 2009)

Constructo	Contexto	Indicadores	Escala	Referências
Intention (cont.)	Not Specified (cont.)	I intend to continue using this system to justify my decisions.	Scale 0 to 10, Not at All to Very Much	(Titah & Barki, 2009)
		I intend to continue using this system to exchange with other people.	Scale 0 to 10, Not at All to Very Much	(Titah & Barki, 2009)
		I intend to continue using this system to plan or follow-up on my tasks.	Scale 0 to 10, Not at All to Very Much	(Titah & Barki, 2009)
		I intend to continue using this system to coordinate with others.	Scale 0 to 10, Not at All to Very Much	(Titah & Barki, 2009)
		I intend to continue using this system to serve customers.	Scale 0 to 10, Not at All to Very Much	(Titah & Barki, 2009)
		Assuming I had access to the system, I intend to use it.	Likert 1-7	(Kim, 2009)
		Given that I had access to the system, I predict that I would use it.	Likert 1-7	(Kim, 2009)
Perceived Behavioral Control	Anti-Spyware	Please rate the difficulty for you to clean spyware from your computer using anti-spyware applications.	Scale 1 to 5, Extremely difficult to Extremely easy	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
		Please rate the difficulty for you to protect your computer from spyware.	Scale 1 to 5, Extremely difficult to Extremely easy	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
	Not Specified	I have control over using the system.	Likert 1-7	(Kim, 2009)
		I have the resources necessary to use the system.	Likert 1-7	(Kim, 2009)
		I have the knowledge necessary to use the system.	Likert 1-7	(Kim, 2009)
		Given the resources, opportunities and knowledge it takes to use the system, it would be easy for me to use the system.	Likert 1-7	(Kim, 2009)
		The system is not compatible with other systems I use.	Likert 1-7	(Kim, 2009)
Subjective Norm	Anti-Spyware	Most people who are important to me think it is a good idea to clean spyware from my computers.	Scale 1 to 5, Completely Disagree to Agree	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
		Most people who are important to me think it is a good idea to prevent spyware from running on my computer.	Scale 1 to 5, Completely Disagree to Agree	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
	Not Specified	People who are important to me think that I should use the system.	Likert 1-7 and Scale 0 to 10, Disagree Completely to Agree Completely	(Kim, 2009; Titah & Barki, 2009)

Constructo	Contexto	Indicadores	Escala	Referências
Subjective Norm (cont.)	Not Specified (cont.)	People who influence me think that I should use the system.	Likert 1-7 and Scale 0 to 10, Disagree Completely to Agree Completely	(Kim, 2009; Titah & Barki, 2009)
Attitude toward Getting Information	e-Commerce	For me, getting information about this product from this website within the next 30 days would be.	Scale 1 to 7, Very Bad to Good Idea	(Pavlou & Fygenson, 2006)
		For me, getting information about this product from this website within the next 30 days would be.	Scale 1 to 7, Very Foolish to Wise	(Pavlou & Fygenson, 2006)
Awareness	Anti-Spyware	I follow news and developments about the spyware technology.	Scale 1 to 5, Completely Disagree to Agree	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
		I discuss with friends and people around me security issues of Internet.	Scale 1 to 5, Completely Disagree to Agree	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
		I read about the problems of malicious software intruding Internet users' computers.	Scale 1 to 5, Completely Disagree to Agree	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
		I seek advice on computer web sites or magazines about anti-spyware products.	Scale 1 to 5, Completely Disagree to Agree	(Dinev & Hu, 2007)
		I am aware of the spyware problems and consequences.	Scale 1 to 5, Completely Disagree to Agree	(Dinev & Hu, 2007)
Controllability	Anti-Spyware	I have the skill and resources to clean spyware from my computer.	Scale 1 to 5, Completely Disagree to Agree	(Dinev & Hu, 2007)
		I have the skill and resources to protect my computer from spyware.	Scale 1 to 5, Completely Disagree to Agree	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
		Whether or not to clean spyware from my computer is completely under my control.	Scale 1 to 5, Completely Disagree to Agree	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
Controllability over Getting Information	e-Commerce	All necessary resources for getting information about this product from this website will be accessible to me within the next 30 days.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Controllability over Getting Information (cont.)	e-Commerce (cont.)	Getting information about this product from this website within the next 30 days is completely under my control.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
Download Delay	e-Commerce	I expect the speed by which this website would provide information to be fast enough.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		The speed by which a website provides information would make it (much more difficult/easier) for me to get information about this product.	Scale 1 to 7, Much More Difficult to Easier	(Pavlou & Fygenson, 2006)
		I expect the rate at which the information would be displayed on this website to be fast enough.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		A fast rate at which websites display information would make it (much more difficult/easier) for me to get information about this product.	Scale 1 to 7, Much More Difficult to Easier	(Pavlou & Fygenson, 2006)
Facilitating Conditions	Not Specified	I have the human and technological resources necessary to use the system.	Scale 0 to 10, Disagree Completely to Agree Completely	(Titah & Barki, 2009)
		I have the knowledge necessary to use the system.	Scale 0 to 10, Disagree Completely to Agree Completely	(Titah & Barki, 2009)
		A specific person (or group) is available for assistance with system difficulties.	Scale 0 to 10, Disagree Completely to Agree Completely	(Titah & Barki, 2009)
Getting Information	e-Commerce	During the last 30 days, I got information about this product from this website.	Yes or No	
Getting Information Habit	e-Commerce	Getting product information from this vendor's website has become a habit for me.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		Getting product information from this website has become natural for me.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
Getting Information Skills	e-Commerce	If I wanted to, I could become skillful at comparing and evaluating products on this website.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		Becoming skillful would make it (much more difficult/easier) for me to get information about this product.	Scale 1 to 7, Much More Difficult to Easier	(Pavlou & Fygenson, 2006)
		If I wanted to, I could easily become knowledgeable about getting all relevant information about products from this website.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Getting Information Skills (cont.)	e-Commerce (cont.)	Becoming knowledgeable about getting information would make it (much more difficult/easier) for me to get all relevant information about this product from this Web vendor.	Scale 1 to 7, Much More Difficult to Easier	(Pavlou & Fygenson, 2006)
Intentions to Get Information	e-Commerce	I intend to get information about this product from this website within the next 30 days.	Scale 1 to 7, Extremely Unlikely to Likely	(Pavlou & Fygenson, 2006)
		I plan to get information about this product from this website within the next 30 days.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
Monetary Resources	e-Commerce	I expect to have the money needed to purchase this product from this Web vendor within the next 30 days.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		Having the money needed to purchase products would make it (much more difficult/easier) for me to purchase this product from this Web vendor.	Scale 1 to 7, Much More Difficult to Easier	(Pavlou & Fygenson, 2006)
		It would be within my budget to purchase this product from this Web vendor within the next 30 days.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		Being within my budget would make it (much more difficult/ easier) for me to purchase this product from this Web vendor.	Scale 1 to 7, Much More Difficult to Easier	(Pavlou & Fygenson, 2006)
Past Experience – Getting Information	e-Commerce	How long have you been using the Internet for getting information about products? _____ years.	Direct Answer	(Pavlou & Fygenson, 2006)
		During the last 30 days, how much time did you spend on the Internet getting product information in general? _____ hours.	Direct Answer	(Pavlou & Fygenson, 2006)
		During the last year, how many times have you made product purchases from the selected Web vendor? _____ times.	Direct Answer	(Pavlou & Fygenson, 2006)
Past Experience – Purchasing	e-Commerce	During the last year, how many times have you made product purchases from the Internet in general? _____times.	Direct Answer	(Pavlou & Fygenson, 2006)
		During the last year, how much have you approximately spent on Internet purchases? $ _____.	Direct Answer	
		During the last year, how many times have you made product purchases from the selected Web vendor? _____ times.	Direct Answer	(Pavlou & Fygenson, 2006)
Perceived Behavioral Control over Getting Information	e-Commerce	Please rate the difficulty of you getting information about this product from this website within the next 30 days.	Scale 1 to 7, Extremely Difficult to Easy	(Pavlou & Fygenson, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Behavioral Control over Purchasing	e-Commerce	Please rate the difficulty of you purchasing this product from this Web vendor within the next 30 days.	Scale 1 to 7, Extremely Difficult to Easy	(Pavlou & Fygenson, 2006)
Perceived Diagnosticity	e-Commerce	I expect this website to help me get a real feel for this product.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		Being able to get a real feel for a product would make it (much more difficult/ easier) for me to purchase this product from this Web vendor.	Scale 1 to 7, Much More Difficult to Easier	(Pavlou & Fygenson, 2006)
		I expect this website to help me carefully evaluate this product.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		Being able to carefully evaluate a product would make it (much more difficult/easier) for me to purchase this product from this Web vendor.	Scale 1 to 7, Much More Difficult to Easier	(Pavlou & Fygenson, 2006)
Perceived Ease of Getting Information	e-Commerce	Getting information about this product from this website would be easy.	Scale 1 to 7, Extremely Unlikely to Likely	(Pavlou & Fygenson, 2006)
		For me, getting product information easily from a website is.	Scale 1 to 7, Not at All to Extremely important	(Pavlou & Fygenson, 2006)
		Learning how to get information about this product from this website would be easy.	Scale 1 to 7, Extremely Unlikely to Likely	(Pavlou & Fygenson, 2006)
		For me, learning how to get product information easily from a website is.	Scale 1 to 7, Not at All to Extremely important	(Pavlou & Fygenson, 2006)
Perceived Ease of Purchasing	e-Commerce	Purchasing this product from this website would be easy.	Scale 1 to 7, Extremely Unlikely to Likely	(Pavlou & Fygenson, 2006)
		For me, purchasing products easily from a Web vendor is.	Scale 1 to 7, Not at All to Extremely important	(Pavlou & Fygenson, 2006)
		Learning how to purchase this product from this Web vendor would be easy.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		For me, learning how to purchase products easily from a Web vendor is.	Scale 1 to 7, Not at All to Extremely important	(Pavlou & Fygenson, 2006)
Perceived Ease of Use	Anti-Spyware	The process of configuring my computer to protect from spyware is clear and understandable.	Scale 1 to 5, Completely Disagree to Agree	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Ease of Use (cont.)	Anti-Spyware (cont.)	It would be easy for me to prevent spyware from running on my computer.	Scale 1 to 5, Completely Disagree to Agree	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
		It would be easy for me to clean my computer from spyware.	Scale 1 to 5, Completely Disagree to Agree	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
Perceived Information Protection	e-Commerce	I expect my personal information to be adequately protected when I purchase this product from this Web vendor.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		An adequate protection of my personal information would make it (much more difficult/easier) for me to purchase this product from this vendor.	Scale 1 to 7, Much More Difficult to Easier	(Pavlou & Fygenson, 2006)
		I feel secure that my personal information is kept private when I purchase this product from this Web vendor.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		Feeling secure that personal information is kept private would make it (much more difficult/easier) for me to purchase this product from this Web vendor.	Scale 1 to 7, Much More Difficult to Easier	(Pavlou & Fygenson, 2006)
Perceived Purchasing Usefulness	e-Commerce	This website would be useful in purchasing this product.	Scale 1 to 7, Extremely Unlikely to Likely	(Pavlou & Fygenson, 2006)
		For me, a website that is useful in purchasing products is.	Scale 1 to 7, Not at All to Extremely important	(Pavlou & Fygenson, 2006)
		This website would enhance my effectiveness in purchasing this product.	Scale 1 to 7, Extremely Unlikely to Likely	(Pavlou & Fygenson, 2006)
		For me, a website that enhances my effectiveness in purchasing products is.	Scale 1 to 7, Not at All to Extremely important	(Pavlou & Fygenson, 2006)
Perceived Usefulness	Anti-Spyware	I believe it is beneficial to protect my computer from spyware.	Scale 1 to 5, Completely Disagree to Agree	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
		I believe protecting from spyware will enhance my effectiveness in working with computer.	Scale 1 to 5, Completely Disagree to Agree	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
		I believe cleaning spyware off my computer will enhance my effectiveness in working with computer.	Scale 1 to 5, Completely Disagree to Agree	(Dinev & Hu, 2007)

Constructo	Contexto	Indicadores	Escala	Referências
Perceived Usefulness of Getting Information	e-Commerce	This website would be useful for getting valuable information about this product.	Scale 1 to 7, Extremely Unlikely to Likely	(Pavlou & Fygenson, 2006)
		For me, getting valuable information about a product from a website is.	Scale 1 to 7, Not at All to Extremely important	(Pavlou & Fygenson, 2006)
		This website would enhance my effectiveness in getting useful information about this product.	Scale 1 to 7, Extremely Unlikely to Likely	(Pavlou & Fygenson, 2006)
		For me, getting useful information about a product from a website is.	Scale 1 to 7, Not at All to Extremely important	(Pavlou & Fygenson, 2006)
Product Value	e-Commerce	Purchasing this product from this Web vendor would save me money within the next 30 days: (Extremely unlikely/likely).	Scale 1 to 7, Extremely Unlikely to Likely	(Pavlou & Fygenson, 2006)
		For me, saving money within the next 30 days is: (Not at all /Extremely important).	Scale 1 to 7, Not at All to Extremely important	(Pavlou & Fygenson, 2006)
		I would purchase this product from this Web vendor at a bargain price within the next 30 days.	Scale 1 to 7, Extremely Unlikely to Likely	(Pavlou & Fygenson, 2006)
		For me, getting products at bargain prices within the next 30 days is.	Scale 1 to 7, Not at All to Extremely important	(Pavlou & Fygenson, 2006)
Purchasing	e-Commerce	During the last 30 days, I purchased this product from this Web vendor.	Yes or No	(Pavlou & Fygenson, 2006)
Purchasing Attitude	e-Commerce	For me, purchasing this product from this Web vendor within the next 30 days would be.	Scale 1 to 7, Very Bad to Good Idea	(Pavlou & Fygenson, 2006)
		For me, purchasing this product from this Web vendor within the next 30 days would be.	Scale 1 to 7, Very Undesirable to Desirable	(Pavlou & Fygenson, 2006)
Purchasing Controllability	e-Commerce	All necessary resources for purchasing this product from this Web vendor will be accessible to me within the next 30 days.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		Purchasing this product from this Web vendor will be completely under my control within the next 30 days.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
Purchasing Habit	e-Commerce	Getting product information from this vendor's website has become a habit for me.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		Getting product information from this website has become natural for me.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Purchasing Intentions	e-Commerce	I intend to purchase this product from this website within the next 30 days.	Scale 1 to 7, Extremely Unlikely to Likely	(Pavlou & Fygenson, 2006)
		I plan to purchase this product from this website within the next 30 days.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
Purchasing Self-Efficacy	e-Commerce	If I wanted to, I would be able to purchase this product from this Web vendor within the next 30 days.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		If I wanted to, I am confident I could purchase this product from this Web vendor within the next 30 days.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
Purchasing Skills	e-Commerce	If I wanted to, I could become skillful at making good product purchasing decisions on the Web.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		Becoming skillful at making good purchasing decisions on the Web would make it (much more difficult/easier) for me to purchase this product from this Web vendor.	Scale 1 to 7, Much More Difficult to Easier	(Pavlou & Fygenson, 2006)
		If I wanted to, I could easily become knowledgeable about purchasing products on the Web.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		Becoming knowledgeable about Web purchasing would make it (much more difficult/easier) for me to purchase this product from this Web vendor.	Scale 1 to 7, Much More Difficult to Easier	(Pavlou & Fygenson, 2006)
Purchasing Subjective Norm	e-Commerce	Most people who are important to me think that it is fine to purchase a product from this Web vendor within the next 30 days.	Scale 1 to 7, Not at All to Completely True	(Pavlou & Fygenson, 2006)
		Most people who are important to me would purchase this product from this Web vendor.	Scale 1 to 7, Not at All to Completely True	(Pavlou & Fygenson, 2006)
Self-Efficacy	Anti-Spyware	I am confident that I can clean spyware off my system.	Scale 1 to 5, Completely Disagree to Agree	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
		I am confident I can prevent unauthorized intrusion to my computer.	Scale 1 to 5, Completely Disagree to Agree	(Dinev, Goo, Hu, & Nam, 2009; Dinev & Hu, 2007)
		I believe I can configure my computer to provide good protection from spyware.	Scale 1 to 5, Completely Disagree to Agree	(Dinev & Hu, 2007)
Self-Efficacy over Getting Information	e-Commerce	If I wanted to, I would be able to get information about this product from this website within the next 30 days.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Self-Efficacy over Getting Information (cont.)	e-Commerce (cont.)	If I wanted to, I am confident I could get information about this product from this website within the next 30 days.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
Subjective Norm on Getting Information	e-Commerce	Most people who are important to me think it is a good idea to get information about this product from this website.	Scale 1 to 7, Not at All to Completely True	(Pavlou & Fygenson, 2006)
		Most people who are important to me would get information about this product from this website.	Scale 1 to 7, Not at All to Completely True	(Pavlou & Fygenson, 2006)
Time Resources	e-Commerce	I expect to have the time needed to get information from this website within the next 30 days.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		Having the time needed would make it (much more difficult/easier) for me to get information about this product.	Scale 1 to 7, Much More Difficult to Easier	(Pavlou & Fygenson, 2006)
		There would always be time for me to get information from this website within the next 30 days.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		Finding time would make it (much more difficult/easier) for me to get information about this product.	Scale 1 to 7, Much More Difficult to Easier	(Pavlou & Fygenson, 2006)
Trust – Getting Information	e-Commerce	This Web vendor would be competent in providing objective information about this product.	Scale 1 to 7, Extremely Unlikely to Likely	(Pavlou & Fygenson, 2006)
		For me, getting objective product information from a website is: (Not at all/Extremely important).	Scale 1 to 7, Not at All to Extremely important	(Pavlou & Fygenson, 2006)
		This Web vendor would be honest in providing accurate information about this product.	Scale 1 to 7, Extremely Unlikely to Likely	(Pavlou & Fygenson, 2006)
		For me, getting accurate product information from a website is.	Scale 1 to 7, Not at All to Extremely important	(Pavlou & Fygenson, 2006)
Trust – Purchasing	e-Commerce	This Web vendor would be competent in delivering this product in a timely fashion.	Scale 1 to 7, Extremely Unlikely to Likely	(Pavlou & Fygenson, 2006)
		For me, product delivery in a timely fashion is.	Scale 1 to 7, Not at All to Extremely important	(Pavlou & Fygenson, 2006)
		This Web vendor would be honest in its dealings when I purchase this product from it.	Scale 1 to 7, Extremely Unlikely to Likely	(Pavlou & Fygenson, 2006)
		For me, a Web vendor that is honest in its dealings with its customers is.	Scale 1 to 7, Not at All to Extremely important	(Pavlou & Fygenson, 2006)

Constructo	Contexto	Indicadores	Escala	Referências
Trust – Purchasing (cont.)	e-Commerce (cont.)	This Web vendor would not seek to take advantage of me if I purchase this product from it.	Scale 1 to 7, Extremely Unlikely to Likely	(Pavlou & Fygenson, 2006)
		For me, a Web vendor that does not seek to take advantage of its customers is.	Scale 1 to 7, Not at All to Extremely important	(Pavlou & Fygenson, 2006)
Web Vendor Reputation	e-Commerce	This Web vendor has a good reputation in the marketplace.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
Website Navigability	e-Commerce	I expect the sequencing of hyperlinks in this website to be clear.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		Having a clear sequence of hyperlinks would make it (much more difficult/ easier) for me to get information about this product.	Scale 1 to 7, Much More Difficult to Easier	(Pavlou & Fygenson, 2006)
		I expect the layout of this website to be intuitive.	Scale 1 to 7, Strongly Disagree to Agree	(Pavlou & Fygenson, 2006)
		A website with an intuitive layout would make it (much more difficult/ easier) for me to get information about this product.	Scale 1 to 7, Much More Difficult to Easier	(Pavlou & Fygenson, 2006)

I - Constructos e Indicadores da Theory of Reasoned Action

A presente tabela contém todos os constructos e indicadores identificados relacionados com a *Theory of Reasoned Action.*

Constructo	Contexto	Indicadores	Escala	Referências
Attitude Towards the Behavior	Data Warehousing Predefined Reporting Software	Using _____ is (not enjoyable/ very enjoyable).	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		Overall, using _____ is a (unpleasant/pleasant) experience.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		My attitude toward using _____ is (very unfavorable/very favorable).	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
	Instant messaging (IM) systems	Using IM is a good idea.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		Using IM would be unpleasant.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		I like the idea of using IM.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
	Microsoft's Windows 3.1 software package	All things considered, adopting Windows in my job within the next six months would be extremely negative ... extremely positive.	Scale -3 to +3	(Karahanna, Straub, & Chervany, 1999)
		All things considered, adopting Windows in my job within the next six months would be extremely good ... extremely bad.	Scale -3 to +3	(Karahanna, Straub, & Chervany, 1999)
		All things considered, adopting Windows in my job within the next six months would be extremely harmful ... extremely beneficial.	Scale -3 to +3	(Karahanna, Straub, & Chervany, 1999)
Behavior				
Behavioral Intention	Content Management System	I intend to use the system in the next <n> months.	Likert 1-7	(Sykes, Venkatesh, & Gosain, 2009)
		I predict I would use the system in the next <n> months.	Likert 1-7	(Sykes, Venkatesh, & Gosain, 2009)
		I plan to use the system in the next <n> months.	Likert 1-7	(Sykes, Venkatesh, & Gosain, 2009)
	Data Warehousing Predefined	I intend to use _____ as a routine part of my job over the next year.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)

Constructo	Contexto	Indicadores	Escala	Referências
Behavioral Intention (cont.)	Reporting Software	I intend to use _____ at every opportunity over the next year.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		I plan to increase my use of _____ over the next year.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
	Instant messaging (IM) systems	I would use IM to communicate with others.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		Using IM is something I would do.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		I could see myself using IM.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
	Microsoft's Windows 3.1 software package	I intend to adopt Windows in my job within the next six months.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
		During the next six months, I plan to experiment with or regularly use Windows in my work.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
Subjective Norm	Instant messaging (IM) systems	My friends think I should use IM.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		People who influence me think that I should use IM.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		People who are important to me think that I should use IM.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
	Microsoft's Windows 3.1 software package	Most people who are important to me think I should adopt Windows.	Scale -3 to +3	(Karahanna, Straub, & Chervany, 1999)
Accessibility	Data Warehousing Predefined Reporting Software	_____ allows information to be readily accessible to me.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		_____ makes information very accessible.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		_____ makes information easy to access.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
Accuracy	Data Warehousing Predefined Reporting Software	_____ produces correct information.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		There are few errors in the information I obtain from _____.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)

Constructo	Contexto	Indicadores	Escala	Referências
Accuracy (cont.)	Data Warehousing Predefined Reporting Software (cont.)	The information provided by _____ is accurate.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
Cognitive Trust in Competence	Recommendation Agents (RAs)	This RA is a real expert in assessing products.	Likert 1-7, Strongly Disagree to Agree	(Komiak & Benbasat, 2006)
		This RA has good knowledge about products.	Likert 1-7, Strongly Disagree to Agree	(Komiak & Benbasat, 2006)
Cognitive Trust in Integrity	Recommendation Agents (RAs)	This RA provides unbiased product recommendations.	Likert 1-7, Strongly Disagree to Agree	(Komiak & Benbasat, 2006)
		This RA is honest.	Likert 1-7, Strongly Disagree to Agree	(Komiak & Benbasat, 2006)
		I consider this RA to be of integrity.	Likert 1-7, Strongly Disagree to Agree	(Komiak & Benbasat, 2006)
Completeness	Data Warehousing Predefined Reporting Software	_____ provides me with a complete set of information.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		_____ produces comprehensive information.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		_____ provides me with all the information I need.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
Currency	Data Warehousing Predefined Reporting Software	_____ provides me with the most recent information.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		_____ produces the most current information.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		The information from _____ is always up to date.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
Ease of Use	Data Warehousing Predefined Reporting Software	_____ is easy to use.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		It is easy to get _____ to do what I want it to do.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		_____ is easy to operate.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)

Constructo	Contexto	Indicadores	Escala	Referências
Ease of Use (cont.)	Microsoft's Windows 3.1 software package	Learning to operate Windows would be easy for me.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
		If I were to adopt Windows, it would be easy to use.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
		If I were to adopt Windows, it would be difficult to use.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
	Instant messaging (IM) systems	I believe that it is easy to get IM to do what I want to do.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		Learning to operate IM is easy for me.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		Overall I believe that IM is easy for me to use.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
Emotional Trust	Recommendation Agents (RAs)	I feel secure about relying on this RA for my decision.	Likert 1-7, Strongly Disagree to Agree	(Komiak & Benbasat, 2006)
		I feel comfortable about relying on this RA for my decision.	Likert 1-7, Strongly Disagree to Agree	(Komiak & Benbasat, 2006)
		I feel content about relying on this RA for my decision.	Likert 1-7, Strongly Disagree to Agree	(Komiak & Benbasat, 2006)
Facilitating Conditions	Content Management System	The organization has provided the necessary resources for me to use the system.	Likert 1-7	(Sykes, Venkatesh, & Gosain, 2009)
		A specific help support person or group is available for assistance with system difficulties.	Likert 1-7	(Sykes, Venkatesh, & Gosain, 2009)
		Organizational technical and support infrastructure are available to help me in case of problems.	Likert 1-7	(Sykes, Venkatesh, & Gosain, 2009)
Familiarity	Recommendation Agents (RAs)	I am familiar with how this RA makes its recommendation.	Likert 1-7, Strongly Disagree to Agree	(Komiak & Benbasat, 2006)
Flexibility	Data Warehousing Predefined Reporting Software	_____ can be adapted to meet a variety of needs.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		_____ can flexibly adjust to new demands or conditions.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		_____ is versatile in addressing needs as they arise.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)

Constructo	Contexto	Indicadores	Escala	Referências
Format	Data Warehousing Predefined Reporting Software	The information provided by _____ is well formatted.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		The information provided by _____ is well laid out.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		The Information provided by _____ is clearly presented on the screen.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
Information Quality	Data Warehousing Predefined Reporting Software	Overall, I would give the information from _____ high marks.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		Overall, I would give the information provided by _____ a high rating in terms of quality.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		In general, _____ provides me with high-quality information.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
Information Satisfaction	Data Warehousing Predefined Reporting Software	Overall, the information I get from _____ is very satisfying.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		I am very satisfied with the information I receive from _____.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
Integration	Data Warehousing Predefined Reporting Software	_____ effectively integrates data from different areas of the company.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		_____ pulls together information that used to come from different places in the company.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		_____ effectively combines data from different areas of the company.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
Normative Beliefs	Microsoft's Windows 3.1 software package	Top management thinks I should adopt Windows.	Scale -9 to +9	(Karahanna, Straub, & Chervany, 1999)
		My close friends think I should adopt Windows.	Scale -9 to +9	(Karahanna, Straub, & Chervany, 1999)
		My immediate supervisor thinks I should adopt Windows.	Scale -9 to +9	(Karahanna, Straub, & Chervany, 1999)
		My peers think I should adopt Windows.	Scale -9 to +9	(Karahanna, Straub, & Chervany, 1999)
		The [name of the MiS department] thinks I should adopt Windows.	Scale -9 to +9	(Karahanna, Straub, & Chervany, 1999)

Constructo	Contexto	Indicadores	Escala	Referências
Normative Beliefs (cont.)	Microsoft's Windows 3.1 software package	Other computer technical specialists in the organization think i should adopt Windows.	Scale -9 to +9	(Karahanna, Straub, & Chervany, 1999)
Perceived Critical Mass	Instant messaging (IM) systems	Many people I communicate with use IM.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		The people I communicate with will continue to use IM in the future.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		The people I communicate with using IM will continue to use IM in the future.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		Of the people I communicate with regularly, many use IM.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
Perceived Personalization	Recommendation Agents (RAs)	This RA understands my needs.	Likert 1-7, Strongly Disagree to Agree	(Komiak & Benbasat, 2006)
		This RA knows what I want.	Likert 1-7, Strongly Disagree to Agree	(Komiak & Benbasat, 2006)
		This RA takes my needs as its own preferences.	Likert 1-7, Strongly Disagree to Agree	(Komiak & Benbasat, 2006)
Prior Use	Instant messaging (IM) systems	How frequently do you use IM?	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		If you were unable to continue using this technology, how much impact would it have on your life?	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
Reliability	Data Warehousing Predefined Reporting Software	_____ operates reliably.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		_____ performs reliably.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		The operation of _____ is dependable.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
Result Demonstrability	Instant messaging (IM) systems	I would have no difficulty telling others about the results of using IM.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		I believe I could communicate to others the consequences of using IM.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		The results of using IM are apparent to me.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)

Constructo	Contexto	Indicadores	Escala	Referências
Social Network	Content Management System	Network density.	Not Specified	(Sykes, Venkatesh, & Gosain, 2009)
		Valued network density.	Not Specified	(Sykes, Venkatesh, & Gosain, 2009)
		Network centrality.	Not Specified	(Sykes, Venkatesh, & Gosain, 2009)
		Valued network centrality.	Not Specified	(Sykes, Venkatesh, & Gosain, 2009)
System Quality	Data Warehousing Predefined Reporting Software	In terms of system quality, I would rate _____ highly.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		Overall, _____ is of high quality.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		Overall, I would give the quality of _____ a high rating.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
The Intention to Adopt as a Decision Aid	Recommendation Agents (RAs)	I am willing to use this RA as an aid to help with my decision about which product to buy.	Likert 1-7, Strongly Disagree to Agree	(Komiak & Benbasat, 2006)
		I am willing to let this RA assist me in deciding which product to buy.	Likert 1-7, Strongly Disagree to Agree	(Komiak & Benbasat, 2006)
		I am willing to use this RA as a tool that suggests to me a number of products from which I can choose.	Likert 1-7, Strongly Disagree to Agree	(Komiak & Benbasat, 2006)
The Intention to Adopt as a Delegated Agent	Recommendation Agents (RAs)	I am willing to delegate to this RA for my decision about which product to buy.	Likert 1-7, Strongly Disagree to Agree	(Komiak & Benbasat, 2006)
		I am willing to let this RA decide which product to buy on my behalf.	Likert 1-7, Strongly Disagree to Agree	(Komiak & Benbasat, 2006)
System Satisfaction	Data Warehousing Predefined Reporting Software	All things considered, I am very satisfied with _____.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		Overall, my interaction with _____ is very satisfying.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
Timeliness	Data Warehousing Predefined Reporting Software	It takes too long for _____ to respond to my requests.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		_____ provides information in a timely fashion.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)

Constructo	Contexto	Indicadores	Escala	Referências
Timeliness (cont.)	Data Warehousing Predefined Reporting Software	_____ returns answers to my requests quickly.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
Usefulness	Data Warehousing Predefined Reporting Software	Using _____ improves my ability to make good decisions.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		_____ allows me to get my work done more quickly.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
		Using _____ enhances my effectiveness on the job.	Likert 1-7, Strongly Disagree to Agree	(Wixom & Todd, 2005)
Visibility	Microsoft's Windows 3.1 software package	In my organization, one sees Windows on many computers.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
		In my organization, I have seen many people with Windows on their computers.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
	Instant messaging (IM) systems	I have seen many people using IM.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		It is easy for me to observe others using IM.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
		I have not seen many others using IM.	Likert 1-7, Strongly Disagree to Agree	(Van Slyke, Ilie, Lou, & Stafford, 2007)
Voluntariness	Microsoft's Windows 3.1 software package	My boss does not require me to adopt Windows.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)
		Although it might be helpful, adopting Windows is certainly not compulsory in my job.	Scale 1 to 7	(Karahanna, Straub, & Chervany, 1999)

J - Constructos e Indicadores da Unified Theory of Acceptance and Use of Technology

A presente tabela contém todos os constructos e indicadores identificados relacionados com a *Unified Theory of Acceptance and Use of Technology.*

Constructo	Contexto	Indicadores	Escala	Referências
Behavioral Intention	Collaboration Tool	I intend to use the <collaboration tool> in the next 6 months.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		I predict I would use the system in the next 6 months.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		I plan to use the system in the next 6 months.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
	CV Database	I predict that I will use CV databases in the future.	Likert 1-7, Strongly Disagree to Agree	(Eckhardt, Laumer, & Weitzel, 2009)
		I plan to use CV databases in the future.	Likert 1-7, Strongly Disagree to Agree	(Eckhardt, Laumer, & Weitzel, 2009)
		I intend to use CV databases in the future.	Likert 1-7, Strongly Disagree to Agree	(Eckhardt, Laumer, & Weitzel, 2009)
	Internet	I intend to use the Internet in the next 2 months.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008)
		I predict I would use the Internet in the 2 months.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008)
		I plan to use the Internet in the next 2 months.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008)
		I intend to use the system in the next 3 months.	Scale 1 to 7	(Niehaves & Plattfaut, 2014)
		I predict I would use the system in the next 3 months.	Scale 1 to 7	(Niehaves & Plattfaut, 2014)
		I plan to use the system in the next 3 months.	Scale 1 to 7	(Niehaves & Plattfaut, 2014)
	Mobile Internet	I intend to continue using mobile Internet in the future.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		I will always try to use mobile Internet in my daily life.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		I plan to continue to use mobile Internet frequently.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)

Constructo	Contexto	Indicadores	Escala	Referências
Behavioral Intention (cont.)	Not Specified	I intend to use the system in the next <n> months.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		I predict I would use the system in the next <n> months.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		I plan to use the system in the next <n> months.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		I like to spend time mastering [the system].	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007)
		Using [the system] is personally meaningful to me.	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007)
		I really feel [the system] is my system.	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007)
	Web-based course management system (M-web)	I plan to use m-web very often during the rest of the semester.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I intend to use m-web frequently during the rest of the semester.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I plan to use m-web much during the rest of the semester.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
	Web-based decision support and transactional system	I intend to use the system in the next <n> months.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
		I predict I would use the system in the next <n> months.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
		I plan to use the system in the next <n> months.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
Effort Expectancy	Collaboration Tool	Using <collaboration tool> will not require a lot of mental effort.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		I believe <collaboration tool> will be easy to use.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		Using <collaboration tool> will be easy for me.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
	CV Database	Learning to operate CV databases would be easy for me.	Likert 1-7, Strongly Disagree to Agree	(Eckhardt, Laumer, & Weitzel, 2009)

Constructo	Contexto	Indicadores	Escala	Referências
Effort Expectancy (cont.)	CV Database (cont.)	I would find CV databases easy to use.	Likert 1-7, Strongly Disagree to Agree	(Eckhardt, Laumer, & Weitzel, 2009)
		My interaction with CV databases would be clear and understandable.	Likert 1-7, Strongly Disagree to Agree	(Eckhardt, Laumer, & Weitzel, 2009)
		It would be easy for me to become skilful at using CV databases.	Likert 1-7, Strongly Disagree to Agree	(Eckhardt, Laumer, & Weitzel, 2009)
		I believe that it is easy to get CV databases to do what I want them to do.	Likert 1-7, Strongly Disagree to Agree	(Eckhardt, Laumer, & Weitzel, 2009)
	e-Government (SmartID)	I would find it easy to use SmartID to access government services.	Scale 1 to 7	(Chan et al., 2011)
		Learning to use SmartID to access government services would be easy for me.	Scale 1 to 7	(Chan et al., 2011)
		It would be easy for me to become skillful at using SmartID to access government services.	Scale 1 to 7	(Chan et al., 2011)
	Internet	My interaction with the Internet enables me to accomplish tasks more quickly.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008)
		It would be easy for me to become skillful at using the Internet.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008; Niehaves & Plattfaut, 2014)
		I find the Internet easy to use.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008)
		Learning to use the Internet is easy for me.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008)
		My interaction with the Internet would be clear and understandable.	Scale 1 to 7	(Niehaves & Plattfaut, 2014)
		I would find the Internet easy to use.	Scale 1 to 7	(Niehaves & Plattfaut, 2014)
		Learning to operate the Internet is easy for me.	Scale 1 to 7	(Niehaves & Plattfaut, 2014)
	Mobile Internet	Learning how to use mobile Internet is easy for me.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		My interaction with mobile Internet is clear and understandable.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		I find mobile Internet easy to use.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)

Constructo	Contexto	Indicadores	Escala	Referências
Effort Expectancy (cont.)	Mobile Internet (cont.)	It is easy for me to become skillful at using mobile Internet.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
	Not Specified	My interaction with the system would be clear and understandable.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		It would be easy for me to become skillful at using the system.	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007; Venkatesh, Morris, Davis, & Davis, 2003)
		I would find the system easy to use.	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007; Venkatesh, Morris, Davis, & Davis, 2003)
		Learning to operate the system is easy for me.	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007; Venkatesh, Morris, Davis, & Davis, 2003)
	Web-based course management system (M-web)	It is easy to get m-web to do what I want to do.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		M-web is flexible to work with.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		M-web is easy to use.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
	Web-based decision support and transactional system	My interaction with the system would be clear and understandable.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
		It would be easy for me to become skillful at using the system.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
		I would find the system easy to use.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
		Learning to operate the system is easy for me.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
Facilitating Conditions	Collaboration Tool	I have the resources necessary to use <collaboration tool>.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		I have the knowledge necessary to use <collaboration tool>.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		A specific person (or group) is available for assistance with difficulties with <collaboration tool>.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)

Constructo	Contexto	Indicadores	Escala	Referências
Facilitating Conditions (cont.)	CV Database	I have the resources necessary to use CV databases.	Likert 1-7, Strongly Disagree to Agree	(Eckhardt, Laumer, & Weitzel, 2009)
		I have the knowledge necessary to use CV databases.	Likert 1-7, Strongly Disagree to Agree	(Eckhardt, Laumer, & Weitzel, 2009)
	e-Government (SmartID)	I expect to have the resources necessary to use SmartID to access government services.	Scale 1 to 7	(Chan et al., 2011)
		I expect to have the knowledge necessary to use SmartID to access government services.	Scale 1 to 7	(Chan et al., 2011)
		I expect that a specific person (or group) would be available for assistance with difficulties using SmartID to access government services.	Scale 1 to 7	(Chan et al., 2011)
	Internet	I have the knowledge necessary to use the Internet.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008)
		A specific person (or group) is available for assistance with Internet difficulties.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008)
		I have the resources necessary to use the Internet.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008)
		The Internet is not compatible with other systems I use.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008)
	Not Specified	I have the resources necessary to use the system.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		I have the knowledge necessary to use the system.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		The system is not compatible with other systems I use.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		A specific person (or group) is available for assistance with system difficulties.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		Due to lack of technical support, I have found [the system] difficult to use.	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007)
		The current hardware in this organization does not support [the system].	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007)
		There are several organizational barriers preventing me from using [the system] effectively.	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007)

Constructo	Contexto	Indicadores	Escala	Referências
Facilitating Conditions (cont.)	Web Portal	I have the technical resources necessary to use the upgrades of The System.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
		I have the knowledge necessary to use the upgrades of The System.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
	Web-based course management system (M-web)	I have the knowledge necessary to use m-web.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		The m-web system is not compatible with other systems I have used.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		A specific person is available for assistance with m-web system difficulties.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
	Web-based decision support and transactional system	I have the resources necessary to use the system.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
		I have the knowledge necessary to use the system.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
		The system is not compatible with other systems I use.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
		A specific person (or group) is available for assistance with system difficulties.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
Habit	Mobile Internet	The use of mobile Internet has become a habit for me.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		I am addicted to using mobile Internet.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		I must use mobile Internet.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		Using mobile Internet has become natural to me.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
	Web Portal	Using The System has become a habit to me.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
		Using The System has become automatic to me.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
Hedonic Motivation	Mobile Internet	Using mobile Internet is fun.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		Using mobile Internet is enjoyable.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)

Constructo	Contexto	Indicadores	Escala	Referências
Hedonic Motivation (cont.)	Mobile Internet (cont.)	Using mobile Internet is very entertaining.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
Performance Expectancy	Collaboration Tool	I believe <collaboration tool> will be useful for communication.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		Using <collaboration tool> will enable me to accomplish work tasks more quickly.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		Using the collaboration tool will increase my productivity.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
	CV Database	How satisfied are you with the quality of data available about applicants when using CV databases.	Likert 1-7, Strongly Disagree to Agree	(Eckhardt, Laumer, & Weitzel, 2009)
		Operation departments are satisfied with applicants identified using CV databases.	Likert 1-7, Strongly Disagree to Agree	(Eckhardt, Laumer, & Weitzel, 2009)
		How satisfied are you with the quality of data available about applicants when using CV databases.	Likert 1-7, Strongly Disagree to Agree	(Eckhardt, Laumer, & Weitzel, 2009)
		How satisfied are you with the quantity of data available about applicants when using CV databases.	Likert 1-7, Strongly Disagree to Agree	(Eckhardt, Laumer, & Weitzel, 2009)
	e-Government (SmartID)	Using SmartID would enable me to access government services more quickly.	Scale 1 to 7	(Chan et al., 2011)
		Using SmartID would make it easier to access government services.	Scale 1 to 7	(Chan et al., 2011)
		Using SmartID would enhance my effectiveness in accessing government services.	Scale 1 to 7	(Chan et al., 2011)
	Internet	I find the Internet useful in my job.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008)
		Using the Internet enables me to accomplish tasks quickly.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008; Niehaves & Plattfaut, 2014)
		Using the Internet increases my productivity.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008; Niehaves & Plattfaut, 2014)
		If I use the Internet I increase my chances of getting a salary increase or promotion.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008)
		I find the Internet useful.	Scale 1 to 7	(Niehaves & Plattfaut, 2014)
		If I use the Internet, I will increase my chances of getting a raise.	Scale 1 to 7	(Niehaves & Plattfaut, 2014)

Constructo	Contexto	Indicadores	Escala	Referências
Performance Expectancy (cont.)	Mobile Internet	I find mobile Internet useful in my daily life.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		Using mobile Internet increases my chances of achieving things that are important to me.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		Using mobile Internet helps me accomplish things more quickly.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		Using mobile Internet increases my productivity.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
	Not Specified	I would find the system useful in my job.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		Using the system enables me to accomplish tasks more quickly.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		Using the system increases my productivity.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		If I use the system, I will increase my chances of getting a raise.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		[The system] will improve my job performance.	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007)
		[The system] will make it easier for me to do my job.	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007)
		[The system] will increase my productivity.	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007)
	Web-based course management system (M-web)	Using m-web improves my performance in this course.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		Using m-web increases my productivity in this course.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		Using m-web increases my effectiveness in this course.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
	Web-based decision support and transactional system	I would find the system useful in my job.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
		Using the system enables me to accomplish tasks more quickly.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
		Using the system increases my productivity.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)

Constructo	Contexto	Indicadores	Escala	Referências
Performance Expectancy (cont.)	Web-based decision support and transactional system	If I use the system, I will increase my chances of getting a raise.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
Price Value	Mobile Internet	Mobile Internet is reasonably priced.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		Mobile Internet is a good value for the money.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		At the current price, mobile Internet provides a good value.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
Social Influence	Collaboration Tool	People who influence my behavior think that I should use <collaboration tool>.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		People who are important to me think that I should use <collaboration tool>.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		The senior management of this business thinks I should use <collaboration tool>.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
	CV Database	My peers in the HR department | the operations department | the IT department | Applicants (customers) | My superiors think that I should use CV databases.	Likert 1-7, Strongly Disagree to Agree	(Eckhardt, Laumer, & Weitzel, 2009)
		My peers in the HR department | the operation department | the IT department | Applicants (customers) | My superiors recommend using CV databases.	Likert 1-7, Strongly Disagree to Agree	(Eckhardt, Laumer, & Weitzel, 2009)
		My peers in the HR department | the operation department | the IT department | Applicants (customers) | My superiors use CV databases frequently.	Likert 1-7, Strongly Disagree to Agree	(Eckhardt, Laumer, & Weitzel, 2009)
	e-Government (SmartID)	People who influence my behavior would think that I should use SmartID to access government services.	Scale 1 to 7	(Chan et al., 2011)
		People who are important to me would think that I should use SmartID to access government services.	Scale 1 to 7	(Chan et al., 2011)
		People who are in my social circle would think that I should use SmartID to access government services.	Scale 1 to 7	(Chan et al., 2011)

Constructo	Contexto	Indicadores	Escala	Referências
Social Influence (cont.)	Internet	People who are important to me think that I should use the Internet.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008; Niehaves & Plattfaut, 2014)
		People who influence my behavior think that I should use the Internet.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008; Niehaves & Plattfaut, 2014)
		The senior management and staff of my organization have been helpful in the use of the Internet.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008)
		In general, my organization has supported use of the Internet.	Scale 1 to 7	(Gupta, Dasgupta, & Gupta, 2008)
		I use the Internet because of the proportion of peers who use the Internet.	Scale 1 to 7	(Niehaves & Plattfaut, 2014)
		In general, my peers have supported the use of the Internet.	Scale 1 to 7	(Niehaves & Plattfaut, 2014)
	Mobile Internet	People who are important to me think that I should use mobile Internet.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		People who influence my behavior think that I should use mobile Internet.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		People whose opinions that I value prefer that I use mobile Internet.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
	Not Specified	People who influence my behavior think that I should use the system.	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007; Venkatesh, Morris, Davis, & Davis, 2003)
		People who are important to me think that I should use the system.	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007; Venkatesh, Morris, Davis, & Davis, 2003)
		The senior management of this business has been helpful in the use of the system.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		In general, the organization has supported the use of the system.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		My friends in this organization think I should use [the system].	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007)
		My colleagues in this organization think I should use [the system].	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007)
	Web Portal	My management promote the use of the upgrades of The System.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
		My co-workers think that I should use the upgrades of The System.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)

Constructo	Contexto	Indicadores	Escala	Referências
Social Influence (cont.)	Web-based course management system (M-web)	People who influence my behavior think I should use m-web.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		People who are important to me think that I should use m-web.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
	Web-based decision support and transactional system	People who influence my behavior think that I should use the system.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
		People who are important to me think that I should use the system.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
		The senior management of this business has been helpful in the use of the system.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
Use Behavior	Collaboration Tool	I rate my intensity of use of <collaboration tool> to be:	Scale 1 to 7, Very Light to Very Heavy	(Brown, Dennis, & Venkatesh, 2010)
		How frequently do you use <collaboration tool>:	Scale 1 to 7, Never to Very Frequently	(Brown, Dennis, & Venkatesh, 2010)
		On an average week, how much time (in hours) do you use <collaboration tool>?	Direct Answer	(Brown, Dennis, & Venkatesh, 2010)
		Of the opportunities you have to use collaboration tools, including a telephone, what percentage of time do you choose <collaboration tool>?	Percentage	(Brown, Dennis, & Venkatesh, 2010)
	Mobile Internet	Please choose your usage frequency for: SMS.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		Please choose your usage frequency for: MMS.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		Please choose your usage frequency for: Ringtone and logo download.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		Please choose your usage frequency for: Java games.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		Please choose your usage frequency for: Browse websites.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)
		Please choose your usage frequency for: Mobile e-mail.	Likert 1-7, Strongly Disagree to Agree	(Venkatesh, Thong, & Xu, 2012)

Constructo	Contexto	Indicadores	Escala	Referências
Use Behavior (cont.)	Not Specified	When I can avoid using [the system], I do.	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007)
		When given the choice between using or not using [the system] for a task, I usually choose not to use it.	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007)
		When I can do a task using [the system], I will sometimes choose to use other ways to complete the task.	Likert 1-7, Strongly Disagree to Agree	(Neufeld, Dong, & Higgins, 2007)
Actual Frequency of Use	Web-based course management system (M-web)	Actual grade look-up.	Direct Answer	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		Actual email archive use.	Direct Answer	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		Actual course website access.	Direct Answer	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
Agreeableness	Web-based course management system (M-web)	I have a good word for everyone.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I get back at others.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I make people feel at ease.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I have a sharp tongue.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I cut others to pieces.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I insult people.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
Anxiety	Not Specified	I feel apprehensive about using the system.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		It scares me to think that I could lose a lot of information using the system by hitting the wrong key.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		I hesitate to use the system for fear of making mistakes I cannot correct.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		The system is somewhat intimidating to me.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)

Constructo	Contexto	Indicadores	Escala	Referências
Applications for Fun	Internet	The Internet provides many applications that are enjoyable.	Not Specified	(Niehaves & Plattfaut, 2014)
		I enjoy the Internet.	Not Specified	(Niehaves & Plattfaut, 2014)
		My Internet has applications that are fun.	Not Specified	(Niehaves & Plattfaut, 2014)
		I am able to have fun in the Internet.	Not Specified	(Niehaves & Plattfaut, 2014)
Applications for Personal Use	Internet	I find that the Internet has tools for personal productivity.	Not Specified	(Niehaves & Plattfaut, 2014)
		I find that the Internet has tools to support household activities.	Not Specified	(Niehaves & Plattfaut, 2014)
		The Internet has software that helps with activities in the house.	Not Specified	(Niehaves & Plattfaut, 2014)
Assistance	e-Government (SmartID)	I expect to get the help I need in using SmartID to access government services.	Scale 1 to 7	(Chan et al., 2011)
		It would be easy for me to get assistance when I am having trouble using SmartID to access government services.	Scale 1 to 7	(Chan et al., 2011)
		I expect clear instructions for using SmartID to access government services to be available to me.	Scale 1 to 7	(Chan et al., 2011)
Attitude toward using technology	Not Specified	Using the system is a bad/good idea.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		The system makes work more interesting.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		Working with the system is fun.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		I like working with the system.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
Avoidance of Personal Interaction	e-Government (SmartID)	Using SmartID would enable me to access government services without having to interact with anyone.	Scale 1 to 7	(Chan et al., 2011)
		Using SmartID, I would not have to interact with civil servants to access government services.	Scale 1 to 7	(Chan et al., 2011)
		Using SmartID, I would be able to access government services solely by myself.	Scale 1 to 7	(Chan et al., 2011)
Awareness	e-Government (SmartID)	Hong Kong is actively embracing e-government using SmartID-supported government services.	Scale 1 to 7	(Chan et al., 2011)
		The Hong Kong Government is providing SmartID-supported government services to better our lives.	Scale 1 to 7	(Chan et al., 2011)

Constructo	Contexto	Indicadores	Escala	Referências
Awareness (cont.)	e-Government (SmartID) (cont.)	I am aware that SmartID-supported government services are provided by the Hong Kong Government.	Scale 1 to 7	(Chan et al., 2011)
Behavioral Expectation	Web-based decision support and transactional system	I expect to use the system in the next <n> months.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
		I will use the system in the next <n> months.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
		I am likely to use the system in the next <n> months.	Likert 1-7, Strongly Disagree to Agree	(Maruping, Bala, Venkatesh, & Brown, 2017)
Comfort with Change	Web Portal	I feel comfortable with the changes resulting from the upgrades of The System.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
		The continuous pace of upgrades of The System does not bother me.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
Compatibility	e-Government (SmartID)	Using SmartID to access government services would be compatible with all aspects of my life.	Scale 1 to 7	(Chan et al., 2011)
		I think that using SmartID to access government services would fit well with the way I like to live.	Scale 1 to 7	(Chan et al., 2011)
		Using SmartID to access government services would fit into my life style.	Scale 1 to 7	(Chan et al., 2011)
Computer Self-Efficacy	Collaboration Tool	I could complete a task using a computer if there was no one around to tell me what to do.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		I could complete a task using a computer even if there was not a lot of time to complete it.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		I could complete a task using a computer if I had just the built-in help facility for assistance.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
Concurrency	Collaboration Tool	I can easily use <collaboration tool> while participating in other activities.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		I can easily communicate using <collaboration tool> while I am doing other things.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		I can use <collaboration tool> while performing another task.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)

Constructo	Contexto	Indicadores	Escala	Referências
Confirmation	Web Portal	My overall experience with using the upgrades of The System was better than what I expected.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
		The service level provided by the upgrades of The System was better than what I expected.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
Conscientiousness	Web-based course management system (M-web)	I am always prepared.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I waste my time.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I find it difficult to get down to work.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I get chores down right away.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I carry out my plans.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I shirk on my duties.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
Consistency with User Knowledge	Web Portal	In the upgrades, the use of buttons, radio buttons, and combo boxes is consistent with my understanding.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
		In the upgrades, the data display is consistent with my usage conventions.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
Convenience	e-Government (SmartID)	SmartID would enable me to access government services anytime, day or night.	Scale 1 to 7	(Chan et al., 2011)
		SmartID would enable me to access government services from home, from the office, on the road, or at other locales.	Scale 1 to 7	(Chan et al., 2011)
		It would be convenient for me to access government services using SmartID.	Scale 1 to 7	(Chan et al., 2011)
Cost	Internet	Nowadays, the Internet is too expensive.	Not Specified	(Niehaves & Plattfaut, 2014)
		I think using the Internet is expensive.	Not Specified	(Niehaves & Plattfaut, 2014)
		It is not cheap to use the Internet.	Not Specified	(Niehaves & Plattfaut, 2014)

Constructo	Contexto	Indicadores	Escala	Referências
Declining Cost	Internet	The costs of Internet usage are constantly declining.	Not Specified	(Niehaves & Plattfaut, 2014)
		I believe the cost of Internet usage will continue to decline in the future.	Not Specified	(Niehaves & Plattfaut, 2014)
		I think the Internet will offer more for lower prices in the near future.	Not Specified	(Niehaves & Plattfaut, 2014)
Extraversion	Web-based course management system (M-web)	I would describe my experiences as somewhat dull.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I am skilled in handling social situations.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I know how to captivate people.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I have little to say.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I don't talk a lot.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I am the life of the party.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
Facilitating Conditions (Resources)	Collaboration Tool	There isn't sufficient access to use <collaboration technology>.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		Using <collaboration tool> is very resource intensive for me.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		I am not able to use <collaboration tool> when I need it.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
Facilitating Conditions (Technology)	Collaboration Tool	<Collaboration tool> is not compatible with other tools and technologies that I use.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		<Collaboration tool> is not compatible with other software that I use.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		I have trouble using <collaboration tool> seamlessly with other applications.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)

Constructo	Contexto	Indicadores	Escala	Referências
Familiarity with Communication Partners	Collaboration Tool	I feel comfortable discussing personal or private issues with co-workers with whom I collaborate.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		I feel comfortable using informal communication (such as slang or abbreviations) with co-workers with whom I collaborate.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		Overall, I feel that I know my collaborators well.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
Fear of Technological Advances	Internet	The trends in technological advancement are worrisome to me.	Not Specified	(Niehaves & Plattfaut, 2014)
		I fear that today's fastest Internet connection will be obsolete fairly soon.	Not Specified	(Niehaves & Plattfaut, 2014)
		I am worried about the rapid advances in information technology.	Not Specified	(Niehaves & Plattfaut, 2014)
Flexibility	e-Government (SmartID)	I expect that SmartID could be adapted to meet a variety of needs.	Scale 1 to 7	(Chan et al., 2011)
		I expect SmartID to be able to flexibly adjust to new demands or conditions.	Scale 1 to 7	(Chan et al., 2011)
		I expect SmartID to be versatile in addressing needs as they arise.	Scale 1 to 7	(Chan et al., 2011)
Friends and Family Influences	Internet	My friends think I should use the Internet at home.	Not Specified	(Niehaves & Plattfaut, 2014)
		Those in my social circle think I should use the Internet at home.	Not Specified	(Niehaves & Plattfaut, 2014)
		My family members think I should use the Internet at home.	Not Specified	(Niehaves & Plattfaut, 2014)
		My relatives think I should use the Internet at home.	Not Specified	(Niehaves & Plattfaut, 2014)
Immediacy	Collaboration Tool	<Collaboration tool> enables me to quickly reach communication partners.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		When I communicate with someone using <collaboration tool>, they usually respond quickly.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		When someone communicates with me using <collaboration tool>, I try to respond immediately.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
Intention to Continue Using	Web Portal	I intend to continue using The System rather than discontinue its use.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
		My intention is to continue using The System rather than using any alternative means.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)

Constructo	Contexto	Indicadores	Escala	Referências
Intention to Use Future Features	Web Portal	I predict that I will use the new features when they become available.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
		I intend to use the new features when they become available.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
Neuroticism	Web-based course management system (M-web)	I am not easily bothered with things.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I am often down in the dumps.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I panic easily.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I rarely get irritated.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I seldom feel blue.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I feel comfortable with myself.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I have frequent mood swings.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
Openness to experience	Web-based course management system (M-web)	I believe in the importance of art.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I enjoy hearing new ideas.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I am not interested in abstract ideas.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I do not like art.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		I do not enjoy going to art museums.	Likert 1-7, Strongly Disagree to Agree	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
Peer Influence	Collaboration Tool	My friends think I should use <collaboration tool>.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		My peers think I should use <collaboration tool>.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)

Constructo	Contexto	Indicadores	Escala	Referências
Peer Influence (cont.)	Collaboration Tool (cont.)	My co-workers believe I should use <collaboration tool>.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
Perceived Ease of Use	Internet	My interaction with the Internet would be clear and understandable.	Not Specified	(Niehaves & Plattfaut, 2014)
		I would find the Internet easy to use.	Not Specified	(Niehaves & Plattfaut, 2014)
		Using the Internet does not require a lot of mental effort.	Not Specified	(Niehaves & Plattfaut, 2014)
		I find it easy to do what I want in the Internet.	Not Specified	(Niehaves & Plattfaut, 2014)
	Web Portal	Learning to use the upgrades of The System is easy for me.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
		My interaction with the upgrades of The System is clear and understandable.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
		I find the upgrades of The System easy to use.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
Perceived Frequency of Use	Web-based course management system (M-web)	In a typical week, how many times have you looked up grades?	Direct Answer	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		In a typical week, how many times have you accessed the email archive?	Direct Answer	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
		In a typical week how many times have you accessed the course website?	Direct Answer	(Barnett, Pearson, Pearson, & Kellermanns, 2015)
Perceived Usefulness	Web Portal	Using the upgrades of The System enables me to accomplish tasks more quickly.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
		Using the upgrades of The System increases my productivity.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
		Overall, the upgrades of The System are useful in my job.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
Personal Innovativeness	Web Portal	If I heard about a new information technology, I would look for ways to experiment with it.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
		Among my peers, I am usually the first to try out new information technologies.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
		I like to experiment with new information technologies.	Likert 1-7	(Hong, Thong, Chasalow, & Dhillon, 2011)
Satisfaction	e-Government (SmartID)	All things considered, my continuing to use SmartID for government services is:	Scale 1 to 7, Extremely Negative to Extremely Positive	(Chan et al., 2011)

Constructo	Contexto	Indicadores	Escala	Referências
Satisfaction (cont.)	e-Government (SmartID) (cont.)	All things considered, my continuing to use SmartID for government services is:	Scale 1 to 7, Extremely Bad to Extremely Good	(Chan et al., 2011)
		All things considered, my continuing to use SmartID for government services is:	Scale 1 to 7, Extremely Harmful to Extremely Beneficial	(Chan et al., 2011)
	Web Portal	What is your overall satisfaction with the upgrades of The System?	Scale 1 to 7, Very Dissatisfied to Very Satisfied	(Hong, Thong, Chasalow, & Dhillon, 2011)
		What is your overall satisfaction with the upgrades of The System?	Scale 1 to 7, Very Unpleasant to Very Pleasant	(Hong, Thong, Chasalow, & Dhillon, 2011)
		What is your overall satisfaction with the upgrades of The System?	Scale 1 to 7, Very Frustrated to Very Contented	(Hong, Thong, Chasalow, & Dhillon, 2011)
Secondary Sources' Influences	Internet	Information from newspapers suggests that I should use the Internet at home.	Not Specified	(Niehaves & Plattfaut, 2014)
		Information that I gather by watching TV encourages me to use the Internet at home.	Not Specified	(Niehaves & Plattfaut, 2014)
		Based on what I have heard on the radio, I am encouraged to use the Internet at home.	Not Specified	(Niehaves & Plattfaut, 2014)
Self-Efficacy	e-Government (SmartID)	I could use SmartID to access government services if I could call someone for help if I got stuck.	Scale 1 to 7	(Chan et al., 2011)
		I could use SmartID to access government services if I had just the self-help information for assistance.	Scale 1 to 7	(Chan et al., 2011)
		I could use SmartID to access government services if someone showed me how to do it first.	Scale 1 to 7	(Chan et al., 2011)
	Internet	I feel comfortable using the Internet on my own.	Not Specified	(Niehaves & Plattfaut, 2014)
		If I wanted to, I could easily operate the Internet on my own.	Not Specified	(Niehaves & Plattfaut, 2014)
		I can use the Internet even if no one is around to help me.	Not Specified	(Niehaves & Plattfaut, 2014)
	Not Specified	I could complete a job or task using the system if there was no one around to tell me what to do as I go.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		I could complete a job or task using the system if I could call someone for help if I got stuck.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)

Constructo	Contexto	Indicadores	Escala	Referências
Self-Efficacy (cont.)	Not Specified (cont.)	I could complete a job or task using the system if I had a lot of time to complete the job for which the software was provided.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
		I could complete a job or task using the system if I had just the built-in help facility for assistance.	Scale 1 to 7	(Venkatesh, Morris, Davis, & Davis, 2003)
Status Gains	Internet	People who use the Internet at home have more prestige than those who do not.	Not Specified	(Niehaves & Plattfaut, 2014)
		People who use the Internet at home have a high profile.	Not Specified	(Niehaves & Plattfaut, 2014)
		Using the Internet is a status symbol.	Not Specified	(Niehaves & Plattfaut, 2014)
Social Presence	Collaboration Tool	Using <collaboration tool> to interact with others creates a warm environment for communication.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		Using <collaboration tool> to interact with others creates a sociable environment for communication.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		Using <collaboration tool> to interact with others creates a personal environment for communication.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
Superior Influence	Collaboration Tool	I believe the top management would like me to use <collaboration tool>.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		My supervisor suggests that I use <collaboration tool>.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
		There is pressure from the organization to use <collaboration tool>.	Likert 1-7, Strongly Disagree to Agree	(Brown, Dennis, & Venkatesh, 2010)
Technology Experience	Collaboration Tool	My experience with audioconferencing is:	Scale 1 to 7, None at all to Very Extensive	(Brown, Dennis, & Venkatesh, 2010)
		My experience with videoconferencing is:	Scale 1 to 7, None at all to Very Extensive	(Brown, Dennis, & Venkatesh, 2010)
		My experience with messaging tools (e.g., MSN messenger) is:	Scale 1 to 7, None at all to Very Extensive	(Brown, Dennis, & Venkatesh, 2010)
		My experience with technologies similar to <collaboration tool> is:	Scale 1 to 7, None at all to Very Extensive	(Brown, Dennis, & Venkatesh, 2010)

Constructo	Contexto	Indicadores	Escala	Referências
Trust	e-Government (SmartID)	SmartID would provide government services in my best interest.	Scale 1 to 7	(Chan et al., 2011)
		SmartID would provide access to sincere and genuine government services.	Scale 1 to 7	(Chan et al., 2011)
		SmartID would perform its role of providing government services very well.	Scale 1 to 7	(Chan et al., 2011)
Utility for Children	Internet	The Internet provides applications that my kid(s) can use.	Not Specified	(Niehaves & Plattfaut, 2014)
		The Internet has useful software for my child (or children).	Not Specified	(Niehaves & Plattfaut, 2014)
		I find the Internet to be a useful tool for my child (or children).	Not Specified	(Niehaves & Plattfaut, 2014)

L - Referências Utilizadas na Análise das Teorias/Modelos

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