

## COLLABORATIVE STRATEGY BETWEEN PORTUGAL AND INDIA: TEXTILE SECTOR

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**Abstract.** *The need of Open Innovation emerged with the improvement of the present development, focused on business conditions where organizations have constrained assets to fulfil their advancement needs inside house. Open development is tied in with working with outside accomplices to popularize interior advancements and to acquire a wellspring of outer advancement that can be marketed. This study aims to contribute to the improvement of the collaboration between India and Portugal and decrease the risk for Portugal in textile China's market. To beat this, Portugal ought to be more cooperative with India, since India is a major contender to China. Portugal and India have great connection among them and if this occurs there will be shared winning for the nations: Portugal is solid and inventive; India has a decent market esteem everywhere throughout the world. The Indian market is one of the greatest and fastest creating economies all over the world. The paper plans to introduce one conceivable method for being a successful open pioneer by joining open and closed features, and answers the key inquiries of what to share, how to esteem the procedure and impacts of sharing, and how to build up an effective collaborative strategy.*

**Keywords:** *Collaborative strategy, open innovation, India and Portugal, textile sector.*

### 1. INTRODUCTION

The need of open innovation emerged with the improvement of development of business conditions where organizations have restricted assets to fulfil their advancement needs inside doors [1]. The focal thought behind open development is that, in a universe of broadly appropriated information, organizations can't stand to depend totally all alone research, however ought to rather purchase or permit procedures or innovations (i.e. licenses) from different organizations. Furthermore, inner developments not being utilized as a part of a company's business ought to be taken outside the organization [2]. Open Innovation is the use of "purposeful inflows and outflows of knowledge to accelerate innovation internally while also expanding the markets for the external use of innovation" [3]. This original notion of Open Innovation was largely based on transferring knowledge, expertise and even resources from one company or research institution to another. This undertakes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as they seek to expand their acting [4]. Open innovation is grounded in the recognition that firms can harness knowledge from multiple sources to enhance innovation and thus deliver additional value for customers. When rely on open innovation model, company does not drive to generate good ideas entirely by itself. It seeks to utilize internal and external ideas in a good manner, to be more effective at managing cost and risk and to accelerate technology development [5]. As a consequence, business adopting this innovation model need to engage in proactive intellectual property management in order to exploit their own and other firm's knowledge and innovation in a strategic manner [6]. The Clothing and Textile industry has a long tradition in Portugal and the recent evolution of the global market presented several challenges. The way chosen for being so competitive resulted specially from high quality, quickest response available in the market, endogenous design and technological innovation and less commodities and more specialities. With the support of a strong and active scientific and technological system, the sector developed vigorously their activities in the field of non-commodity Technical Textiles. Now, the technology-intensive and design-intensive products are responsible for the main part of the growth of Portuguese exports and, specially, the growth of GVA (Gross Value Added) per employee. Portugal major competition in textile is Asian countries like China, India and Bangladesh. In textile and clothing sector India and China have good market value. They are the leading exporters and importers in the sector. The major threat for Portugal in textile is China's market. To overcome this, Portugal should be more collaborative with India, because India is a big competitor to China. Portugal and India have good relationship between them and if this happens there will be mutual winning for the countries: Portugal is strong and innovative; India has a good market value all over the world. The Indian market is one of the biggest and quickest developing economies in the world. Development of the industrial sector expanding utilizations of specialized textile in the development business are the key elements energizing the interest in textile sector.

### 2. METHODOLOGY

In the paper we present the results of a study conducted to contribute to the reflexion of conceiving and maintaining a harmonious dynamic balance between the different features of open innovation in the Clothing and Textile sector between India and Portugal. Textile sector in Portugal is very important sector contributing 11% of GVA and one of the largest among 28 EU member states. This study adopted a methodology which was divided into six stages. In the first stage it is defined the relationship between India and Portugal. The second stage explains and differentiate the Indian textile sector and Portugal textile sector. One then proceeded with the third stage and explains in detail that factors that foreign countries find to collaborative with India. In the fourth stage an efficient collaborative business strategy is introduced with a view to implement textile sector both Portugal and India. The fifth stage explains the Textile sector in China and ways to overcome the threat of China market. Finally, the sixth stage presents the conclusion, as well as proposals for future work.

### 3. RELATIONSHIP BETWEEN INDIA AND PORTUGAL

India is developing very fast, more than the advanced world economies. Portugal is in the European Union and is recovering from a difficult economic period lived during five years. The two nations are hoping to develop monetary transitions, investments and increase trade relations. Bilateral trade has been growing steadily over the last few years but remains modest at \$692 million in 2015-16. Portuguese investment positions 56<sup>th</sup> as far as the general FDI inflow into India. Portugal and India have comparative needs such as boosting local financial development, reducing speculation, promoting the work, industry and technological advancement, there are a few areas with complementarities where associations can be proposed to shared advantage, for example, infrastructure (streets, ports, inland conduits), sustainable power source (wind and sun supplies), ICT (Start Ups), Water and Waste Management, Agro-Processing, Tourism and Hospitality [7].

**Table 1:** Trade and Investment of Portugal and India [7].

CRITERIA	CONTENT
BILATERAL TRADE	<ul style="list-style-type: none"> <li>• Bilateral Trade has been growing steadily during the past few years. Bilateral trade has been growing steadily over the last few years but remains modest at \$692 million in 2015-16.</li> <li>• Main imports from India include: Cotton; Fish &amp; Crustaceans; Iron and Steel; Machinery and Mechanical Appliances; Footwear; Plastics and articles; Man-made fibres; Organic Chemicals etc. Main imports from Portugal are Machinery and Mechanical Appliances; Electrical machinery and equipment; plastics; organic chemicals; copper and articles; paper; raw hides and skins etc.</li> </ul>
PORTUGUESE INVESTMENT IN INDIA	<ul style="list-style-type: none"> <li>• Portugal ranks 56<sup>th</sup> in Foreign Direct Investments to India, Major Portuguese investors in India are: Martifer (Porto) in the Metals Manufacturing sector; Efacec (Oeiras) in Industrial Machinery, Equipment &amp; Tools sector; Euroamer Garuda, a subsidiary of Euroamer (Lisbon), a Construction project in Bangalore in the Real Estate sector; Sodecia's acquisition of the Indian Automotive Ancillary Services Group in 2011; Petrotec Group in production, marketing and providing technical support for equipment and systems for the oil industry's distribution and retail areas.</li> </ul>
INDIAN INVESTMENT IN PORTUGUESE	<ul style="list-style-type: none"> <li>• Indian investments in Portugal are in the range of USD 150 million. Portugal has initiated a Golden Visa scheme to attract non-European investors to Portugal. The first major foreign investor under the Golden Visa Scheme who was given a residency permit was an Indian Hotelier, N. Muthu who invested Euro 50 Mn in three hotels in the Algarve region and was awarded the Golden Visa and Resident permit by Portuguese Foreign Minister Dr Paulo Portas during his visit to India in March, 2013. Other investors from India include: Saptashva Solar, a subsidiary of XL Telecom &amp; Energy in the Renewable energy sector in a Electricity project; TCS Iberoamerica in a IT and software services project in the city of Lisbon; Shakthi Auto component a subsidiary of Sakthi Sugars, Chennai with approx US\$ 30 mn investment in an auto component plant in Agueda. Another Indian company Zomato has invested Euro 11 million in Portugal.</li> </ul>

### 4. DIFFERENTIATE THE INDIAN AND PORTUGUESE TEXTILE SECTORS

#### 4.1 INDIAN TEXTILE SECTOR

- India's textile industry is one of the most seasoned and successful ventures in Indian economy, going back a few centuries. Indeed, even today, textile sector is one of the biggest and important of India's economy, with roughly 13 percent of aggregate fares. The textile industry is also labour intensive and is one of the largest employers in India. The textile business utilizes around 45 million of direct workers and 20 million of indirect workers in other suppliers and complementary industries. The Indian textile industry has different levels of "modernization": some firms are very low-tech, with hand-spun and hand-woven materials areas producing basic products and craftwork textiles, and some others are capital intensive, enormous and modern plants, producing very good textile products (yarns, fabrics and clothing). The weaving sector and the hosiery are important in the Indian textile production, having cotton as local raw material in many categories of exported products. The Indian raw material industry has the ability to deliver a wide assortment of items appropriate to various market fragments, both inside India and over the world [8].
- The Indian textile industry, now evaluated at around US\$ 120 billion, is expected to achieve US\$ 230 billion by 2020. The Indian Textile Industry contributes roughly 5 percent to India's Gross Domestic Product (GDP), 10 percent of assembling generation and 14 percent to generally speaking Index of Industrial Production (IIP). Indian "Khadi" items deals expanded by 33 percent year-on-year to Rs 2,005 crore (US\$ 311.31 million) in 2016-17, and is expected to reach Rs 5,000 crore (US\$ 776.33 million) in 2018-19, according to the Khadi and Village Industries Commission (KVIC). The aggregate zone under development of cotton (raw material) in India is relied upon to increment by 7 percent to 11.3 million hectares in 2017-18, with rising costs and enhanced product yields. Indian fares of privately made retail and way of life items developed at a compound yearly development rate (CAGR) of 10 percent from 2013 to 2016, predominantly driven by bedding shower and home textiles. The Government of India targets to export textiles material and clothing sends out at US\$ 45 billion for 2017-18 [8].
- The textile sector has reached remarkable performance in the most recent five years, with a boost of foreign investment. The business (including dyed and printed) pulled in Foreign Direct Investment (FDI) worth US\$ 2.55 billion during April 2000 to June 2017. The Indian government has concocted various fare advancement approaches for the materials segment. It has additionally permitted 100 percent FDI in the Indian textile area, under the automatic route to reduce time to invest. The future for the Indian textile industry looks encouraging, floated by both solid local utilization and in addition send out interest. With consumerism and disposable income on the rise, the retail segment has encountered a fast development compared with previous decade [8].

#### 4.2 PORTUGUESE TEXTILE SECTOR

- The below table represent Portuguese textile and clothing sector Industry, compared with the European sector.

**Table 2:** Comparison of textile and clothing of Portugal and Europe [9].

CONTENT	PORTUGAL (%)	EUROPE (%)
EXPORT	10	3
EMPLOYMENT	20	8
TURNOVER	9	4
PRODUCTION	9	4

- The Portuguese textile and clothing sector showing a good improvement in all the areas of the sector. The below table show the improvement of 2016 and 2017.

**TABLE 3:** Analysis of Portugal textile and clothing sector of 2016- 2017 [9]

CONTENT	2016	2017
TURNOVER (€ 1.000)	7.347	7.500
PRODUCTION (€ 1.000)	7.136	7.400
EMPLOYMENT	135.197	137.000
EXPORT (€ 1.000)	5.035	5.237
IMPORT (€ 1.000)	3.932	4.138

TRADE BALANCE (€ 1.000)	1.103	1.098
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## 5. EFFICIENT COLLABORATIVE BUSINESS STRATEGY IS INTRODUCED WITH A VIEW TO IMPLEMENT TEXTILE SECTOR BOTH PORTUGAL AND INDIA

Portugal major competition in textile is Asian countries like China, India and Bangladesh. In textile and clothing sector India and China have good market value. They are the leading exporters and importers in the sector worldwide. The major threat or competitor for Portugal in textile and clothing industry is China. To overcome this, Portugal should be more collaborative with India, because India is a big competitor to China. Portugal and India have good relationship between them and if this happens there will be mutual winning for the countries: Portugal is strong in Technology and Creativity; India has a good market value all over the world. The table below explains the performance overview in the Global Competitiveness Index between Portugal, India and China.

**Table 4:** Performance overview of Global Competitiveness Index (Ranks) [10].

CONTENT	PORTUGAL	INDIA	CHINA
POPULATION (MILLION)	10.3	1,309.3	1,382.7
INFRASTRUCTURE	18	66	46
HIGHER EDUCATION AND TRAINING	34	75	47
GOOD MARKET EFFICIENCY	34	56	46
LABOUR MARKET EFFICIENCY	55	75	38
FINANCIAL MARKET DEVELOPMENT	116	42	48
TECHNOLOGY READINESS	26	107	73
MARKET SIZE	54	3	1
BUSINESS SOPHISTICATION	43	39	33
INNOVATION	32	29	28

The Indian market is one of the biggest and quickest developing economies in the world. Development of the industrial sector expanding utilizations of specialized textile in new and innovative business are the key elements energizing the interest in textile sector. Portugal is solid in Technology Readiness, India has a strong Market Value, and thus a cooperative action between them will be very important.

## 6. FACTORS OF FOREIGN COUNTRIES FIND TO COLLABORATIVE WITH INDIA

As the world's biggest producer/manufacturer of textile and clothing, India's textile and garments part is a significant sector of India's economy. India's local textile and clothing industry is profoundly differing, comprising of hand-spun and hand-woven activities toward one side, and of the assembling range to advanced and modern factories at the opposite end. The domestic textile and clothing industry is vertically-coordinated over the value chain and reaches out from fiber (natural or synthetic) to manufacturing however to a great extent works through manufacturing clusters, with about 70 material groups, delivering 80 percent of the nation's aggregate material. Despite the fact that India's textile industry is an immense benefactor regarding sends exports, industrial output and employment, as China's, India's domestic industry isn't without its difficulties. The performance of the Indian industry begins from its low costs and fare profits. But the upper hand that India had with respect to its low work costs has been breaking down bit by bit against other countries like Bangladesh and Vietnam that offer a capable workforce and more affordable work. The development of market in India is changing in standard of individuals and consumers. Their budgetary status has been enhanced and expanding in number of individuals and this is a key factor. The table below clarifies the variables that outside nations find to work together with India.

**Table 5:** Factors that can convince Portugal to collaborate with India [11].

CRITERIA	CONTENT
POPULATION	India has a large population base containing more than one and quarter billion people. Half of the Indian population is under 25 years and this population joins the workforce and they are earning people, so the spending force will increase. Textile and clothing will be the prime recipient of this expansion in obtaining benefits.
INCREASE IN BUYERS	In recent two decades, the purchasing propensities have changed essentially in India. They have moved from a need-based buy to aspiration-based buy. Nowadays consumers are inclining more towards branded product, especially in fashion segment. People in urban areas are spending substantially more on attire than they did 10 years back which has brought about an expanded concentration by brands and retailers in these urban areas.
INCREASE URBANIZATION	In this century, occurs an increment in the urban population, the development of urban areas and a developing impact of urban patterns and services in rural areas, is being witnessed in India. The joined impact of these progressions is putting more cash in the hands of the citizens/buyers and is making new desires and request which will thus will have a noteworthy development effect on clothing shops and money spent by the fashion consumers.
GROWTH OF ONLINE RETAIL SALES	India is encountering a digital revolution throughout the most recent couple of years and many individuals are presently associated with the internet. This has brought about an upsurge in internet retailing as to ever-increasing extent individuals are searching for simplicity of shopping, substantial discount offered by online entryways, and better payment and return policies.

## 7. THREAT AND WAYS TO OVERCOME OF PORTUGAL FROM CHINA MARKET

China has been the undisputed pioneer in worldwide exchange in the course of the most recent three decades. In the textile and clothing segment particularly, China has kept up a prevailing offer of more than 40% in the course of the most recent twenty years. Low fares and costs have assumed a critical role in this monetary accomplishment of China. Between 2001 and 2014, Chinese clothing trades expanded more than four times from US\$ 54 bn. to US\$ 193 bn., developing at 10% CAGR. China has accomplished this status on the worldwide trade, by utilizing its huge human asset base, low assembling and manufacturing expenses and economy's scales. Nonetheless, in the ongoing years, China's development in the worldwide material and clothing exchange has backed off. After the financial emergency of 2009, China's improvement in the exchange stock market has backed off from a normal 15% to around 4% of every 2014. India's most serious issue in production aspects is low concentration in innovation development, and this makes India to be in different levels from different nations. Portugal is solid in technology if Portugal (Technology Readiness) and India (Market Value) and thus a cooperative action between them will be very important [11].

## 8. CONCLUSION

Open Innovation is essential in the current context of entrepreneurial activities since it fosters the improvement of business conditions. When an organization wishes to be more competitive and differentiated, the necessary changes must invariably occur "within the house" first. Open Innovation infers another worldview for the administration of the 21st century. It is a fact that organizations need to be more open and more collaborative, sometimes even developing new products or concepts together with clients, suppliers and competitors. The world of today is constantly subjected to rapid change, so that organizations are required to be agile and flexible. Companies should also work more closely and in a collaborative and cooperative way to meet the challenges at hand. The future is certainly more sustainable for the companies which have already understood that open innovation is the key to gaining a competitive edge and facing the market's adversities successfully.

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