Abstract

Modelling tourism development cycles associated with planning and investment cycles intends to be a contribution to the understanding of the tourism activity within a *continuum* process. It allows a better apprehension of the sequence of interdependencies that exist and can be addressed enlarging the well-known concept of tourism product and its life-cycle. The model sketched in this paper is still under progress and has been adapted from the territorial plan-process model (Lourenço, 2003) which is based on the *quasi*-model of Holton.

Key words
Plan-processes, tourism, modelling.

1 - Introduction

The main objective of this paper is to present the research methodology of a PHD thesis presently being started at Minho University and incentive discussion and new approaches on this subject. The aim of the thesis is to develop the model about plan-processes proposed by Lourenço in 2003 and apply it to areas for tourism development. The innovation lies in the introduction of sustainability and environmental components in the model.
The first part of this paper delineates the importance of Plan-Processes and the relationship of this issue and tourism activity. The continuum process of planning and the integration of all sector policies are considered basic factors for tourism development in the proposed model.

The intention to develop this model as a tool for understanding tourism activity cycles may contribute for the sustainable growth of the tourist activity. It has been adapted from the territorial plan-process model (Lourenço, 2003) which is based on the quasi-model of Holton. This model is presented in section 3.

It is essential to emphasize that the tourist model sketched in section 4 of this paper is still under progress. Some researchers have been working with some models based on the Butler’s model (1980). Nevertheless, there are older models (Fox, 1973) that portray graphically the life cycle of a product, market or industry.

The research hypothesis concerning the proposed model states that the structuring of tourist destination, the efficient marketing and the environmental sustainability of the tourism product, can bring up better levels of tourism development. Lastly, some conclusions regarding the theoretical framework being addressed at present, have been put forward in section 5. It is highlighted that the proposed model is still being worked out. Furthermore, it can be regarded as a tool for monitoring tourism activity but not for prescriptive behaviour.
2 - Plan-Processes and the importance of this issue

Plan-process is a concept specifically developed since the seventies of the XX century where development, meaning actions and investment of financial resources, is put forward within a process of planning where plans are of utmost importance.

Therefore, between the decision to invest and the action or investment itself, a tool exists that is a plan. This plan can be of different origins and typologies. In the seventies, the plans were basically static aiming at certain point in time, considering that starting conditions would be maintained throughout time.

In fact the conditions of the territory, economy and tourist development were estimated as rather stable. The petrol crash in 1973, for example, as well as wars a revolutions are major disruptions on the planned systems. Nowadays, the static plan is no longer used but other types of plans such as strategic ones, albeit their problems, keep being in use. They are important tools to foster development.

As such, the importance of plan processes revived again in the nineties of the XX century in Europe and always kept in the most organized and development territories such as in the Netherlands and United Kingdom.

The existence of a plan-process in a *continuum* allows for feed back of the system. In this way, the desires and values of the community would be listened and environment could be developed in a more sustainable way. Likewise, it is possible to evaluate the plans, the
possible alternatives, to incorporate the gaps and uncertainties in the system. The plans are then made more effective because they are monitored.

![Figure 2.1 - Incorporating Feedback in the Tourism Development Process](image)

According to Ruschmann in Monica (1996:46):

“One of the biggest problems of the tourism development plans derives on the lack of integration with other social, economic and physical programs of territories. Thus, they are made in rather isolated way; therefore they end up not attaining the proped objectives”.

Therefore, it is essential to bring together physical and economical planning on the agenda. In fact, in the appropriate land-use tools these two facets of planning have been more and more looked for (Faludi & Valk, 1994; Healey, 1993). This fact derives from the complexity of the decision-making process taking into account their social, economic, political and environmental relevance as well as their territorial specificities. As an example, some countries develop a spatial strategic national programme as well as regional or development plans (100% coverage in several Western European countries). These tools have a key effect in comprehensive planning incorporating land-use as well as economic and social policies.
3 - Lourenço’s model and the tourism development process

The proposal of Lourenço’s model was based in the quasi-model of Holton and then adapted for urban areas with a territorial plan-process. In the current PhD analysis, this model is adapted for tourist areas where tourism development plans occur aiming at the development of the tourist activity.

As such, and based in previous meta-heuristic models used for boom growth in mining villages and for research growth as the Quasi-model of Holton (see Figure 3.1), an ideal model of a plan-process was designed (see Figure 3.2).

![Figure 3.1 – Quasi-model of Holton](image-url)

The explanation of the quasi-model of Holton will be presented along Lourenço’s model (see Figure 3.2). In this last model, the horizontal axis also represents time but the period T is equal to ten years. In the vertical axis, the representation of the importance of the ideas,
knowledge, etc, was parameterised in three classifications: minimum (I), medium (II) and strong (III) according to the stages of a planning process rising from birth, then apogee culminating in decline. The variable “importance” in the Quasi-Model of Holton is the intensity of the cycle in Lourenço`s model. These three stages represent a cycle of a planning process related to actions and life-cycles, for a specific urban expansion area.

That is, on a bi-dimensional graph over intensity of cycle and time dimensions, an attempt to portray the planning efforts, the investment on urbanization, public infrastructures and equipment and the adherence of the population is quantified at the mentioned three levels. As can be noticed from the graph on Figure 3.2 from rise to death of a planning cycle for the growth of an urban area, 70 years are taken into account.

After 10 years planning production, the rate of planning decreases significantly on that area, reaching a minimum level after 20 years from starting point. After seventy years of the start of urbanization even a prime area that keeps successful must have an increase in its planning activity. The actions and living curves follow a low level start and increase significantly over time, having respective peaks at twenty and forty years later, respectively.
The main objective was to find the fundamental characteristics underlying the process of making and implementation of land-use plans derived from the context in which they are generated as well as from the logics of public and private action, especially in the fields of plan negotiation and development control as well as action programmes and local policies. As such, underlying factors were divided into decisive and critical, the first grouped among three levels (physical, technical and cultural). The critical factors were found to be the persistence on attaining the proposed objectives and the perception of innovations. This hypothesis was tested in seven case-studies aimed at expansion areas with zonings normally difficult to implement in Portugal such as green, industrial, conservation and urban fringe areas. This in-depth micro-research for seven Portuguese urban places chosen for standing out of the ordinary was carried out so that the critical factors could find maximum enforcement.

Some numerical modelling concerning the expansion areas around four of the case-studies was performed in digital form through aerial photography computer mapping as well as
plans analysis at three periods: up to 1945, from this time to 1970 and between this year and 1990 (see Figure 3.3).

![Figure 3.3 – Case study areas](image)

Applying the *quasi-model* of Holton for each study-area validated the model. As such as while in Maia I, for example, the ideal model can be adapted after the seventies, in Ermezinde the planning cycle does not follow the ideal model, showing three cycle breaks, while the actions and living cycles keep at low level for a long time (see Figures 3.4.1 and 3.4.2).

![Figure 3.4.1 – Maia’s Results](image)
In sum (see Figure 3.5), Perception of Innovations can be considered a critical factor of the Plan-Process. There remains a successful application of the heuristics model of Holton to a land-use planning process with innovations. If the model does not stand, a matrix of the relevant actor’s behaviour towards innovation can explain the differences in the graphical forecasting model.

Lourenço’s model allows a successful achievement of the objectives as the graphical forecasting model combined with a matrix of the behaviour of the relevant actors related to
the critical factors can prove quite effective in the monitoring of a plan-process and its possible trends. It is not a prescriptive model but basically a tool for monitoring a plan-process.

The use of Lourenço’s model (2003) is a subject to be further analysed in the current PhD thesis, particularly in areas for tourism development where ground for innovation exists, such as World Heritage areas that will be chosen for case studies. In the meantime, it is important to emphasize that this model was developed for urban growth areas and the corresponding land-use plan-process. The applicability for tourist areas is being tested and further re-modelled.

4 - Hypothesis for modelling a tourism development process

The research hypothesis at the core of this presentation are that a bigger investment in: 

- i) the structuring of tourist destination; 
- ii) efficient marketing; 
- iii) environmental sustainability of the tourism product, will generate better levels of tourism development.

The determinant factors still to be further developed and being looked at, presently, are:

- The importance of public participation and integrated approach of all sectors involved on the management of the tourism development;
- The need to plan before hand tourist actions activities;
- The need to have market research.
Thus, the research hypothesis plus the determinant factors need some modelling that supports the theoretical framework and that allows it to be validated.

In the seventies, several adaptations have been developed to portray graphically the development of the life of a product, market and or industry such as the one put forward by Fox in 1973. The models keep being similar although the number and names of the stages have varied throughout time. From five stages: precommercialization, introduction, growth, maturity and decline (Fox, 1973) to one of the most recent versions keeping the same number with different names such as embryonic, growth, shakeout, maturity and decline (Hill and Jones, 1998).

In the eighties, Butler adapted the life cycle product model to the tourism industry. He established six or seven according to the latest development but he used different names: exploration, investment, development, consolidation, stagnation. He then introduced one innovation after stagnation stage: the product can decline or revitalize. This kind of theoretical tool is being presented in technical reports nowadays such as the Action Plan of the tourism area of Lloret del Mar. The following transcription exemplifies this statement.

“As in other economic sectors, tourism follows a determined "product life cycle", with a curve similar to that of the attached graph. In this process several stages can be identified:

- A first stage called discovery, in which tourism begins to implant itself timidly in a territory for the first time. The practices involved are accessible to a minority, characterised by improvisation, singularity and the integration of the tourists with the territory which they are visiting and with its surroundings.
- A second stage known as **launch**, in which the tourism phenomenon grows spectacularly and very quickly. There is a change from minority practices to others of general scope, characterised by an enormous quantitative increase of both demand and supply, following a pattern of discontinuous growth.

- A third stage of **stagnation**, in which saturation is reached: the quality of the offer falls, demand levels off, and the environmental degradation of the tourist destination begins to be obvious and worrying.

![Figure 4.1 - Life cycle of the tourism product](image)

- A fourth stage of **decline**, which represents the current state of the mature tourist destinations (that is, coastal areas developed for mass tourism in the 50’s and 60’s). The problems which were sensed in the stagnation stage now manifest themselves clearly, the model of tourism adopted becomes exhausted and it is necessary to redress the situation, to invert the downward trend of the curve. In the face of this situation the mature destinations can opt for various solutions:

1. Continued decline, due to the passivity of the public and private agents, which force the model until there is no longer any solution.

2. Stagnation, due to the application of piecemeal measures which do not attack the root of the problems but only the most evident effects.
3. A radical change of mentality, leading to the adoption of measures which even entail a new tourism model, based on sustainability and the integration of tourism with the territory, the economy and the local population”. (Life cycle of the tourism product in Lloret del Mar Agenda XXI, 2005)

Other tourism researchers have used this or similar type of life-cycle model as Fuster (1975), Jain (1985), Knowles (1996), Ruschmann (1997) and Cooper (2002). According to Cooper (2002):

“Life Cycle Stage – whilst many destinations may intuitively know their position within the life cycle, this is more difficult to quantify. Here, Knowles (1996) identifies eight factors which can assist in identifying the life cycle stage: market growth rate; growth potential; range of product lines; number of competitors; distribution of market share amongst competitors; customer loyalty; entry barriers; and technology. Another approach is to consider growth indicators (Cooper, 1992) such as: rates of volume growth; ratio of repeat to first-time visitors; length of stay; visitor profiles; expenditure per head; and visit arrangement (package/independent)”.

After analysing this life-cycle type of model and incorporating the cycles considered within Lourenço’s model: planning, actions and living, an attempt to adjust both type of models will be presented. Previously, some considerations on the proposed tourism plan-process model are introduced and discussed.

In the first stage “discovery”, at the initial start of tourism activity, there must be a big planning effort as well as capital investment to structure the destination in order to attract tourists. In the twenty initial years, the intensity of the planning cycle is very strong (III) while the actions and the living cycles start to grow.
In the second stage, the tourism **launch**, planning is still very needed. In the meantime, after around twenty years the planning activities are consolidated (II). At this moment of the time period, the living is more intense and the actions still grow.

In the third stage, either stagnation or **decline** will occur. The planning, living and actions cycles go down until the minimum level (I). There are only low efforts in all variables under analysis: planning, living and action (see figure 4.2).

![Figure 4.2 - Tourism development ending in stagnation or decline](image)

Nevertheless, in the third stage it is possible to do something to **launch again** or **revitalize** the tourism product. For this it is essential to plan and invest again. That need explains why in the model proposed, actions grow again since around the 40\(^{th}\) year, then the living may increase also (see figure 4.3).
In sum, this graphical portrayal of a tourism development plan-process is still being sketched. But empiric evidence suggests that the life-cycle period of the tourism activity is shorter than the urbanization activity.

5 – Conclusions

The proposed methodology, working hypothesis and explaining model for the tourism development process are still being studied. Some more effort in the conception of the proposed model is needed. However incipient the work performed within one month-length
of the start of this PHD thesis, the interaction of the presented models from economic research such as the ones from Fox, Hill and Jones, to the tourism research such as the ones by Fuster, Jain, Knowles, Ruschmann and Cooper as well as the incorporation of urban modelling by Lourenço seem to converge to a successful working hypothesis.

Afterwards, the proposed model will be tested in two or four case studies, depending on availability of data and forthcoming conclusions are expected for some tourist areas of the state of Minas Gerais in Brazil and Douro Valley in Portugal. Further research is also needed on finding the indicators to use in order to be able to quantify the life-cycle variables. Obviously, there are several expected limitations in the use of this proposed tool for analysis of the tourism activities.

Bibliography


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