A Work Project, presented as part of the requirements for the Award of a Master Degree in Management from the NOVA- School of Business and Economics.

Portugal as a near shore destination for Information Technology and Business Processes Outsourcing.

Factors influencing the location assessment.

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Abstract

This research aims to define Portuguese positioning in the near shoring market for Information Technology and Business Processes Outsourcing.

The TAVAAS methodology used throughout this work considers six factors, for which corresponding relative weights were assumed.

A qualitative research methodology was conducted to identify the motivational drivers of companies whose transnational services are installed in Portugal. Its results challenged the initial assumption; therefore, they were re-applied to the framework.

The deviation from the results achieved with the initial perceived weights was not significant; thus, the initial hypothesis was tested and its results accepted.

As conclusion, the relative factor weights to consider when evaluating Portugal as a near shore destination for IT and BPO have been identified.

Keywords: Near shoring, Portugal, Outsourcing, Local assessment

Acronyms

APO: Association Portugal OutsourcingBPO: Business Processes OutsourcingICT: Information and Communication TechnologyIT: Information TechnologySSC: Shared Services Centers

Introduction

Over the last decade a trend has emerged in outsourcing decisions (mainly Information Technology and Business Processes Outsourcing, hereinafter referred to as IT and BPO) giving preference to lower cost foreign locations in close geographic proximity to the contracting company, over traditional offshoring destinations such as China or India (Oshri, 2015).

This is mainly due to difficulties in communication, control and supervision, coordination, and trust building (Carmel & Tjia 2005; Carmel & Abbot 2007) that companies have been facing while outsourcing to distant countries.

As a result, it becomes extremely important for service providing countries to clearly position themselves in the market by properly defining their characteristics and competitive advantages, in order to benefit from these trends.

The purpose of this research study is to better define Portuguese positioning in the near shoring market and to analyze the key motivational drivers that make Portugal an attractive destination for companies to outsource some of their activities.

In order to do this, the TAVAAS methodology (Talent-based, value-adding and advanced sourcing countries - supported by the Centre for Global Sourcing and Services at the Loughborough School of Business & Economics in the UK), a valuable tool in the academic environment for location assessment for near shore activities, was selected and applied to Portugal. The reason for choosing TAVAAS lies on the fact that it represents the only available framework in the academic environment specific for near shore activities and based on a quantitative approach. An assumption regarding the relative weight of each of the six TAVAAS factors (costs, availability of skills, environment, quality of infrastructure, risk Profile and market Potential) in the overall assessment

was necessary to implement the framework. Subsequently, a qualitative research methodology enabled to infer the key motivational drivers that influenced companies whose transnational services are already installed in the Country. Being the results deriving from this research on the market slightly different from the ones achieved by implementing the initial hypothesis they were re-applied to the framework, to check which impact they would have on the overall evaluation of Portugal as a near shore destination.

Interestingly, in both the scenarios Portugal achieved the same score. Also, for the other three countries, the deviation from the results achieved with the initial perceived weights was not significant; thus, the initial hypothesis is tested and its results can be accepted.

1. What is Outsourcing? Why is it relevant today?

Outsourcing is increasingly being used as a buzz world in the Operations Management vocabulary. The term is often misused and hundreds of neologisms have been created to adjust its meaning to a variety of different peculiar aspects of the extremely complex phenomenon.

"Considerable space in academic publications has been dedicated to exploring of these definitional distinctions and adding of new extensions such as *near-shoring*, *in-shoring* and *far-shoring*" (T. Pedersen, L. Bals, 2013:370).

The term could not be more relevant than it is nowadays; indeed, due to enormous advancements in terms of transportation and information communication technologies, contemporary international trade flows are increasingly characterized by "production sharing" (R.S. Rajan, S. Srivastava, 2007) and this is true not only for goods but also for services. The practice of outsourcing services arose in the late 1990s when the trend was to offshore to lowcost developing countries, mainly, such as India. The role emerging economies in this phase was crucial due the low cost of work in these Countries. "According to the National Association of Software and Service Companies (NASSCOM) in India the sector in 2014 employed one million people representing 25% of India's total exports. The IT services sector dominates the industry with exports of \$40 billion, followed by BPO exports of \$20 billion" (D. Farrel, 2006).

Lower costs due to a competitive bidding structure is a major advantage of traditional offshore outsourcing arrangements over captive arrangements and joint ventures; providers maximize efficiencies and lower costs by servicing various customers. "The disadvantages may include loss of control, loss of flexibility, and the possibility if misaligned incentives between the customer and the provider and cost overruns" (Carmel E., Tjia P., 2005: 121).

"Although cost advantage continues to be the most important determinant of the offshore location attractiveness, supply of specialized talent and quality of operating conditions are increasingly important" (M. Cali, K.Elvis, D.W. Te Velde, 2006 : 78).

What is more, popularity of some low wage Countries has some disadvantages. For instance, due to the high number of multinationals hiring in the same area "the turnover rate among IT staff in the banking industry is 30% to 40% in some Indian cities, and hiring graduates from the country's prestigious technology institutes, has become a nightmare" (D. Farrel, 2006).

Cultural compatibility and geopolitical risks are also one of the main reasons why many European companies are nowadays reversing their offshore decisions and taking the services back to Europe. According to the Ghemawhat CAGE framework, the distance between two Countries manifests itself along four main dimensions, namely Cultural, Administrative, Geographical, and Economic

Distance, despite ongoing globalization efforts (Ghemawhat, 2001). These can have different implication on the business processes, depending on the market of reference.

Nevertheless, it becomes evident that traditional tools used by managers to evaluate expansion strategies, such as the CPA (Country Portfolio Analysis) are not sufficient to address the complexity of the overall assessment. Therefore, "in choosing a city, U.S and Western companies will have to focus less on low wages and much more on other ways that candidate cities can fulfill their business needs" (Farrell, 2006).

It is in this particular historical phase that new countries started proposing themselves as outsourcing destinations; among these also European. This had a significant impact on the distribution of the market shares; in 2004 India had 70% of the world outsourcing market; in 2014 it had only 44%. (Ryan, 2014).

In the near shoring perspective, the European environment is divided in two parts. On one side some countries are considered as established players. On the other side are the emerging countries, where costs are lower and the industry and regulatory landscape are still developing (Kearney, 2014). Already in 2012, Belarus, Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovakia, Ukraine were listed in Gartner's 30 leading locations for offshore services (Gartner, 2014).

During these years this trend has been growing, and "for the first time in 2014 growth in outsourcing services in Europe exceeds growth in the USA" (Oshri et al., 2015: 9). In Europe, the main users of outsourced services are located in the United Kingdom. Therefore, it becomes extremely important also for European service providing countries to clearly position themselves in the market.

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1.1 Definitions

Due to the confusion surrounding the Sourcing glossary, it is necessary to define the boundaries of the main terms used throughout the course of this paper.

By the word "Outsourcing" we are referring to "the contracting of the management and/or execution of a business function to an outside third party contractor or subcontractor"¹.

For the aim of this work, we are only referring to the outsourcing of services even though outsourcing can also refer to production.

When mentioning "Off shoring" we are calling attention to "the practice of the relocation of an entire business process to a foreign country. The business process or function can be performed by the parent company or by a local third- party contractor"².

On the other hand, when talking about "Near shoring" we intend the "offshoring of a business process or manufacturing plant to a lower cost foreign location that is in close geographic proximity to the contracting company"³.

1.2 Portugal in the Outsourcing Market

In 2013 Portugal was among the 13 developed countries' leaders on the potential for the provision of offshore services for IT and BPO for the third consecutive year in Gartner's ranking. Nevertheless, still in 2015 its positioning in the near shoring market is not well define, mainly due to a lack of methodological tools.

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- ² Hinkelman, E., & Putzi, S. (2008). *Dictionary of international trade: Handbook of the global trade community*, includes 27 key appendices (8th ed.). Petaluma, Calif.: World Trade Press.
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¹ Hinkelman, E., & Putzi, S. (2008). Dictionary of international trade: Handbook of the global trade community, includes 27 key appendices (8th ed.). Petaluma, Calif.: World Trade Press.

During the last decade the non-profit Association Portugal Outsourcing (hereinafter referred to as APO) has been collaborating with the top IT and BPO companies in Portugal in order to develop the Portuguese Outsourcing Sector, in the area of ICT namely "through spreading information, promoting best practices, fostering the debate on relevant issues for the sector evolution and supporting the development of strategic studies about the subject" (APO, 2010).

Since 2010, APO has been publishing yearly reports "Portugal as a near shore outsourcing destination" in order to "attract foreign investments, maximize efficiency and ultimately create jobs".

To support their studies, APO developed a framework that would allow to evaluate the attractiveness of Portugal and to identify its key competitive advantages as an outsourcing/near shoring destination. The framework takes into consideration four domains (country, infrastructure, competences and costs) and compares the results of Portugal with eight reference countries.

According to the last version of "Portugal as a Near Shore Destination" (2015), "Portugal's competitiveness as a viable near shore location for IT based outsourcing operations followed an increasing trend between 2012 and 2015 and the skills of the talent base outperform the arguments of offshore destinations. The main conclusion from this report is that at this stage the Portuguese Public Administration's adoption of Outsourcing models and solutions is still below EU average. However, positive signs are being observed since operational models like Shared Services for specific Central and Local Government function are being implemented. Forecasted relief of personal and corporate tax burden will encourage more economic activity and foreign investment". The main limitation of APO work lies in the fact that its studies were fragmented during the time and conducted by different entities/teams. Therefore, the methodology used in the data collection

is not always coherent. In order to evaluate whether the APO framework is complete and effective and whether it takes into consideration the right combination of factors, it has been decided to evaluate Portugal attractiveness with TAVAAS framework.

2. Literature Review

Location Assessment in Outsourcing decision-making.

"Selecting a location is one of the major challenges when making offshoring and outsourcing decisions" (Oshri et al., 2015).

Whereas previous study focused on selection factors for vendors, the importance of the vendor's location should not be underestimated. "A variety of decision criteria for location selection are proposed in previous outsourcing and offshoring literature but no quantitative analysis is performed" (Boardman Liu et al, 2006: 19). During the last decade the need for quantitative tools that would support the location decision-making process for outsourcing has been identified.

The main source of debate is on whether the location assessment should be performed on a national or a city level. Despite this, majority of attempts privilege the former option.

The Global Services Tholons Reports are an example comprehensive methodology based on a city level. Six factors are analyzed, namely: scale and quality of workforce, business catalyst, cost, infrastructure, risk profile and quality of life. Within these six factors there are fifteen subcategories, each representing a corresponding weight. The methodology relies on primary research (mainly survey and interviews), secondary research when the first is not applicable and represents a combination of quantitative and qualitative analysis. The result is a ranking of cities as outsourcing destinations at a global level.

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On the other side, A.T. Kearney Global location index compares countries against three main aspects: the financial attractiveness (on a scale from 0 to 4), people and skills availability and the business environment (on a scale from 0 to 3). According to this methodology, the weighted distribution for the three categories is 40:30:30. The main limitation of this model is the small number of factors it considers; thus, its results cannot be accepted as significant nor representative. Carmel's eight factors model (often referred to as the Oval model) takes into consideration government vision and policies, human capital, wages, quality of life, linkages, technological infrastructure, capital and industry characteristics. The main limitation of this model lies in the fact that it was created to identify the national software export success factors; therefore, it can be a useful tool for countries to develop strategies to improve their national well-being (Carmel, 2003) but does not provide any comparison for outsourcing location assessment.

According to the authors of the TAVAAS methodology Oshri and Ravinshankar, Farrell's six factor model represents the most complete available tool to evaluate off shoring decisions (Oshri et al, 2015). Farrell's model considers six variables, namely: costs, availability of skills, environment, quality of infrastructure, risk profile and market potential. Farrell also developed a decision model that is made up of four steps: potential location identification and listing, definition of decision criteria (considering the six factors of the model), qualitative/quantitative data research on the selected destinations, criteria ranking based on relative importance for the company, ranking of potential locations, measurement of location sustainability (Farrell, 2006). Farrell also remarks that data research cannot be implemented on national level, since significant differences may exist among different cities/areas of the same Country.

Oshri and Ravinshankar modified the Farrell (2006) *to* "fit the challenges that talent-based, valueadding countries such as UK are facing in attracting outsourcing investments" (Oshri et al, 2015:106). By abolishing a cultural compatibility factor (based on key characteristics of the national culture and the business culture) the TAVAAS framework has been created.

3. Methodology

Problem Statement. The problem identified in the field of interest of this report is that Portugal positioning in the near shoring market has to be properly defined; methodologies and tools actually available to evaluate Portugal attractiveness have to be tested.

Following this reasoning, it has been decided to evaluate Portugal attractiveness as a near shore destination through the application of the TAVAAS framework.

Research questions. The following research questions are answered in this report in order to get a clear and well formulated answer to the problem statement:

- Which are the factors that make Portugal an attractive destination for IT and BPO investments?
- Given the TAVAAS flexibility, which are the relative weights of each factor for Portugal?
 Are availability of skills (25%), costs (20%), quality of infrastructure (15%), risk profile (15%), environment (15%) and market potential (10%), the correct factor weights when evaluating Portugal as a near shore destination for IT and BPO?

Research method. A mixed method research has been preferred, since it aims to balance possible errors in any of the method used; in fact, "recognizing that all methods have limitations, researchers felt that biases inherent in any single method could neutralize or cancel the biases of other methods" (Creswell, 2003).The research focuses on outsourcing decisions for IT and BPO.

Data Collection: In the first part of the research secondary data has been used to investigate the outsourcing phenomenon, through the consultation of various academic researches/studies and reports. In addition, the ongoing communication with I. Oshri, ensured the correct application of TAVAAS to Portugal. Subsequently, qualitative analysis was performed based on the data collected through survey to companies that have transnational services installed in Portugal.

3.1 The hypothesis

According to the TAVASS methodology, each factor has a corresponding weight on the overall assessment of a Country. Some degree of flexibility is left, allowing to endorse local features.

The ranges of values to compute each factors' relative weight proposed by I. Oshri can be illustrated as follows: Costs: 20-25%; Availability of Skills: 20-25%; Environment: 15%; Quality of infrastructure: 10-15%; Risk Profile: 10-15%; Market Potential: 10-15%.

While implementing TAVAAS to Portugal, it has been assumed that the ranking of the factors for Portugal behaves as follows: availability of skills (25%), costs (20%), quality of infrastructure (15%), risk profile (15%), environment (15%) and market potential (10%).

The values for availability of skills and costs are based on a British study, which affirms that the access to skills not available internally is the main driver for outsourcing as perceived by CIOs and CFOs; the second driver is cost reduction and access to innovation process and practices (Oshri, 2010). Being this study based on a sample of British companies, there is a need to confirm whether these factors are applicable to Portugal or not.

The other values are based on perception. Medium importance is given to Risk profile (elements such as Labor Policy, Bureaucracy can significantly impact the continuity of any economic activity), Infrastructure (infrastructures requirements are related to the sector of activity; nevertheless, some elements such as transportation networks, quality and reliability of energy/Internet are not business-specific) and Environment.

The lowest importance is given to Market Potential because when installing an Outsourcing activity the focus is on price, rather than selling in the Country of installation of the service.

Subsequently, data collection has been implemented for all the factors.

For each sub factor a performance ranking of the four Countries was achieved (position from 1 to 4); then, an average of the position of all sub factors belonging to the same factor has been calculated. The absolute value obtained in this calculation has been subsequently multiplied by the corresponding weight in order to get to a value that could represent the Country Attractiveness Score. This way, a Balance scorecard was easily achieved. Refer to Appendix 1 for a resume of the data and calculations developed.

For the aim of this study, it has been decided to compare Portugal with other three Countries, namely Czech Republic, Poland and Spain. This was due to the comparative nature of the TAVAAS methodology and was decided together with its author I. Oshri. In our perception these are the Countries that are most likely to be considered and shortlisted together with Portugal as a near shore destination, because of some similarities to Portugal, especially in terms of costs, size of the talent pool and quality of infrastructure.

The results of the work have been presented during the "Portugal: a Near shoring Innovation" Conference that took place on 9th October 2015 in Lisbon.

3.2 Testing

In order to test the hypothesis, a survey was conducted with companies whose transnational services are placed in Portugal.

The aim of the survey was to investigate on the key motivational aspects for choosing Portugal and in particular what was the importance of each factor of the TAVASS methodology in their decision making process. The result of the survey has been analyzed through a qualitative approach that will also enhance the possibility to improve the TAVAAS methodology in the computation of the categories' weights.

4. Results of the application of TAVAAS to Portugal

The results of the application of the TAVAAS framework to Portugal, implementing the assumed factors' relative weights (Refer to Chapter 4.1: The Hypothesis) can be resumed as follows:

4.1 Costs

Considering the costs, it can be stated that Portugal main strengths can be identified as the low wage costs level (not expected to grow throughout the next few years), low real estate cost base in largest cities (Rent EUR/sqm/month: Lisbon 18.50 and Porto 13.50) (Cushman and Wakefield, 2014), flexible labor laws in place and a structured system of National grants and incentives to promote job creation.

"From the fiscal point of view, an ongoing tax reform decreased the level of the corporate tax rate from 25% to 23% in 2014, with a further decrease to 21% in 2015 already approved. The Government has stated that, depending on the evolution of the economy, the base tax rate could be gradually reduced to as low as 17% in 2018" (Ernst & Young, 2014). Nevertheless, this was true under the previous governance; further developments might occur.

4.2 Availability of Skills

According to the IMD World Competitiveness Centers (2014) top quality of scientific research institutions are present in the Country and access to scientists and engineers is relatively easy.

What is more, advanced sourcing managerial skills are available thanks to the presence in the market of internationally recognized University Institutions (Financial Times, Eduniversal 2015); availability of top quality foreign language skills is widespread in the Country. Low turnover levels are registered for most existing BPOs and SSCs; a strong service mentality and high level flexibility and adaptability characterizes the Country.

The so called "Portuguese lifestyle" (a mix of good weather throughout the year, low cost of life and easy going lifestyle) is becoming more and more attractive to foreign students and young professionals, making it easier to attract foreign talents already living in the Country and recruit them from abroad.

4.3 Environment

The Portuguese environment is stimulating. In fact, Portugal is ahead of competitors on Innovation (Growth Performance on Innovation - EU Innovation Scorecard '14), Networked Readiness Index (The Global IT Report '14), Ease of Doing Business Rank (The World Bank, Doing Business '15). In addition, several Governmental support measures are in place to stimulate job creation. At the same time, R&D and productive investment and an increase in investments in administrative modernization and simplification is being registered.

Information and Communication Technology Services sector is the first priority Sector of the Portuguese FDI Agency. As a matter of facts, Lisbon has been selected as the destination for the next Web Summit, the most important annual technology forum centered on internet technology that was historically held in Dublin (from 2010). Paddy Cosgrave, the event founder, explained that Lisbon's infrastructure and event capacity was a major reason behind the move.

Lisbon has been selected as one of the winners of the European Entrepreneurial Region (EER) for 2015. In addition, Lisbon is acquiring a reputable position in the Startup international environment, getting the name of Europe's San Francisco.

4.4 Quality of Infrastructure

Infrastructures represent Portugal major strength; in fact, Portugal ranks 2nd in IMD World Competitiveness Report 2014 for quality of the roads, second only to United Arab Emirates.

Airports infrastructure also is well developed and represents a main connections with Brazil and African Countries. What is more, in the last years, several low Cost carriers, such as Ryanair and Easyjet entered the market, significantly diminishing the cost of reaching main European destinations. Internet Infrastructure is also well established, with a very satisfying Internet bandwidth speed, according to the IMD World Competitiveness Yearbook, 2014.

On the other hand, an improvement of the rail system both in terms of high speed trains (for logistics and passengers) and Logistics platforms is necessary in order to compete on European level.

4.5 Risk Profile

Portugal is performing well under the risk profile side. Low risk of political threats (Institute for Economics and Peace, Vision of Humanity) and a high degree of safety under the point of view of intellectual protection (World Economic Forum, 2014) characterize the environment.

According to the Economist Intelligence Unit (2014) labor strikes are an issue, being Portugal ranked as a High Risk Country. Their minimization through the development of a more efficient labor policy, is one of the most relevant points to include in the political Agenda.

4.6 Market Potential

Portugal unquestionably is a mature outsourcing local market. Shared Service Centers are being installed in Portugal to serve near shore geographies; at a same time leading outsourcing vendors are already present in the market.

Apart of its favorable geographical position, being it the closest European Country to the USA and Africa representing a significant competitive advantage in terms of time zones, its language represents a huge opportunity. Indeed, Portuguese is the sixth most widely spoken languages in the world, with 200 million native speakers (SIL International, 2015) and the most spoken on the southern hemisphere. In addition, knowledge of foreign languages is widespread in Portugal.

Historical ties, common language, related legal systems make Portuguese speaking countries, such as Angola, Brazil and Mozambique privileged trade and investment partners of Portugal. The Lusofonia markets represent more than 250 million consumers and a number of initiatives, such as Link-Lusophonia Investment Network (Ernst & Young, 2014) are already in place in Portugal to support foreign companies in their entry strategies for Lusophonia markets.

4.7 TAVAAS Balance scorecard

As a result of TAVAAS application to Portugal, its position in the perceptual map is strong.

Indeed, Portugal ranks first on Risk profile, Infrastructures and Skills. Poland performs best in Market Potential and Costs and Spain is the first regarding the Environment.

By applying the assumed relative weight to the data research (Refer to Chapter 4.1: The Hypothesis) a Balanced Scorecard with the following results was achieved: Portugal 1.66; Czech Republic 2.46; Poland 2.71; Spain 2.6. Being the lowest result the best, it can be stated that Portugal over performs its competitors. Refer to Appendix 1 for Balance Scorecard results.

Poland underperforms on Infrastructure, Environment and Skills; Spain has much higher costs.

The Country with the most similar characteristics to Portugal is Czech Republic. Portugal is stronger on Infrastructures, Risk Profile, Skills and Market potential; on the other side, Czech Republic has lower costs. The two Countries are very similar under the environment factor.

5. Surveys Analysis

Once the Balance Scorecard was achieved, a survey was conducted with companies whose transnational services are placed in Portugal, to test in the market the initial assumption on the TAVAAS factors applied to Portugal. Survey has been chosen as the best Research Methodology, since "respondents, who are not easily approachable, can be reached conveniently and have adequate time to give well thought out answers" (Kothari, 2006).

In consideration of the twelve (12) answers received to the survey, a qualitative approach has been used for its analysis (Refer to Appendix 2 for a template of the survey and to Appendix 3 for a comprehensive list of the companies contacted). The sample composition can be described as follows: more than 75% are +200 employees' companies and more than 50% are from the IT sector. Being the aim of this research the evaluation of Portugal as near shore destination, there is no interest in collecting information about cities/year of implementation and other details.

By computing the weighted average of answer to Q1 of the Survey (Refer to Appendix 2 for a template of the survey) each factor got a final score (Refer to Appendix 4 for Survey result analysis); the importance of the factors can be ranked as follows: Availability of skills, Costs, Quality of Infrastructure, Risk Profile, Environment, Market Potential.

All of the companies contacted declared themselves as satisfied with the choice of Portugal. One hundred percent of them would recommend Portugal as a near shore location to other companies. The Country that was most commonly short-listed together with Portugal during the location assessment process is Spain; therefore, it can be considered as its' main competitor in the Market. Other Countries mentioned were Czech Republic, Morocco, Poland and Romania. India was also mentioned, but it cannot be considered as Portugal's competitor for the aim of this work, since we are taking into consideration only the near shore destinations for European companies.

The ranking of importance of factors resulting from the survey seems to be coherent with our assumptions. Nevertheless, small adjustments are necessary since the values do not completely coincide with the ones assumed in our hypothesis (Refer to Appendix 5 for a comparison of the factors' values in our hypothesis and the ones resulting from the survey). For this reason it has been decided to apply these new factors weights achieved with the survey back to the TAVAAS, in order to check whether the conclusions on Portugal would be significantly impacted or not.

6. Conclusion

As a result of the implementation of the values deriving from the survey, it can be stated that small deviations have been registered from the results achieved with the assumed weights; thus, the initial hypothesis is tested and its results can be accepted. Portugal's Score in both scenarios turns out to be exactly the same: 1.66. The biggest variation is registered for Poland: applying the weights from the initial assumption its score was 2.71; considering those achieved with the survey it scores is 2.74. Refer to Appendix 5 for a more detailed comparison of the results.

On a more general level, it can be stated that the assessment of a Country for near shore destination purposes is not a straightforward process; it has to take into consideration a vast number of factors, most of which carry some subjective evaluations to be made. What is more, there is always a need for contextualization, both in terms of Country peculiarities and activity sector.

On the other hand, there are some other factors that can be objectively taken into consideration as positively/negatively impacting on the overall conditions for the Country to be chosen as a destination for near shoring.

As a result of the implementation of TAVAAS to Portugal it can be stated that Portugal presents a good mix of characteristics that makes it an attractive possible destination for companies willing to near shore their services/process, in the area of IT and BPO.

7. Recommendations

As a recommendation, in order to better position Portugal in the near shore market in the long term it is necessary to identify one/several sector type of operations (Shared Services, Call Center, BPO etc.), and/or one/several sector of activity (Telecommunication , IT, Banking, Insurance, Professional Services etc.). This would represent a more strategic choice in long term and a more proactive attitude, in opposition with the current strategy of making implementation decisions based only on the customer requests. In fact, the lack of specialization in a certain area, could lead to the impossibility to detain a competitive advantage in the long term and could represent an issue to attract foreign investments in the future.

In addition, Portugal could evolve towards a place of excellence for specific activities, making also possible the shift to a premium price for its advanced quality specialized services.

8. Limitations and directions for future research

The main limitation of this work is that the combination of factors cannot be standardized to any Country nor to any business; in this sense, there is no 'all for one' solution.

Country specific characteristics and their value propositions have to be taken into consideration in order to identify the best combinations of factors and their relative weight for each single Country. In this regards it is interesting to compare the results of the application of TAVAAS to Portugal with those of the UK (costs: 15%, availability of skills: 30%, environment: 15%, quality of infrastructure: 10%, risk profile: 10% and market potential: 20%). In both cases, the availability of skills seems to be the most relevant factor. Nevertheless, cost related issues are definitely a more relevant aspect for Portugal and Market potential for the UK respectively. This is coherent and reflects on the UK proposition as a value-adding, talent-based with advanced sourcing capabilities location (Oshri, 2015), adopted by majority of IT and BPO vendors.

Also, companies' subjective and contextual aspects play a key role in the overall assessment of a Country to outsource services. Thus, each company should establish a ranking of importance of the factors to their strategy, taking into consideration their competitive priorities.

In the case of Portugal, it can be stated that some of the aspects considered in the APO framework could be integrated in the TAVAAS and perhaps with some further studies in order to give a more complete and objective picture of the Portuguese reality. This would undoubtedly represent an interesting exercise and a useful tool for companies that are evaluating the possibility to outsource their services to Portugal. What is more, in regards to the recommendation to specialize in a certain type of operation/sector, it would be useful to identify which these could be. This would require a

deep research on the Portuguese market and an analysis of the demand currently existent at the international level. The current study could represent a helpful starting point for such a research. Another interesting aspect would be to identify those factors that objectively positively/negatively impact on the overall conditions for the Country to be chosen as a destination for near shoring.

Appendix Appendix 1. Data Collection – TAVAAS Methodology

Availability of Scientific Research Institutions (Ranking 1>144) 18 36 63 37 Quality of Scientific Research Institutions (Ranking 1>144) 8 55 62 11 1 3 4 2 Quality of management schools - score 5,9 4,3 4 5,9 4,3 4 5,9 Quality of management schools - ranking 4 68 84 3 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 1 2 3 4 1 3 2 3 4 1 3 2 3 4 1 3 2 3 4 1 3 2 3	Category	Raw Data				Position in				
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Bribing and corruption index (Ranking) 32 45 28 35 Quality of life 159,57 161,12 141,79 169,39 Serious crime 1,1 0,8 0,9 0,6 Infrastructures PT CZ PL SP Housing Stock 565 458 360 549 Bandwidth speed (ranking) 10 14 19 23 Quality of raidways 4,4 4,5 2,9 6 Moreage rental office_1st city 244,2 262,44 324 322,8 4 Average wage skilled employee_PM 31927 3153 31488 42918 3 2 4 Cost of telco_fixed BB 26,98 20,43 18,12 30,94 2 3 2 Risk profile PT CZ PL SP Cost of telco_fixed BB 26,98 20,43 18,12 30,94 Cost of telco_fixed BB 26,98 20,43 18,12 30,94 Cost of telco_fixed BB 20,21 1,5 2,5 3,5 2,7	Environment	РТ	CZ	PL	SP	U	PT	cz	PL	SP
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Infrastructures PT CZ PL SP CZ PL SP Housing Stock 565 458 360 549 1 3 4 2 Bandwidth speed (ranking) 10 14 19 23 4 2 3 4 2 3 4 2 3 4 2 3 4 2 3 4 2 3 4 2 3 4 2 3 4 2 3 4 2 3 4 2 3 4 2 3 4 2 3 4 2 3 4 2 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 3 3 <		,	- / -	- /-	.,.	Avg	1.8	3.0	2.8	2.5
Bandwidth speed (ranking) 10 14 19 23 Quality of roads 6,3 3,7 3,5 5,9 Quality of roads 4,4 4,5 2,9 6 Market Potential PT CZ PL SP Costs PT CZ PL SP Average rental office_1st city 244,2 262,44 324 32,8 4 Average wage skilled employee_PM 31927 30153 31488 42918 1 3 4 Average wage skilled employee_Dev 16084 23345 18723 25177 1 2 1 2 1 3 2 4 Cost of telco_fixe dBB 26,98 20,43 18,12 30,94 2 1 4 2 3 1 4 Cost of telco_fixe dBB 26,98 20,43 18,12 30,94 2 3 1 4 Cost of telco_fixe bB 0,21 0,25 0,18 0,33 2 1 4 Impact of terrorism 1 2 2	Infrastructures	РТ	CZ	PL	SP					
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Impact of terrorism 1 2 2 1,5 1 3 3 2 Intellectual property protection (ranking 1>144 countries) 35 55 63 77 1 3 3 2 Market Potential PT CZ PL SP Arg 1.0 2,5 3,5 4 GDP growth rate 1,6 2,5 3,5 2,5 4 2 1 3 4 2 1 GDP 201 180,8 491,2 1320,2 4 2 1 2 3 4 2 1	Personal security violent crime	1	1,5	1,5	2	İ	1	2	2	4
Intellectual property protection (ranking 1>144 countries) 35 55 63 77 1 2 3 4 Market Potential PT CZ PL SP Avg 1.0 2.5 2.5 3.5 GDP growth rate 1.6 2.5 3.5 2.5 3.5 2.5 4 2 1 2 1 2 3 4 2 1 2 3 4 2 1 2 3 4 2 1		1	2	2	1.5	t	1	3	3	2
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		1.	1-	- /-	1.	ł				
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Language skins 17 34 21 30 1 5 2 4 Avg 2,7 3,0 1,7 2,3	Language skins	17	54	21	50	1 A	-			

	РТ	CZ	PL	SP
25% Skills	1,40	2,10	3,20	1,80
15% Environment	1,80	3,00	2,80	2,50
15% Infrastructures	1,50	2,50	3,80	2,30
20% Costs	2,00	2,00	1,90	3,50
15% Risk profile	1,00	2,75	2,50	3,50
10% Market potential	2,67	3,00	1,67	2,33
TAVAAS score	1,66	2,46	2,71	2,63

Appendix 2. Template of Survey

NOVA School of Business & Economics in collaboration with <u>APDC Portugal</u> Outsourcing is conducting a study in order to evaluate the attractiveness of Portugal as a near shore destination.									
This study is being conducted further to the recently presented update of the 'Portugal as a near shore outsourcing destination" report.									
As Your company either may already have installed or may be planning to do so in the near future, we were/are your key motivations (and whether your e	would like to know more about wh	at							
We kindly ask you to fill in the following survey. We minutes which will be of an extreme importance to Thank you very much in advance for your feedback.	our assignment.	couple							
mank you very much in advance for your reedback.	•								
 Please take into consideration the following factors in choosing Portugal as a near shore destination and rank them in a scale of importance from 1 to 6 (1-Most important). 	What other countries were s listed during the location assessment process?	short-							
Costs Availability of Skills Environment Quality of Infrastructure Risk profile Market Potential	 Please give us some more d about what kind of Operatio have in place in Portugal (Ty Operations, Locations etc.) 	ns you pe of							
 Warket Potential Still considering the above, how do they relate with your expectations (companies which have already installed service centers in Portugal)? Please evaluate in a 1 thru 5 scale 	 Size of the Operation (numb employees) 50 51-100 100-200 Above 200 	er ol							
 Were there any additional factors that influenced your decision to install your company's service center in Portugal? 	8. Sector of activity Telecommunication IT Banking Insurance								
 Would you recommend Portugal as a near shore location to other companies (with regards to the above)? Please tell us more about this (especially if your answer was no)! 	Professional Services Others								

Appendix 3. List of Companies contacted for the survey

Accenture	Deloitte	IBM	Reditus	Tecnocom
Altran	Everis	Indra	SAP	Xerox
Atos	Fujitsu	Novabase	Sibs	
Cisco	GFI Portugal	Prime IT	Processos	
CGI	HP Enterprise	PT Pro	Technip	

Appendix 4. Survey result analysis.

The following table resumes the answers obtained to Question1 of the Survey and respective analysis.

	Extremely Important	Very Important	Moderately Important	Neutral	Slightly Important	Low Importance	Tot.	Score
Cost	8.33%	58.33%	0.00%	16.67%	8.33%	8.33%	12	4.17
	1	7	0	2	1	1		
Av. Skills	50.00%	8.33%	25.00%	0.00%	8.33%	8.33%	12	4.67
-	6	1	3	0	1	1		
Environment	8.33%	8.33%	8.33%	33.33%	33.33%	8.33%	12	3.00
-	1	1	1	4	4	1		
Infrastructure	8.33%	8.33%	66.67%	0.00%	16.67%	0.00%	12	3.92
-	1	1	8	0	2	0		
Risk Profile	8.33%	16.67%	0.00%	50.00%	8.33%	16.67%	12	3.17
-	1	2	0	6	1	2		
Market Potential	16.67%	0.00%	0.00%	0.00%	25.00%	58.33	12	2.08
-	2	0	0	0	3	7		

The score is calculated as a based on the weight assigned to each answer choice. The formula applied is the following:

$$x_1w_1 + x_2w_2 + x_3w_3 \dots x_nw_n$$

Total

W: weight of answer choice (in terms of importance from 1 to 6) X: Number of answers received

Appendix 5. Balance Scorecard results

This table shows a comparison of the TAVAAS scores obtained from application of the hypothesis and the ones achieved with the Survey Analysis.

Scenario 1	Scenario2	_				
Initial Hypothesis	Survey Analysis		РТ	CZ	PL	SP
20,00%	19.85%	Cost	2.00	2	1.90	3.50
25,00%	22.23%	Av. Skills	1.40	2.10	3.20	1.80
15,00%	14.28%	Environment	1.80	3	2.80	2.50
15,00%	18.66%	Infrastructures	1.50	2.50	3.80	2.30
15,00%	15.09%	Risk Profile	1	2.75	2.50	3.50
10,00%	9.9%	Market Potential	2.67	3	1.67	2.33
		TAVAAS score Scenario 1	1.66	2.46	2.71	2.63
		TAVAAS score Scenario 2	1.66	2.47	2.74	2.64

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