



Universidade Técnica de Lisboa
Instituto Superior de Economia e Gestão

Individual Research Project in Management

Outsourcing Delivery Centers - a decision making model

Author:

Elsa da Glória Bernardo Fernandes

Supervisors:

Mário Caldeira (ISEG)

Alexandre Gil (IBM)

ISEG/UTL, September 2012



Acknowledgments

I would like to thank IBM for sponsoring this dissertation, and in particular to my internal supervisor at IBM, Alexandre Gil – Manager of Server Systems Operations in Portugal – for his extensive experience and orientation through this dissertation, he gave me many useful suggestions.

I would like to thank my supervisor at ISEG, Professor Mário Caldeira, for his orientation and assistance in guiding me through this study.

I would also like to thank Professor Rui Brites, he has been an endless source of support in guiding me through the Data Analysis.

Abstract

The objectives that push enterprises towards outsourcing may be very simple or very complex, but there is a common thread among all, the need to cut costs, increase efficiency and focus on the core business of the enterprise. Currently outsourcing has gained such visibility that it is considered strategic and the option to transfer all or part of a company business area to an external entity plays an extremely important role in the internal strategic plan of each company. More recently we can see that it is not only companies that look to achieve more advantages and to increase business value in their business through outsourcing but it is also the suppliers that provide those outsourcing services that are now trying to accomplish the same advantages and objectives. What these suppliers are undertaking is even more ambitious because they are trying to change the way they conduct the outsourcing business with the implementation of Delivery Centers. A common concern of clients when IT services are relocated to an outsourcing provider is usually that those services are being delivered from remote countries, with a different culture, time zones, with language barriers and difficulties in business travel. All of these differences can be major obstacles to communication and therefore can diminish the perceived quality of service. To shed light on this issue, the current study examines the reasons that motivate suppliers to change the way they are outsourcing business with the introduction of DC's, the challenges and the risks they face, and the impact of such change. This study used a cross-sectional and exploratory case. The data were collected using key informant interviews and questionnaires. The study results indicate that a relation exists between outsourcing and DC's objectives and that cost savings is the key factor. The introduction of DC's on the outsourcing business affected negatively the local people and also the service quality.

Table of Contents

1. Introduction	8
1.1. Overview.....	8
1.2. Statement of the Problem.....	9
1.3. Purpose of the Study.....	10
1.4. Research Question.....	11
2. Review of the Literature.....	13
2.1. Historical Perspective of Outsourcing.....	13
2.2. Historical Perspective of IBM’s Outsourcing – IBM Global Services Unit	14
2.3. Drivers of Outsourcing	15
2.4. Outsourcing and Delivery Centers	16
3. Research Methodology	22
3.1. Unit of Analysis and Data Collection.....	23
3.2. Population and Purposive Sampling.....	25
3.3. Semi-Structured Interview Checklist	28
3.4. Human Subject Protection and Data Confidentiality	29
4. Results.....	30
4.1. Data Collection.....	30
4.2. Data Analysis.....	34
5. Conclusions, Limitations and Future Research.....	68
5.1. Conclusions.....	68
5.2. Limitations	73
5.3. Future Research.....	74
6. Bibliography.....	76
7. Appendixes.....	81
7.1. Semi-Structured Interview Checklist	81
7.2. E-mail sent to the local Key people.....	82
7.3. E-mail sent to Brno – Czech Republic DC Key people	83
7.4. Reinforcement E-mail sent to Brno – Czech Republic DC Key people.....	84
7.5. DC Questionnaire.....	85
7.6. Demographic Questions by Location	87

7.7. Validity of the information collected on questions of Section II 89

Table of Figures

Figure 1. Delivery Centers Methodology 19

Figure 2. key element of IBM’s globally integrated capabilities strategy 20

Figure 3. IBM Title/Role of respondents 32

Figure 4. Number of working years in IBM..... 33

Figure 5. Objectives and expectations of outsourcing from IBM point of view 36

Figure 6. Objectives and expectations of outsourcing from IBM point of view of local Respondents..... 38

Figure 7. Objectives and expectations of outsourcing from IBM point of view of DC Respondents..... 38

Figure 8. Objectives and expectations of outsourcing from IBM point of view by Importance Classification..... 40

Figure 9. Objectives and expectations of outsourcing from IBM point of view of local Respondents by importance classification 41

Figure 10. Objectives and expectations of outsourcing from IBM point of view of DC Respondents..... 41

Figure 11. Objectives and expectations of outsourcing from Customer point of view .. 42

Figure 12. Objectives and expectations of outsourcing from Customer point of view of local Respondents 43

Figure 13. Objectives and expectations of outsourcing from Customer point of view of DC Respondents 43

Figure 14. Objectives and expectations of outsourcing from Customer point of view by Importance Classification..... 44

Figure 15. Objectives and expectations of outsourcing from Customer point of view of local Respondents by importance classification 45

Figure 16. Objectives and expectations of outsourcing from Customer point of view of DC Respondents by importance classification 45

Figure 17. Objectives and expectations of DC’s from IBM point of view 46

Figure 18. Objectives and expectations of DC’s from IBM point of view of the local Respondents..... 48

Figure 19. Objectives and expectations of DC’s from IBM point of view of the DC Respondents..... 48

Figure 20. Objectives and expectations of DC’s from IBM point of view by importance classification 49

Figure 21. Objectives and expectations of DC’s from IBM point of view of the local Respondents by importance classification 50

Figure 22. Objectives and expectations of DC’s from IBM point of view of the DC’s Respondents by importance classification 50

Figure 23. Relation between outsourcing and DC’s objectives and expectations..... 51

Figure 24. Relation between outsourcing and DC’s Objectives and expectations by local Respondents..... 53

Figure 25. Relation between outsourcing and DC's Objectives and expectations by DC Respondents.....	53
Figure 26. Impact of DC's on service quality	54
Figure 27. Impact of DC's on service quality by local Respondents	56
Figure 28. Impact of DC's on service quality by DC Respondents.....	56
Figure 29. Impact of DC's on local people	57
Figure 30. Impact of DC's on the local people by local Respondents.....	59
Figure 31. Impact of DC's on the local people by DC Respondents.....	59
Figure 32. Problems and barriers of DC's implementation	61
Figure 33. Problems and barriers of DC's implementation by local Respondents.....	63
Figure 34. Problems and barriers of DC's implementation by DC Respondents.....	63
Figure 35. Impact of DC's on the Outsourcing Business.....	65
Figure 36. Impact of DC's on the Outsourcing Business by local Respondents.....	67
Figure 37. Impact of DC's on the Outsourcing Business by DC Respondents.....	67
Figure 38. IBM Title/Role of local respondents.....	88
Figure 39. IBM Title/Role of Brno DC respondents	88
Figure 40. Number of working years in IBM of local Respondents.....	89
Figure 41. Number of working years in IBM of Brno DC Respondents.....	89

Table of Tables

Table 1. Description of questions items and scale.....	28
Table 2. Invitees vs. Respondents.....	31
Table 3. Objectives of outsourcing from IBM perspective information validity	90
Table 4. Objectives of outsourcing from IBM perspective by local Respondents information validity	90
Table 5. Objectives of outsourcing from IBM perspective by DC Respondents information validity	90
Table 6. Key objectives of outsourcing from IBM perspective information validity.....	91
Table 7. Key objectives of outsourcing from IBM perspective by local Respondents information validity	91
Table 8. Key objectives of outsourcing from IBM perspective by DC Respondents information validity	91
Table 9. Objectives of outsourcing from Customer perspective information validity ...	92
Table 10. Objectives of outsourcing from Customer perspective by local Respondents information validity	92
Table 11. Objectives of outsourcing from Customer perspective by DC Respondents information validity	92
Table 12. Key objectives of outsourcing from Customer perspective information validity.....	92
Table 13. Key objectives of outsourcing from Customer perspective by local Respondents information validity.....	93
Table 14. Key objectives of outsourcing from Customer perspective by DC Respondents information validity.....	93
Table 15. Objectives DC's from IBM perspective information validity	93

Table 16. Objectives of DC's from IBM perspective by local Respondents information validity.....	94
Table 17. Objectives of DC's from IBM perspective by DC Respondents information validity.....	94
Table 18. Key objectives of DC's from IBM perspective information validity.....	94
Table 19. Key objectives of DC's from IBM perspective by local Respondents information validity	94
Table 20. Key objectives of DC's from IBM perspective by DC Respondents information validity	95
Table 21. Relation between outsourcing and DC's objectives information validity	95
Table 22. Relation between outsourcing and DC's objectives by local Respondents information validity	95
Table 23. Relation between outsourcing and DC's objectives by DC Respondents information validity	95
Table 24. Impact of DC's on service quality information validity.....	96
Table 25. Impact of DC's on service quality by local Respondents information validity	96
Table 26. Impact of DC's on service quality by DC Respondents information validity	97
Table 27. Impact of DC's on local people information validity.....	97
Table 28. Impact of DC's on local people by local Respondents information validity..	97
Table 29. Impact of DC's on local people by DC Respondents information validity....	98
Table 30. Problems of DC's implementation information validity	98
Table 31. Problems of DC's implementation by local Respondents information validity	99
Table 32. Problems of DC's implementation by DC Respondents information validity.....	99
Table 33. Impact of DC's on the Outsourcing Business information validity	99
Table 34. Impact of DC's on the Outsourcing Business by local Respondents information validity	100
Table 35. Impact of DC's on the Outsourcing Business by DC Respondents information validity.....	100

1. Introduction

1.1. Overview

Outsourcing is not a new concept if we analyze it in the sense of the classical dilemma that organisations come across in their daily activities when they are confronted with the decision of whether to buy or to make an item or a service¹ at a given time. The decision of whether “to buy”, involves the obtaining something from a supplier who provides the completed item or service rather than buying the components and manufacturing them in-house. In respect to the literature, outsourcing is defined from many different perspectives. For some, outsourcing is the process of transferring the responsibility for a specific business function from an employee group to a non-employee group (Zhu, Hsu et al. 2001). For others is allotting work to suppliers and distributors to provide needed services and materials and to perform those processes that the organisation does not perform itself (Krajewski and Ritzman 2002).

While in the past outsourcing was primarily limited to the procurement of non-core components and services, today the tendency to outsource has expanded to include virtually every activity of a firm, core components and non-core components, business processes, information technology processes, manufacturing, distribution activities and customer support activities (Chamberland 2003) (Gottfredson, Puryear et al. 2005) (Holcomb and Hitt 2007) (Insinga and Werle 2000) (Kakabadse and Kakabadse 2000) (Niezen and Weller 2006) (Venkatraman 2004). Today's hyper-competitive

¹ Services in the IT world, can have different meanings, such as, consulting, systems operations, networking services, strategic outsourcing, learning services, storage and wireless services, etc. (For example, IBM's different services can found at <http://www-935.ibm.com/services/us/en/it-services/services-a-to-z.html>)

environment, characterized by constant change, market unpredictability, and the pressure to reduce costs and cycle times, attached with the globalization trend, has provided further impetus to the growth of outsourcing (D'Aveni, Canger et al. 1995).

The growth of outsourcing has led outsourcing strategies to become an increasingly important component of firm success (Gottfredson, Puryear et al. 2005) (Kakabadse and Kakabadse 2000) (Talluri and Narasimhan 2004), and it is generally accepted that provides certain advantages that are not available to a company's internal departments. These advantages can have many dimensions: economies of scale, process expertise, access to capital, access to expensive technology, availability of resources, etc. The combination of these dimensions creates the cost savings inherent in outsourcing.

The business press is replete with examples of manufacturing firms that have been successful when choosing outsourcing by reducing costs, improving speed and responsiveness, reducing cycle times, improving innovativeness and quality, increasing flexibility and agility, and improving overall competitiveness (Chamberland 2003) (Chan and Pollard 2003) (Garaventa and Tellefsen 2001) (Kakabadse and Kakabadse 2000) (Sislian and Satir 2000) (Venkatraman 2004).

1.2. Statement of the Problem

In the last years the importance of outsourcing has increased exponentially and that has provoked an explosion in the number of studies and research about the topic, such as the motivation factors for outsourcing and its strategic decision, advantages, risks and disadvantages, consequences, success and failure factors, etc, but there has been no

significant investigation or study regarding what is happening with the way the suppliers are working.

Traditionally organisations considered outsourcing to rapidly improve performance and reduce operating costs. In the present, organisations are using strategic and transformational outsourcing to seek improved business focus, mitigate risks, build sustainable competitive advantage, and extend technical capabilities and free resources for core business purposes (Bartell 1998). Competitive advantages can be gained when the most appropriate business processes are performed more effectively and efficiently by external suppliers (Lankford and Parsa 1999).

Those competitive pressures are also forcing outsourcing suppliers to look objectively and critically at the way they do their business and to adapt and become more competitive. It has been mentioned that some of the advantages in opting for outsourcing is to gain from the economies of scale from the suppliers, process expertise, expensive technology and resources, etc, and those are the same advantages that the suppliers are using for their own benefit. It has also been mentioned that the combinations of all of these dimensions creates the cost savings inherent in outsourcing and that is also another advantage that the suppliers pursue.

1.3. Purpose of the Study

The purpose of this dissertation is to explore the main reasons and factors that influence outsourcing suppliers to change the way in which they are working. The justification for studying the problem is the lack of scholarly research debating whether the same factors that lead the organisations to go to outsourcing are the same that force now the suppliers

to go to delivery centers. In this research we will study one supplier, IBM, namely in respect to its reasons and factors that are contributing to the internal movement of some of its outsourcing services to delivery centers² (DC's) which are being created specifically for that purpose. In the last few years, IBM has made an enormous investment in such DC's. Argentina, Poland, India, Czech Republic, etc, are some of the countries where these DC's are located, created with the purpose of housing large buildings and infrastructure needed to support hundreds of people, organised by teams where every team has a catalogue of services exclusively to provide strategic outsourcing services. Additionally, this study will attempt to determine the advantages, disadvantages and consequences of such a move.

1.4. Research Question

This present research will investigate some areas of IBM's Outsourcing based on the perceptions and experiences of key people that have being involved in the process of transferring strategic outsourcing services to the DC's. The key people consist of IT people, team leaders and managers. The areas under investigation are related with the following factors: cost reduction; economies of scale; technological factors, skills and knowledge or intellectual capital. Advantages and disadvantages, service quality, local people motivation and impact of the move will be under scrutiny, besides the problems encountered previously and after the move, such as language barrier and skills or lack of it or of procedures.

² IBM Service delivery centers have its core activities focus in providing strategic outsourcing services, like remote server and application support, networking services and end user customer support.

To cover all of these areas, a checklist will be compiled and surveys will be conducted with those key people to help gain an understanding of the factors and reasons that are influencing IBM outsourcing and investment in the DC's and to identify all the advantages and disadvantages that are perceived in relation to the movement of some outsourcing delivery services.

Research Question

What are the drivers, challenges and impacts of Delivery Centers in the Outsourcing Business?

To better answer the research question, this research examines the following sub-questions:

1. Is the cost savings a factor that has influenced DC's implementation?
2. Can the centralization of strategic outsourcing services on the DC's add economies of scale in this sector?
3. The achievements of better intellectual capital, skills and knowledge have contributed in any way to this decision?
4. Is the service quality being affected by the transferring of services to the DC's?
5. Does this strategic decision has any impact in the motivation of the local people?
6. What were the problems encountered? Was language a barrier?
7. Did the transferring of services impact in any way upon the outsourcing business?

2. Review of the Literature

2.1. Historical Perspective of Outsourcing

Research and academic studies have developed in recent years to encompass a variety of sophisticated perspectives about outsourcing. In the beginning, researchers focused mainly on a “make or buy” strategy (Buchowicz 1991) (Buck-Lew 1992) (Welch and Nayak 1992). In the 1960’s time-sharing of IBM Mainframes, allowed multiple users to simultaneously access a central mainframe through remote terminals and as such was a popular method of outsourcing (Lee, Huynh et al. 2003) and represented one of the first IT outsourcing deals. During the 1970’s there was another kind of outsourcing, when organisations started to hire contract programmers mainly because the cost of application development was very high (Lee, Huynh et al. 2003). During the 1980’s the scope of outsourcing grew to other areas, such as payroll, data processing and accounting services, but it was only in 1989 with the outsourcing decision of Eastman Kodak’s to outsource its IT operations to IBM that the outsourcing became a focus for the organisations (Loh and Venkatraman 1992)³. It was this agreement between Eastman Company and IBM by which IBM designed, built and managed a new data-center for Kodak in Rochester, N.Y. that encouraged IBM to provide more and different outsourcing services. Following Kodak’s decision, there were many other organizations such as Xerox, delta Airlines, Continental Bank, etc, that also decided to outsource their IT activities (Dibbern, Goles et al. 2004). Since that time we can find a huge number of outsourcing deals in the available literature on the subject.

³ Referred to as the “Kodak effect”

2.2. Historical Perspective of IBM's Outsourcing – IBM Global Services

Unit

Three different stages characterize IBM's evolution into a services-led business, the early-1990s, the mid-1990s and late-1990s and beyond (IBM Corporate Archives 2002) (IBM 2002).

During the early nineties, and after confronting a high risk of being dismantled in 1993, IBM kept itself intact (in order to act as an integrator business model), established its future around networks, hardware and software, and acquired resources to better position the company in a world in which services were becoming more important for the success of a company.

In the middle of the last decade, IBM formed a unified, single and global organisation to develop and deliver services. This new unit, called IBM Global Service (IGS), formed in 1995 with the purpose to deliver seamless integrated solutions to customers worldwide. This decision forced IBM to rationalize and shrink its huge service offerings down to a small number that were consistent globally. To fulfil this strategy, IGS services were reorganized around clear lines of business mapped to customer needs and concerns, aligning IGS capabilities, skills and practices around three major areas: innovation and integration, infrastructure support and strategic outsourcing.

In more recent years, IGS has expanded its services portfolio and that was a natural consequence of the incremental use of the Internet in commerce. Furthermore, by aligning its resources, skills, knowledge and capabilities closely to customer demands, allowed IGS to become a services-led business, and IBM's to be a major outsourcing service provider for customers in a wide range of industries.

2.3. Drivers of Outsourcing

Organisations are motivated to outsource for a variety of reasons. Economies of scale and scope are the most commonly mentioned factors for outsourcing (Chalos 1995). Organisations are able to reduce fixed investments costs, gain advantages of the scale and scope using the provider's capabilities, resources, skills and intellectual capital. According to Thondavadi and Albert (2004), "the decision to outsource non-core business processes is driven by the need to reduce cost, gain access to cost-effective talent pool, focus on core business processes, increase speed to market, and improve service quality".

The most famed explanation is cost savings (Earl 1996) (Lacity and Hirschhein 1993) (Patane and Jurison 1994) (OutsourcingInstitute 1998). As part of the decision process, organisations will compare their internal IT costs to that of an outsourcing supplier (Gartner 2002). In the literature, there are a considerable number of studies that present different models and theories that have been used to assess economic factors of outsourcing, and the most mentioned is the Williamson's transaction cost economics, "TCE" (Lacity and Willcocks 1995). TCE approaches the decision to outsource as an economic matter, concluding that an organisation should contract out if the combined production and transaction costs of a supplier or market are less than to produce the same internally.

There are other factors, such as strategic benefits and resource management that can influence the organisation decision to go for outsourcing (Lacity and Willcocks 2000). Strategic benefits include refocusing the organisations focus on its core components by outsourcing non-core components (Earl 1996) (OutsourcingInstitute 1998) and resource

management benefits are the capabilities and intellectual capital, technology and resources and skills of the supplier (OutsourcingInstitute 1998).

The research firm DiamondCluster International (2002) conducted a global IT outsourcing study to answer questions, such as, (a) what is really going on in executive suites where outsourcing decisions are being made, (b) who is at the table, (c) what are their expectations, and (d) what have they learned from their outsourcing experience.

In this study, the researchers were able to identify four key reasons for pursuing outsourcing. In order of importance, the four key drivers identified were the following: (a) gaining access to excellent capabilities, (b) reducing or controlling costs, (c) lack of appropriate internal skill sets, and (d) company philosophy of outsourcing non-core activities (DiamondCluster, 2002).

All of the mentioned factors can be grouped in the following main factors that contribute to the attractiveness of outsourcing – strategic, economic and technological (Grover, Cheon et al. 1994) (Willcocks and Lacity 1995). Strategic factors are basically gaining competitive advantage and focus on core components. Economic factors include cost reduction, economies of scale, scope and performance and technological factors include access of intellectual capital, resources, and technology⁴.

2.4. Outsourcing and Delivery Centers

In the literature there are a few articles regarding DC's, referring to the increasing number of the same in several countries or in regards to the specific type of services that

⁴ Note that the support for these factors is not uniform across all studies.

they provide. As their numbers increase, and as their importance grows, so too will the number of papers and articles that can be found in the common business literature. IBM can be considered responsible for this emerging phenomenon because it is a part of its strategy in the outsourcing business to incorporate the DC's as an important success factor in differentiation.

IBM's employee Ilario Musio stated (Gotel, Joseph et al. 2009) that these delivery centers serve as outsourcing partners with the advantage of being within the same corporation and that the main benefits are, shorter project set-up times due to internal contracting, standard infrastructure and communication channels, consistent methodologies and processes, increased security and confidentiality and protection of proprietary knowledge.

DC's were established in 2004 as a cornerstone of IBM's long-term strategy. The original vision was the creation of an operating model based on integrated job roles, supported by automated technology, structured into logical support groups of no more than 400 people, operating in a high-density, 'factory' environment, all running in low-cost Global Resourcing sites. Additionally, only fully transformed accounts and services, running a very narrowly-defined range of tools, would be operated from the DC's, with each account being managed from just one DC. Nowadays, a number of the original design concepts have changed as a consequence of the rate and pace of European IT transformation. There is no longer any DC-unique technologies; DC-based job roles largely reflect the standard competency roles; single accounts are routinely spread across multiple DC's and though there is a strong drive to standardise the tooling, today multiple toolsets often co-exist within the same functional space.

Operating in more than 170 countries, IBM undertakes a meticulous process of analyzing cost, business environment, availability of knowledge and risk to select the locations that offer the finest environment to meet customer needs. Today IBM's Delivery Centers are located in strategic and diversified locations, such as India, China, Argentina or Brazil, besides others. Each of these locations is then constituted by different installations that are placed in different key cities, normally in small towns with a elevated academic environment. The academic environment is very important consideration because it arms DC's with a huge number of resources, people with a desire to learn and build a curriculum with practical experience and knowledge for a relatively small income.

The foundation of these Delivery Centers relies on a common governance framework and standardized methods, tools and processes to provide delivery excellence (IBM Globally Integrated Capabilities) (IBM 2009). Another important key factor of differentiation is the methodologies used for consistency and continuous process improvement, based on unmatched Application Assembly Optimization delivery approach and Lean processes:

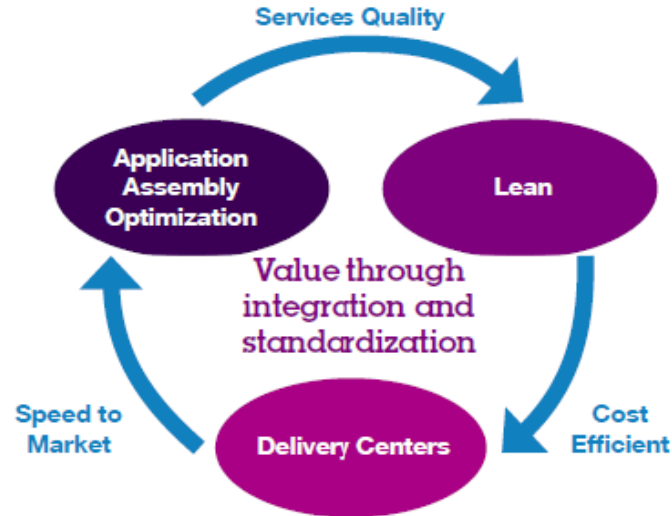


Figure 1. Delivery Centers Methodology
(Globally Integrated Capabilities, *Capabilities without borders*, 2009) (IBM 2009)

- A key element of IBM’s globally integrated capabilities strategy namely, Application Assembly Optimization (AAO) applies a factory floor assembly model and automation principles to the discipline of geographically distributed software development and management. AAO provides revenue growth, faster time to market, increased value, and cost savings throughout the application development lifecycle. The measurement framework for application assembly optimization is a dynamic system with automation, extensibility and flexibility in mind.

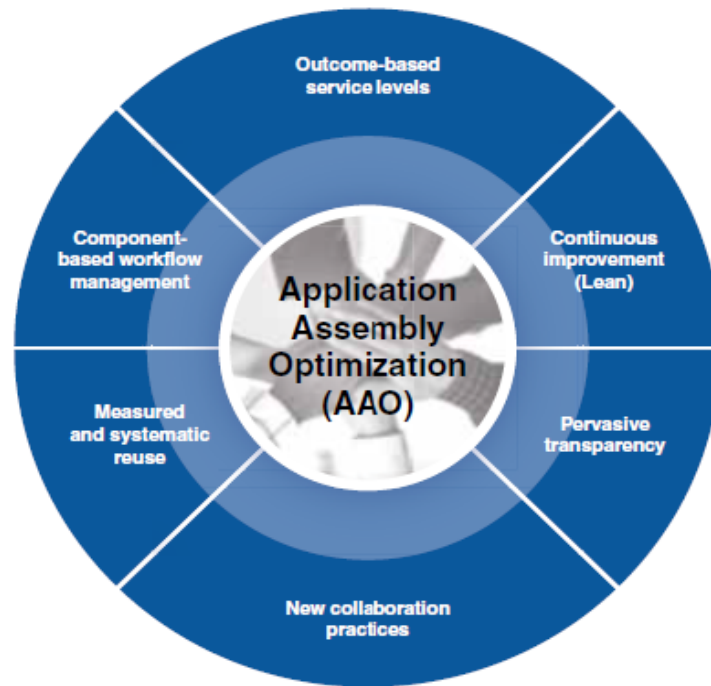


Figure 2. key element of IBM's globally integrated capabilities strategy (Application Assembly Optimization, *A distinct approach to global delivery*, 2010)

(IBM 2010)

Through AAO, the delivery team:

- Accelerates response to business needs.
- Improves visibility to IT delivery performance.
- Improves metrics.
- Reduces time-to-value and time-to-market.
- Improves productivity and quality.

(Application Assembly Optimization, *A distinct approach to global delivery*, 2010)

(IBM 2010)

- Lean is an industry-proven methodology that delivers value through operational excellence. It is a set of principles that drive overall business philosophy towards continuous process improvement and elimination of waste. Lean results in less rework due to fewer defects. It can help reduce IT budget and enable faster delivery of services. Each AAO process is developed using a Lean approach and is regularly reviewed to provide continuous operational excellence

(Globally Integrated Capabilities, *Capabilities without borders*, 2009) (IBM 2009)

It is clear the relation of the outsourcing and the DC's phenomenon but it is not clear that one influences or has influenced the other. As it is not clear that the reasons and factors that push the suppliers for the creation and implementation of DC's are the same as the organisations moving forward to outsourcing.

3. Research Methodology

As discussed previously, currently, there is lack of research regarding the creation of DC's as a major success factor of outsourcing suppliers, regarding its reasons and contributing factors, or even obstacles, problems or any other specification. That way, there is no theoretical base or model that can be used as a starting point for this study.

The inexistence of other studies involving the evolution of the outsourcing business and the impact of it in the way that customers and suppliers maintain outsourcing deals as a mutual success factor represents a big hole. As highlighted in section 2, Review of the Literature, there are several studies on outsourcing and a few references on delivery centers but there are only a few that relates one with the other. This study will try to introduce this discussion and will potentially generate other discussions and future complementary studies.

Due to the investigative purpose of this study and the research question and sub-questions, and its nature of “how, why and what”, it will be used an exploratory case study approach (Saunders, Lewis et al. 2009). Other reasons could be appointed that justifies the use of an exploratory case study, as follow:

There is little or no prior research of the phenomenon or topic under investigation, as in the present case;

The phenomenon under investigation in this study is complex and not yet understood;

The exploratory case study is used in studies with the objective of clarify a decision or group of decisions, and to answer questions like, why the decision was made, how it was implemented and what was the result of it, as in the present case;

Other characteristic of an exploratory case study is its flexibility and adaptability to changes and this being an unexplored phenomenon it could need some adjustment as a result of new insights or data;

The population under examination is small and restricted;

For last, the exploratory case study has demonstrated in the past to be very robust and efficient, and is being used successfully in several other studies with respected results (Saunders, Lewis et al. 2009).

3.1. Unit of Analysis and Data Collection

This study will be based on IBM's outsourcing and so it is IBM's outsourcing that will be regard as the unit of analysis for this study. Inside the IBM's outsourcing organisation, the focus will be composed of a group of key people that were, and some still are, involved in the process of strategic services transferring to DC's and those will be the individuals that will contribute to this study.

Data will be collected in two ways. Locally, data will be collected from semi-structural interviews using a checklist (Appendix 7.1) and the interviews will be conducted to those key professional people that have experience in this research field. At the same time, it will be distributed by IBM's internal e-mail, a questionnaire (Appendix 7.5) based on the same checklist used on the interviews, to the key people working on the

principal DC, Brno, in Czech Republic⁵. The e-mail will be sent individually to each of the key people to guarantee identity confidentiality.

Those interviews and questionnaires have the objective of studying the phenomenon that surrounds DC's creation and the transferring of outsourcing services to it and aimed to capture the local and DC's perspective, and they will be conducted in a short period of time, and so it will be a cross-sectional study (Saunders, Lewis et al. 2009). The checklist used on the local interviews will serve as a guide to make sure that all pertinent topics that were previously established are covered during the interview.

The choice of semi-structured interviews rather than structured interviews was employed because it offers sufficient flexibility to approach the different respondents differently, while still covering the same areas of data collection.

Besides the interviews and questionnaire, the fieldwork included also participant observation and analysis of documentary sources about IBM outsourcing organisation. Documents were collected such as articles, journals, text books, conference reports, company reports, company newsletters and others to complement as well as to compensate for the limitations of the interview and questionnaire methods. Observation generated insight and better understanding on the phenomenon under analysis and documentary evidence acts as a method to cross validate information gathered from the interviews and questionnaires, given that sometimes what people say is different from what people do.

⁵ The Integrated Delivery Center of Brno is one of the biggest and most diverse IBM centers of its kind worldwide. Its core activities focus on providing strategic outsourcing services - remote server and application support, networking services and end customer support. There are over 2400 IT professionals working at the center, who form a uniquely diversified team consisting of up to 70 different nationalities. The IDC Brno staff provides services to over 600 clients from around the world, ranging from leading world banks, major international corporations, phone operators, to pharmaceutical companies. (<http://www.grafton.cz/files/projects/cz/ibm/>)

3.2. Population and Purposive Sampling

The selection of the key people to approach from the list of people working in IBM's outsourcing organisation will be based on a number of criteria. First criteria, is that the appropriate participants of this case study must be accessible, and agreeable to participate in this research.

Second criteria, they were or still are involved in the process that surrounds DC's decision, were or are part important in the process of definition and implementation of services transfer to DC's.

Last, but most important, the participants in this case study must have the potential to provide useful information that will help understand the phenomenon under investigation. The phenomenon of DC's in Portugal is still in its infancy, only now it is beginning to show some signs of maturity, and that represents an additional difficulty in the participants selection, as they must have some experience involving the transfer of services to the DC's.

Other criteria that could be used are the information regarding the potential layoffs and restructuring of the local organisation, which normally accompanies these phenomenon's. But as a rule, this kind of decisions does not involve the all organisation, generally involving only the chief officers and not lower than the mid-level manager. So, applying this criterion could implicate having a very small population, and that is the reason for its inapplicability.

Having established the selection criteria, the group of key people that will be interviewed and questioned will correspond to a non-representative sampling, i. e., they are information rich and they present the researcher an insight or a clearly description of the phenomenon under investigation. This approach corresponds to a purposeful

sampling approach, and it is immensely valuable in determining which of the IBM's outsourcing organisation people can positively contribute to this research and can help clarify the topic of this study.

Before the interviews, it will be distributed by IBM's internal e-mail a request for participation to the local people (Appendix 7.2) and then, at each interview, detailed information about the purpose of this study will be given, as so the potential benefits and the level of participation required from the interviewees. Other important information given at this point will be the anonymity and confidentiality of the participants. The same information will be distributed by IBM's internal e-mail as a request for participation (Appendix 7.3) with the questionnaire to the Brno DC people.

The interviews and questionnaire will be focused based on specific questions or topics previously elaborated but allowing sufficient flexibility, permitting the interviewer to ask open-ended questions that will consent the interviewee to provide as detailed information as possible. The questions will focus on the participant individual experiences and opinions with the phenomenon under investigation.

The purpose for the open-ended questions is to describe, explain, interpret and then build a correspondent theory, and so, it will be an inductive approach (Saunders, Lewis et al. 2009). Other purpose of having open-ended questions is to guarantee that the interviewer is more involved and that way ensured that their own biases were not introduced into the results.

Regarding the length of the interviews, it will not be established previously, allowing the participants to have time to explain their involvement, roles and experiences. The testimonial will be written in paper and then transcribed to computer or will be written directly in computer. Each interviewee will agreed with what is being written by the

interviewer and give its approval, that to minimize further follow-ups. At the conclusion of each interview, it will be asked to participants to be available for follow-up should further clarifications be necessary.

Limitations and Assumptions

1. Sample size – Studying only one organisation, IBM's outsourcing, and applying the selection criteria previously referred will reduce the number of high-quality participants. However, as many people are involved in the DC's phenomenon, the assumption will be that the sample size of participants will be enough to get accurate results.
2. Sensitivity of data – As the requested data in the interviews and questionnaires has sensitivity data in nature, there may be inhibition from the participants in providing expected information and that can affect this analysis. Confidential interviews and questionnaires will give them the opportunity to share their experiences and to explain how they see the phenomenon under investigation. Their experiences and opinions on this topic will be crucial to shape and to organize the knowledge about it.
3. Ambiguity of data and results (bias) – Having the researcher working in the same organisation and in the same business area under investigation as the outsourcing could influence the study results. Impartiality and objectivity will be a must and a fundamental objective of the researcher. Another positive factor that will certainly contribute to the required impartiality and objectivity of the study is the researcher detachment with the transferring process of services to DC's, with the decision process or even with the implementation phase that followed the decision.

3.3. Semi-Structured Interview Checklist

The checklist instrument that will be used for the interviews and also on the questionnaires will be divided in two sections. Section I, will consist of questions regarding participant role involving the topic under investigation. This section will determine participant role and involvement with the research phenomenon and will allow the categorization of respondents to see if there are any relationships between them. Section II, will consist in open-ended questions, the content of which will be in sync with the hypothesis and research question and sub-questions stated in chapter 1 and 3. The responses to section I can be previously coded in advance, based on the characteristics of the purposive sampling, while section II coding will occur only after data collection and patterns determination.

The following table shows the mapping between the investigative questions and the Checklist questions.

Topic under investigation	Question Items	Scale	Checklist Questions
General	Demographic Questions		Questions 1a & 1b
Outsourcing	Outsourcing Objectives from IBM perspective	2-Items	Questions 2a & 2b
	Outsourcing Objectives from Customer perspective	2-Items	Questions 2c & 2d
Outsourcing & Dc's	DC's Objectives from IBM perspective	2-Items	Questions 3a & 3b
	Relation between Outsourcing and DC's Objectives	1-Item	Question 3c
DC's Impact & Results	Impact on Service Quality	1-Item	Question 4a
	Impact on Local People	1-Item	Question 4b
	Barriers on DC's implementation	1-Item	Question 4c
	Impact on the Outsourcing Business	1-Item	Question 4d

Table 1. Description of questions items and scale



3.4. Human Subject Protection and Data Confidentiality

This dissertation will be conducted with IBM's sponsoring, and will follow IBM's conduct guidelines regarding human subject protection and data confidentiality. IBM has agreed to participate in this research and has provided a supervisor that will help orienting this study.

The researcher team consists solely on the researcher and the interviews and questionnaires will be confidential and anonymous. Participation or non-participation in this research will have no affect on any person's career and there will be no incentive offered to respondents other than their participation.

4. Results

This chapter first discusses the details of the data gathering phase. Then the results of the analysis of the data collected from the interviews and questionnaires based on the semi-structured checklist presented in Appendixes section.

4.1. Data Collection

Seventeen IBM key employees were invited to participate in this research project and twelve did participated. The list of IBM Key employees was previously discussed internally with the IBM supervisor and was finally closed with the contribution of some of the people interviewed. The group of people that were invited to participate in this research includes team members responsible for execution and those responsible for implementation. The decision owners were not invited as they are in the higher levels of hierarchy and normally do not participate in the implementation and therefore do not possess the knowledge and the experience to be considered relevant for this study. The team members responsible for execution and for implementation on the other hand, did not participated in the decision process and so, they can have different opinions regarding the decision, but have the knowledge and experience in the subject under discussion. All the invitees were first contact by personalized e-mail, requesting their participation and explaining the objectives. They were then informed that the current research was previously approved internally and that their contribution was extremely valuable (Appendix 7.2 & 7.3). Additional measures taken to improve the response rate were then made with a second personalized e-mail sent reinforcing the importance of their participation (Appendix 7.4). Some of the people interviewed showed fear and was a little afraid of the implications of their participation on this research as probably they

would say something that was against the common opinions or against some internal policy. At the beginning of the interview was clarified that IBM was sponsoring this research and that all the information collected and also the respondent's identity will remain confidential and only the statistics findings will be documented.

Although the overall response rate was not as hoped, it was determined that further invitations would probably not be productive, so the data collected were analyzed for the research.

The following table itemizes the number of invitees and respondents per category with their respective response rate.

Study Sample	Categories	
	Portugal	Brno DC
Invitees	10	7
Respondents	8	4
Response Rate (%)	80	57.14

Table 2. Invitees vs. Respondents

Section I of the checklist used on the interviews and also on the questionnaires contained demographic questions which were used to provide a general sense of the respondent group dynamics with respect to IBM title and role and years of service at IBM.

IBM Title/Role: The majority of the respondents in the sample are Managers (58.33%). The remaining respondents (41.67%) have also positions where they are decision makers and some have also teams to orient but do not have the “Manager” role. The Manager, or normally called People Manager, has people reporting to him in a hierarchy view and has an independent department. Each department can have different teams, and normally each team has its own Team Leader. The Team Leader does not have people reporting to him/her but he/she is responsible for that specific team. Sometimes he/she has also management responsibilities but not in a hierarchy structure. Inside each team or department, there are different Focal Points. The Focal Point is a particular person that responds for a particular topic or project or even account. The following figure describes the IBM title of each respondent.

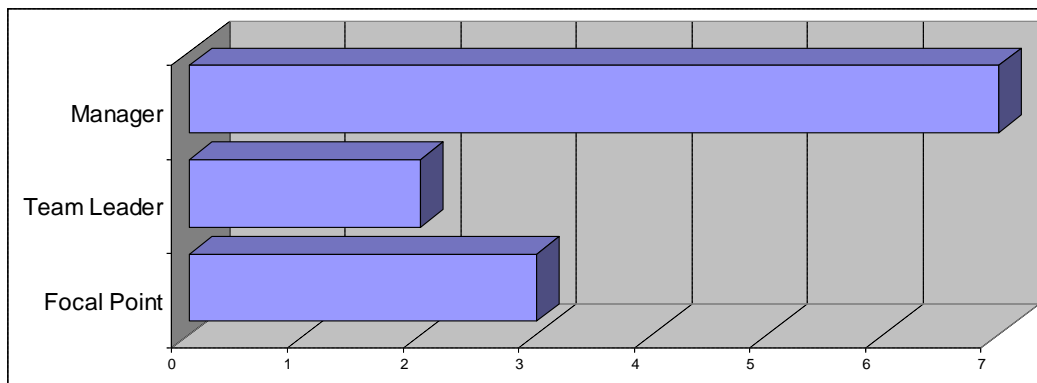


Figure 3. IBM Title/Role of respondents

Regarding validity of the information collected, all the answers were valid as each of the twelve respondents answered this question (100% valid answers and 0% missing).

Looking at the distribution by location, 71.43% of the Managers are local and only 28.57% come from Brno Delivery Center. All the Focal Points are local and all the Team Leaders are located at Brno DC (See Appendix 7.6 for additional details).

Numbers of years in IBM: Out of twelve respondents, six (50%) reported that they are in IBM for less than six years. 25% of the remaining respondents work in IBM for a period of six to ten years and the other 25% respondents work in IBM for over than ten years. The following figure describes the number of years in IBM of the respondent's sample.

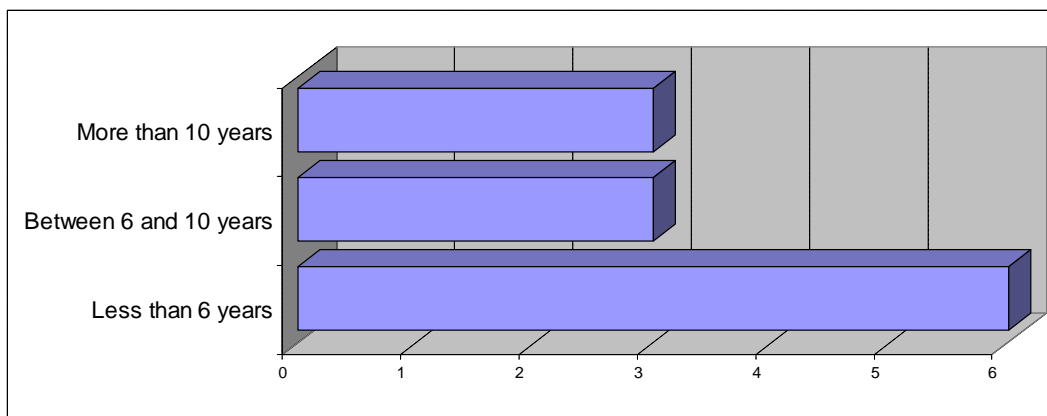


Figure 4. Number of working years in IBM

This can be explained by some recent acquisitions in the Outsourcing Business. It was out of the scope of this research the investigation of outsourcing contracts but the increase in the number of acquisitions on the last years, forced IBM to get more people. Another factor that could explain the abovementioned results could be the fact that each new Outsourcing Business acquisition brings people from the customer to IBM, as direct transfer or with the creation of joint-ventures.

Regarding validity of the information collected, all the answers were valid as each of the twelve respondents answered this question (100% valid answers and 0% missing).

Looking at distribution by location, 66.67% of the respondents that work in IBM for less than six years are local, 66.67% of the respondents that have between six and ten years working for IBM and more than ten years are local. (See Appendix 7.6 for additional details).

4.2. Data Analysis

The following section provides the analysis and results on the information received from the respondents regarding section II of the Checklist. The coding concepts and categories were developed using the research question and sub-questions and the review of the interview transcripts, field notes and questionnaires answers. All of the data collected was then analyzed line by line in the sequence in which they were collected. Specific phrases, words and terms were marked and labeled using the MAXQDA qualitative software for content analysis (MAXQDA). Then they were examined again and grouped in concepts and categories (Corbin and Strauss 2008). As the codes were being created, the purpose of coding was constantly taken in consideration so the number of codes did not increase to a huge number and consequently became unmanageable. MAXQDA allowed the transcripts contents to be marked, colored and tagged for further analysis (Lewins and Silver 2007). This supported the analysis of the linkages between the categories and the development of explanations for the phenomenon under investigation. The following is an example of a quote and how it was coded:

“Revenue and cost model. IBM has responsibilities to their shareholders and outsourcing is something that can generate revenue because of the simple factor that it can manage the factor cost” (Local Manager).

This quote represents two processes in the research model: revenue and cost savings. The interviewee was saying that the objectives and expectations of the outsourcing from IBM perspective were revenue and also cost savings as one is consequence of the other.

Each statement collected was evaluated and coded in this manner to develop the results of this research. The result data extracted from the MAXQDA, such has the categories frequency, was then analyzed with Microsoft Excel.

Objectives and expectations of outsourcing from IBM point of view

Question one from the section II of the checklist, belongs to the group of questions regarding the Outsourcing Business and it gathered the information regarding participant’s opinion about the objectives and expectations of outsourcing from IBM point of view. The following figure provides the details.



Figure 5. Objectives and expectations of outsourcing from IBM point of view

The abovementioned results show that the majority of the respondents consider revenue as one of the objectives and expectations of IBM regarding the outsourcing business. As one of the respondents firmly pointed out:

“Revenue is fundamental” (Local Focal Point).

Another mentioned:

“Revenue is more important than the cost savings” (Local Manager).

The second factor referred to was cost savings and the third mentioned factor was a strategic business change. Regarding the last one, one of the Respondents affirmed:

“Strategic change in the business paradigm. ...In general, the outsourcing and the services component allowed IBM to establish a global position in the global and transversal support in the different IT areas, having in mind the objective to increase the business, leaving outside the hardware. ...Services are better to increase margins

than hardware; And because of globalization, the margins are becoming even lower” (Local Manager).

And another:

“Move from the commodities business to guarantee constant and healthy revenue; and maintain a list of customers that in other way could leave IBM” (Local Manager).

As noted above, outsourcing was an opportunity for IBM, a strategic move to a new way of doing business. There were three other factors mentioned as follow, standardization of processes and services, intellectual capital gains and economy of scale, but as mentioned before the financial factors aligned with the business change were the principal motivators that compelled IBM in respect to outsourcing.

Regarding the validity of the information collected, one of the Respondents did not answer this question mentioning lack of experience in the subject. The validity of the information collected is present at Appendix 7.7.

Objectives and expectations of outsourcing from IBM point of view by location

Analyzing the data collected separately by location (local and Brno DC) we have some differences on the results, as following two figures describe.



Figure 6. Objectives and expectations of outsourcing from IBM point of view of local Respondents



Figure 7. Objectives and expectations of outsourcing from IBM point of view of DC Respondents

Based on the information collected by location, revenue was only identified as an IBM objective by the local Respondents as all the DC Respondents did not identify it as an expectation of IBM from the Outsourcing Business. Local Respondents also identified objectives of economy of scale and intellectual capital gains and DC Respondents did not. In the other hand, DC Respondents identified that IBM has the expectation of standardize processes and services with outsourcing and local Respondents did not.

Likely this is result of the different realities that these two locations have. The local people are part of the Outsourcing Business and see it as a whole. DC people only have contact with specific areas on some of the outsourcing contracts and so they cannot see it as a whole, having only in mind Delivery Center reality. As one of the DC Respondents pointed out:

“Possibility to increase efficiency and effectiveness of services (automation, innovation); provides a long term and cheap business platform with high valued deliverables” (DC Team Leader).

Is almost what is expected from the DC’s itself.

Regarding the validity of the information collected, the Respondent that did not answer this question comes from the DC. The validity of the information collected is present at Appendix 7.7.

Objectives and expectations of outsourcing from IBM point of view - Importance classification

Question two from the section II of the checklist questioned the Respondents regarding the importance classification of the previous identified objectives and expectations of outsourcing from IBM point of view. All the Respondents identified several objectives and this question has the objective to identify which of the identified factors is the most important. The following figure provides the details.



Figure 8. Objectives and expectations of outsourcing from IBM point of view by Importance Classification

The most important factors for IBM regarding outsourcing that were identified by the participants were revenue and cost savings and both have exactly the same importance.

“Revenue and cost model, are associated” (Local Manager).

Two other strong motivators also with same importance classification are intellectual capital gains and strategic business change.

Regarding the validity of the information collected one of the Respondents did not answer this question mentioning lack of experience in the subject. The validity is present at Appendix 7.7.

Objectives and expectations of outsourcing from IBM point of view by location - Importance classification

Analyzing the data collected separately by location (local and Brno DC) we have some differences on the results, as following two figures describe.



Figure 9. Objectives and expectations of outsourcing from IBM point of view of local Respondents by importance classification



Figure 10. Objectives and expectations of outsourcing from IBM point of view of DC Respondents

Questioned the respondents regarding the most important factors for IBM regarding the Outsourcing Business, they answered that revenue and cost savings are the most important factors for both locations. Regarding the validity of the information collected, the Respondent that did not answer this question comes from the DC. The validity of the information collected is present at Appendix 7.7.

Objectives and expectations of outsourcing from Customers point of view

Third question from the section II of the checklist questioned the Respondents regarding the objectives and expectations of outsourcing from the Customers point of view. The following figure provides the details.



Figure 11. Objectives and expectations of outsourcing from Customer point of view

The abovementioned results show that the majority of the respondents consider cost savings as one of the factors that push Customer for outsourcing:

“Costs. Customers have also responsibilities to their shareholders” (Local Manager).

“Cost Savings is the most important factor” (Local Focal Point).

“To receive a high quality service with lower cost” (DC Manager).

A secondary motivation for outsourcing considering Customer perspective was intellectual capital gains:

“This way, costumers can have access to skills that in other way they couldn't” (Local Focal Point).

“With a global structure there are gains of skills” (Local Manager).

“Intellectual capital transferred from the client to the supplier normally allows to make more with less” (Local Manager).

Regarding the validity of the information collected, one of the Respondents did not answer this question mentioning lack of experience in the subject. The validity of the information collected is present at Appendix 7.7.

Objectives and expectations of outsourcing from Customers point of view by location

Analyzing the data collected separately by location (local and Brno DC) we have some differences on the results, as following two figures describe.



Figure 12. Objectives and expectations of outsourcing from Customer point of view of local Respondents



Figure 13. Objectives and expectations of outsourcing from Customer point of view of DC Respondents

Based on the information collected by location, Respondents from both locations consider that cost savings is one of the motivators to outsourcing from Customer perspective. The intellectual capital gains factor is only mentioned by the local Respondents and DC Respondents mention factors like economy of scale and service quality.

Regarding validity of the information collected, the Respondent that did not answered this question comes from the DC. The validity of the information collected is present at Appendix 7.7.

Objectives and expectations of outsourcing from Customers point of view - Importance classification

The fourth question of section II of the checklist questioned the Respondents regarding the importance classification of the previous identified objectives and expectations of outsourcing from the Customers point of view. All the Respondents identified several objectives and this question has the objective to identify which of the identified factors is the most important. The following figure provides the details.



Figure 14. Objectives and expectations of outsourcing from Customer point of view by Importance Classification

The results undoubtedly show that the participants identified cost savings as the most important motivator for outsourcing from Customer standpoint.

“Cost is the most important factor. You know the cost that you will pay when the service is transferred (when it’s done internally its value is subjective)” (Local Manager).

Regarding the validity of the information collected, two of the Respondents did not answer this question mentioning lack of experience in the subject and the other answered in an ambiguously way. The validity of the information collected is present at Appendix 7.7.

Objectives and expectations of outsourcing from Customers point of view by location - Importance classification

Analyzing the data collected separately by location (local and Brno DC) we have some differences on the results, as following two figures describe.



Figure 15. Objectives and expectations of outsourcing from Customer point of view of local Respondents by importance classification



Figure 16. Objectives and expectations of outsourcing from Customer point of view of DC Respondents by importance classification

DC Respondents classify with the same importance the following factors, cost savings and gains of intellectual capital and Local Respondents referred almost only cost savings.

Regarding the validity of the information collected, the two Respondents that did not answered this question comes from the DC location. The validity of the information collected is present at Appendix 7.7.

Objectives and expectations of DC's from IBM point of view

The next group of questions introduces the Delivery Center topic to the previous topic under discussion, the outsourcing. First question of this group inquires the Respondents regarding their opinion on the objectives and expectations of the Delivery Centers from IBM point of view. The following figure provides the details.

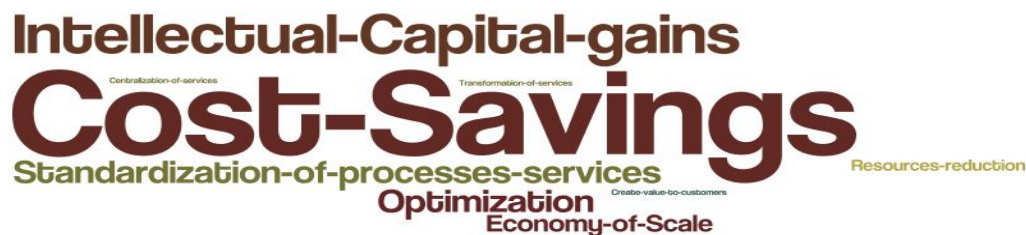


Figure 17. Objectives and expectations of DC's from IBM point of view

The abovementioned results show that the majority of the respondents consider that again the key factor that motivated IBM to move to the Delivery Centers is cost savings.

“Costs; is the strategy to centralize services in locations where the rates are lower, allowing having a good price/quality relation” (Local Manager).

“DC’s are competitive because they live of resources rotation, allowing rates reduction but in the other hand it affects quality” (Local Manager).

“Cost savings without doubts because of the locations where the DC’s are created” (Local Manager).

“Costs; Everything related with costs. Customer requests to lower margins result in centralization in just one team” (Local Focal Point).

“From money perspective, DCs costs are lower in every aspect” (DC Team Leader).

“Concentrate skills to gain efficiency in costs and standardize the delivery” (DC Manager).

Regarding the validity of the information collected, all the Respondents answered this question. The validity of the information collected is present at Appendix 7.7.

Objectives and expectations of DC’s from IBM point of view by location

Analyzing the data collected separately by location (local and Brno DC) the answers are very similar, considering cost savings is the factor that was more referred by both locations, as following two figures describe.

Cost-Savings

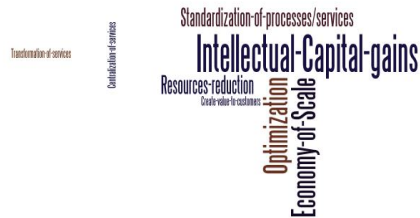


Figure 18. Objectives and expectations of DC's from IBM point of view of the local Respondents



Figure 19. Objectives and expectations of DC's from IBM point of view of the DC Respondents

The secondary factor also mentioned by both locations is intellectual capital gains.

“Better synergies are created on the DC's because it's where the more valuable skills are located” (Local Manager).

“They have access to many IBM tools, and they don't have difficult to use them and we have. They have processes and we fail. We work without processes, every person works individually and the intellectual capital is also individual” (Local Manager).

“Having every one at the same place creates synergies, and they have analysis processes, SLA's, etc” (Local Focal Point).

“DCs are providing a huge capacity for knowledge and resources which can be easily moved and transformed across projects” (DC Team Leader).

Two other factors were also referred, the standardization of processes and services by both location participants and optimization mostly by the local participants.

“The objective was the standardization of services; offer and service standardization implies economy of scale” (Local Manager).

“To standardize processes of tasks provided to customers, resulting in cost saving from mitigation of misunderstandings and related problems” (DC Team Leader).

“Short time objectives: Cost reduction. Long time objectives: quality improvement and resources optimization” (Local Focal Point).

The validity of the information collected is present at Appendix 7.7.

Objectives and expectations of DC’s from IBM point of view - Importance classification

The next question of section II of the checklist questioned the Respondents regarding the importance classification of the previous identified objectives and expectations of the DC’s from IBM point of view. All the Respondents identified several objectives and this question has the objective to identify which of the identified factors is the most important. The following figure provides the details.



Figure 20. Objectives and expectations of DC’s from IBM point of view by importance classification

Again, the results of this question show that cost savings is the principal key factor that influenced IBM to move to the Delivery Centers from participant’s opinion.

“Cost Savings. DC’s are located on countries with lower cost resources and specialized” (Local Focal Point).

The validity of the information collected is present at Appendix 7.7.

Objectives and expectations of DC’s from IBM point of view by location -

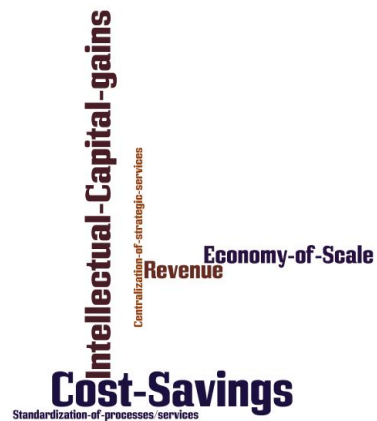
Importance classification

Analyzing the data collected separately by location (local and Brno DC) we have some differences on the results, as following two figures describe.



Cost-Savings
optimization

Figure 21. Objectives and expectations of DC’s from IBM point of view of the local Respondents by importance classification



Intellectual-Capital-gains
Centralization-of-strategic-services
Economy-of-Scale
Revenue
Cost-Savings
Standardization-of-processes/services

Figure 22. Objectives and expectations of DC’s from IBM point of view of the DC’s Respondents by importance classification

The results collected explain that the local Respondents consider that the cost savings is almost the unique factor that motivates IBM, and DC Respondents consider that besides the cost savings, there are some other factors also involved, such as intellectual capital

gains and also revenue and economy of scale. The validity of the information collected is present at Appendix 7.7.

Relation between outsourcing and DC's objectives and expectations

Following question of section II of the checklist questioned the Respondents regarding the relation between outsourcing objectives and DC's objectives and wants to answer if the objectives of one are the same of the other, or if both were influenced by the same factors. The following figure provides the details.



Figure 23. Relation between outsourcing and DC's objectives and expectations

The abovementioned results show that the majority of the respondents consider that there is a relation between the objectives and expectations of the outsourcing business and the Delivery Centers.

“There’s a relation. We to execute an outsourcing service have to be organized this way, centralized, having processes, with cost reduction for IBM, with resources optimization and with synergies exchange... On the DC’s of Brno they were already working that way” (Local Focal Point).

“There is a relation but it’s not mandatory; IBM could move to DC’s without first moving to the outsourcing business” (Local Focal Point).

Also a considerable number of Respondents referred that the objectives of both outsourcing and DC’s are different.

“No relation. DC’s are an instrument and the outsourcing is a way to get an objective” (Local Manager).

“They are different; Clients move to outsourcing because of cost; IBM’s move to DC’s is not only because of costs, is also because of skills and knowledge. Costs are always associated but the reality is different” (Local Focal Point).

Two of the answers collected were not considered in the above results as they were not clear and extremely ambiguous. The validity of the information collected is present at Appendix 7.7.

Relation between outsourcing and DC’s objectives and expectations by location

Regarding the data collected by location, both locations referred that there is a relation between outsourcing and DC’s objectives. The Respondents that referred that the objectives are different are local as no one from the DC referred it and one Respondent from DC location considers that the objectives are the same, as following two figures describe.

Common-factors
Relation-exists
Same
Different

Figure 24. Relation between outsourcing and DC's Objectives and expectations by local Respondents

Relation-exists
Same

Figure 25. Relation between outsourcing and DC's Objectives and expectations by DC Respondents

The two Respondents that were not considered for these results are from the DC location. The validity of the information collected is present at Appendix 7.7.

Impact of DC's on service quality

The next question inquired participants regarding the impact of the DC's on service quality.

The following figure provides the details.

Next it was referred that there is a negative impact because of two other factors, lack of skills and lack of knowledge on customer environment, as follow citations demonstrate:

“There are definitely differences between DCs all over the world but what is the same is the potential of resources, experience and skills/languages and low cost. What may be missing is the deeper customer knowledge, customer intimacy” (DC Manager).

“The decrease of quality is not mandatory but is obligatory to change the modus operandi. There are differences between areas, some are more easy as for instance Intel, because it needs lower skills, but the same doesn’t apply on Unix area, because its more specialized, it requires different conditions. The impact is the lower quality on Intel. The resources numbers are the same, for Intel and for Unix areas, but the numbers of Unix servers are less” (Local Focal Point).

“Every change affects service quality as it requires adaptation to the new processes and culture. The team didn’t have the required skills” (Local Focal Point).

“At the beginning there’s always degradation, many times the contracted people don’t have the necessary skills” (Local Focal Point).

Other two negative impacts were also mentioned, related with the different cultures and the adaptation period that is required in such cases:

“There was change involved and every time there’s change there’s an adaptation period and at the beginning there were some problems” (Local Manager).

“Service quality was affected. There’s a learning cycle” (Local Manager).

“Every change affects service quality as it requires adaptation to the new processes and culture” (Local Focal Point).

“It’s related with different cultures, with different ways of working and that is also related with the different locations where they are located” (Local Manager).

Regarding the validity of the information collected, one of the Respondents did not answer this question mentioning lack of experience in the subject. The validity of the information collected is present at Appendix 7.7.

Impact of DC's on service quality by location

Analyzing the data collected separately by location (local and Brno DC) we have some differences on the results, as following two figures describe.

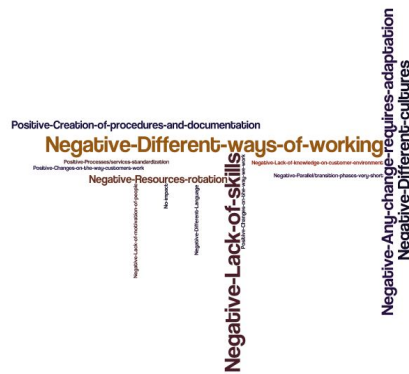


Figure 27. Impact of DC's on service quality by local Respondents



Figure 28. Impact of DC's on service quality by DC Respondents

The analysis of the data collected by location show an interesting result, as the local Respondents complain about the lack of skills of DC's teams and the different ways of work locally and on the DC and the DC Respondents complain about their lack of knowledge on the customer environment:

“At the beginning there's always degradation, many times the contracted people don't have the necessary skills, but in the other hand we don't have the procedures and documentation produced” (Local Focal Point).

“The team didn't have the required skills” (Local Focal Point).

“Negative with projects, where customer requires exceptions and usage of non standard tools, builds. Typically technology which is not yet known to specialists” (DC Team Leader).

The Respondent that did not answer this question comes from the DC. The validity of the information collected is present at Appendix 7.7.

Impact of DC’s on local people

Following question inquired the participants regarding the impact of the DC’s on local people. The following figure provides the details.



Figure 29. Impact of DC’s on local people

The abovementioned results show that the majority of the respondents consider that the impact of the introduction of the Delivery Centers affects negatively the local people, mainly with the decrease of the responsibility and the ownership of problems, requests, services, etc, as following citations demonstrate:

“There are some people that after the transfer of services, don’t want to care or know any more about them; They feel that they have been affected because of the transfer and don’t understand the decision and so they don’t give the same collaboration and every time they are questioned about the service they don’t know the status and can’t give it to customers” (Local Focal Point).

“Other thing is the change made on what they managed. There are some issues regarding the ownership because of the people perception of the process, they don’t understand the process and consider the DC’s as an external area” (Local Manager).

“Ownership continues to be ours even with the services transferring, but people don’t see it like this. Lack of responsibility; people think that if the service moves to the DC’s, it’s theirs and not ours” (Local Manager).

“It affects. At security and ownership level” (Local Manager).

“Lack of responsibility and conflicts and decrease of motivation are the principal factors” (Local Focal Point).

“Lack of responsibility and ownership, after the move it’s not ours any more” (Local Focal Point).

“In some other areas people were uninterested, they started having deficient responsibility and they decreased their collaboration” (Local Focal Point).

“At the individual level, there’s always worry, lack of motivation, lack of responsibility and ownership but those issues are taken care by the governance model” (Local Manager).

Another negative factor was referred next, the resources reduction that occurs when the services are transferred to the DC’s:

“When a service is transferred to the DC’s, one structure grow up and the other shrink” (Local Manager).

“The motivation decreased because of the resources reduction” (Local Focal Point).

“Lack of motivation clearly because the number of people were reduced, even if it was made only on sub-contractors, they had relations inside the team and synergies already established. All the resources reduction was made based on decisions supported by specific criterion but it affected the remaining resources” (Local Manager).

“Transferring of services implies resources reduction; The resource reduction is treated carefully and there are a selection of the resources that need to be reduced so the impact is also reduced” (Local Focal Point).

“Based on global decision, work from one place is moved to other place, people are losing their jobs” (DC Team Leader).

One of the answers was not taken in this analysis because it was extremely ambiguous and contradictory. The validity of the information collected is present at Appendix 7.7.

Impact of DC’s on local people by location

Analyzing the data collected separately by location (local and Brno DC) we have some differences on the results, as following two figures describe.

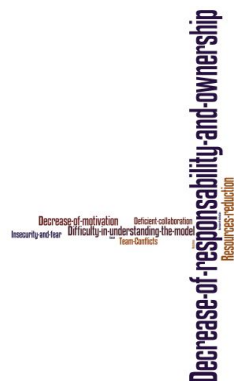


Figure 30. Impact of DC’s on the local people by local Respondents



Figure 31. Impact of DC’s on the local people by DC Respondents

Based on the information collected by location, the negative impact regarding the decrease of responsibility and ownership was only referred by the local Respondents and it was the principal factor mentioned. Another impacts referred were the negative impact regarding the resources reduction, the decrease of motivation and the difficulty of local people in understanding the model. Regarding these last two, some of the local Respondents mentioned:

“Lack of motivation clearly because the number of people were reduced” (Local Manager).

“There are some issues regarding the ownership because of the people perception of the process, they don’t understand the process and consider the DC’s as an external area” (Local Manager).

“Lack of responsibility and conflicts and decrease of motivation are the principal factors. The motivation decreased because of the resources reduction” (Local Focal Point).

“They feel that they have been affected because of the transfer and don’t understand the decision” (Local Focal Point).

“The first reaction is the difficulty of people in understanding this model” (Local Focal Point).

The DC Respondents presented two principal negative factors, the team conflicts and also insecurity and fear:

“The major factor is the “next job perspective”. The local teams may feel frustrated from loosing a job, not seeing a perspective for future involvement in IBM” (DC Team Leader).

“Worries of loosing the job. Especially if there is no new business signed for a period of time. Individual behaviour is then dependent on the level of economical pressure and society culture” (DC Manager).

The Respondent that did not answer this question comes from the DC. The validity of the information collected is present at Appendix 7.7.

Problems and barriers of DC's implementation

The next question questioned the Respondents regarding the problems and barriers of DC's implementation. The following figure provides the details.



Figure 32. Problems and barriers of DC's implementation

The abovementioned results show that the majority of the respondents consider that the major problem or barrier to the implementation of DC's is the deficient procedures and documentation:

“Deficient documentation I see as only bigger problem. If service is moved from country to country, there must be details of the service described to make it working in other location” (DC Team Leader).

“The first problem was the level of detail needed on the work instructions. If it's not written it won't be executed. At the beginning we had to be imaginative when creating procedures to force DC's to be more creative (this works for both ways, DC's and PT).

Currently the work instructions are made at the parallel phase of service transfer, so that way we force DC people to work and not only to follow instructions” (Local Focal Point).

“At the beginning there’s was lack of procedures and documentation” (Local Focal Point).

“Deficient procedures and documentation and Language are the principal problems” (Local Manager).

“Procedures almost don’t exist, they are at any ones head, but it’s not a barrier, it’s a difficulty; All that is customer related must be written and it’s a difficulty because increases the wait time in the transfer processes (because of the translation)” (Local Manager).

“Deficient procedures and documentation. The first experience failed except in areas where there were procedures and documentation established” (Local Manager).

“Lack of knowledge on customer environment is important but the most important factor is the lack of procedures and documentation, and it’s ours” (Local Focal Point).

“Documentation is a problem; we had to produce a lot” (Local Focal Point).

“Quality of DC service is dependant on quality of documentation and communication provided from sending site (local teams)” (DC Team Leader).

The secondary problem and barrier referred was language:

“Language can represent a problem at the interpretation level” (Local Manager).

“Language is a problem sometimes and if Portuguese language is required it will be a problem certainly” (Local Focal Point).

“Language is also important because is not the native language for both sides” (Local Focal Point).

“Language. At the beginning there was lack of strategic vision to where the things could go with the backoffice activities, non customer related and the language was a

minor factor. Now, without having more of these activities (non customer related) the language is a difficulty” (Local Manager).

“Deficient procedures and documentation and Language are the principal problems” (Local Manager).

“Needed number of skilled resources speaking the customer language if it's not English” (DC Manager).

“Language. As there are very few accounts requiring native language support this is a very difficult topic” (DC Team Leader).

All the Respondents answered this question, the validity of the information collected is present at Appendix 7.7.

Problems and barriers of DC’s implementation by location

Analyzing the data collected separately by location (local and Brno DC) we have the following results:



Figure 33. Problems and barriers of DC’s implementation by local Respondents



Figure 34. Problems and barriers of DC’s implementation by DC Respondents

Both locations mentioned the problem of having deficient procedures and documentation and the problem of language. Another problem referred by both locations was the lack of knowledge on customer environment:

“The only barrier I see is the lack of knowledge on customer environment. The lack of knowledge about an impact or a wrongly applied procedure can make. This could be improved by better service management and communication” (DC Manager).

“In the exceptions there were good results, for instance in the ISeries area they tried to learn the environments and that make the difference” (Local Manager).

“Lack of knowledge on customer environment is important but the most important factor is the lack of procedures and documentation” (Local Focal Point).

“Lack of knowledge on customer environment because our work is customer oriented and DC’s work in a standard way” (Local Focal Point).

“There are problems on the knowledge about customer environment because of the remoteness of the DC’s” (Local Manager).

The validity of the information collected is present at Appendix 7.7.

Impact of DC’s implementation on the Outsourcing Business

Following question inquired the participants regarding the Impact of DC’s on the Outsourcing Business. The following figure provides the details.



Figure 35. Impact of DC's on the Outsourcing Business

The abovementioned results show that the majority of the respondents consider that the DC's have a positive impact on the Outsourcing Business. Customer knowledge about DC's is positive because it gives the idea that IBM is a global company.

“It depends on the customer, as some have bad experiences. Customer knowledge about the use of DC's is positive; what can be a negative factor is the service provided. Customer knows that there's always someone that can provide the service, and the negative factor is always the bad service provided but that can happen at DC level or locally here” (Local Focal Point).

“IBM's contracts include the DC's and sometimes customers sign with IBM just because IBM has a global dimension and it could be positive. When there are critical problems, IBM potential in getting a solution is better than the one from a local company. The DC's are common in other global companies. The DC's or the global resourcing is an IBM negotiation for customers and it represents an add-on to win new business and to grow the current” (Local Manager).

“In these terms, DC's show a great potential for globalization and standardization as value provided to customers.

This model of knowledge and capacity centers can be a driver of IT business outsourcing” (DC Team Leader).

However, based on participant's observations, it seems that they think that the DC factor is only positive because it represents IBM with a more global presence in the market, with more potential and capacity to act in specific situations, like critical problems. They do not identify direct benefits from the DC's on the Outsourcing Business.

There were another two main factors, one with a negative impact and another one with a positive impact, negative impact on the service provided and positive impact that resulted from the DC's optimization and efficiency program.

“It has a negative impact on the service provided to the customers because it should be transparent. Customers ask about who is going to provide the service and customers are not comfortable with the provided service” (Local Manager).

“It depends on the customer, as some have bad experiences. Customer knowledge about the use of DC's is positive; what can be a negative factor is the service provided” (Local Focal Point).

“DC's provide a capability of absorbing business with commons skills sets. There is an enormous knowledge capacity which supports day to day business” (DC Team Leader).

“Brno has an efficiency program. For instance the reduction of alerts project has implications of optimization in Brno. It's already planned to have optimization and cost reduction in services so they can be competitive” (Local Manager).

One of the Respondents did not answer this question mentioning lack of experience in the subject. The validity of the information collected is present at Appendix 7.7.

Impact of DC's implementation on the Outsourcing Business by location

Analyzing the data collected separately by location (local and Brno DC) we have some differences on the results, as following two figures describe.

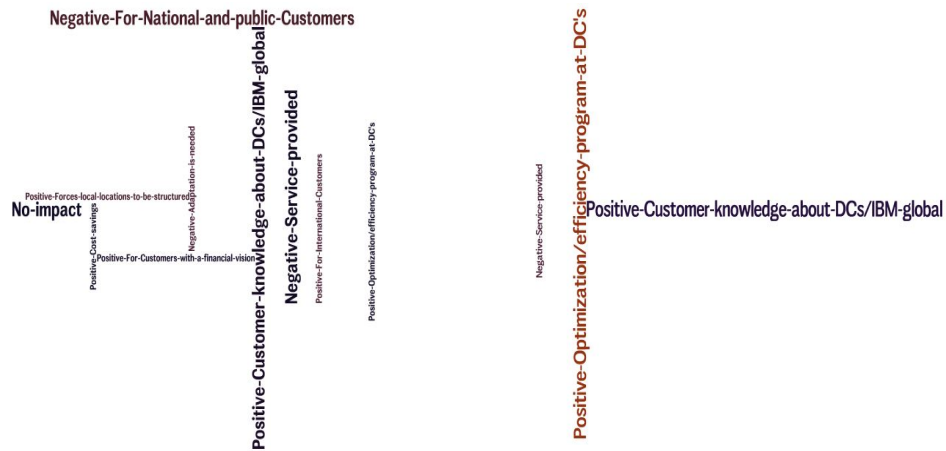


Figure 36. Impact of DC's on the Outsourcing Business by local Respondents

Figure 37. Impact of DC's on the Outsourcing Business by DC Respondents

Based on the information collected by location, both locations mentioned the positive impact regarding customer knowledge about the DC's based on the fact that it means that IBM is Global. DC Respondents were the ones that referred the positive impact because of the optimization and efficiency program that the DC's have.

The Respondent that did not answer this question comes from the DC. The validity of the information collected is present at Appendix 7.7.

5. Conclusions, Limitations and Future Research

This chapter will provide conclusions based on the analysis of the data collected and presented in Chapter Four and the implications of these results. Additionally, it shall discuss the limitations of this study and present recommendations for future research.

5.1. Conclusions

The first group of questions addressed the Outsourcing Business and wished to obtain a list of the principal objectives and expectations of outsourcing from IBM and from Customer perspective. What are the principal factors that influenced IBM and Customers move to outsourcing? What did they want or expect to achieve from it?

First and second questions questioned the participants on the above subject from IBM perspective. Three factors were identified as significant by the participants of the study: revenue, cost savings and strategic business change. Financial factors were the most referred to answer and it was extremely clear that it was the major motivating factor. The outsourcing was a way for IBM to augment the revenue and to reduce costs. The strategic business change factor was clearly associated with the fact that the existing outsourcing business is based on services (and not on hardware or software) and serves as a way to increase business and to become more global and transversal, and this leads to the increase of revenue. It was interesting to analyze these results by location, as DC participants added another factor to the previous list, the standardization of processes and services, and this factor can also explain the cost reduction.

Third and fourth questions addressed the same topic but from a Customers perspective. One major factor was identified, cost savings. The factor cost was the most referred and

mentioned by almost all the participants in this study and the analysis by location were consistent. Local participants also introduced some gain of intellectual capital, mainly added skills that otherwise would not have existed. However, even with this factor it was obvious that the cost savings that result from the outsourcing is what influences Customers.

The next group of questions introduced in the investigation the Delivery Centers and expected to obtain the list of objectives and expectations of the Delivery Centers implementation from IBM. What are the principal factors that have influenced IBM to bring in the DC's to the Outsourcing Business? What was the expected return from this strategic change? The potential relation between the identified factors and the identified factors on the first two questions of the previous group of questions was also asked about.

The first and second questions of this group questioned participants regarding the objectives and expectations of DC's from IBM point of view. In this area cost savings was defined as the principal factor referred by the participants. Based on the information collected, IBM is aiming to reduce costs with the introduction of DC's in the Outsourcing Business. Intellectual capital gains were also referred by the participants on both locations. Skills improvement, creation of synergies, better processes and more knowledge and resources are the identified gains that can result from the implementation of DC's on the Outsourcing Business at IBM's. Moreover, two other factors were also pointed out by the participants with fewer occurrences, the optimization that results from the applicability of DC's and the standardization of processes and services. These two factors are likely associated with the optimization

and improvement programs that are associated with the Delivery Centers and the fact that DC's work mainly with standard processes and services.

The next question questioned the participants regarding their belief on the existing or non-existing relation between the above factors and the ones identified regarding outsourcing. The results obtained show that the majority of the participants think that a relation exists between the factors that influenced IBM to outsourcing and the factors that influenced IBM to DC's.

The last group of questions questioned the participants about the results and impacts of the implementation of DC's on the local outsourcing contracts.

The first question addressed the potential impact of DC's on service quality. The results obtained show that the majority of participants consider that DC's have a negative impact on the service quality. First participants consider that the two different locations have very different ways of working and that fact has a negative impact on the quality of service. Those working in DC's work with standard processes and services and the local people do not. Local people workers are influenced by Customers with specific and customized services that are provided to specific Customers. The fact that DC's work with well established processes represents another problem, as it was identified that local people do not have those or other processes in place. Two other negative results that arise from the implementation of the DC's were identified and are also significant, namely in respect to the lack of skills and lack of knowledge in relation to Customer environment. It was pointed out by the local Respondents that DC people do not have the right skills, and the reasons referred are related with the resources rotation and with the different areas that have different requirements. Specific areas have

requirements with more specialized skills and in those normally there are no problems. Areas where the requirements are more generic the problems appear more frequently. Regarding the lack of knowledge in the customer environment, the same stems from the remoteness of the DC's, the distance that exists between DC's and Customers and the specific customer tools, processes and services that are used locally but are not used in the DC's. This happens also because of the resources rotation associated with DC's. The resources do not have sufficient time to know the customer specifications because when they start having that knowledge they move to another place or job. But in the other hand, the resources rotation at DC's is very important to control the costs associated with the resources.

The next question asked the participants about the potential impact of DC's on the local people. The principal impact referred to is negative and is related to the decrease of responsibility and ownership felt by the local people when a specific service is transferred to the DC's. Local people become uninterested in a service every time it is transferred to the DC's and normally they distance themselves from it. The behavior that is commonly observed is the lack of interest after the move, even when they maintain the responsibility of the service for the customer or internally. Another significant impact which is also negative is the reduction of resources. With the transfer of services, teams are reorganized and resources are optimized and the number of workers is reduced. This is a direct consequence of the implementation of DC's in the outsourcing business. Other negative impacts identified that have also some significance, are the decrease of motivation, the difficulty of local people in understanding the model, team conflicts and insecurity and fear. All of these impacts are related with the resource reduction and with the uncertainty regarding the future. What

was believed to well established and guaranteed in the workplace has been viewed as now being uncertain and unknown.

The next question questioned the participants about the principal problems and barriers of the DC's implementation. This question wanted to identify the difficulties encountered from the beginning of the DC's implementation until now. The majority of Respondents identified one major problem, namely deficient (or sometimes non-existent) procedures and documentation. Likely this is related with the fact previously mentioned regarding the nonexistent local processes. The transfer of services to DC's requires the transfer of procedures and documentation that supports each service transferred. The absence of or lack of sufficient documentation and procedures was a barrier and the project plan of each transfer was impacted because the procedures and documentation needed to be created because they did not previously exist. DC's work based on these requirements and when they are not present or when they have gaps, a problem appears and that complicates the proper transfer of services. Other problems identified were the language and the lack of knowledge on customer environment. The language was a major problem when the Portuguese language was a requirement as they have difficulties to obtain people that speak Portuguese. Even when the English is used it is complicated as DC's are populated with people coming from different parts of the globe, and neither they nor we have English as a native language.

The last question asked the participants about their opinion regarding the potential impact of DC's on the Outsourcing Business. The majority of the Respondents consider the knowledge of DC's a positive impact on the business as they consider that with it IBM is more global. IBM has a huge capacity to provide services and support and can answer a specific request more easily having this global capability than companies

without it. Furthermore it was pointed that what could have a negative impact is the service provided with the transfer of services. If the service quality decreases with the implementation of DC's, it could negatively impact the Outsourcing Business. Finally, another positive impact referred to was the use of the optimization and efficiency program that is associated with DC's. If there are positive results from its applicability, such as cost savings, standardization of processes and services, it certainly could improve the Outsourcing Business.

5.2. Limitations

There are several limitations to this study. The first limitation is the small sample population used in the study, only seventeen invitations were sent. The participants were selected using purposive sampling based on the experience on the matter under scrutiny. Notwithstanding the fact that the sample population was small, the response rate was high (70.59%). The second limitation of this study is the use of only one Delivery Center (Brno DC). This research study would be improved if there was more DC's involved. The third limitation of this study is the questionnaire instrument aimed at people within the DC's. It would be more productive the use of interviews like it was done locally. With the questionnaire the answers were very short and some without explanations. In the interviews, each Respondent was asked an additional explanation every time the researcher had a doubt relating to a specific answer. That way the results obtained on the interviews had more substance contributing with more valuable information. Another consequence of the use of the questionnaire compared with the interview instrument was the absence of some answers from some DC Respondents.

There were a few answers that reported a lack of experience on the subject. This could be solved if it during the interview method the researcher could explain each question better and clarify any doubt of the Respondents. This problem could also be solved if there was some additional information to help lead/guide the participants. Another potential limitation was the reluctance for some participants to discuss issues involving the matter under discussion. While participants were well informed about confidentiality, the possibility of the participants not expressing themselves correctly or truly regarding a specific question remained a concern.

5.3. Future Research

Further research regarding the use of Delivery Centers should focus on expanding the sample population, such as other Delivery Centers, the opinions of those working within them regarding the same questions and hypothesis analyzed in this study. Analyzing more participants that are involved in this phenomenon will increase the value of this research and will contribute with important and complementary information.

It is common knowledge that the Delivery Centers are populated with extremely young people that have little experience and underdeveloped skills. The location of the Delivery Centers is also important as some are located near universities and the students are among the people being selected. The rotation of people is very high and normally a person stays in a specific position only until they find a better position with better salary.

As discussed in the press, every day there are more companies following IBM's strategy and who are starting to invest and develop their Delivery Centers. And on the other

hand, IBM's continues to invest in more Delivery Centers and will continue to transfer more services to it. Selecting other Delivery Center's to complement this study will increase its value. Comparing their point of view regarding the topics discussed here will add valuable information with more options and different perspectives.

Another approach could be the use of different firms and companies also in the Outsourcing Business and that have Delivery Centers. Can this research be made and validated across companies in the same industry? Could the results obtained by this study be replicated using other companies in the same industry?

Future research could investigate the relationships between local and DC people more profoundly as this study identified some problems in that area. Can the impacts of the DC's implementation be less painful to the local people or to the service quality provided to the customers? Involving Customers in such study could also be extremely positive and could complement some gaps regarding Customer opinions about the DC's implementation and the transferring of services. Services that were provided locally and that now are being provided by some people that they do not know. Including Customers in such study will certainly help us understand this strategic phenomenon better, and that way all the stakeholders that are linked together could have a say in it.

6. Bibliography

"All Business." from www.allbusiness.com/.

"Google Books." from <http://books.google.pt/>.

"IBM." from www.ibm.com.

"IBM Services." from <http://www-935.ibm.com/services/us/en/it-services/services-a-to-z.html>.

"Information Week." from www.informationweek.com.

"Outsourcing Center." from www.outsourcing-center.com/.

"Outsourcing Law." from www.outsourcing-law.com/.

Aird, L. C. and D. Sappenfield (2009). "IT the 'Enabler' of Global Outsourcing." Financial Executive.

Aldred, G. (2012). "The Outsourcing Project: Strategy, Communication and Preparation." Strategic Advisor **8**.

Barrar, P. and R. Gervais (2006). Global Outsourcing Strategies, Gower Publishing, Ltd.

Bartell, M. S. (1998). "Information Systems Outsourcing: A Literature Review and Agenda for Research." International Journal of Organizational Theory and Behavior.

Brown, D. and S. Wilson (2005). The Black Book of Outsourcing – How to Manage the Changes, Challenges, and Opportunities, John Wiley & Sons.

Buchowicz, B. S. (1991). "A Process Model of Make vs. Buy Decision Making: The Case of Manufacturing Software." IEEE Transactions on Engineering Management **38**.

Buck-Lew, M. (1992). "To Outsource or Not?" International Journal of Information Management **12**.

Chalos, P. (1995). "Costing, Control, and Strategic Analysis in Outsourcing Decisions." Cost Management.

Chamberland, D. (2003). "Is it core strategic? Outsourcing as a strategic management tool." Ivey Business Journal Online.

Chan, P. S. and D. Pollard (2003). "Succeeding in the dotcom economy: Challenges for brick & mortar companies." International Journal of Management **20**.

Corbin, J. and A. Strauss (2008). Basics of Qualitative Research, Sage Publications, London.

D'Aveni, R. A., et al. (1995). "Coping with hypercompetition: Utilizing the new 7S's framework." The Academy of Management Executive **9**.

Dibbern, J., et al. (2004). "Information Systems Outsourcing: A Survey and Analysis of the Literature." Newsletter ACM SIGMIS Database **35**.

Djavanshir, R. G. (2005). "Surveying the Risks and Benefits of IT Outsourcing." IEEE Computer Society.

Earl, M. J. (1996). The Risk of Outsourcing IT. Sloan Management Review. **37**.

Galliers, R. and E. D. Leidner (2003). Strategic Information Management, Taylor & Francis.

Garaventa, E. and T. Tellefsen (2001). Outsourcing: The hidden costs. Review of Business. **22**.

Gartner (2002). "Gartner." from www.gartner.com.

Gotel, O., et al. (2009). Software Engineering Approaches for Offshore and Outsourced Development.

Gottfredson, M., et al. (2005). Strategic Sourcing: From Periphery to the Core. Harvard Business Review. **83**.

Grover, V., et al. (1994). "An Evaluation of The Impact of Corporate Strategy and The Role of Information Technology on IS Functional Outsourcing." European Journal of Information Systems **3**.

Holcomb, T. R. and M. A. Hitt (2007). "Toward a model of strategic outsourcing." Journal of Operations Management **25**.

IBM (2002). IBM Corporate Archives.

IBM (2009). Globally Integrated Capabilities, Capabilities without borders.

IBM (2010). Application Assembly Optimization, A distinct approach to global delivery.

Insinga, R. C. and M. J. Werle (2000). "Linking outsourcing to business strategy." The Academy of Management Executive **14**.

Kakabadse, N. and A. Kakabadse (2000). "Critical review - outsourcing: A paradigm shift." The Journal of Management Development **19**.

Khosrow-Pour, M. (2006). Emerging trends and Challenges in Information Technology Management, Idea Group Inc (IGI).

King, R. W. and M. J. Katz (2008). "Information Systems Offshoring: Research Status And Issues." Management Information Systems Quarterly **32**.

Korrapati, B. R. (2009). "Risks And Success Factors In Information Technology (IT) Outsourcing." Academy of Information and Management Sciences.

Krajewski, L. J. and L. P. Ritzman (2002). Operations management: strategy and analysis, Prentice Hall: Upper Saddle River, NJ.

Lacity, M. C. and R. A. Hirschheim (1993). Information Systems Outsourcing: Myths, Metaphors and Realities, New York, NY, John Wiley and Sons.

Lacity, M. C. and L. P. Willcocks (1995). "Interpreting Information Technology Sourcing Decisions from a Transaction Cost Perspective: Findings and Critique." Accounting, Management, & Information Technology.

Lacity, M. C. and L. P. Willcocks (2000). "Survey of IT Outsourcing Experiences in US and UK Organizations." Journal of Global Information Management **8**.

Lacity, M. C. and L. P. Willcocks (2001). Global Information Technology Outsourcing: In Search of Business Advantage, John Wiley & Sons.

Lacity, C. M. and P. L. Willcocks (2008). Information Systems and Outsourcing, Palgrave Macmillan

Lankford, W. M. and F. Parsa (1999). Outsourcing: a primer.

Lee, J.-N., et al. (2003). "IT Outsourcing Evolution--Past, Present, and Future." Communications of the ACM **46**.

Lee, J.-N., et al. (2004). "IT Outsourcing Strategies: Universalistic, Contingency, and Configurational Explanations of Success." Information Systems Research **15**.

Lewins, A. and C. Silver (2007). Using Software in Qualitative Research, Sage Publications, London.

Linder, C. J. (2004). Outsourcing for Radical Change – A Bold Approach to Enterprise Transformation.

Loh, L. and N. Venkatraman (1992). "Diffusion of Information Technology Outsourcing: Influence Sources and The Kodak effect." Information Systems Research **3**.

MAXQDA. "MAXQDA - Qualitative Data Analysis." from www.maxqda.com.

Niezen, C. and W. Weller (2006). Procurement as Strategy. Harvard Business Review. **84**.

Oshri, I., et al. (2011). The Handbook of Global Outsourcing and Offshoring, Palgrave Macmillan.

OutsourcingInstitute (1998). "Outsourcing Institute." from www.outsourcing.com.

Patane, J. R. and J. Jurison (1994). "Is Global Outsourcing Diminishing the Prospects for American Programmers?" Journal of Systems Management **45**.

Plugge, A. and M. Janssen (2009). "Managing change in IT outsourcing arrangements - An offshore service provider perspective on adaptability." Strategic Outsourcing: An International Journal **2**.

Rottman, W. J. and C. M. Lacity (2006). Proven Practices for Effectively Offshoring IT Work. Management of Information Systems.

Saunders, M., et al. (2009). Research Methods for Business Students, Pearson Education.

Schniederjans, J. M. and M. A. Schniederjans (2007). Outsourcing Management Information Systems.

Sislian, E. and A. Satir (2000). "Strategic sourcing: A framework and a case study." Journal of Supply Chain Management **36**.

Straub, D., et al. (2008). Strategic dependence on the IT resource and outsourcing: A test of the strategic control model.

Talluri, S. and R. Narasimhan (2004). "A methodology for strategic sourcing." European Journal of Operational Research **154**.

Venkatraman, N. V. (2004). Offshoring Without Guilt. MIT Sloan Management Review. **45**.

Welch, J. A. and P. R. Nayak (1992). "Strategic Sourcing: A Progressive Approach to the Make or Buy Decision." IEEE Transactions on Engineering Management **20**.

Willcocks, L. and M. C. Lacity (1995). "Information Technology Outsourcing in Europe and the USA: Assessment Issues." International Journal of Information Management **15**.

Zhu, Z., et al. (2001). "Outsourcing – a strategic move: the process and the ingredients for success." Management Decision - MANAGE DECISION **39**.

7. Appendixes

7.1. Semi-Structured Interview Checklist

1. Personal Information

- a) What is your title and role at IBM's?
- b) How long have you been with IBM?

2. Outsourcing

- a) What do you think were the objectives and expectations of outsourcing from IBM point of view?

Probes: Establish IBM's drivers (make money; market share; etc)

- b) Please classify in terms of importance the above factors, beginning with the most important one.

- c) What do you think were the objectives and expectations of outsourcing from customer's point of view?

Probes: Establish customer's drivers (save money; better IT; efficiency; etc)

- d) Please classify in terms of importance the above factors, beginning with the most important one.

3. Outsourcing and Delivery Centers

- a) What do you think were the objectives and expectations for IBM's creation of DC's?

Probes: Establish IBM's drivers to create DC's; Establish IBM's strategy; (cost savings, economy of scale with the centralization of strategic outsourcing services on the DC's, intellectual capital, skills and knowledge, etc)

- b) Please classify in terms of importance the above factors, beginning with the most important one.
- c) Do you think that there's a relation between the identified objectives and expectations of doing outsourcing and the creation of DC's?

Probes: Establish if IBM's outsourcing drivers are common with DC's drivers or if there's no relation between them.

4. Validation of Results

- a) Do you think that the service quality is (or was) affected with the transferring of services to the DC's?

Probes: Establish if the transferring of services to DC's impacts the service quality in any way.

- b) Do you think that this decision affects in any way the local people?

Probes: Establish if there are motivations problems; conflicts; etc.

- c) In your opinion what are the principal problems of having DC's in the outsourcing business?

Probes: Identify the potential problems that could occur, such as Language, skills, etc.

- d) Do you think that this strategy of DC's affects the outsourcing business?

Probes: Establish if potential outsourcing clients consider DC's as a positive or negative driver.

7.2. E-mail sent to the local Key people

Subject: Research Project - Request for Participation

Ladies and Gentlemen,

I am writing you today as a master's student at ISEG University, Lisbon, and as part of my dissertation program, I am conducting a study in Outsourcing Delivery Center's. I was referred to you as someone who might be able to help in my research project. The purpose of the research is to gain a better understanding regarding the Delivery Center's decision-making and the drivers that have influenced this strategic move. I also inform you that the research project was previously approved internally at IBM's.

I am currently in the process of interviewing key people and as you are in a unique position because of your experience in the mentioned topic, I would be interested in including it in my research.

The interview should take no longer than an hour. The data generated during the interviews will remain confidential and it will be aggregated and analyzed and only the statistical findings will be documented in a final report which will be submitted to my faculty and IBM's supervisors for assessment and finally, grading.

I will contact each of you personally to schedule our interview.

Thank you in advance for your inputs, they are extremely valuable.

Sincerely,

Elsa Fernandes.

7.3. E-mail sent to Brno – Czech Republic DC Key people

Subject: Research Project - Request for Participation

Ladies and Gentlemen,



I am writing you today as a master's student at ISEG University, Lisbon, and as part of my dissertation program, I am conducting a study in Outsourcing Delivery Center's. I was referred to you as someone who might be able to help in my research project. The purpose of the research is to gain a better understanding regarding the Delivery Center's decision-making and the drivers that have influenced this strategic move. I also inform you that the research project was previously approved internally at IBM's.

I am currently in the process of interviewing and questioning key people and as you are in a unique position because of your experience in the mentioned topic, I would be interested in including it in my research.

Answering the questionnaire should take no longer than 10 minutes. The data collected will remain confidential and it will be aggregated and analyzed and only the statistical findings will be documented in a final report which will be submitted to my faculty and IBM's supervisors for assessment and finally, grading.

I will send to each of you the questionnaire in a separate e-mail. Please fill free to contact me if you have any questions.

Thank you in advance for your inputs, they are extremely valuable.

Sincerely,

Elsa Fernandes.

7.4. Reinforcement E-mail sent to Brno – Czech Republic DC Key people

Subject: Research Project - Request for Participation

Ladies and Gentlemen,



I didn't receive any feedback from you regarding this request and I don't know if you have any question or concern. Your contribution to this research is essential, and your valuable opinions are important to increase its value. I want to be able to give a better and global view of the topic under analysis and I can only do that if I have both contributions, from you and from the local people here.

Please let me know if I can clarify any doubts you may have. This questionnaire only takes in maximum 10 minutes.

Thank you for your contribution.

7.5. DC Questionnaire

QUESTIONNAIRE TRANSCRIPTION

Nº

1. Personal Information

Title/Role	
How long have you been with IBM?	

2. Outsourcing

a) What do you think were the objectives and expectations of outsourcing from IBM point of view? Please explain in a few words.

--

b) Please classify in terms of importance the above factors, beginning with the most important one.

c) What do you think were the objectives and expectations of outsourcing from customer's point of view? Please explain in a few words.

d) Please classify in terms of importance the above factors, beginning with the most important one.

3. Outsourcing and Delivery Centers

a) What do you think were the objectives and expectations for IBM's creation of DC's? Please explain in a few words.

b) Please classify in terms of importance the above factors, beginning with the most important one.

c) Do you think that there's a relation between the identified objectives and expectations of doing outsourcing and the creation of DC's? Please explain in a few words.

4. Validation of Results

a) Do you think that the service quality is (or was) affected with the creation of the DC's and the transferring of services to them? If Yes, negative or positive way? Please explain in a few words.

b) Do you think that this decision (creation of DC's and transferring of services to them) affects in any way the local people (local teams)? Please explain in a few words.

c) In your opinion what are the principal problems/barriers of having DC's in the outsourcing business? Please explain in a few words.

d) Do you think that this strategy of DC's affects the outsourcing business? Please explain in a few words.

Thank you!

7.6. Demographic Questions by Location

IBM Title/Role of the Respondents by location:

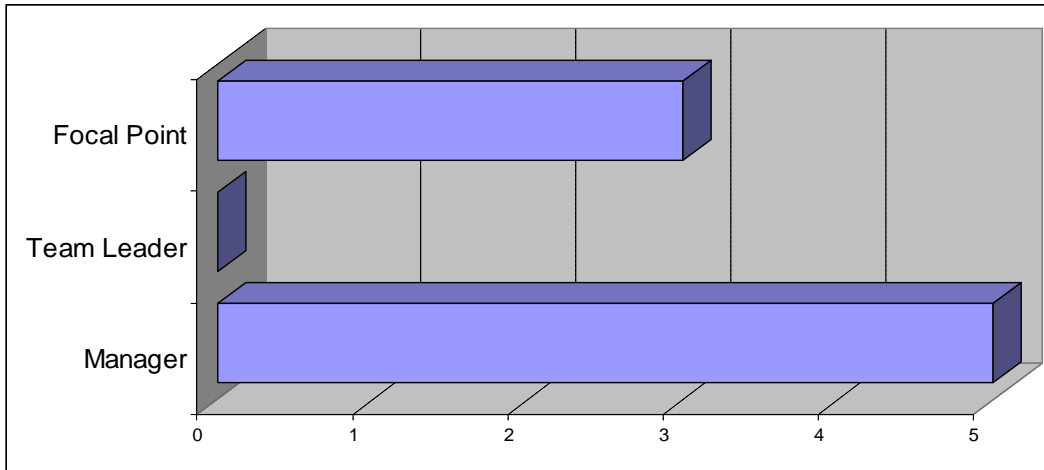


Figure 38. IBM Title/Role of local respondents

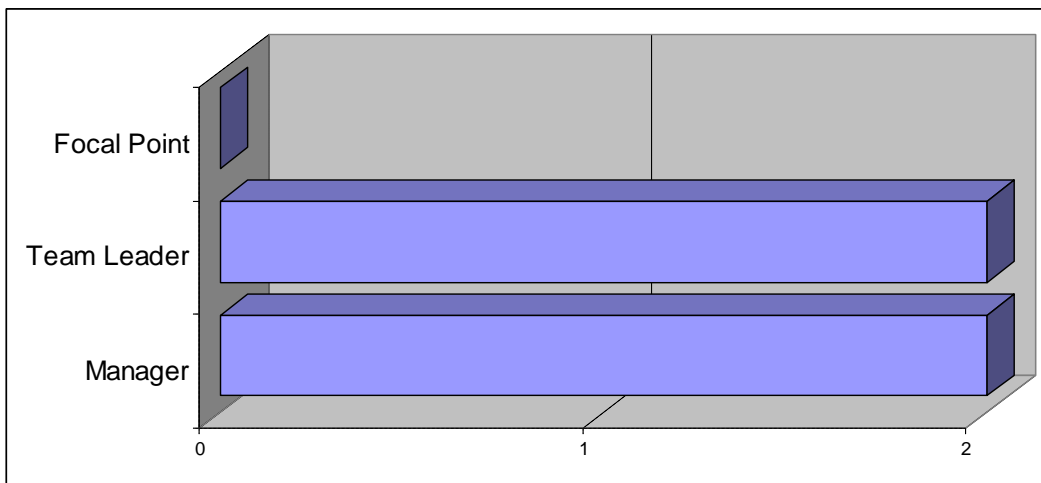


Figure 39. IBM Title/Role of Brno DC respondents

Number of working years in IBM of the Respondents by location:

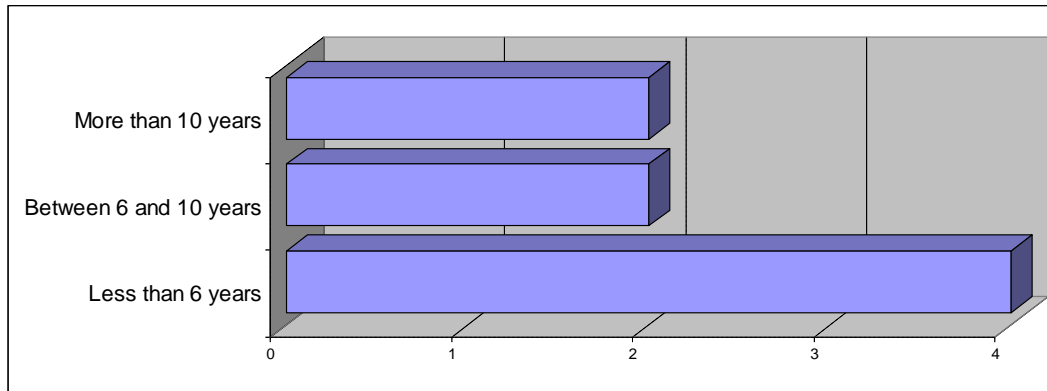


Figure 40. Number of working years in IBM of local Respondents

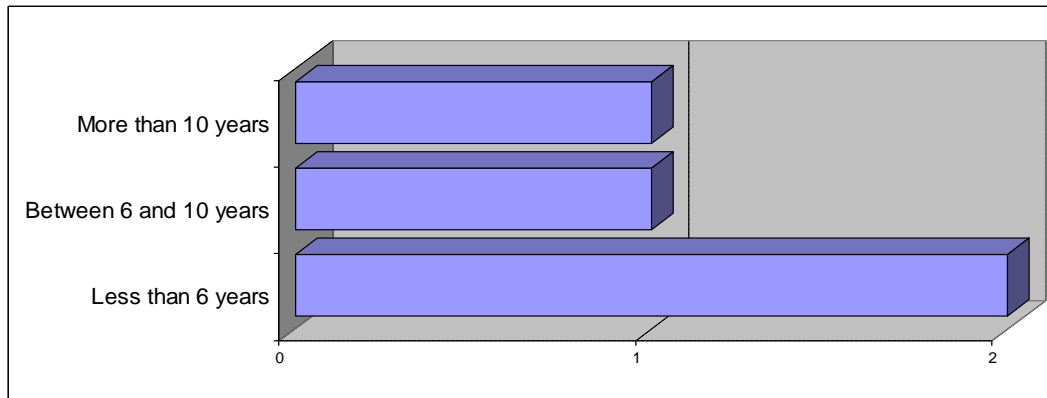


Figure 41. Number of working years in IBM of Brno DC Respondents

7.7. Validity of the information collected on questions of Section II

Validity on the first question of the section II of the checklist – Objectives and expectations of outsourcing from IBM point of view:

Validity Total	Criteria	Frequency	Percent
Valid	Resources dependency reduction	1	4.17
	Centralization of strategic services	1	4.17
	Optimization	1	4.17
	Transformation of services	1	4.17
	Create value to customers	1	4.17
	Economy of Scale	2	8.33
	Intellectual Capital gains	2	8.33
	Standardization of processes&services	2	8.33
	Strategic business change	3	12.50

	Cost Savings	4	16.67
	Revenue	6	25.00
	Total	24	100.00
Invalid	Missing	1	

Table 3. Objectives of outsourcing from IBM perspective information validity

Validity on the first question of the section II of the checklist – Objectives and expectations of outsourcing from IBM point of view by local Respondents:

Validity PT	Criteria	Frequency	Percent
Valid	Resources dependency reduction	1	5,88
	Centralization of strategic services	1	5,88
	Optimization	0	0,00
	Transformation of services	1	5,88
	Create value to customers	0	0,00
	Economy of Scale	2	11,76
	Intellectual Capital gains	2	11,76
	Standardization of processes&services	0	0,00
	Strategic business change	2	11,76
	Cost Savings	2	11,76
	Revenue	6	35,29
	Total	17	100,00
Invalid	Missing	0	

Table 4. Objectives of outsourcing from IBM perspective by local Respondents information validity

The following table shows the validity of the information collected from the DC Respondents.

Validity DC	Criteria	Frequency	Percent
Valid	Resources dependency reduction	0	0,00
	Centralization of strategic services	0	0,00
	Optimization	1	14,29
	Transformation of services	0	0,00
	Create value to customers	1	14,29
	Economy of Scale	0	0,00
	Intellectual Capital gains	0	0,00
	Standardization of processes&services	2	28,57
	Strategic business change	1	14,29
	Cost Savings	2	28,57
	Revenue	0	0,00
	Total	7	100,00
Invalid	Missing	1	

Table 5. Objectives of outsourcing from IBM perspective by DC Respondents information validity

Validity on the second question of the section II of the checklist – Key factor of the identified objectives and expectations of outsourcing from IBM point of view:

Validity Total	Criteria	Frequency	Percent
Valid	Centralization of strategic services	1	5,88
	Standardization of processes	1	5,88
	Customer commitment	1	5,88

	Strategic business change	2	11,76
	Intellectual Capital gains	2	11,76
	Revenue	5	29,41
	Cost Savings	5	29,41
	Total	17	100,00
Invalid	Missing	1	

Table 6. Key objectives of outsourcing from IBM perspective information validity

Validity on the question regarding the key factors of the identified objectives and expectations of outsourcing from IBM point of view by local Respondents:

Validity PT	Criteria	Frequency	Percent
Valid	Centralization of strategic services	0	0,00
	Standardization of processes	0	0,00
	Customer commitment	1	11,11
	Strategic business change	1	11,11
	Intellectual Capital gains	1	11,11
	Revenue	3	33,33
	Cost Savings	3	33,33
	Total	9	100,00
Invalid	Missing	0	

Table 7. Key objectives of outsourcing from IBM perspective by local Respondents information validity

The following table shows the validity of the information collected from the DC Respondents.

Validity DC	Criteria	Frequency	Percent
Valid	Centralization of strategic services	1	12,50
	Standardization of processes	1	12,50
	Customer commitment	0	0,00
	Strategic business change	1	12,50
	Intellectual Capital gains	1	12,50
	Revenue	2	25,00
	Cost Savings	2	25,00
	Total	8	100,00
Invalid	Missing	1	

Table 8. Key objectives of outsourcing from IBM perspective by DC Respondents information validity

Validity on the third question of the section II of the checklist – Objectives and expectations of outsourcing from Customer point of view:

Validity Total	Criteria	Frequency	Percent
Valid	Change of responsibility (to supplier)	1	3,45
	Customers restructuring	1	3,45
	Eliminate height	1	3,45
	Economy of Scale	2	6,90
	Service quality	2	6,90
	Resources dependency reduction	2	6,90
	IBM brand and security	2	6,90
	Core Business focus	2	6,90
	Intellectual Capital gains	4	13,79
	Cost Savings	12	41,38

	Total	29	100,00
Invalid	Missing	1	

Table 9. Objectives of outsourcing from Customer perspective information validity

Validity on the third question of the section II of the checklist – Objectives and expectations of outsourcing from Customer point of view by local Respondents:

Validity PT	Criteria	Frequency	Percent
Valid	Change of responsibility (to supplier)	1	4,17
	Customers restructuring	1	4,17
	Eliminate height	1	4,17
	Economy of Scale	1	4,17
	Service quality	1	4,17
	Resources dependency reduction	2	8,33
	IBM brand and security	2	8,33
	Core Business focus	2	8,33
	Intellectual Capital gains	4	16,67
	Cost Savings	9	37,50
	Total		24
Invalid	Missing	0	

Table 10. Objectives of outsourcing from Customer perspective by local Respondents information validity

The following table shows the validity of the information collected from the DC Respondents.

Validity DC	Criteria	Frequency	Percent
Valid	Change of responsibility (to supplier)	0	0,00
	Customers restructuring	0	0,00
	Eliminate height	0	0,00
	Economy of Scale	1	20,00
	Service quality	1	20,00
	Resources dependency reduction	0	0,00
	IBM brand and security	0	0,00
	Core Business focus	0	0,00
	Intellectual Capital gains	0	0,00
	Cost Savings	3	60,00
	Total		5
Invalid	Missing	1	

Table 11. Objectives of outsourcing from Customer perspective by DC Respondents information validity

Validity on the following question of the section II of the checklist – Key factor of the identified objectives and expectations of outsourcing from Customer point of view:

Validity Total	Criteria	Frequency	Percent
Valid	Intellectual Capital gains	1	9,09
	IBM brand and security	1	9,09
	Cost Savings	9	81,82
	Total	11	100,00
Invalid	Missing	2	

Table 12. Key objectives of outsourcing from Customer perspective information validity

Validity on the question regarding the key factors of the identified objectives and expectations of outsourcing from Customer point of view by local Respondents:

Validity PT	Criteria	Frequency	Percent
Valid	Intellectual Capital gains	0	0,00
	IBM brand and security	1	11,11
	Cost Savings	8	88,89
	Total	9	100,00
Invalid	Missing	0	

Table 13. Key objectives of outsourcing from Customer perspective by local Respondents information validity

The following table shows the validity of the information collected from the DC Respondents.

Validity DC	Criteria	Frequency	Percent
Valid	Intellectual Capital gains	1	50,00
	IBM brand and security	0	0,00
	Cost Savings	1	50,00
	Total	2	100,00
Invalid	Missing	2	

Table 14. Key objectives of outsourcing from Customer perspective by DC Respondents information validity

Validity on the next question of the section II of the checklist – Objectives and expectations of DC's from IBM point of view:

Validity Total	Criteria	Frequency	Percent
Valid	Centralization of services	1	2,63
	Transformation of services	1	2,63
	Create value to customers	1	2,63
	Resources reduction	2	5,26
	Economy of Scale	3	7,89
	Standardization of processes/services	4	10,53
	Optimization	4	10,53
	Intellectual Capital gains	7	18,42
	Cost Savings	15	39,47
	Total	38	100,00
Invalid	Missing	0	

Table 15. Objectives DC's from IBM perspective information validity

Validity on the question regarding the objectives and expectations of DC's from IBM point of view by local Respondents:

Validity PT	Criteria	Frequency	Percent
Valid	Centralization of services	1	3,57
	Transformation of services	1	3,57
	Create value to customers	1	3,57
	Resources reduction	2	7,14
	Economy of Scale	3	10,71
	Standardization of processes/services	2	7,14
	Optimization	3	10,71
	Intellectual Capital gains	4	14,29
	Cost Savings	11	39,29
	Total	28	100,00

Invalid	Missing	0	
----------------	---------	---	--

Table 16. Objectives of DC's from IBM perspective by local Respondents information validity

The following table shows the validity of the information collected from the DC Respondents.

Validity DC	Criteria	Frequency	Percent
	Centralization of services	0	0,00
	Transformation of services	0	0,00
	Create value to customers	0	0,00
	Resources reduction	0	0,00
	Economy of Scale	0	0,00
	Standardization of processes/services	2	20,00
	Optimization	1	10,00
	Intellectual Capital gains	3	30,00
	Cost Savings	4	40,00
Valid	Total	10	100,00
Invalid	Missing	0	

Table 17. Objectives of DC's from IBM perspective by DC Respondents information validity

Validity on the next question of the section II of the checklist – Objectives and expectations of DC's from IBM point of view by Importance Classification (Key Factor):

Validity Total	Criteria	Frequency	Percent
	Centralization of strategic services	1	4,55
	Standardization of processes/services	1	4,55
	Optimization	1	4,55
	Revenue	2	9,09
	Economy of Scale	2	9,09
	Intellectual Capital gains	3	13,64
	Cost Savings	12	54,55
	Valid	Total	22
Invalid	Missing	0	

Table 18. Key objectives of DC's from IBM perspective information validity

Validity on the question regarding the key factors of the identified objectives and expectations of DC's from IBM point of view by local Respondents:

Validity PT	Criteria	Frequency	Percent
	Centralization of strategic services	0	0,00
	Standardization of processes/services	0	0,00
	Optimization	1	11,11
	Revenue	0	0,00
	Economy of Scale	0	0,00
	Intellectual Capital gains	0	0,00
	Cost Savings	8	88,89
	Valid	Total	9
Invalid	Missing	0	

Table 19. Key objectives of DC's from IBM perspective by local Respondents information validity

The following table shows the validity of the information collected from the DC Respondents.

Validity DC	Criteria	Frequency	Percent
Valid	Centralization of strategic services	1	7,69
	Standardization of processes/services	1	7,69
	Optimization	0	0,00
	Revenue	2	15,38
	Economy of Scale	2	15,38
	Intellectual Capital gains	3	23,08
	Cost Savings	4	30,77
	Total	13	100,00
Invalid	Missing	0	

Table 20. Key objectives of DC's from IBM perspective by DC Respondents information validity

Validity on the following question – Relation between outsourcing and Delivery Center objectives and expectations.

Validity Total	Criteria	Frequency	Percent
Valid	Common factors	1	9,09
	Same	2	18,18
	Different	3	27,27
	Relation exists	5	45,45
	Total	11	100,00
Invalid	Missing	2	

Table 21. Relation between outsourcing and DC's objectives information validity

Validity on the question regarding the relation between the objectives and expectations of outsourcing and Delivery Centers by local Respondents:

Validity PT	Criteria	Frequency	Percent
Valid	Common factors	1	11,11
	Same	1	11,11
	Different	3	33,33
	Relation exists	4	44,44
	Total	9	100,00
Invalid	Missing	0	

Table 22. Relation between outsourcing and DC's objectives by local Respondents information validity

The following table shows the validity of the information collected from the DC Respondents.

Validity DC	Criteria	Frequency	Percent
Valid	Common factors	0	0,00
	Same	1	50,00
	Different	0	0,00
	Relation exists	1	50,00
	Total	2	100,00
Invalid	Missing	2	

Table 23. Relation between outsourcing and DC's objectives by DC Respondents information validity

Validity on the following question – Impact of DC's on service quality.

Validity Total	Criteria	Frequency	Percent
Valid	Negative impact: Communication/knowledge transfer	1	2,86

	No impact	1	2,86
	Positive impact - Changes on the way customers work	1	2,86
	Negative impact - Lack of motivation of people	1	2,86
	Negative impact - Parallel/transition phases very short	1	2,86
	Negative impact - Different Language	1	2,86
	Positive impact - Efficiency with formatted work	1	2,86
	Positive impact - Changes on the way we work	2	5,71
	Negative impact - Resources rotation	2	5,71
	Positive impact - Creation of procedures and documentation	2	5,71
	Positive impact - Processes/services standardization	3	8,57
	Negative impact - Different cultures	3	8,57
	Negative impact - Any change requires adaptation	3	8,57
	Negative impact - Lack of knowledge on customer environ.	4	11,43
	Negative impact - Lack of skills	4	11,43
	Negative impact - Different ways of working	5	14,29
	Total	35	100,00
Invalid	Missing	1	

Table 24. Impact of DC's on service quality information validity

Validity on the question regarding the impact of the DC's on service quality by local Respondents:

Validity PT	Criteria	Frequency	Percent
Valid	Negative impact: Communication/knowledge transfer	0	0,00
	No impact	1	3,70
	Positive impact - Changes on the way customers work	1	3,70
	Negative impact - Lack of motivation of people	1	3,70
	Negative impact - Parallel/transition phases very short	1	3,70
	Negative impact - Different Language	1	3,70
	Positive impact - Efficiency with formatted work	1	3,70
	Positive impact - Changes on the way we work	1	3,70
	Negative impact - Resources rotation	2	7,41
	Positive impact - Creation of procedures and documentation	2	7,41
	Positive impact - Processes/services standardization	1	3,70
	Negative impact - Different cultures	3	11,11
	Negative impact - Any change requires adaptation	3	11,11
	Negative impact - Lack of knowledge on customer environ.	1	3,70
	Negative impact - Lack of skills	4	14,81
	Negative impact - Different ways of working	4	14,81
	Total	27	100,00
Invalid	Missing	0	

Table 25. Impact of DC's on service quality by local Respondents information validity

The following table shows the validity of the information collected from the DC Respondents.

Validity DC	Criteria	Frequency	Percent
Valid	Negative impact: Communication/knowledge transfer	1	12,50
	No impact	0	0,00
	Positive impact - Changes on the way customers work	0	0,00

	Negative impact - Lack of motivation of people	0	0,00
	Negative impact - Parallel/transition phases very short	0	0,00
	Negative impact - Different Language	0	0,00
	Positive impact - Efficiency with formatted work	0	0,00
	Positive impact - Changes on the way we work	1	12,50
	Negative impact - Resources rotation	0	0,00
	Positive impact - Creation of procedures and documentation	0	0,00
	Positive impact - Processes/services standardization	2	25,00
	Negative impact - Different cultures	0	0,00
	Negative impact - Any change requires adaptation	0	0,00
	Negative impact - Lack of knowledge on customer environ.	3	37,50
	Negative impact - Lack of skills	0	0,00
	Negative impact - Different ways of working	1	12,50
	Total	8	100,00
Invalid	Missing	1	

Table 26. Impact of DC's on service quality by DC Respondents information validity

Validity on the following question – Impact of DC's on local people.

Validity Total	Criteria	Frequency	Percent
Valid	Increase of motivation (transfer of tedious work)	1	2,33
	Resistance	1	2,33
	Denial	1	2,33
	Difficulty in understanding the model	4	9,30
	Deficient collaboration	4	9,30
	Insecurity and fear	5	11,63
	Decrease of motivation	5	11,63
	Team Conflicts	5	11,63
	Resources reduction	6	13,95
	Decrease of responsibility and ownership	11	25,58
	Total		43
Invalid	Missing	1	

Table 27. Impact of DC's on local people information validity

Validity on question regarding the impact of the DC's on local people by local Respondents:

Validity PT	Criteria	Frequency	Percent
Valid	Increase of motivation (transfer of tedious work)	1	2,78
	Resistance	1	2,78
	Denial	1	2,78
	Difficulty in understanding the model	4	11,11
	Deficient collaboration	3	8,33
	Insecurity and fear	3	8,33
	Decrease of motivation	4	11,11
	Team Conflicts	3	8,33
	Resources reduction	5	13,89
	Decrease of responsibility and ownership	11	30,56
	Total		36
Invalid	Missing	0	

Table 28. Impact of DC's on local people by local Respondents information validity

The following table shows the validity of the information collected from the DC Respondents.

Validity DC	Criteria	Frequency	Percent
Valid	Increase of motivation (transfer of tedious work)	0	0,00
	Resistance	0	0,00
	Denial	0	0,00
	Difficulty in understanding the model	0	0,00
	Deficient collaboration	1	14,29
	Insecurity and fear	2	28,57
	Decrease of motivation	1	14,29
	Team Conflicts	2	28,57
	Resources reduction	1	14,29
	Decrease of responsibility and ownership	0	0,00
Total		7	100,00
Invalid	Missing	1	

Table 29. Impact of DC's on local people by DC Respondents information validity

Validity on the following question – Problems and barriers of DC's implementation.

Validity Total	Criteria	Frequency	Percent
Valid	Lack of future strategic vision	1	2,17
	Local people behaviour	1	2,17
	Resources rotation	1	2,17
	Different work time period	1	2,17
	Countries regulations	1	2,17
	Lack of trust/communication between both sides	2	4,35
	Lack of skills	2	4,35
	Inaccurate service model	3	6,52
	Customers resistance	4	8,70
	Lack of knowledge on customer environment	8	17,39
	Language	10	21,74
	Deficient procedures and documentation	12	26,09
	Total		46
Invalid	Missing	0	

Table 30. Problems of DC's implementation information validity

Validity on the question regarding the problems and barriers of DC's implementation by local Respondents:

Validity PT	Criteria	Frequency	Percent
Valid	Lack of future strategic vision	1	2,78
	Local people behaviour	1	2,78
	Resources rotation	1	2,78
	Different work time period	1	2,78
	Countries regulations	1	2,78
	Lack of trust/communication between both sides	1	2,78
	Lack of skills	2	5,56
	Inaccurate service model	1	2,78
	Customers resistance	4	11,11
	Lack of knowledge on customer environment	5	13,89

	Language	8	22,22
	Deficient procedures and documentation	10	27,78
	Total	36	100,00
Invalid	Missing	0	

Table 31. Problems of DC's implementation by local Respondents information validity

The following table shows the validity of the information collected from the DC Respondents.

Validity DC	Criteria	Frequency	Percent
Valid	Lack of future strategic vision	0	0,00
	Local people behaviour	0	0,00
	Resources rotation	0	0,00
	Different work time period	0	0,00
	Countries regulations	0	0,00
	Lack of trust/communication between both sides	1	10,00
	Lack of skills	0	0,00
	Inaccurate service model	2	20,00
	Customers resistance	0	0,00
	Lack of knowledge on customer environment	3	30,00
	Language	2	20,00
	Deficient procedures and documentation	2	20,00
Total		10	100,00
Invalid	Missing	0	

Table 32. Problems of DC's implementation by DC Respondents information validity

Validity on the next question of the section II of the checklist – Impact of DC's on the Outsourcing Business.

Validity Total	Criteria	Frequency	Percent
Valid	Negative impact - Adaptation is needed	1	5,26
	Positive impact - Cost savings	1	5,26
	Positive impact - Forces local locations to be structured	1	5,26
	Positive impact - For International Customers	1	5,26
	Positive impact - For Customers with a financial vision	1	5,26
	No impact	2	10,53
	Negative impact - For National and public Customers	2	10,53
	Positive impact - Optimization/efficiency program at DC's	3	15,79
	Negative impact - Service provided	3	15,79
	Positive impact - Customer knowledge about DCs; IBM global	4	21,05
	Total		19
Invalid	Missing	1	

Table 33. Impact of DC's on the Outsourcing Business information validity

Validity on the question of the impact of the DC's on the Outsourcing Business by local Respondents:

Validity PT	Criteria	Frequency	Percent
Valid	Negative impact - Adaptation is needed	1	7,14
	Positive impact - Cost savings	1	7,14
	Positive impact - Forces local locations to be structured	1	7,14

	Positive impact - For International Customers	1	7,14
	Positive impact - For Customers with a financial vision	1	7,14
	No impact	2	14,29
	Negative impact - For National and public Customers	2	14,29
	Positive impact - Optimization/efficiency program at DC's	1	7,14
	Negative impact - Service provided	2	14,29
	Positive impact - Customer knowledge about DCs; IBM global	2	14,29
	Total	14	100,00
Invalid	Missing	0	

Table 34. Impact of DC's on the Outsourcing Business by local Respondents information validity

The following table shows the validity of the information collected from the DC Respondents.

Validity DC	Criteria	Frequency	Percent
	Negative impact - Adaptation is needed	0	0,00
	Positive impact - Cost savings	0	0,00
	Positive impact - Forces local locations to be structured	0	0,00
	Positive impact - For International Customers	0	0,00
	Positive impact - For Customers with a financial vision	0	0,00
	No impact	0	0,00
	Negative impact - For National and public Customers	0	0,00
	Positive impact - Optimization/efficiency program at DC's	2	40,00
	Negative impact - Service provided	1	20,00
	Positive impact - Customer knowledge about DCs; IBM global	2	40,00
Valid	Total	5	100,00
Invalid	Missing	1	

Table 35. Impact of DC's on the Outsourcing Business by DC Respondents information validity