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ICT Outsourcing and Insourcing Trends in South Africa.

THE SEARCH FOR THE SOURCE:

Analysis of what drives the repetitive ICT outsourcing and insourcing ebb and flow phenomena in the South African ICT Industry

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A consultancy report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Business Administration

Johannesburg, 2017

(Version August 2017)

DECLARATION

I, Pieter Jacobus Becker, declare that this consultancy report own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the Graduate School of Business Administration, University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Pieter Jacobus Becker

Signed at Pretoria, South Africa

On the 30th day of August 2017.

DEDICATION

The best thing that I found while doing this research, is the undying love and endless support and sacrifices that my wife and kids make, so we can succeed. Every goal I reach, I reach because of them.

This research is dedicated to Marike Becker, Ethan Andries Becker, Jonathan Becker and Michaela Becker.

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I would like to acknowledge, all the research participants, including T-Systems and Eskom executives for the time to go through the tiresome interviews and endless survey questions.

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Supervisor:	Jessica Louwrens
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	Supplementary Document 2: Survey Questionnaire
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LIST OF ACRONYMS

AI	Artificial intelligence
CA	Competitive Advantage
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CIO	Chief Information Officer
ExaaS	Expertise as a service
IaaS	Infrastructure as a service
IoT	Internet of things
ICT	Information Communication Technology
IT	Information Technology
KPI	Key Performance Indicators
MIS	Management Information Systems
PaaS	Platform as a Service
SaaS	Software as a Service
SLA	Service Level Achievements
VR	Virtual Reality

EXECUTIVE SUMMARY

The goal of this study has been to research two factors: What are the drivers for companies to outsource ICT services, and secondly what are the drivers for those companies to insource those services and then to understand whether there is indeed a trend to this phenomenon where companies continuously insource and outsource these services and if it does exist, the reasons for such a trend. The research was performed using analytical methods such as qualitative and quantitative research in the form of surveys, interviews, data collection and literature review to determine the underlying factors of this phenomenon in South Africa.

The results of this research found that there are commonalities between the research that was conducted internationally and this research done in South Africa. The main drivers to outsource and insource services are mainly related to the pursuit of cost efficiencies and a company outsourced services moving closer to the business as the company's strategies evolved.

The results of this research have shown that there does indeed exist a trend where companies insource and outsource their services as the technology matures, the costs decrease and strategies changes where outsourced services are now critical to business value delivery. The trend to change strategies are typically related to the original contracting terms of between 3-7 years, but the main driver for the trends related to how quickly a technology matured so that it could be delivered cheaper and faster internally to the company.

The main highlight of the research can be found in chapter 6.6 "The Search for the Source Model" where the evolution of outsourcing and insourcing is described and the future of outsourcing predicted based on the research conducted. The results indicated that insourcing and outsourcing as we know it will evolve into something new. The new model will have multi-sourcing at its core where many suppliers each deliver their unique service to the same customer together with many other suppliers. This will result in customers needing to become more competent in managing multi-vendor relationships and service.

Expertise as a Service (ExaaS) is likely to become the next nice where outsourcers need to operate to continue to add value to customers. The current outsourcing market has become saturated with competitors, low margins and many commoditised products.

As customer's strategies evolve to embrace new innovations and technologies so too does the outsourcing models need to evolve beyond providing commoditised services, as a service. Outsourcing companies should rather move into the higher cognitive value

chain that focuses on adding business value to the end user throughout the business value chain and up and down the information technology stack to remain relevant.

Keywords: Outsourcing, Insourcing, Information technology, Information communication technology, South Africa, Expertise as a Service, Outsourcing trends.

1 INTRODUCTION

The ICT industry in South Africa has seen a trend in which companies initially outsource their ICT services and then a few years later insource these services, only to repeat the process and re-outsourced these services repeatedly.

Global studies in this area have uncovered the reasons that companies outsource. There is also research that investigates the reasons that companies insource.

However, there is limited research that exists on the topics of firstly if there is a trend of companies that repeatedly change outsourcing/insourcing strategies, and secondly the reasons that companies repeatedly change their outsourcing/insourcing strategies.

The goal of this study has been to research these two factors: whether there is indeed a trend to this phenomenon and if it does exist, the reasons for such a trend. The research was performed using analytical methods such as qualitative and quantitative research in the form of interviews, data collection and literature review to determine the underlying factors of this phenomenon in South Africa.

1.1 PROBLEM STATEMENT

The main problem is to identify the factors that cause companies to continually oscillate their strategic decisions to outsource and insource their ICT services.

The first sub-problem was to identify the driving factors behind decisions to outsource ICT services in South Africa

The second sub-problem was to identify the driving factors behind the decisions to insource ICT services in South Africa

The third sub-problem was to determine if there is a **trend** to insource previously outsourced ICT services in South Africa and then re-outsourced them.

The fourth sub-problem was to determine the driving factors leading to the existence of such a trend (if it exists)

1.2 SIGNIFICANCE OF THE STUDY

The study fills a gap in current and available research that analyses trends by attempting to identify possible patterns and the reasons that contribute to the creation of such. What was not found in the literature reviewed is extensive research on whether a trend exists for the reasons that ICT outsourcing companies' customers continually outsource insourced services along this pattern.

The study endeavoured to provide guidance to companies that may consider the options with regard to sourcing of ICT services and potentially provide guidance to ICT outsourcing companies by showing existing trends and the reasons for their existence. This may hopefully aid in the better understanding of customer decisions.

1.3 DELIMITATIONS OF THE STUDY

The study was limited to companies that are publicly listed and parastatal companies in South Africa. The study was not limited by company size, industry or sector within South Africa. The companies selected had previously insourced services, outsourced services, or they were at the time of the study been outsourcing services, that had at some stage been insourced. The study focussed on the ICT market in South Africa

2 LITERATURE REVIEW

2.1 INTRODUCTION

This literature review defines outsourcing and insourcing. It covers the drivers to company outsourcing and insourcing of ICT services. The review also looked at what kind of services are outsourced. The review was eventually concluded with the determination of whether there is a trend between insourcing and outsourcing.

2.2 WHAT OUTSOURCING AND INSOURCING IS?

Outsourcing and insourcing can quickly become confusing terms especially when one combines it with terms like nearshoring, reshoring, resourcing, onshoring or just plain sourcing. Tate (2017) describes these in terms of making or buying the service. Before making the service, a company is sourcing the service internally to the company. If a company is buying the service from another firm then they are sourcing the service from outside the company, this would be deemed as outsourcing the service. (Foerstl, Kirchoff, & Bals, 2016; Tate & Bals, 2017)

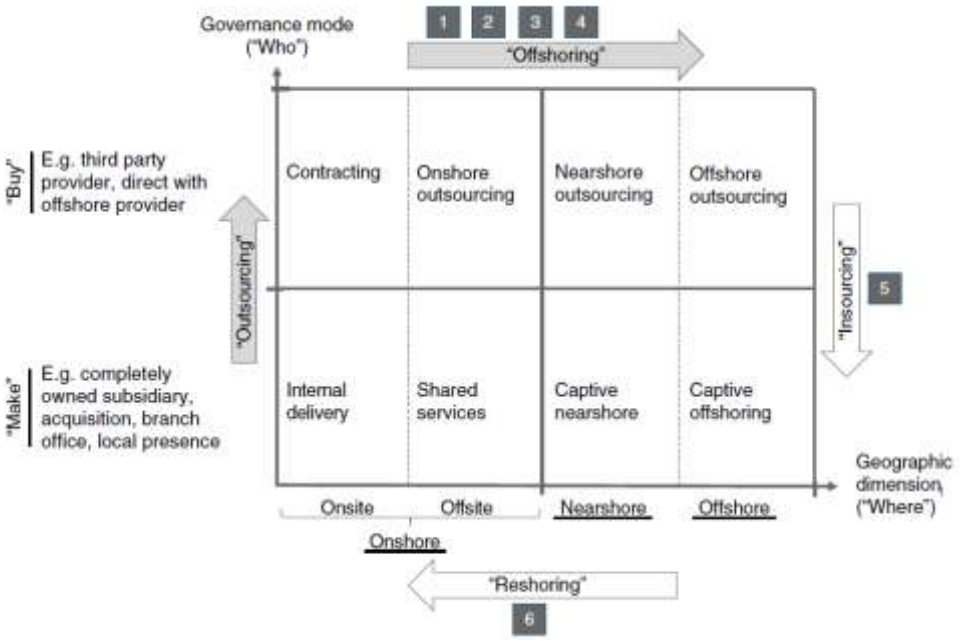


Figure 1: Outsourcing. (Foerstl et al., 2016; Tate & Bals, 2017)

Figure 1 Represents the different insourcing and outsourcing, nearshoring and offshoring options that exist (Foerstl et al., 2016; Tate & Bals, 2017)

2.3 OUTSOURCING

2.3.1 What ICT outsourcing is

ICT outsourcing is the use of external ICT service providers to provide ICT enabled processes and servers or infrastructure solutions on behalf of the company to company or on behalf of the company. Outsourcing is buying the product or service from another firm external to the company. (Tate & Bals, 2017).

Kern (2002) proposed a model where IT Outsourcing can be categorised as follows.

- Insourcing – All the company's resources are under their own management.
- Traditional outsourcing – The outsourcer will take ownership of all the companies resources and provide services that they company then buys from the outsourcer. (Kern et al., 2002; Sebesta, 2013)
- Buy-In –External resources are provided to the company, and the company manages these resources as they would manage their own staff (Kern et al., 2002; Sebesta, 2013)
- Application Service Provider – The provider will provide remote resources on a rental agreement to the customer and provide these services over the internet. (Kern et al., 2002; Sebesta, 2013).
- Software as a Service (SaaS) –The external provider owns all the infrastructure and software and rents it out to the customer on a per use basis.(Kern et al., 2002; Sebesta, 2013).

In Summary, ICT Outsourcing is any ICT service, process or product that is created, provided or produced and sold outside of the company and then bought by the company. (Outsource Magazine, 1999; Tholons, 2017).

2.3.2 The main drivers for outsourcing

The research that was done by UCT (2008) revealed that the outsourcing decisions of companies that are irrelevant of company size or type were cost, in-house expertise and core functions.(Johnson et al., 2008).

In Letica's (2016) study it was found that management decided to go for outsourcing and its primary driver cost reduction, and only after cost reduction, would the secondary driver be to focus on the companies key activities. (Letica, 2016)

Competitive advantage comes from companies that can provide products of a superior quality at a low cost complicated by the ability that a company should have to react to market changes very quickly and adapt accordingly. This means that companies are driven towards focusing their core activities on those components that they specialise in

the most (their core), and then outsource the rest to companies whose speciality it is to run those outsource activities for them.(Letica, 2016)

2.3.2.1 Cost is a driver of ICT Outsourcing

The main reason for outsourcing a company's ICT services is related to cost (Letica, 2016). Qu, Oh and Pinsonneault (2010) research indicate that cost reduction from outsourcing contributes indirectly to the firm's performance. (Qu et al., 2010), This was also highlighted by Grama and Pavaloaia (2014) in which it was concluded that diminishing IT costs is one of the biggest drivers towards why a company should outsource (Grama & Păvăloaia, 2014). ICT resources are the most expensive part of any business and ICT Outsource companies can leverage on the economies of scale and utilise expensive resourced across multiple clients making it possible to significantly bringing down the utilisation cost of that resource that small companies would not be able to achieve. (Barthelemy, 2001).

In a study (Lacity & Willcocks, 1998) that 61 case studies over 40 companies covering 141 executives found 5 interesting cost-saving decisions that they found in Outsourcing, Namely:

1) If a company only selectively outsourced its IT, it found better cost saving than if they would if it totally outsource or insource its IT.
2) If the IT managers and the senior executives worked together and make their IT decisions together they achieved higher cost savings than those who did not make the decisions together.
3) The more proposal and bids from external and internal outsourcing providers were considered, the better cost savings were experienced compared to companies that only considered external bids
4) It is better to have short term outsourcing contracts than long-term contracts as short-term contracts show better cost saving
5) The more detailed the contracts were the better cost savings were achieved.

2.3.2.2 Core is a driver of ICT Outsourcing

The second factor relates to the core and non-core business functions. The company should decide what resources to keep under its control and what functions to outsource. All the functions that do not relate to the core function of the business can thus be outsourced to a 3rd party Outsourcer that can provide these services better than the company can provide them internally. (Barthelemy, 2001; K. A. Johnston, T. Abader, S. Brey, & A. Stander, 2009)

Qu (2010) also agrees that companies that outsource their functional IT units and their IT infrastructure services will gain a better befit from outsourcing, than companies that outsource their supply chain and core production services (Qu et al., 2010)

2.3.2.3 Risk Management is a driver of ICT Outsourcing

Johnston (2009), Benamati & Rajkumar (2002); Lee, Huynh, Kwok, Pi, (2003) Ketler & Willems (1999) research all found that risk management is a key decision factor when it comes to deciding if a company should outsource or not. Issues such as loss of control over the company's resources and deliverables, cultural and language barriers that would exist when the two companies work together and complexity related to the infrastructure are all factors that contribute to the impact of the outsourcing decisions that need to be made. (Benamati & Rajkumar, 2002; K. Johnston et al., 2009; Ketler & Willems, 1999; Lee, Huynh, Kwok, & Pi, 2003)

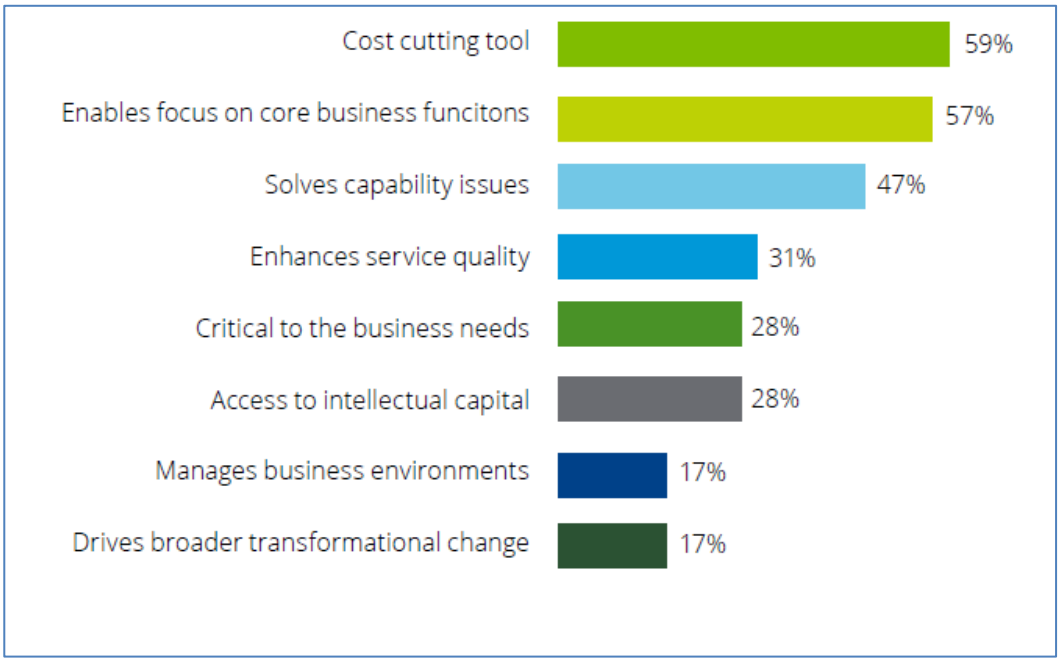


Figure 2: Motivations to outsource. (Deloitte Consulting Llp, 2016)

Figure 2 represents the survey results to show what percentage of respondents chose to outsource services for specific reasons (Deloitte Consulting Llp, 2016)

The main ICT activities that are being outsourced

According to Dibbern (2004) infrastructure is the most outsourced function of all businesses surveyed. It is also one of the most mature services that are being outsourced. Other functions like systems analysis, project management, implementation of systems, business processes and infrastructure implementations are also common services that are being outsourced. (Dibbern et al., 2004; Johnson et al., 2008)

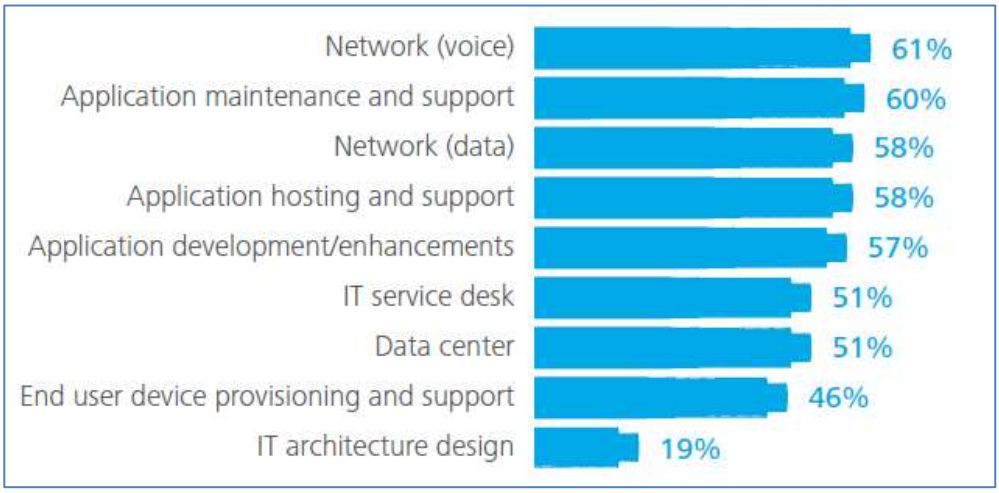


Figure 3: Current outsourcing (Deloitte Consulting LLP, 2014)

Figure 3 represents the primary services that was outsourced

In Deloitte's 2016 survey (2016) the core reasons to outsource have moved from cost toward value creation through innovation. This is largely due to the advancements in technology and the fact that process improvement has been achieved. The survey pointed out what customers wanted from outsourcing providers, was innovation and value. (Deloitte Consulting Llp, 2016)

The best summary found in the literature was done by Bustinza (2010) on what advantages companies traditionally obtain by perusing an outsourcing strategy.

- Converting fixed cost into variable costs
- To reduce cost in terms of employees, smaller capital investments
- Benefits of economies of scale utilised by specialised outsourcers
- Getting newly developed products to markets quicker
- To get the latest innovations and technologies through the outsource companies and not needing to invest in them by the company
- To focus on the core of the business by applying your resources to the activities in the business where they provide the highest value. (Bustinza et al., 2010)

2.3.3 Proposition:

The main drivers for ICT outsourcing are cost reductions and the focus on core business functions.

2.4 INSOURCING

2.4.1 What insourcing is

Insourcing is a term used to describe when a company takes back the service that they have previously given to an outsource company to provide. (Alwasel, Clegg, & Schroeder, 2016; Bekker, 2017). The company does not rely on an external company or person to provide the service

"(Investopedia, 2010). Dibbern (2004) defined insourcing as where a company uses its own internal Information Technology (IT) department to get IT services from.

2.4.2 The main drivers for insourcing

Foerstl's research (2016) indicates that although insourcing has been discussed in the press the academic literature is limited. He continued to argue that the persistent question that remains fragmented in literature is, that the drivers for insourcing are related to the failures to realise the cost benefits that are promised initially by outsourcing strategies, and management's attitude toward the hidden costs and risk over loss of control over operations (Foerstl et al., 2016)

2.4.2.1 Core / Supplier Performance is a driver of ICT insourcing

In the Deloitte (2016) Global survey it was found that cost moves to the second position., The primary position goes to supplier performance. Supplier performance relates to how the to outsource supplier delivered the services that were outsourced to them in comparison to what the company originally envisioned the benefit would be. (Deloitte Consulting Llp, 2016) . The envisioned benefit for IT outsources companies revolves around that fact that IT outsourcing companies focus on continued innovation and cutting-edge technologies and if that did not directly materialise in the core service improvements the company envisioned, then they will insource (Bustinza et al., 2010; TSSA, 2016).

Companies that insource will receive a higher benefit from knowledge sharing and coordination if they retain their core business functions like their production and supply chain services, (Qu et al., 2010)

2.4.2.2 Cost realisation is a driver of ICT insourcing

The 2016 survey by Deloitte(2016) confirmed this - that companies considered insourcing due to the cost realisations that were envisioned originally not materialising. (Deloitte Consulting Llp, 2016) (Hartman, Ogden, Wirthlin, & Hazen, 2017)

A company that did not outsource their IT services correctly would find it more costly to outsource in comparison to a company that did (Lacity & Willcocks, 1998) and thus the company would likely reconsider its outsourcing decisions and then insource these services (Lacity & Willcocks, 1998).

Barthelemy (2001) also substantiated these findings in his report which shows that companies are outsourcing 38% of their IT functions. Of the 50 companies surveyed 14% deemed their outsourcing operations were considered as unsuccessful, the key factor was costs that could not be pinpointed by management. (Barthelemy, 2001)

Wen Guang Qu (2010) research found that some companies found great success in outsourcing, but other companies found better results by insourcing. However, it depends on what type of business they are in and what role IT plays in their company. Qu found that IT insourcing is more beneficial to companies that keep their business process development in-house, and he concluded by advising that companies should move IT into their core business strategies and be involved in the development of their IT resources. (Qu et al., 2010).

2.4.2.3 Incorrect inputs are drivers of ICT insourcing

Qu's research showed that IT business processes showed significant benefits from insourcing over outsourcing specifically the enhanced coordination and shared knowledge the core business and IT departments received from working together internally. (Qu et al., 2010). Management that received incorrect input from consultants, and used incorrect measurement criteria to make the outsourcing decisions initially were found to insource the services that were outsourced. (Foerstl et al., 2016; Hartman et al., 2017; Tate, 2014)

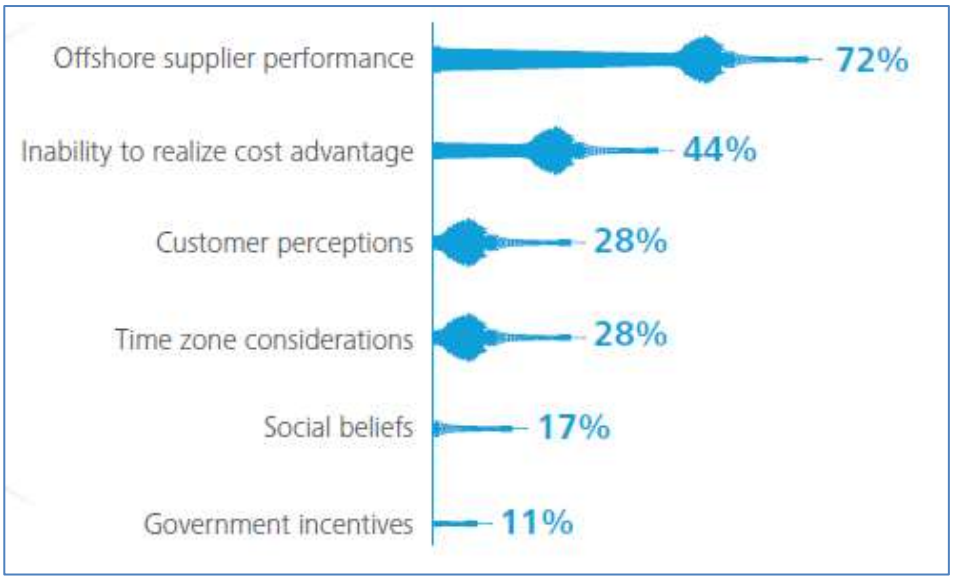


Figure 4: Main drivers to outsource *(Deloitte Consulting Llp, 2016)*

Figure 4 represents what the drivers were when companies chose to outsource their services *(Deloitte Consulting Llp, 2016)*

2.4.3 Proposition:

The main drivers for ICT insourcing are the non-realisation of the original outsourcing benefits, specifically the cost reductions and the lack of materialisation of increased performance in the core services.

2.5 Is there a trend for ICT Insourcing and outsourcing?

Foerstl (2016) studies suggest that the outsourcing trend is being reversed towards insourcing. The study continues to indicate that 40% of managers observe that the outsourcing decisions are being reversed within 5 years of the initial outsourcing decision (Foerstl et al., 2016; Tate, 2014). Deloitte (2014) looked at the insourcing trend but in the following (2016) survey Deloitte did not focus on the trend but simply focussed on what services were being outsourced. Limited studies exist to determine if there is a trend.

The studies that were mentioned focused on the drivers of outsourcing or insourcing. Their results indicate that there is a gap in the literature to fully answer the question. There is a definite need for further research in this area. (Deloitte Consulting LLP, 2014, 2016; Foerstl et al., 2016; Tate, 2014)

2.5.1 Proposition:

There does seem to be a trend, but further research is needed to confirm how extensive the trend is and determine the reasons that the trend may exist.

2.6 Conclusion

Outsourcing companies focus on specialising in services that they can provide to customers. This gives them the ability to apply the latest technologies and innovations into the services that they provide, they can also employ highly skilled and expensive personnel and resources but due to the economies of scale that outsourcers have over other companies, the outsourcers can cross utilise these resources across customers to offset the cost. This makes outsourcing an attractive option seemingly with the promise to reduce costs and give the company the freedom to focus on its core services.

Insourcing, on the other hand, is a combination of lessons learned from what should and should not have been done in the initial outsourcing contracts and technologies that continued to enhance beyond the original need of the business. Such enhancement may require more technical skills to manage these systems than originally envisioned in the outsourcing industry.

What has not been found in the literature reviewed is extensive research on whether there exists a trend towards outsourcing and then insourcing and then outsourcing. Again, it can be seen from the literature that companies ebb and flow between these decisions, and as the outsourcing industry matured so did the scale of outsourcing (Deloitte Consulting LLP, 2014; Gartner_inc, 2012)

The question whether there is an ebb and a flow between outsourcing and insourcing factors has been answered in the literature reviewed with a clear ‘yes’. However, the question regarding why the same company would repeatedly outsource previously insourced services has not been covered sufficiently in the literature that has been reviewed. Hence the need for this research.

3 RESEARCH METHODOLOGY

The structure of the research methodology section that follows outlines the paradigm that was used to view the knowledge, the approach, procedure for data collection and the method that was used for the analysis of the data.

3.1 RESEARCH METHODOLOGY / PARADIGM

Based on the research done in the literature review it was gathered that there are a very limited number of studies that focus on what triggers the outsourcing practice in South Africa and fewer still that focus on the insourcing practice. But the research on the reasons for a correlation between the two is still in need. Hence data collection on the two core topics namely outsourcing and insourcing decisions was conducted with secondary data from literature done in prior research. The trend analysis was also done with secondary data from previous research studies and found in the literature reviewed.

The core of the study, namely why there is a trend, the drivers of the trend to outsource, then insource, thereafter outsource again and continue in this cycle, was done with qualitative research. This was done through the medium of individual interviews. Interviews enabled the researcher to acquire the information (in the secondary data) needed to assist with determining the criteria for a trend.

3.2 RESEARCH DESIGN

The research was designed to get the core answers to the main problem and subproblems through interviews. Interviews gave the advantage to provide rich open-ended questions with their relevant answers that responded to the “why” questions. The disadvantages were access to the right individuals to interview, ensuring that the correct questions were asked, ensuring that the answers were correctly interpreted. The interviews also got background information that is related to the main and sub-problems from the survey questions that was also asked in the interview. A qualitative thematic content analysis was done to ensure the trends and correlations are identified per the problem themes. A deductive approach for analysing the data was done to identify a trend from the data gathered.

The advantage here was that the data are easily accessible, easy to interpret, and reliable. The disadvantage however was that if more in-depth research was needed then some of the data might have been restricted and authorization would have been needed to gain access to this data.

3.3 POPULATION AND SAMPLE

3.3.1 Population

For this research, it was crucial that the population in the target group was made up of individuals who are directly involved in insourcing or outsourcing strategy decision making. Thus, the population in the target market was made of decision makers in public listed, parastatal and outsourcing companies in South Africa. The specific roles in the population that were selected for the interviews and surveys were CIO, COO and CFO roles, account managers, service delivery managers and contract managers. These roles require direct influence and involvement in contracting decisions made for the organisation.

3.3.2 Sample and sampling method

The sampling method was primarily Convenience Sampling specifically snowball sampling.

Sampling Frame: The selected population work in South Africa across various industries that had services Insourced and or Outsourced. Specific focus was placed on the ICT services but not limited to this service only.

Known decision makers were selected that had been previously involved in the decision-making process when insourcing or outsourcing strategies were made, to enable the researcher to obtain the sample for the interviews, The researcher sought out companies that are known in the media or known to the researcher, that had services previously outsourced and insourced. Like Eskom and Transnet and T-Systems. Then the researcher contacted potential networkers that might be able to introduce the researcher to these individuals to obtain their consent to be interviewed. The interviewees that then agreed to the interview was then asked at the end of the interview if they can recommend any additional potential interviewees that the researcher could interview that had the appropriate exposure to be representative of the population and sampling frame that was able to answer the specific interview questions. Those recommended contacts were then contacted and interviewed.

For the online survey, a contact list of the population sampling frame was gathered, this frame selected individuals that have previously worked in an insourced or outsourced service. Voluntary response sampling was utilised to obtain the survey responses.. Snowball sampling method was also used here and the survey were forwarded to over 300 potential respondents. Of those respondents over a 100 chose to complete the survey that enabled the researcher to obtain a larger sample and remove some of the bias and introduce more random factors and more industries to ensure that the sample remained representative of the population.

The reason these above methods was chosen was due to the nature of the research. A limited number of individuals are involved in insourcing and outsourcing strategy decisions that had the appropriate trends and timelines. To obtain the appropriate population sample, convenience sampling was used as the researcher's ability to gather the sample size regarding whom to survey and or interview was available but to obtain the right sample size snowball sampling needed to be used to get the appropriate respondents

3.4 THE RESEARCH INSTRUMENT

The researcher was the primary instrument, open and closed questions was asked in interviews. Exploratory factor analysis and thematic content analysis was then be undertaken.

3.5 PROCEDURE FOR DATA COLLECTION

A combination of thematic content analysis for interviews and a deductive approach was done for the trend analysis. The author has access to one of the largest ICT outsourcing companies in South Africa, with over 120 clients locally and much more internationally. This access gives the author the ability to source data like, what companies have outsourced any components of their IT, and then insourced them again over time. The access also gives the author the ability to directly access the senior management of the companies that are currently outsourcing their services to the ICT outsourcing company that the author has access to.

3.6 THE PROCESS OF HOW THE RESEARCH WAS CONDUCTED.

Task Name	Duration	Start	Finish
Identify Scope of data, gather data	21d	2017/05/08	2017/06/05
Analyse the data, identify what was outsourced, over what ti	7d	2017/06/06	2017/06/14
Postulate possible conclusions, questions, assumptions, dec	7d	2017/06/15	2017/06/23
Design the standard questionnaire	7d	2017/06/06	2017/06/14
Conduct a trial run with internal resources, and a trial run cus	5d	2017/06/26	2017/06/30
Identify appropriate individuals at the selected companies to	7d	2017/06/06	2017/06/14
Conduct the interviews	15d	2017/07/03	2017/07/21
Write up the findings	15d	2017/07/03	2017/07/21
Compare and analyse the findings	17d	2017/07/03	2017/07/25
Discuss the findings	4d	2017/07/22	2017/07/26
Document Conclusions from findings	4d	2017/07/26	2017/07/31

Figure 5: Research Process

Figure 5 represents the research process that was followed to conduct the research. *Find the detailed process included in Supplementary Document 1*

3.7 DATA ANALYSIS AND INTERPRETATION

A combination of thematic content analysis for interviews and a deductive approach was used for the trend analysis. The main risk with this type of research is access to data and candidates to interview. To mitigate this risk, a larger sample set of candidates was identified in step six of the process.

The second risk is that the candidates that were selected may not have had the relevant data, or the information that they did have, may have been forgotten and tainted over time. To mitigate this risk initial probing questions were asked when scheduling the interviews to determine if the candidate had the relevant background, context and answers.

The third risk was that the incorrect questions were asked. To mitigate the risk pilot interviews were conducted to identify the correct and incorrect approaches and questions to ask.

The fourth risk was that the data would be incorrectly interpreted. To mitigate this, risk a 3rd party was consulted to help interpret the data from an independent point of view. A peer review was also conducted to mitigate this risk.

3.8 LIMITATIONS OF THE STUDY

This study is limited to the South African context, in the ICT industry. Reference has been made to outsourcing and insourcing decisions that were made within the last 20 years only. Companies that specialise in outsourcing ICT services were selected and customers that had previously insourced and outsourced services with ICT Outsourcing companies were selected. Individuals in both the outsourcing provider companies and the insourcing companies were selected to be surveyed and interviewed. Large parastatal companies such as Eskom, Transnet and Old Mutual outsourcing contracts were also reviewed as part of this study.

3.9 VALIDITY AND RELIABILITY

The data used comes from peer-reviewed research in respected journals. The data was also sourced directly from ICT Outsourcing company's records. The interview candidates have worked with or are employed at the specific companies that are being researched to ensure validity.

The interview transcripts were reviewed by peers to ensure that bias was removed and that the open and closed questions were correctly interpreted without prejudice and also to ensure that leading questions were not asked.

4 RESEARCH PLANNING

4.1 TIME-TABLE

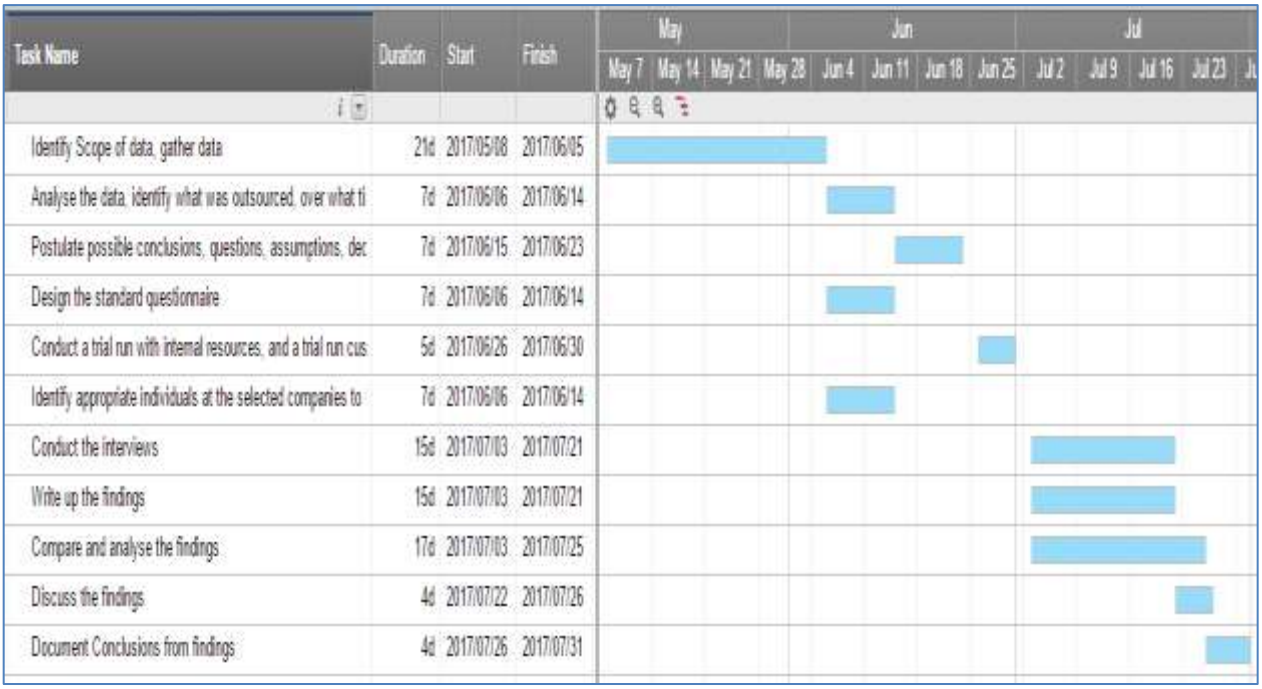
Table 1*: Time Table (Below)*

Table 1 represents the timetable that was followed to conduct the research

Task Name	Duration	Start	Finish
Identify Scope of data, gather data	21d	2017/05/08	2017/06/05
Analyse the data, identify what was outsourced, over what ti	7d	2017/06/06	2017/06/14
Postulate possible conclusions, questions, assumptions, dec	7d	2017/06/15	2017/06/23
Design the standard questionnaire	7d	2017/06/06	2017/06/14
Conduct a trial run with internal resources, and a trial run cus	5d	2017/06/26	2017/06/30
Identify appropriate individuals at the selected companies to	7d	2017/06/06	2017/06/14
Conduct the interviews	15d	2017/07/03	2017/07/21
Write up the findings	15d	2017/07/03	2017/07/21
Compare and analyse the findings	17d	2017/07/03	2017/07/25
Discuss the findings	4d	2017/07/22	2017/07/26
Document Conclusions from findings	4d	2017/07/26	2017/07/31

Table 2: *Schedule (Below)*

Table 2 represents the schedule that was followed in gnat chart format to represent the duration of the research visually



4.2 CONSISTENCY MATRIX 1

Table 3: Consistency Matrix 1

Why do some companies continuously oscillate their strategic decisions to outsource and insource their ICT services?					
Sub-problem	**Literature Review**	**Hypotheses or propositions or questions**	**Source of data**	**Type of data**	**Analysis**
What drives the decisions to **outsource** ICT services in South Africa	(Barthelemy, 2001; Deloitte Consulting Llp, 2016; Johnson, Abader, Brey, & Stander, 2008; Letica, 2016)	The main drivers for ICT outsourcing are cost reductions, and the focus on core business functions.	Interviews, surveys and questionnaire questions.	Nominal – Transcripts and Questionnaire responses	Interview, Thematic content analysis
What drives the decisions to **insource** ICT services in South Africa	(Deloitte Consulting LLP, 2014; Foerstl, Kirchoff, & Bals, 2016; Qu, Oh, & Pinsonneault, 2010; Tate, 2014)	The main drivers for ICT insourcing is the non-realisation of the original outsourcing benefits, specifically the cost reductions and increased performance in the core services not materialising.	Interviews, surveys and questionnaire questions.	Nominal – Transcripts and Questionnaire responses	Interview, Thematic content analysis

4.3 CONSISTENCY MATRIX 2

Table 4: Consistency Matrix 2

Why do some companies continuedly oscillate their strategic decisions to outsource and insource their ICT services?					
Sub-problem	**Literature Review**	**Hypotheses or propositions or questions**	**Source of data**	**Type of data**	**Analysis**
Is there a **trend** to insource previously outsourced ICT services in South Africa and then re-outsource them?	(Deloitte Consulting LLP, 2014, 2016; Foerstl et al., 2016)	There does seem to be a trend, but further research is needed to confirm how extensive the trend is and uncover why the trend exists.	Public companies and parastatal public records, Company Reports, ICT Company Records, Company's Financial Statements.	Ordinal	A deductive approach will be done for the trend analysis.
Why is there a trend to insource previously outsourced ICT services in South Africa and then re-outsource them?	Very limited research exists. This study's purpose is to undertake this research and understand why.	The propositions will become clear as the study progresses. From initial interviews the preliminary data suggests that as companies so does their needs and companies that have once outsourced are more comfortable as outsourcing as a solution for cost / core improvements.	Actual interview and questionnaire questions that will provide the data	Nominal – Transcripts and Questionnaire responses	Interview, Thematic content analysis

5 PRESENTATION OF RESULTS

5.1 INTRODUCTION

The results of the surveys are presented in this chapter. There was a total of 107 survey respondents in the sample in the South African ICT market, ranging from different industries and different company sizes.

The results from the interview are also be presented here. There was a total of 10 interviews done with individuals who have directly been involved in outsourcing and insourcing in the ICT Industry in South Africa.

5.2 FINDING 1 (OUTSOURCING DRIVERS)

There is a common theme across all the participants surveyed. This is supported by the interviews themselves, namely that the top drivers to outsource a service are:

- Outsourcing is seen a cost-cutting tool.
- Outsourcing enables business to focus on their core business.
- It solves capability or capacity issues.
- Outsourcing provides access to intellectual capital or innovation.
- Outsourcing allows for better management of internal business environments.

5.2.1 Surveys results for question 1 (Drivers to Outsource)

Table 5: Survey Results Q1

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Cost cutting tool	0.00	100.00	65.11	25.31	640.70	83
2	Enables focus on core business functions	0.00	100.00	71.21	22.27	496.05	85
3	Solves capability / capacity issues	0.00	100.00	64.75	23.59	556.72	83
4	Enhances service quality	0.00	100.00	56.13	26.14	683.54	76
5	Enhances service delivery	0.00	100.00	56.42	25.55	652.87	77
6	Service is not critical to the business	0.00	100.00	48.58	30.79	948.24	73
7	Access to intellectual capital or innovation	0.00	100.00	57.70	26.01	676.46	79
8	Better management of internal business environments	0.00	100.00	56.49	24.04	577.78	73
9	Drives broader transformational change	0.00	89.00	42.74	25.03	626.53	72
10	Need short term skill / project	0.00	100.00	55.46	28.94	837.74	78
11	Other	0.00	100.00	28.52	35.56	1264.84	44

What are the main drivers to Outsource a service?

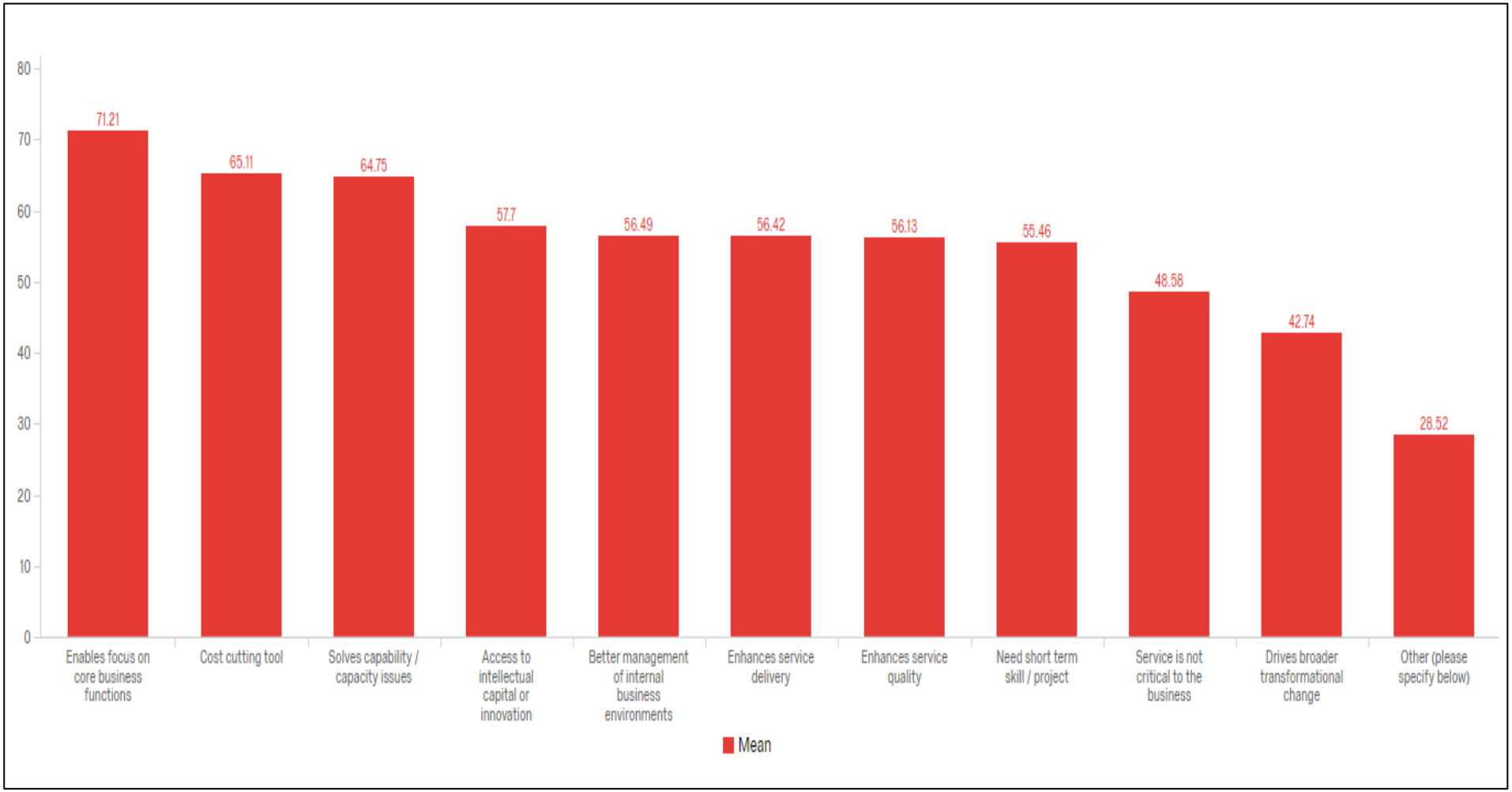


Figure 6: Survey Results Q1 Graph

5.2.2 Interviews results for question 1 (Drivers to Outsource)

Table 6: *Interview Results Q1*

#	Field	Top Driver	Second Driver	Third Driver	Fourth Driver	Fifth Driver
1	Cost cutting tool	86%				
2	Access to Critical Skills		71%			
3	Enables focus on core business functions			57%		
4	Better Quality Service from Outsourcer				28%	
5	Access to Innovation					14%

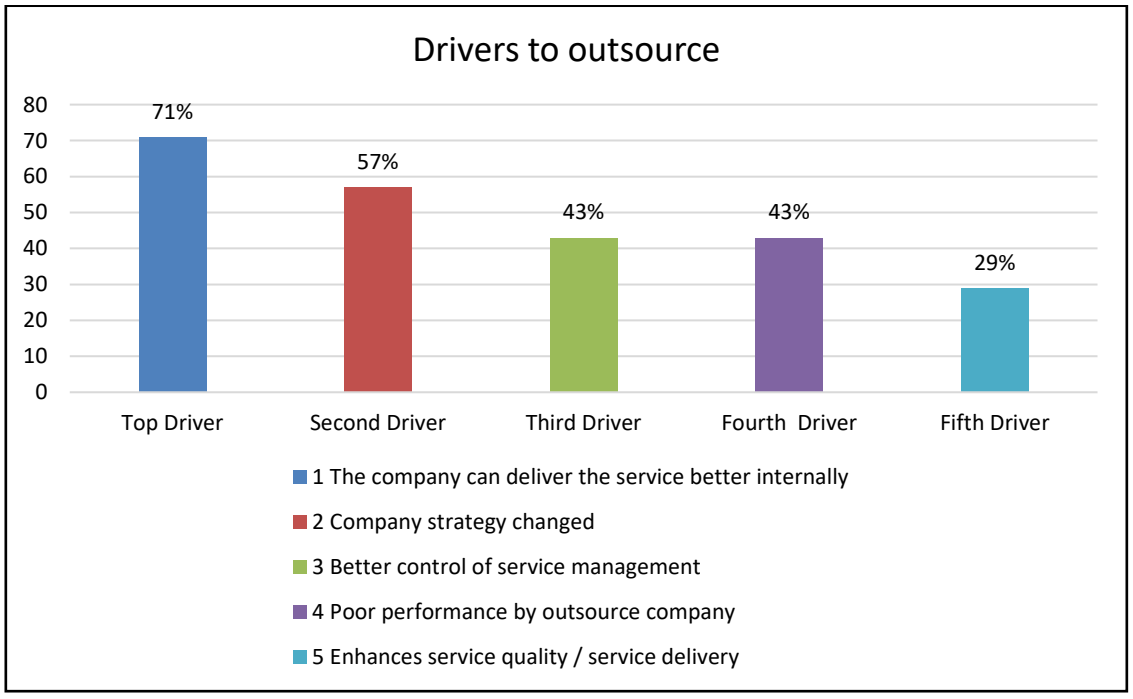


Figure 7: Interview Results Q1 Graph

5.2.3 Conclusion regarding finding 1(Drivers to Outsource)

The research results support the findings in the literature reviews done for global international business. The survey results differ slightly from the interviews conducted where the interviews ranked the drivers in a different order to what was found in the surveys. “Cost cutting tool” came out as a significant primary driver in the interviews, while “Enables focus on core business functions” came out as the primary driver in the surveys.

5.3 FINDING 2 (DRIVERS TO INSOURCE A SERVICE)

A common theme exists across all the participants surveyed and is also supported by the interviews which show that the top drivers to insource a service are:

- poor performance by outsource company
- the company can deliver the service better internally
- company strategy changed
- better control of service management
- enhances service quality/service delivery

5.3.1 Surveys results for question 2 (Drivers to Insource)

Table 7*: Survey Results Q2*

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Poor performance by outsource company	0.00	100.00	63.97	26.21	686.82	73
2	Technology matured and the company could deliver services internally	0.00	96.00	60.72	25.27	638.37	72
3	Cost cutting tool	2.00	100.00	59.63	26.90	723.57	72
4	Outsourced service is now a part of core business functions	0.00	100.00	58.17	27.37	749.11	70
5	Solves capability / capacity issues	0.00	100.00	48.50	25.97	674.28	60
6	Enhances service quality / service delivery	3.00	100.00	61.40	22.95	526.56	63
7	Company strategy changed	4.00	100.00	63.74	22.55	508.51	76
8	Access to intellectual capital or innovation	0.00	90.00	55.44	23.58	556.02	61

9	Better control of service management	0.00	94.00	63.06	22.53	507.39	69
10	Drives broader transformational change	0.00	94.00	50.51	23.40	547.79	61
11	The company can deliver the service better internally	17.00	100.00	67.00	21.20	449.45	69
12	Personal preference	0.00	100.00	49.45	26.37	695.47	64
13	Other (please specify below)	0.00	100.00	34.86	35.21	1239.61	35

What are the main drivers to Insource a service?

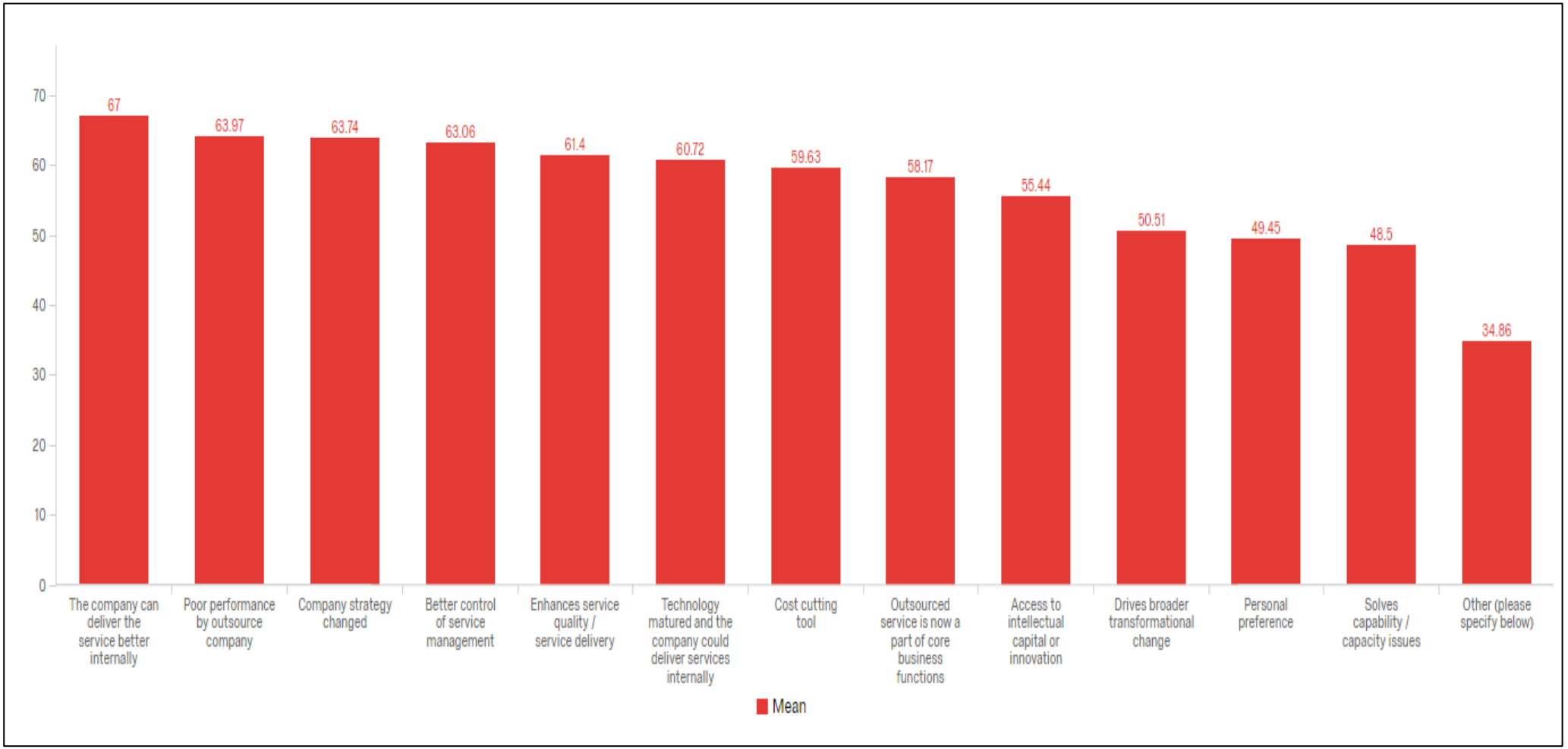


Figure 8: Survey Results Q2 Graph

5.3.2 Interviews results for question 2 (Drivers to Insource)

Table 8: *Interview Results Q2*

#	Field	Top Driver	Second Driver	Third Driver	Fourth Driver	Fifth Driver
1	The company can deliver the service better internally	71%				
2	Company strategy changed		57%			
3	Better control of service management			43%		
4	Poor performance by outsource company				43%	
5	Enhances service quality / service delivery					29%

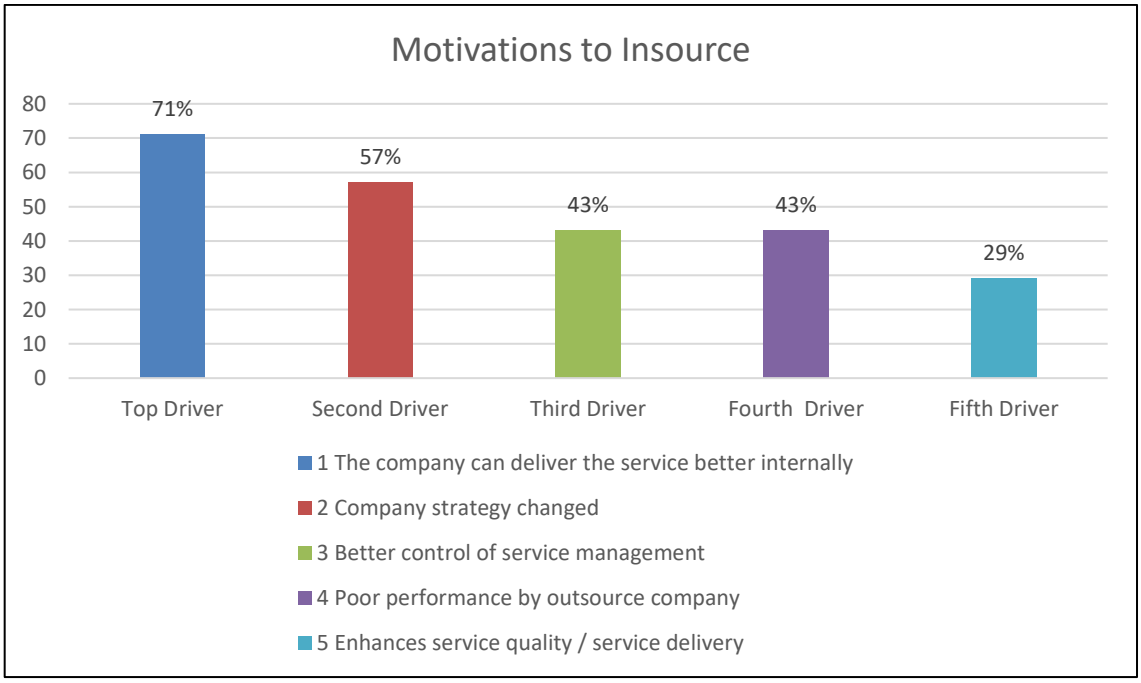


Figure 9: Interview Results Q2 Graph

5.3.3 Conclusion regarding finding 2 (Drivers to Insource a service)

The literature review highlights three top drivers to insource, namely 1) poor supplier performance 2) cost efficiencies and 3) IT becoming part of core business functions.

The surveys found that the opinion that companies can deliver the services better internally as a top driver, followed closely by poor performance by outsourcing suppliers and strategy that changed also came out as a strong driver.

In the interviews conducted the results reflected the answers received in the survey more than in the literature review, namely that that company can deliver the services better internally is a stronger driver than cost when the decisions were made to insource.

5.4 FINDING 3 (INSOURCING OUTSOURCING TRENDS)

The research has shown that there is indeed a trend where companies insource outsourced services. The research survey found 61 examples where companies insourced an outsourced service and then outsourced that service. This trend does not appear to be common but it does exist.

5.4.1 Industry trends

Financial Services were identified as the industry that had the highest example of insourcing outsourcing trends, closely followed by the IT industry.

The interviews also revealed a correlation with the survey answers and the interviewees could provide more detailed answers and details regarding the content around which companies and services changed sourcing strategies between outsourcing and insourcing.

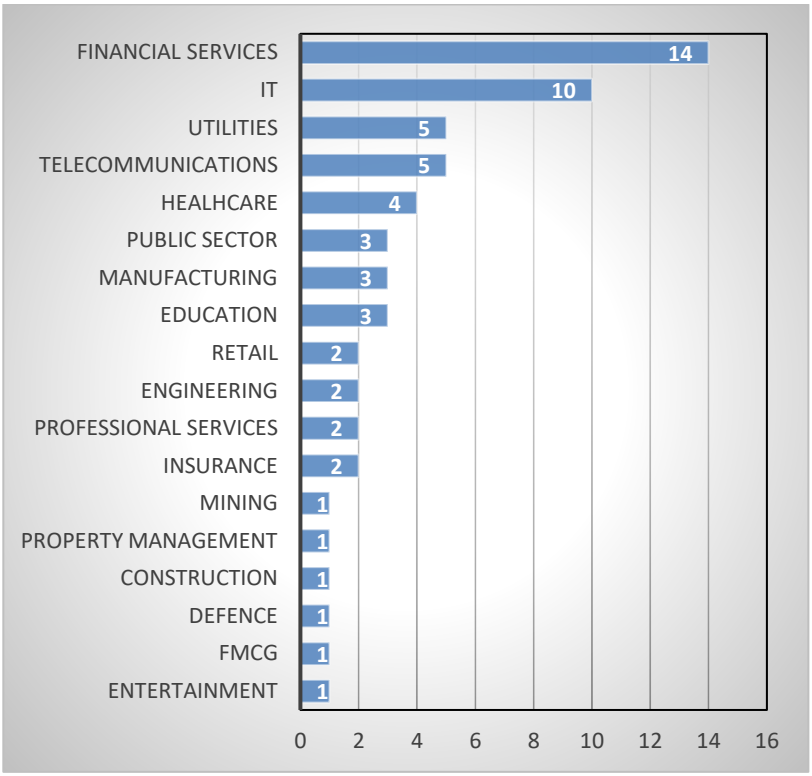


Figure 10: Industries Trends Respondents.

Figure 10 represents the count of how many respondents were surveyed from different industries.

5.4.2 Timelines for the Insourcing and Outsourcing Cycle.

The literature review highlighted that outsourcing decisions are being revisited within 5 years. The surveys support this as 3 to 5 years was highlighted as the most frequently selected timeline for when the cycle tends to be repeated. The Interviews also supported this timeline of 3-5 years.

What is the most frequently selected timeline for the outsourcing insourcing trend cycle?

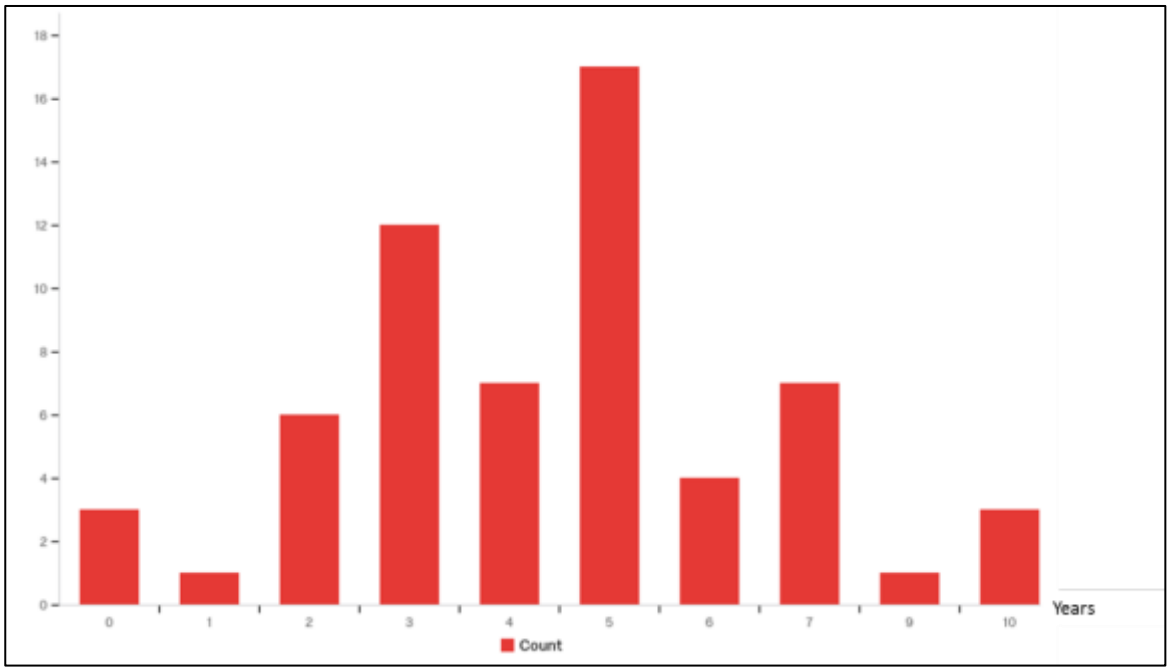


Figure 11: Timelines of Outsourcing.

Figure 11 graphically represents the timelines that the survey respondents selected of when (in years) when asked when they believe companies usually change their outsourcing and insourcing strategy. The majority believed that companies change their strategy every five years followed by three years.

5.4.3 Conclusion regarding finding 4 (Insourcing Outsourcing trends)

The research has shown that there clearly exists a trend where companies outsource a service, then insource that service, and thereafter outsource that service. The data shows that the financial services industry is the top one in which such experiences occur. This holds true even though there was no specific selection favouring the financial services industry. The sample used is purely a random one in this regard.

The trend to change the company's insourcing or outsourcing strategy tends to repeat every 3-5 years on average

5.5 FINDING 4 (WHAT ARE THE MAIN DRIVERS FOR THE TREND TO CONTINUOUSLY INSOURCE AND OUTSOURCE A SERVICE)

The drivers for the trend tend to differ among industry, the life cycle of the business, technology maturity and the point at which the company is in that life cycle and if it is a service provider or a service recipient. The main drivers across all the interviews and the survey responses are:

1. maturing of technology
2. Speed agility needed that only insourcing or outsourcing can provide
3. Change of cost benefits Customer needs / Business focus changed over time
4. Internal/external company could deliver the services better
5. Perceived benefits of outsourcing did not realize

5.5.1 Surveys results for question 4 (What are the main Drivers for the trend to continuously insource and outsource a service?)

Table 9: *Survey Results Q4*

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Strategy changed	0.00	100.00	56.26	26.76	716.05	58
2	Technology matured	0.00	100.00	50.40	28.05	786.99	48
3	Cost benefits changed	0.00	100.00	68.63	21.87	478.16	56
4	Customer needs / Business focus changed over time	0.00	100.00	53.75	27.64	764.06	48
5	Internal / external company could deliver the services better	0.00	100.00	60.11	26.37	695.27	53
6	Service became part of core internal business functions.	0.00	92.00	55.33	27.61	762.49	45
7	Need to control intellectual property	0.00	100.00	57.73	27.14	736.82	45
8	Speed & Agility needed that only insourcing or outsourcing can provide	0.00	100.00	63.00	24.25	588.24	51
9	Personal preference	0.00	100.00	47.17	29.76	885.68	48

10	Perceived benefits of outsourcing did not realize	0.00	100.00	61.33	25.37	643.56	51
11	Perceived benefits of insourcing did not realize	0.00	100.00	55.79	27.61	762.16	48
12	Other (please specify below)	0.00	99.00	37.48	34.12	1164.32	27

Question 4 What are the main drivers for the trend to continuously insource and outsource a service?

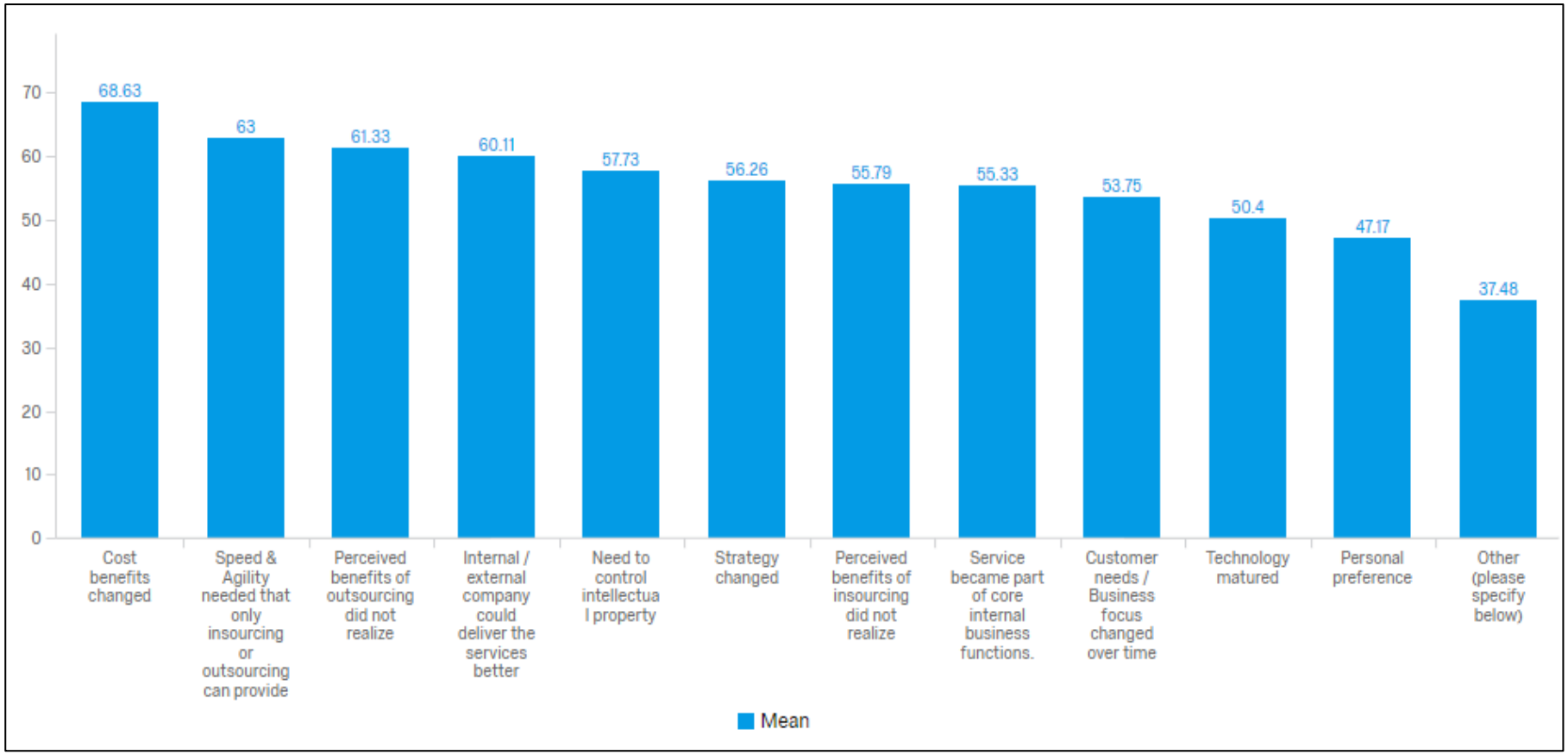


Figure 12: Survey Results Q4 Graph

Figure 12 ranks the survey answers to question 4 from high on the left to low on the right. Over 68.63% of the respondents selected Cost Benefits changed as the primary answer to question 3

5.5.2 Interviews results for question 4 (What are the main Drivers for the trend to continuously insource and outsource a service)

Table 10: *Interview Results Q4*

Table 10 represents the interview answers to question 4. 57 % of the respondents nr 1 and 2 on the table as the answer to question 4

#	Field	Top Driver	Second Driver	Third Driver	Fourth Driver	Fifth Driver
1	Technology matured	57%				
2	Cost benefits changed		57%			
3	Customer needs / Business focus changed over time			43%		
4	Internal/external company could deliver the services better				29%	
5	Speed & Agility needed that only insourcing or outsourcing can provide					29%

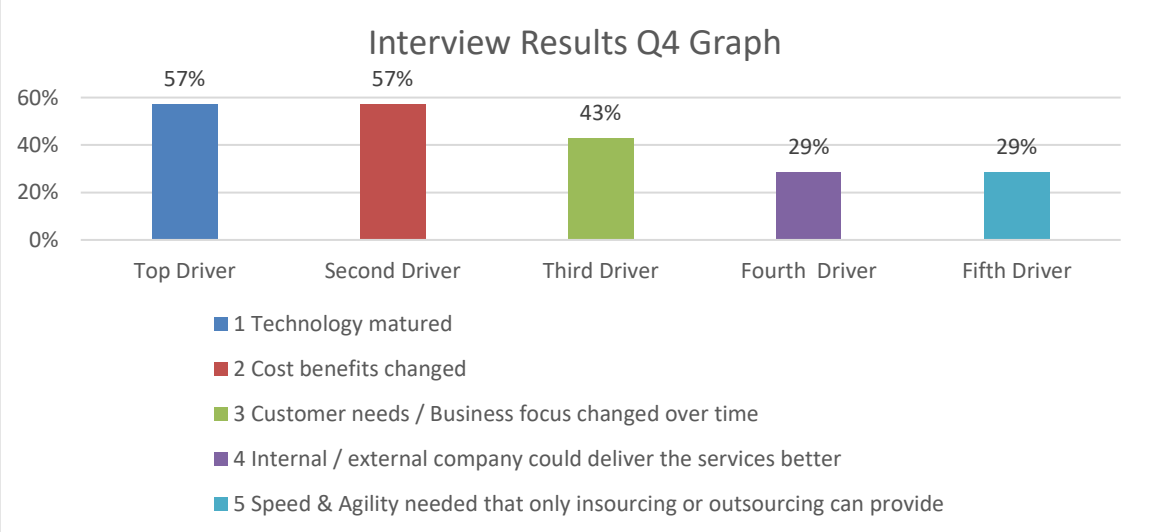


Figure 13: Interview Results Q4 Graph

Figure 13 graphically represents the data shown in table 10

5.5.3 Conclusion for question 4 (What are the main Drivers for the trend to continuously insource and outsource a service)

In both the surveys conducted and in the interviews performed the same drivers were indicated, namely 1) The cost-benefit of outsourcing/insourcing changed, 2) speed & agility needed that only insourcing or outsourcing can provide, 3) customer needs / business focus changed over time. The driver “Perceived benefits of outsourcing did not realize” only occurred in service recipients interviewed, and “Internal/external company could deliver the services better” only occurred in service providers interviewed.

5.6 SUMMARY OF THE RESULTS

The interesting thing that came from the research is that cost cutting is one of the main drivers for both insourcing and outsourcing and thus it is also a driver for the repetitive trend on in/outsourcing as the cost is used to gain a competitive advantage.

The research has also shown that companies’ core business components change over time and as such so does their strategy to outsource and insource. ICT, for some industries used to not be a part of core business and as such it was outsourced. As ICT became part of a company’s own competitive advantage it then insourced that service, only to realise that it does not need all the components of the ICT stack to be insourced. Thus certain components of the ICT stack that can be commoditised becomes outsourced while services related to intellectual property and competitive advantage producing aspects of the business is retained in-house.

It was also found that there is a trend to repetitively insource outsourced services and then outsource them again. The main drivers for this again are cost advantage was driven and speed and agility that is gained from outsourcing or insourcing.

6 DISCUSSION OF THE RESULTS

6.1 INTRODUCTION

The first sub-problem was to identify the driving factors behind decisions to outsource ICT services in South Africa

The second sub-problem was to identify the driving factors behind the decisions to insource ICT services in South Africa

The third sub-problem was to determine if there is a trend to insource previously outsourced ICT services in South Africa and then re-outsourced them.

The fourth sub-problem was to determine the driving factors leading to the existence of such a trend (if it exists)

6.2 DISCUSSION PERTAINING TO RESEARCH QUESTION 1 (WHAT ARE THE DRIVERS TO OUTSOURCE A SERVICE?)

6.2.1 The literature review

From the literature review, it was proposed that the main drivers ICT outsourcing are

1. cost reduction and,
2. the focus on core business functions.

6.2.2 The survey

The survey data reflects what was found in the literature reviewed, that the top drivers are:

1. It enables focus on core business functions
2. Viewed as a cost-cutting tool
3. solves capability/capacity issues

6.2.3 The interviews

The interview data reflects what was found in the literature review and in the surveys conducted that the top drivers to outsource a service are:

1. cost cutting tool
2. access to critical skills
3. access to innovation
4. enables focus on core business functions

5. better quality service from outsourcer

6.2.4 Discussion

6.2.4.1 Outsourcing is used as a cost-cutting tool and to gain access to critical skills and innovation

The theme that emerged from the literature review and the research is that outsourcing is used as a cost-cutting tool. What is interesting about this theme is that the literature and the surveys could not clearly specify why this theme emerged as a top driver, and why it was not consistently chosen by all the survey participants but only by some participants.

The reasoning that outsourcing is mostly used as a cost-cutting tool was explained and elaborated on by several Interviewees who have been involved in the ICT outsourcing market for a long time. Interviewee "C" explained it the best by labelling companies that outsource a service for the first time as first generation outsourcing contracts. As these contracts get renewed these contracts then become second generation outsourcing contracts and so on. Interviewee "C" elaborated that in first generation outsourcing contracts a client can expect *a 20 – 30 percent cost savings* if they move their services to an outsource partner.

This is mainly due to the large economies of scale that outsourcing firms use. The outsourcing firms can acquire critically skilled resources, that tend to be too expensive to employ otherwise. Such resources can be utilized across multiple customers.

For second generation outsourcing contract, the cost savings have largely been achieved. However the customer will not get the same cost savings as a first-generation outsourcing contract. In the second-generation outsourcing contract, the customer looks for innovation from the outsourcing firm to obtain competitive advantage in other words or costs savings through innovation. Interviewee "A" reflected that outsource clients are after cost savings especially as their outsourcing contracts mature.

The concern for business here is that a business is outsourcing contracts are exactly that, it is a contract that is designed to deliver a set of services in a specific way at a specified cost. The outsourcer is motivated to absorb costs internally to increase their own profit margins. As such, they cut their supply chain costs down to the bone so that they can do more with less. The expectation is that these costs savings then gets passed to the customer. However, if the outsourcer passes the cost savings on to the customer then

the outsourcer cannot increase their profits since they cannot increase their prices to the customer because of the outsourcing contract. The only option available for the outsourcing supplier is to pass on only the contracted amount of saving to the customer and more aggressively cut their internal or supply line costs. But the issue with this is that the outsource contract is designed with a set number of resources, so the only option that the outsourcer has is to either cut resources, automate or lose profit margins. If the outsourcer absorbs cost, what happens is that the customer pays for a 100% service but the outsourcer only delivers exactly what is needed to make the contracted service levels.

For example, company A outsourced its telephone service desk. The contract is designed to cater for the service desk answering 2000 calls a day. On day one of the contract the service desk manager has 100 staff members answering the calls. The end user waits about 2 seconds on the phone before it gets answered and 5 minutes before their problem is resolved. The contracted service levels are 15 seconds to answer a call and 15 minutes to resolve the incident on the phone. In year 3 of the contract, the service desk manager sees that they only need 70 staff members on the service desk because they only receive about 1500 calls a day. This cost saving of 30 resources has a direct impact on the outsourcers bottom line. But the net effect is that the end user has to wait the maximum service level times on the call. It is exactly what was contracted but their frustration from the end user side. They only see that they used to get a 2 second answer time and as the years passed they perceive the outsource service providers' servers has degraded and they get frustrated. Everyone is doing exactly what was asked and is in accordance with the contracted terms but the users are not happy.

6.2.4.2 Enables focus on core business functions

All the interviewees reiterated the main reason that companies should outsource. The interviewees mentioned many examples of companies that needed to focus on their core business functions and did not see ICT as part of their core function. So they outsourced ICT as a result with the intention to enable that the company invest time, resources and management overhead into core business functions that give competitive advantage.

Interviewee "E" uses an example of a large utility provider for which the core business focus was to generate electricity and decided to outsource their ICT functions to an external provider so that they could focus on generating electricity. Interviewees "A, B, C & F" and the literature reviewed also mentioned that ICT is largely a commodity-based service and the IT can be sold and consumed by any customer. Thus, the competitive advantage could no longer be obtained from the bottom of the ICT stack and as such

companies should focus on their own competitive advantage that is largely received from the higher levels of the IT stack. (Image below).

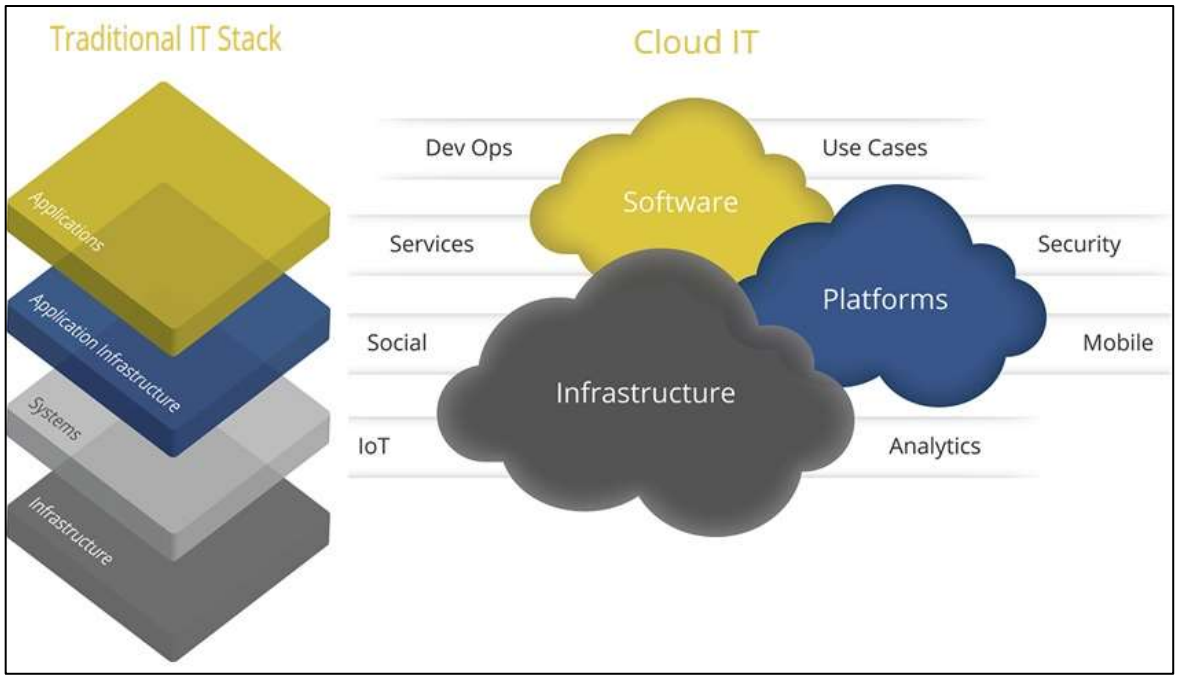


Figure 14: IT Stack of services. (SaiInfoComm, 2017)

Figure 14 graphically represents the traditional stack and cloud IT stack of services to show how the different layers are stacked on top of one another to illustrate how the new cloud IT stack differs from the traditional stack of services. (SaiInfoComm, 2017)

The interviewers concluded that the bottom of the IT stack is where the largest portion of the current outsourcing market lies, but it also has the smallest margins. This it is becoming a volume game where the more customers an outsourcer can acquire the better economies of scale it can have and the more it can invest in innovation into its own technologies to provide better services to more customers. Interviewees “B and F” mentioned that cloud is currently the biggest outsourcing commodity that customers are using in their digital roadmap toward industry automation, artificial intelligence and digital neural networks will transform the ICT industry and it is likely that these will be the next generation of outsourcing services being provided to customers due to the cost and the advantages that customers can access to only buy what they need in the “as a service” models. This will enable the customer to become more focused on its core business functions that differentiate it from their competitors and only buy the IT that it is needed when it is needed.

6.3 DISCUSSION PERTAINING TO RESEARCH QUESTION 2 (WHAT ARE THE DRIVERS TO INSOURCE A SERVICE)

6.3.1 The literature review

The literature review showed that the main drivers for ICT insourcing are;

1) the non-realisation of the original outsourcing benefits, specifically the cost reductions
2) increased performance in the core services not materialising.

6.3.2 The survey

The survey respondents overwhelmingly chose 3 of the top 5 categories relating to the need for better quality of service delivery and better management of services. The other category with the second highest nomination reflected what was found in the literature review namely that the company perceived the poor performance of the outsourcing company to deliver the contracted services. The third category mostly chosen by the survey respondents reflect that the company's strategy changed. It can be interpreted that the strategy may have changed because of the other drivers noted and as a result, these drivers are considered to have value as factors that contribute to strategy change.

6.3.3 The interviews

The interviewees' responses agreed with what was found in the literature review and in the survey respondents, but more detailed reasoning and examples were given of companies which insource that support the following reasons:

1) Better perceived management, control and delivery of quality services if the company insources their services.
2) Strategy changed over time.

6.3.4 Discussion

It can be seen from the literature review, survey respondents and the interviewees that the perception of quality service delivery is an important driver to insource, and as such, it is an interesting metric because it is very difficult to measure and even more difficult to contract.

Financial services was found to be the industry that most respondents to the survey identified as an industry where services are continuously insourced and outsourced. The interviews on the other hand very clearly came back with 100% of the interviewees stating that the banking services sector were renowned for retaining all their ICT services in-house and not outsourcing any of them. But the insurance sector had the opposite

indication. The insurance sector outsources its ICT services more than the banking sector. The interviewees highlighted that in banking services any downtime would negatively affect its customer base and as such, they preferred to not outsource those services to a third party. The insurance industry, on the other hand, does not have the same urgency an insurance policy being underwritten an hour or so later than expected has much less impact on service delivery than compared to a banking service being delayed. Banking services receive hundreds of transactions per second and thus an outage would have severe consequences.

6.3.4.1 Perception of Service delivery

Interviewee “H” explained that although a customer can contract specific customer satisfaction KPI’s and specific SLA to define a satisfactory service delivery from a contract level it does not mean that the perception of the service delivery is satisfactory. But to understand this from an SLA level refer to the example given in 6.2.4.2. For KPI’s customer satisfaction is an unreliable metric to use since only a certain type of individual will complain or compliment the service. Most people will not do either and just grumble at the water cooler, Interviewee “H” explained.

From the literature, we can see that the original cost saving that was perceived from outsourcing is also mostly under calculated or under-realized. This is supported by Interviewee “M” in his explanation of first-generation outsourcing contracts being the only type that receives a significant cost saving advantage over the other generations that follow.

For example, if a customer has 100000 service tickets a month and the SLA states that 95% of all requests need to be serviced within 8 hours. If the outsource service provider meets this service level in a month, it still means that 5% of the service tickets are not served within 8 hours. Thus the service provider has 5000 different end users who are not happy with the contracted service that they received.

6.3.4.2 Strategy Changes

The strategy that changes over time is the second highly indicated driver in the survey, and the interviews conducted uncovered that the reason that the strategy changed, the reason that the expectation of service delivery value that was received in the outsourcing contract was not realised. Cost also came out strong in terms of what drives the insourcing strategy change. Cost, however was not a direct calculation but rather a result of perceived lack of value and the lack of innovation brought to the client by the outsourcing vendor. The cost calculation was then made and in some cases, the

customer believed that they could better deliver that innovation internally and so insourced those components of the outsourcing contract.

6.4 Discussion pertaining to research question 3 (Is there a trend to insource previously outsourced ICT services in South Africa and then re-outsourced them?)

6.4.1 The literature review

The literature suggested that there is indeed a trend, but not all companies and industries experience this trend.

6.4.2 The survey

From the surveys conducted the financial services industry and the IT Industry showed the most examples of companies that followed this trend.

The surveys also confirmed what was highlighted in the literature that the average time when the strategy is changed between 3-7 years

6.4.3 The interviews

The interviewees were specifically selected due to their possible exposure to this trend and as such, they have all witnessed this trend and agree that on average companies outsource every 3-7 years with 5 years being cited in more than 60% of the interviews.

6.4.4 Discussion

From the literature, supported by the surveys and confirmed by the interviews, there exists a trend where companies outsource a service, then later insource that same service and then outsources the service again. The interviewees all highlighted that the main reasons that there is a 3-7-year trend are:

1) Morse law
2) Contracting terms.

Technology matures very quickly and as a result, the outsourcing contracts were originally designed to follow the technological maturation timelines. Interviewee “M” mentioned that the large original outsourcing contracts had very long life spans, some up to 20 years. But as the technology refresh cycle becomes shorter and shorter over time so did the outsourcing contracts terms. The literature showed that 5.3 and 6.4 years is the average contracting term, but the survey respondents and interviewees noted that technology is maturing at a much faster pace today, to such an extent that a 5-year

outsourcing contract would be deemed as too long, even a 3-year outsourcing contract is too long as per Interviewee “M”

If, for example, the mobile app market is looked at it can be seen that a company can rent access to a service on a monthly basis. Netflix and its service contracts illustrate this. When one has a Netflix monthly subscription contract, one can either rent a movie online one movie at a time at a fraction of the cost or a person can have access to all the movies for a monthly subscription. ICT services are also moving toward this outsourcing model.

It has thus been deduced that the outsourcing trend will continue, but it will evolve into a different model that is more component and commodity-driven over a much-shorter contracting period.

6.5 DISCUSSION PERTAINING TO RESEARCH QUESTION 3 (WHAT ARE THE MAIN DRIVERS FOR THE TREND TO CONTINUOUSLY INSOURCE AND OUTSOURCE A SERVICE?)

6.5.1 The literature review

From the literature reviewed we can clearly see the drivers to outsource and insource a service, but the literature is very limited in terms of what the drivers would be a continues trend to oscillate between these two sourcing strategies.

6.5.2 The survey

The survey responses gave insight into what is perceived to be the main drivers in the ICT market in South Africa, namely

1) the cost benefits changed
2) speed and agility needed
3) Expected benefits of outsourcing did not realise.

6.5.3 The interviews

The interviewees gave the richest answers as to why each of these drivers might drive the trend.

1) technology matured
2) cost benefits changed
3) customer needs or business focus changed over time.

6.5.4 Discussion

It can be deduced that the driver “cost benefits changed over time” was the main driver to insource and to outsource, and a trend exists to cycle between these two strategies, then the driver behind the trends would also be related to cost.

Interviewee “M” explained that the original outsourcing contracts were huge where the outsourcing company on board an entire company ICT portfolio of services, companies like Eskom or Transnet and Old Mutual was mentioned. As technology and the outsourcing contract matured so did the customer needs. The drivers “technology matured” and “customer or business focus changed over time” can be best illustrated by the following model in 6.6.

6.6 THE SEARCH FOR THE SOURCE MODEL

The basis of the model was designed around Maslow's hierarchy of needs model, the figure below is an example of the Maslow model to illustrate the origin of the outsourcing model that will be discussed in section 6.7. The data received in the research, specifically interviewee "A and M" responses were used to build the model. The data was then combined with the basic ICT layers and then overlaid with the general services that ICT provides to the industry.

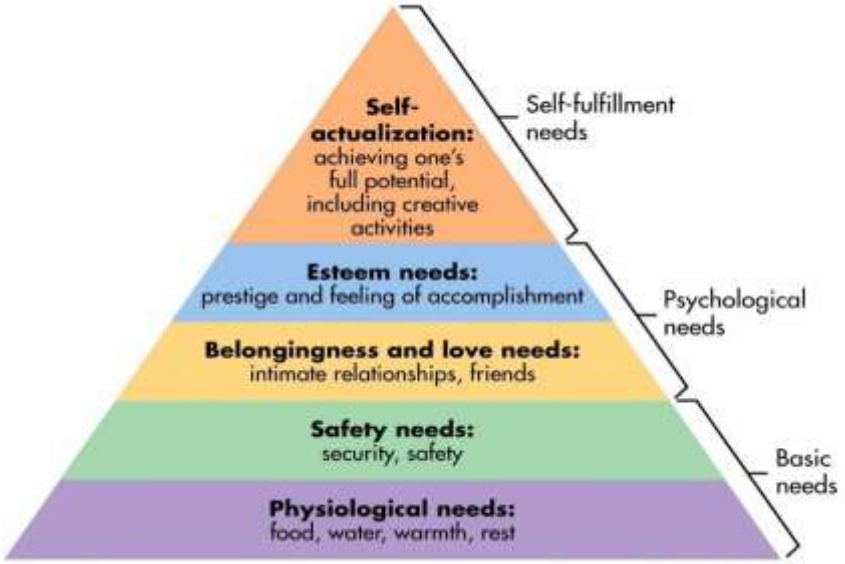


Figure 15: Maslow *hierarchy of needs. (Maslow, 1943)*

Figure 15 graphically represents how the different needs are stacked on top of one another. The higher up the pyramid one goes, the more reliant one is on the layers below. The sourcing model discussed below follows the same design as the model in figure 15. (Maslow, 1943)

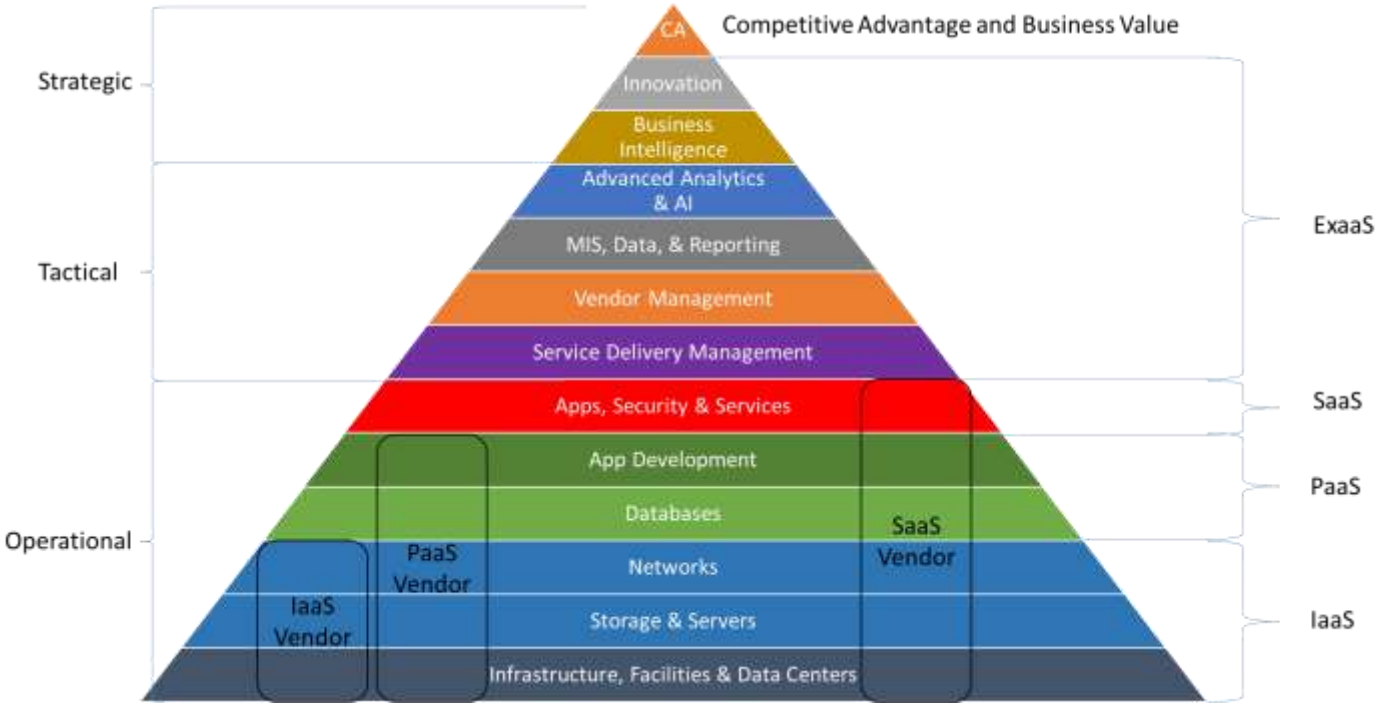


Figure 16: Becker Sourcing Model 1.

Figure 16 shows the different horizontal layers of the different IT Services. As one ascends the pyramid, the functions also climb from operational to tactical to strategic on the left-hand side. On the right-hand side, the different "as a service" services are shown in their hierarchy with Expertise as a service (ExaaS) sitting just below competitive advantage that is achieved right on top (Becker, 2017b)

6.6.1 First Generation Outsourcing

The first-generation outsourcing contracts typically had the entire company's ICT services outsourced to a single provider, but only retained a small management component (CIO) that simply interacted with the outsource supplier for anything they needed. In this model, the CIO typically reported to the CFO and had the least control over their ICT strategy.

First Generation outsourcing

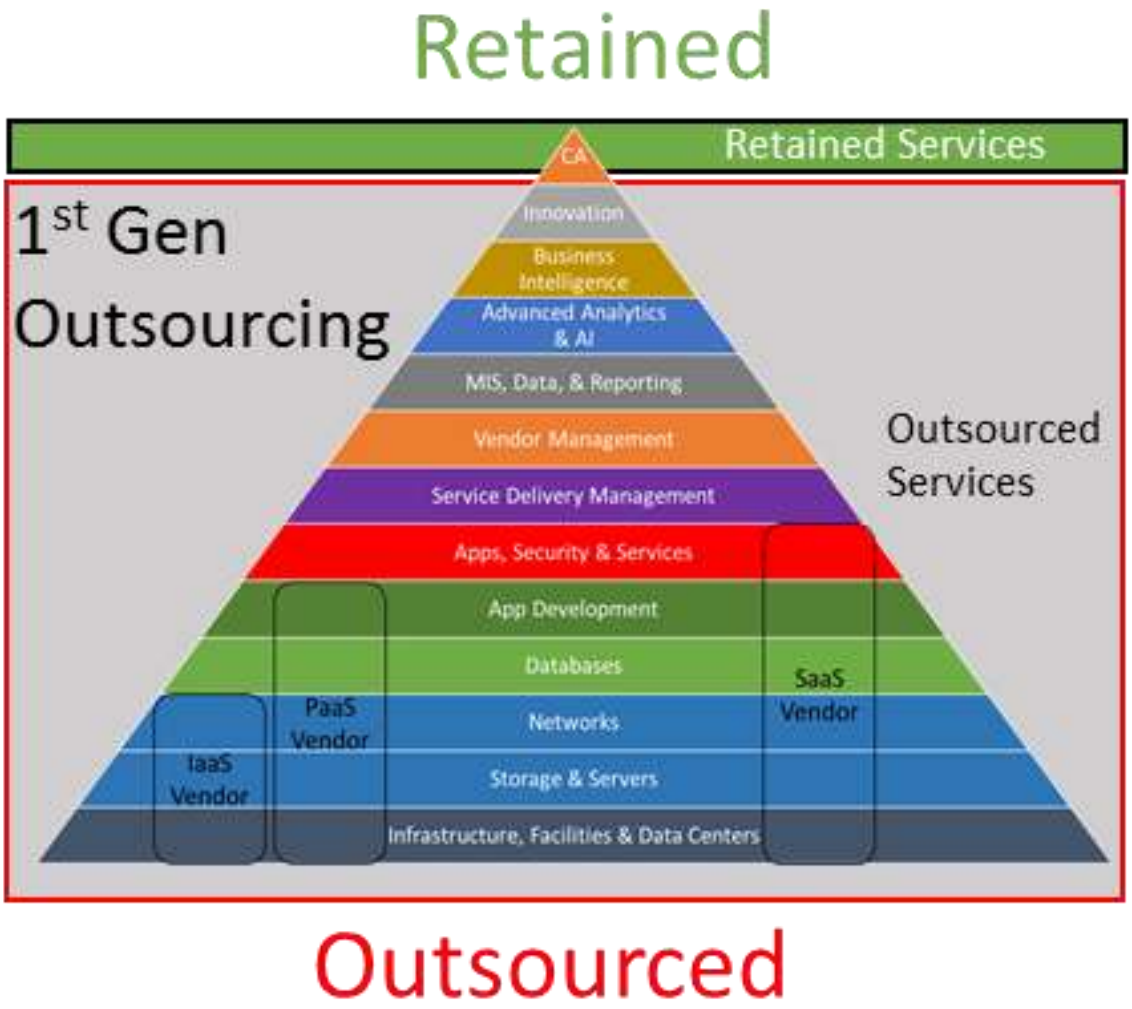


Figure 17: Becker Sourcing Model 1st Gen.

Figure 17 Shows the green block on top is the retained services. The red bock is all the outsourced services. This figure illustrates that in the first generation outsourcing all the IT services was outsourced in totality and only the competitive advantage right at the top remained with the company (Becker, 2017b)

6.6.2 Second Generation Outsourcing:

The second-generation outsourcing contracts typically had the entire company's ICT services still outsourced to a single provider.

The IT management (CIO) layer had increased because the company realized that business needed speed and agility to remain competitive. This was largely because of two main aspects of outsourcing. A) The contract between the companies. If a company wanted a specific service from the outsourcer, then the customer needed to log a request,

the outsourcer needed to verify that request, get clarity of the requirements, then verify that request against the contracted services, if it was not contracted then the request needed to be quoted on. If it was contracted then a team needed to be assembled to execute the request as documented. This all led to delays to get the required service a company that did not have an outsource contract in place did not experience since one could simply walk over to the IT department and get the requirements explained and have services delivered in a much shorter timeline. The outsourcing contracts inhibited a company from this agility and as such the company pushed the layer down in terms of what components of ICT it will manage and what services the vendor will manage. This enabled the company to remain close to the business and give it the needed flexibility to move with business.

Second Generation Outsourcing

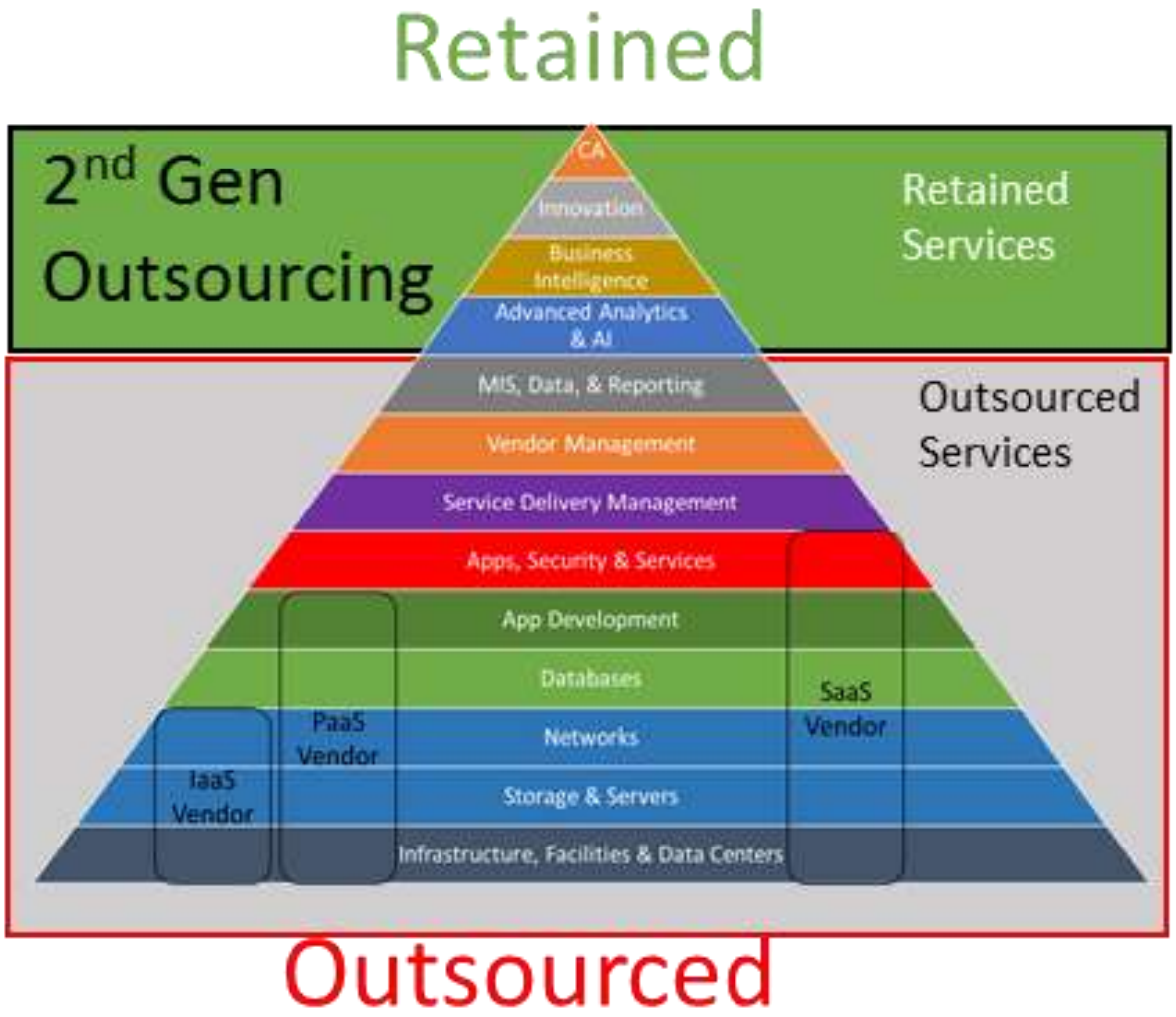


Figure 18: Becker Sourcing Model 2nd Gen.

Figure 18 Shows the green block on top (the retained services) has grown in the second Generation of Outsourcing to incorporate the first four layers of top CIO management, namely Competitive Advantages, Innovation, Business Intelligence and Advanced Analytics. The red bock (the outsourced services) has shrunk. This figure illustrates that in second generation outsourcing where companies insourced more of the control of their IT organisation and reduced the outsourced services *(Becker, 2017a)*

6.6.3 Third generation outsourcing

The Third-generation outsourcing contracts have changed to accommodate the evolution of technology and gain a competitive advantage through innovation. Technology has become more commoditised, and more outsourcing vendors were available to the customer. As each of the outsourcing vendors specialised in their own services to give

them their own competitive advantage, companies were given a wider choice of outsourcing suppliers. The contract terms became shorter the customer could choose the best vendor for the specific service they required. This brought on the multi-vendor outsourcing contracts.

It meant that the company had a much larger IT management structure. Typically the CIO reports to the board of directors in this type of model. This enabled the company to purchase innovation in the areas where the company decided it was needed most and could get niche suppliers to supply very special services on a pay per use basis, services like Infrastructure as a service (IaaS), Platform as a Service (PaaS) and Software as a Service (SaaS). This all enabled the company to get the speed and agility that multi vendors with non-binding contracting could bring. This was all initiated by the technology that matured enough so that it can be purchased from large vendors like Amazon Cloud service, Microsoft Azure and Google Services.

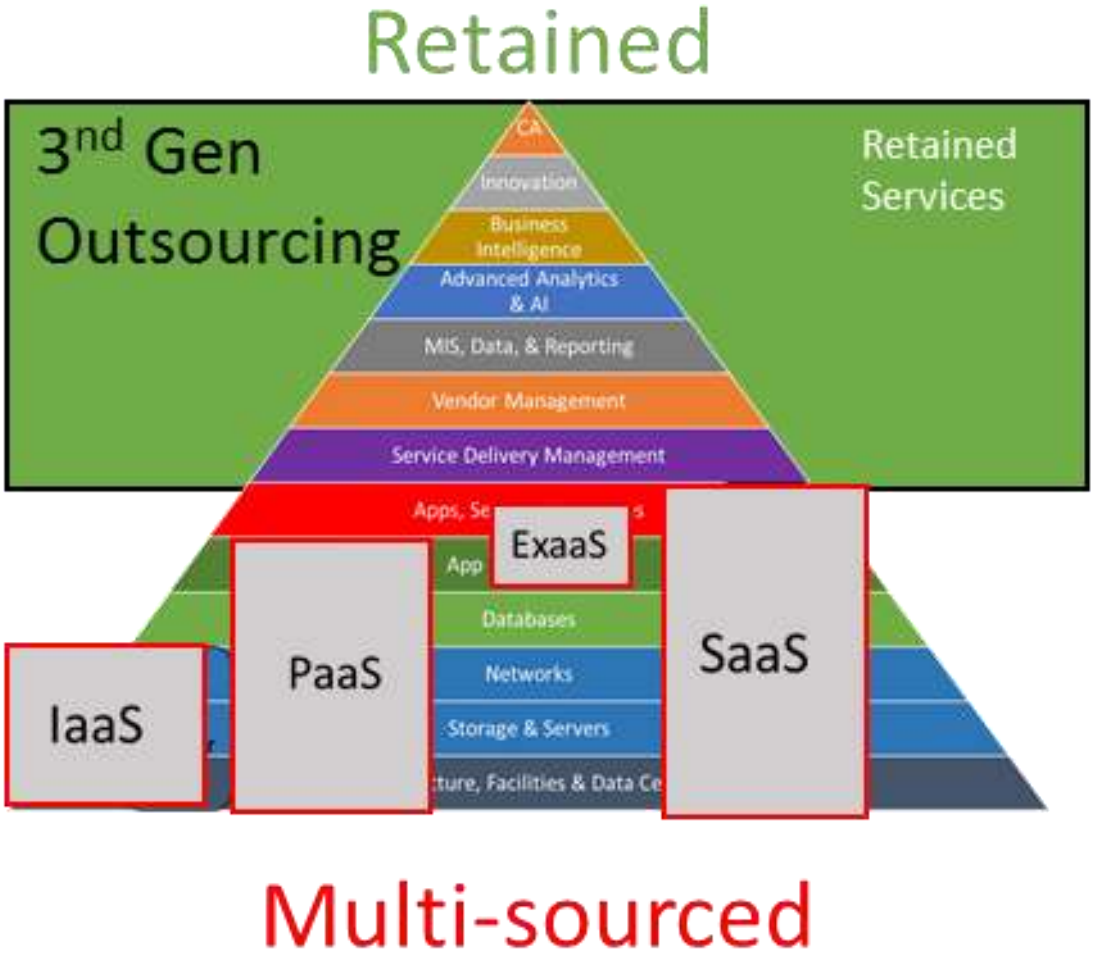


Figure 19: Becker Sourcing Model 3rd Gen *(Becker, 2017b)*

Figure 19 Shows the green block on top (the retained services) has grown even more in the third Generation of Outsourcing to incorporate the top 7 layers and also added Management Information Systems (MIS) Vendor management and Service Delivery to their insourced services. The red bock (the outsourced services) has shrunk even more. This figure illustrates that in third generation outsourcing where companies insourced more of the control of their IT organisation and reduced the outsourced services. In the third generation, we can also see that a multi-vendor strategy is used more and more. We can also see the pay as you use services like IaaS, PaaS, SaaS and ExaaS being used more across the layers.

6.6.4 Future model for outsourcing

The future model for outsourcing sees the continuation of niche outsourcing companies providing very specific services across the IT services stack. The “as a service” business model is used more frequently and outsource vendors now provide their services as their own competitive advantage. Services such as Infrastructure as a service (IaaS), Platform as a Service (PaaS) and Software as a Service (SaaS) get incorporated into the companies’ digitization strategy to leverage the benefits of scales, ease of purchase of a

service and the flexibility that can be provided to the customer. With these service models, the customer does not need to manage the commoditised IT services like data centres, servers and applications, but can simply outsource these IT services to the best provider. Googles Gmail is a good example of Software as a service (SaaS). Amazon Web Services is a good example of platforms as a service (PaaS).

Outsource providers (Outsourcing Company) will start providing expertise as a service (ExaaS) in more and more areas in the customer's organisation. ExaaS gives the customer the benefit of just contracting a specific expert (or outsourcer) for a specific service. An example would be where a company might get an Auditing or project company to come and deliver a specific project. This would be ExaaS.

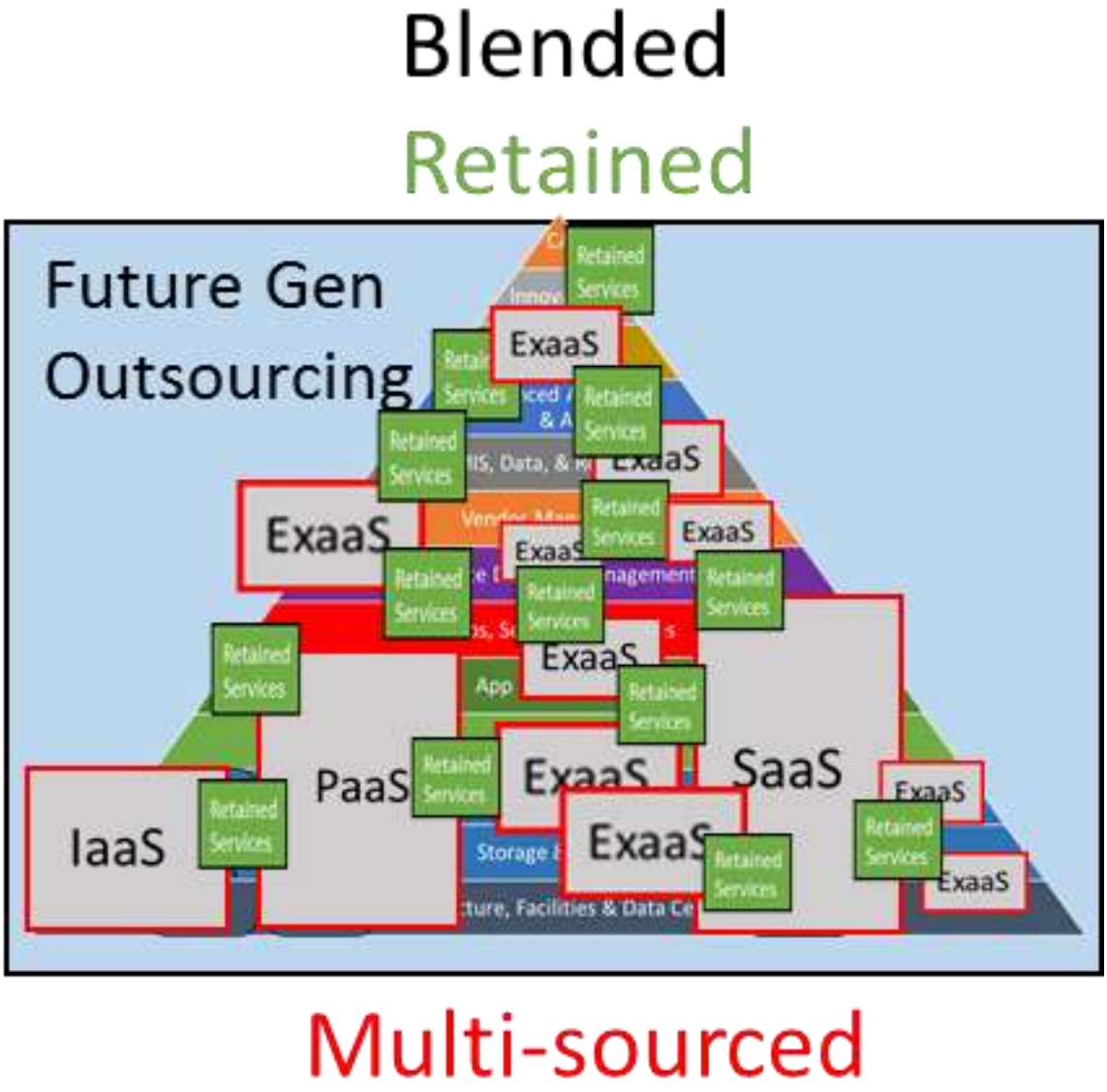


Figure 20: Becker Sourcing Future Model *(Becker, 2017a)*

Figure 19 represents a multi-sourced future model of outsourcing and insourcing. The green blocks (the retained services) are split and multiplied across the service stack in the fourth Generation of outsourcing. The figure illustrates how the retained services are now smaller but more spread out across the services to give companies greater agility. The red bocks (the outsourced services) has now completely morphed to an As a service model and customers no longer outsource their complete IT services to one vendor but instead buy a service from multiple vendors across the entire IT stack of services. When the Red and the Green blocks overlap here is where companies now instead retain some of the services – like management of the vendor's services.

6.7 CONCLUSION

The major hypotheses that the research aimed to cover were to understand if there is a trend where companies continuously insource and outsource services and if there is a trend, to determine what the drivers are.

The research has shown that there is a trend between 3-5 years, but the answer to the question of why there is a trend was much more complicated one to determine. The reason is that the answer was: “It depends.” To unpack this answer, the research needed to be broken down into much more detail.

The research has confirmed that the drivers to outsource are very similar between companies and industries if a researcher measures them against their own sectors and industry. But the real insight was provided when the researcher measured companies against where they are in the outsourcing cycle (first generation outsourcing vs third generation outsourcing). If one looks at where the company is in its outsourcing cycle it can be seen that companies tend to outsource for the same reasons in the same cycle.

The research found that the main drivers to outsource and insource are as follows:

To outsource:

1. cost cutting tool, gain access to critical skills and to innovation
2. enables focus on core business functions

To insource:

1. perception of service delivery expectations
2. strategy changed

The research also confirmed that there is a trend for some companies to continuously insource and then outsource service. The financial service Industry came out as the top industry to follow this trend. The overall timeline of when companies switch strategies is generally every 5 years, mainly due to the contracting term and technology maturation cycles

The study further uncovered what the drivers are for the reasons behind a trend. The data shows that companies do not simply insource and then outsource the same service in continual cycle, but it depends on where the company is in its outsourcing cycle. it is this that determines what their drivers are to insource or outsource and then change their

strategy based on their own business needs to determine if those specific ICT services are now part of the core business that they need to keep close to their business and insource it, or if it is a commodity product that can be outsourced to the best vendor for the best value. This means that the maturity of technology also plays a large role in the strategic decision-making process.

6.7.1.1 The Outsourcing Cycles Strategic Drivers

6.7.1.1.1 First generation outsourcing

Most first-generation outsourcing companies outsource for the cost savings benefits that come from the first generations outsourcing contracts. Companies can thereafter choose whether to remain with the current outsourcing provider, or they can choose to insource some business functions.

6.7.1.1.2 Second generation outsourcing

Most second-generation outsourcing contracts have more customer management components insourced to the customer, but the bulk of the ICT services are still with the outsourcer. This is all due to the companies looking for the speed and agility which the business requires and that the first-generation outsourcing contract could not provide. As such the management layer is stronger on the customer side where the speed and agility components reside.

6.7.1.1.3 Third generation outsourcing

Most third-generation outsourcing contracts are now mature and the company decided to insource more of their management functions from the outsourcer. Technology has also now matured to such an extent that it makes more business sense to have a multi-vendor outsourcing model. IaaS, PaaS, SaaS and ExaaS services are now easily accessible and affordable to the customer. This enables the business to pick the best vendor for the specific services that they require and not be tied to one vendor for all services for a 5-year term. This offers the company the most flexibility, cost savings and innovation from outsourcing contracts.

6.7.1.1.4 Future generation outsourcing

The future generation of outsourcing will incorporate a blend of outsourcing providers all over the IT stack of services. CIO's will have the luxury to get an outsourcing company to take care of innovation for them, or to provide enterprise architecture services to them on a pay per use basis where professional services will be combined with the traditional commoditised IT services such as IaaS, PaaS and SaaS. It is likely that the trend will continue, but the outsourcing business and industry will change significantly. With artificial intelligence (AI), big data, cloud services automation and the Internet of things (IoT) it is even more likely that these new services will be outsourced to providers that can provide these unique skills to multiple customers due to the expertise and cost involved in providing these services. The economies of scale will yet again come into play and the outsourcing trend will continue as the technology matures and becomes commoditised.

In summary, the drivers to outsource and insource are very similar. There is a trend where companies outsource and insource and outsource their ICT services. The drivers behind the motivations to insource or outsource are mainly driven by the maturity of the outsourcing contracting industry and their customers, the evolution of technology and the business drivers that a company is after that will enable their competitive advantage and add value to their customers.

In the future, the outsourcing model will look very different from the first-generation outsourcing contracts, the proposed evolution of outsourcing can be seen from the following figure.

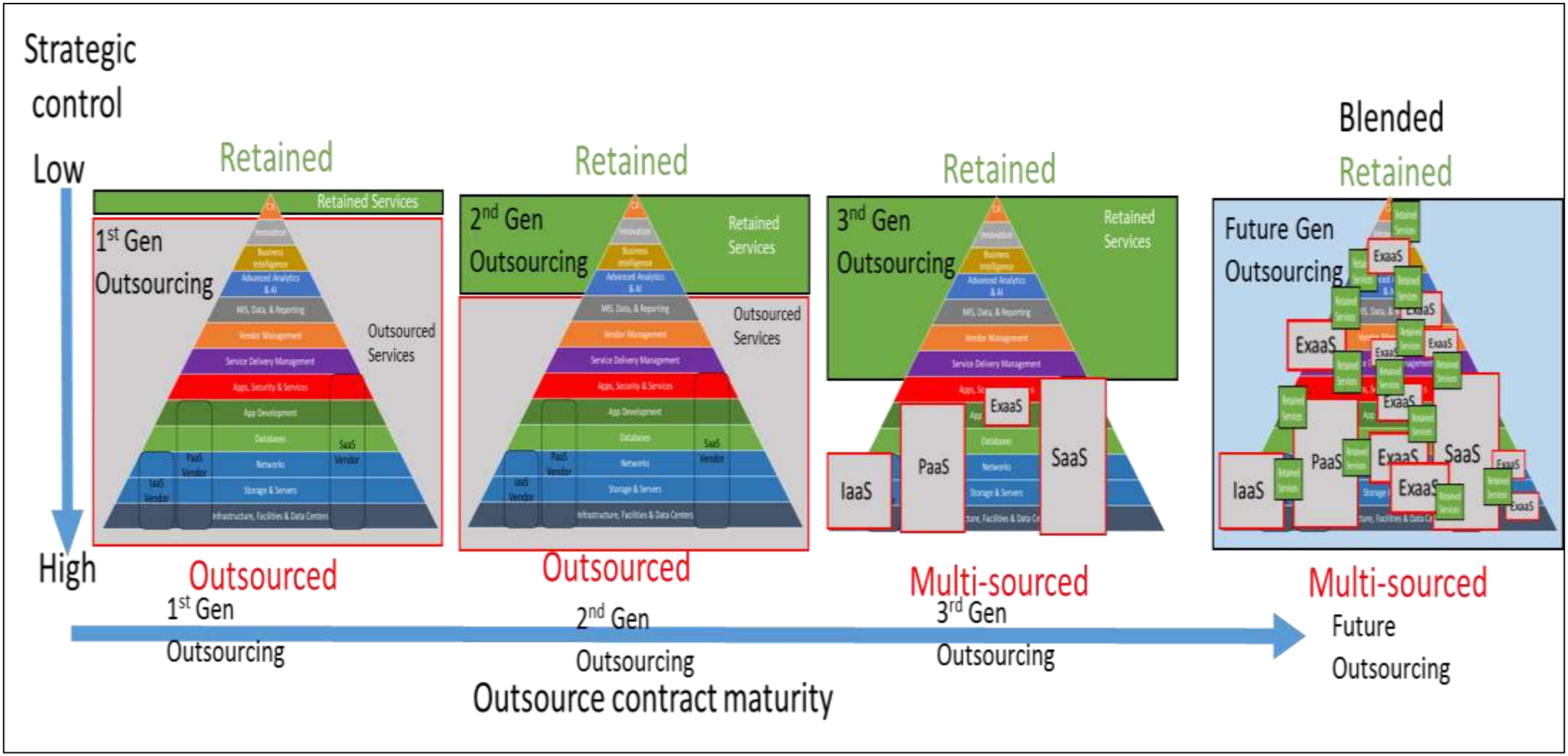


Figure 21: Becker Sourcing Model All.

Figure 21 is a combined view of the previous figures. This graphical represents the strategic control on the left from low to high and the maturity of the outsourcing services at the bottom axis from the first generation to the future of outsourcing. Notice how the retained services have grown and the outsourced services have shrunk.

7 CONCLUSIONS & RECOMMENDATIONS

7.1 INTRODUCTION

In this chapter, the conclusions of the study have been highlighted. The main findings that the research was embarked on to address have been summarised. The chapter concludes with the main drivers that are ranked as per the findings in the study.

7.2 CONCLUSIONS OF THE STUDY

The main problem this study undertook was to identify the factors that cause companies to continually oscillate their strategic decisions to outsource and insource their ICT services.

The research found that the benefits received by the company at each stage of its outsourcing life cycle change as the life cycle matures and as such so do the drivers to outsource and insource.

The question, “Do certain companies like Eskom, Transnet, and Old Mutual continuously oscillate their strategic decisions to outsource and insource their ICT services”, is answered with a ‘yes’; but it is not true for all their services as in a first-generation outsourcing contract. The specific services and the management of those services get insourced and outsourced on different levels.

In the first generation outsource contracts all the ICT services get outsourced. In very mature outsource contracts only the commodity ICT services such as software, cloud, platform and infrastructure services get outsourced. The functions/services that give the company speed, agility and innovation gets insourced.

The interesting finding was that it is seen that expertise as a service (ExaaS) is now being used in the company’s speed, agility, innovation, audit and consulting services more and more. This points towards yet another shift in the outsourcing industry where outsource companies are now also providing services in the advisory and consulting space to ensure that they cover the vertical and horizontal integration into the companies’ ICT services supply chain.

Insourcing and outsourcing drivers have been documented in various literature around the world. The research conducted in this study’s data suggested that the ICT industry in South Africa is very much like other ICT industries around the world and that the drivers for insourcing and outsourcing is very similar

Cost remains the main driver to outsource in first generation outsourcing contracts.

The lack of outsourcing service providers providing the envisioned benefits that outsourcing brings in terms of innovation and service delivery quality in second generation outsourcing contracts are the main drivers for companies to insource.

There is a trend of 5 years to outsource and insource services, and this time frame is directly related to the contract terms and the forecasted technology innovation/ maturity cycles.

7.2.1 What drives the repetitive ICT outsourcing and the insourcing ebb and flow phenomena in the South African ICT Industry.

1 business value and cost efficiencies change over time as technology matures
2 speed and agility are needed in outsource contracts that are too rigid and slow to respond to constant business changes
3 Perception of what outsourcing companies should provide and the expectation thereof is incorrect. Innovation is expected from outsource companies. But the contracts are incorrectly contracted to motivate outsourcing innovations internal to outsourcing companies and not business innovation to companies.

7.3 RECOMMENDATIONS

This chapter makes recommendations to companies that are considering outsourcing and insourcing. This chapter will also make recommendations for Outsourcing providers around future business strategies to consider to remain relevant.

7.3.1 Recommendations to companies looking to outsource a service.

A clear trend exists where companies outsource and insource services. This trend normally follows a 5-year cycle and is typically detailed in the contracting terms of the outsourcing contract.

7.3.1.1 Technology changes quicker than contracts.

Companies evaluating their in/out-sourcing strategy should clearly define what the core drivers are for strategy change. It must be known that core business drivers for strategy change may change before contract term is ended. Technology changes very frequently and a 3- 5-year contracting term might be too long in the future.

The recommendation is to look for companies or contracts that outsource a service with flexible acquisition, transitioning and termination clauses. A new un-outsourcing model has emerged in which a customer can terminate any service for convenience without prejudice.

7.3.1.2 Separate Technology from Innovation

Most companies in the second to third generation outsourcing complain about the lack of innovation from the outsourcing provider. What the company does not realise is that the outsourcing provider is indeed applying innovation towards the services that they provide, but this is on a cost level to increase profits for the outsourcing provider.

The recommendation is to not contract innovation from an outsource provider that is looking after all the ICT services. Innovation services must be sought from a company that specialises in innovation. An ICT outsourcing company is excellent at vendor management and delivery management but the ICT company only deals with the ICT aspects of the company's business. The innovation company needs to consult with business, not with the IT department only. Innovation should be a company's core business, and as such, it should not be outsourced.

7.3.1.3 Stick to your core

A company's core business functions change over time, and as the technology matures so do the company's core business functions change. To keep up with these changes a company needs to constantly evaluate its own core functions and the value that they receive from it.

The recommendation is to outsource all a company's business functions that are not directly related to a company's core business functions. This does not only relate to a company's ICT services but all services, from payroll to facilities management, right through to web development and service desk support. The costs and the ease of contracting these services may help to reduce the risk, reduce the costs and increase the value a company receives from such services.

7.3.2 Recommendations to companies looking to insource a service.

7.3.2.1 Perception is more important than contract achievement

Poor service delivery by outsourcing providers has repeatedly been sighted by the research respondents, but upon further investigation, it was found that the minority of providers got their contracts cancelled and their services insourced because of break of contract. Most outsource service providers had their services insourced with 100% service level achievements. This meant that an outsource provider could deliver everything that a customer contracted with them, but experience the customer being unhappy with the services received.

Recommendation to companies looking to insource a service: Only insource a company's core services, if the provider achieves its contracted obligations and the perception is that the service provider is not meeting the company's business needs, then the likely problem lies with the contract that the company has with the outsource service provider.

Recommendation to outsource a service provider: Manage the customer perceptions, as these will determine whether the outsourcing company will see the following contract generation of outsourcing from that company or not. Thus the outsourcing provider's management layer needs to be very competent in customer management.

7.3.3 Recommendation to analysing the trends between insourcing and outsourcing

The recommendation is to analyse where a company is in its outsourcing cycle, what has been outsourced and insourced, what a company's core functions are, what are the end user requirements, what can be outsourced, and what must be retained to give that company competitive advantage over its competitors.

The insourcing outsourcing trend will continue. The recommendation is that outsourcing companies should adjust their business models and value proposition to provide services throughout the supply chain of the companies, through vertical integration and horizontal integration with their ICT and business supply chains. Most traditional ICT services are very homogenous and the economic factors point towards saturation of this market. To

remain relevant in this market new technologies and higher cognitive services need to be provided to customers for outsourcing providers to remain a strategic outsourcing partner of choice.

7.4 SUGGESTIONS FOR FURTHER RESEARCH

7.4.1 The future of outsourcing

The future of outsourcing has been covered very lightly in this study and it is recommended that thorough research should be done of what the future might hold for outsourcing providers. Expertise as a service has been growing in the last couple of years with new technologies like artificial intelligence and neural networks. The study will need to understand new technology and how the weak signals that surround them will influence the ICT outsourcing market in the future so that current ICT outsourcing providers can pivot towards this new trend. This will also provide customers with new insights into possible future outsourcing models that may be incorporated into their business functions.

7.4.2 The next generation of employment

The study showed that the way employees perform their roles and deliver their deliverables is beginning to change with the new type of technologies and outsourcing models. Like work from home, virtual offices with no computers only VR headsets, and expertise as a service (ExaaS) trends are emerging and changing the workforce.

The question arises of whether a company in the future will be able to outsource all its services including its executives and contact them with an outsourcing model where they contract deliverables and not “hours at the office”.

7.4.3 How personality of the CIO effects strategic choices

The study has also shown some outliers when the reasons to insource a service was analysed. The personality of the CIO emerged as a very big factor regarding how that company’s insource and outsourcing strategy changed. Sometimes the CIO did not change the company strategy despite all the drivers pointing towards a different strategy. This uncovered an interesting future research question “How personality of the CIO effects strategic choices”. Some CIO’s prefer dealing with outsourcing providers as they believe they might have more leverage to achieve their strategic goals. Other CIO’s prefer everything under their own control to

achieve these same strategic goals. This begs the question of 'What personality produces the best results?'

7.4.4 Economic Research on Outsourcing

Future research is suggested in the field of the total cost of outsourcing across multiple generations of outsourcing vs insourcing among companies in the same industry, size and region. Comparison of the results with first world countries where labour costs are higher versus 3rd world countries where the labour cost is cheaper must be done. Thereafter a comparison Then compare the two with companies that offshore their services in an offshore outsourcing model must be done to determine what model provides the best customer service and the best cost benefits.

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9 SUPPLEMENTARY INFORMATION

9.1 SUPPLEMENTARY DOCUMENT 1

9.1.1 Research process

1) Find out what companies have outsourced, insourced, and then outsourced again. An Inductive research method will be used. First, the data will be sourced from all the account managers and senior managers that currently work for the ICT outsourcing company the author has access to. These managers would be best enabled to identify what companies are following a trend. These managers will typically have been with the company for more than 10 years in a senior role to effectively can identify the appropriate companies. The risk here is that there might not be many managers that would be able to identify the appropriate customers, but from an internal sample already conducted at least, 3 companies have already been identified.
2) The selected company's data will be analysed in the form of the contracts that they have had with the ICT outsourcing company in the past, in these contracts (master services agreements) the scope of work and the specific services and the service levels will be documented. If a company had insourced the contractual documentation would be reviewed to understand what the reasons were for the outsourcing termination. The risk here is that the contracting documentation might only have the legal reason but not the actual corporate reason. For example, the contract might state that the service was terminated because the contract term ended. But the real question is why did the company not re-contract with the ICT outsourcing company (or another one), for that reason, I would need to consult public records for public listed companies, but even then, I might not get the true answer, as such I would need to interview one of the key decision makers to ask what the actual reason why the contract was terminated. The literature review already indicated what the main reasons could be. But if the company outsourced that same service again a few years later then the reason might be different in the new context.
3) The reasoning why a company might have cancelled or renewed a contract might be more complex and this needs to be analysed from primary data and secondary data via contractual documentation and from discussions with internal management at the ICT outsourcing company. From the analysis, I envision to find gaps in the data and as such, the need to have these specific gaps in the data needs to be identified and prioritised to ensure that they covered by the interview questionnaire.

4) All data that has been collected will be refined and combined to create an interview questionnaire to use during the formal interviews. In Supplementary Document 2 is a high-level draft of the initial multiple choice questionnaire. The need for open ended questions also needs to be catered for but these questions will become evident as the research unfolds. Between 300 and 450 data points will be analysed over the 10 to 15 interviews, the data will be analysed using content analysis methodology (Neuendorf, 2016)
5) A trial run will be conducted with a pilot audience, first internal management to the ICT outsourcing company, and then secondly a pilot client that has outsourced and insourced in the past. It is envisioned that the pilot will give me the opportunity to adjust the interviews and questionnaires in the appropriate way so that It will be conducted in a standardised way towards the larger audience.
6) Identify appropriate individuals at the selected companies to interview to verify. The sample will be publicly listed companies and parastatal companies in South Africa due to the availability of the data, the second source of data will be the ICT outsourcing company's records. The audience targeted to be interviewed are CIO, COO and CFO's. Account Managers, Contract Managers and Service Delivery Manager that has a direct view or influence over the contracting decisions that was made in the past in the analysed organisation.
7) Schedule interview, and follow up questions. First, the contact details need to be obtained. The management of the ICT outsourcing company will have the relevant contact details of the selected individuals that need to be interviewed seeing that they are their primary clients. Second, a slot in their diaries needs to be found where the meeting can be held. Here again, I need to rely on the ICT outsourcing company management to help with an introduction and help with setting up a meeting. The alternative would be to contact the appropriate candidate's secretaries and obtain an introduction. The risk here is that far fewer candidates will be available during the research timeframe allows. To mitigate this risk, it is envisioned to aim for at least 10-15 interviews, it is believed that after the answers from the interviews become repetitive and no new insights are received from the interviews, then no further interviews will be conducted, but it is the goal to initially identify at least 35-40 candidates and try to get an interview from each and so mitigate the fact that only one candidate for every three approached will be available.
8) Conduct the interviews. The interviews will be held at either the client's site of preference or at the ICT outsourcing company offices. The interview will take between

30 min to 60 min to conduct. The interview will have the following agenda as per Supplementary Document 3

9) Document the interview, group, categorise and index the finding of both the multiple-choice questions as well as the open-ended questions.
10) Once all the interviews are completed all the data will then be analysed and comparatively. The data will be validated and verified by a 3rd party.
11) Review these findings, resonate them with a 3rd party like the supervisor and get a different perspective on the data, conclusions, assumptions and findings.
12) Document the findings in the research paper and conclude the paper.

9.2 SUPPLEMENTARY DOCUMENT 2

9.2.1 Survey Questionnaire questions

A. Motivations to outsource?

Q20 These questions aim to get a better understanding of why companies decide to outsource a service or a project.

Q1 Motivations to outsource? What do you believe are the main reasons to outsource a service? Should you pick more than one item below, please rank your choices. Rank: 0= Least Relevant. 100 = Most relevant.

_____ Cost cutting tool (1)
_____ Enables focus on core business functions (2)
_____ Solves capability / capacity issues (3)
_____ Enhances service quality (4)
_____ Enhances service delivery (5)
_____ Service is not critical to the business (6)
_____ Access to intellectual capital or innovation (7)
_____ Better management of internal business environments (8)
_____ Drives broader transformational change (9)
_____ Need short term skill / project (10)
_____ Other (please specify below) (11)

Q2 Please help us understand why you selected the answer above:

Q21 These questions aim to get a better understanding of why companies decide to insource a service or a project that was previously outsourced.

Q3 Motivations to insource? What do you believe are the main reasons to insource a service? Should you pick more than one item below, please rank your choices. Rank: 0= Least Relevant. 100 = Most relevant.

_____ Poor performance by outsourcing company (1)
_____ Technology matured and the company could deliver services internally (2)
_____ Cost cutting tool (3)
_____ Outsourced service is now a part of core business functions (4)
_____ Solves capability / capacity issues (5)
_____ Enhances service quality / service delivery (6)
_____ Company strategy changed (7)
_____ Access to intellectual capital or innovation (8)
_____ Better control of service management (9)
_____ Drives broader transformational change (10)
_____ The company can deliver the service better internally (11)
_____ Personal preference (12)
_____ Other (please specify below) (13)

Q4 Please help us understand why you selected the answer above:

Q22 These questions aim to get a better understanding of why companies decide to insource a project or service that was outsourced and then outsource these services yet again.

Q5 Name the service that was insourced, then later outsourced again?

Service(s) (1)
Industry (2)
Company (Optional) (3)

Q6 What is the outsourcing, insourcing, outsourcing trend (in terms of timelines)? Organisation tends to change its insourcing and outsourcing strategy every ____ years?

_____ Years (1)

Q14 What do you believe is the main reason(s) for this repetitive cycle of insourcing and outsourcing of the same service? Should you pick more than one item below, please rank your choices. Rank: 0= Least Relevant. 100 = Most relevant.

_____ Strategy changed (1)
_____ Technology matured (2)
_____ Cost benefits changed (3)
_____ Customer needs / Business focus changed over time (4)
_____ Internal / external company could deliver the services better (5)
_____ Service became part of core internal business functions. (6)
_____ Need to control intellectual property (7)
_____ Speed & Agility needed that only insourcing or outsourcing can provide (8)
_____ Personal preference (9)
_____ Perceived benefits of outsourcing did not realize (10)
_____ Perceived benefits of insourcing did not realize (11)
_____ Other (please specify below) (12)

Q8 Please help us understand why you selected the answer above:

Q9 What is your job role?

- ❍ Owner (1)
- ❍ Partner (2)
- ❍ Management/C-Level (3)
- ❍ Vice President (4)
- ❍ Senior Manager (5)
- ❍ Middle Manager (6)
- ❍ Manager (7)
- ❍ Team Lead (8)
- ❍ Administrative (9)
- ❍ Individual Contributor (10)
- ❍ Intern (11)
- ❍ Volunteer (12)

Q10 Thank you for completing this survey. Kindly provide us with your details for data categorisation purposes

Industry (1)
Country (2)
City/Town - Optional (3)
Name & Surname - Optional (4)
Company - Optional (5)
Email Address - Optional (6)

Q11 Would you be open and available to be interviewed regarding this survey?

- ❍ Yes (1)
- ❍ No (2)

9.3 SUPPLEMENTARY DOCUMENT 3

Agenda

- Welcome Introductions and Safety and Evacuation – 1-5 min
- Background and need for the study – 5 min
- Conducting of multiple choice questionnaire 10 min
- Conducting of open ended questions 10-30 min
- Conclusion and closing 2-5 min

9.3.1 Interview Questionnaire questions

1) What do you believe are the main drivers to outsource?
    a) (If relevant) - Please expand on your answer for each driver
    b) How would you rank the above Top drivers in terms of importance to least important (E.g. Cost is 60% of the reason to outsource and 40% due to technology that has matured)?
    c) What other drivers do you believe also play a factor in the above choice that does not form part of your top choices?
    d) (Internal Note) Summarise Answer and confirm Summary is correct (Bullet points)
        i) (If relevant) Can you give an example for the main drivers you mentioned before
        ii) Unpack example (if necessary)
2) What do you believe are the main drivers to insource?
    a) (If relevant) - Please expand on your answer for each driver
    b) How would you rank the above Top drivers in terms of importance to least important (E.g. Cost is 60% of the reason to outsource and 40% due to technology that has matured)?
    c) What other drivers do you believe also play a factor in the above choice that does not form part of your top choices?
    d) (Internal Note) Summarise Answer and confirm Summary is correct (Bullet points)
        i) (If relevant) Can you give an example for the main drivers you mentioned before
        ii) Unpack example (if necessary)
3) What companies/industries are you aware of that have outsourced a service, then insourced that service, and then later re-outsourced that same service?
    a) What do you believe is the cycle to this outsourcing insourcing phenomena in terms of timelines?
    b) What do you believe are the main drivers that drive this trend?

c) How would you rank the above top drivers in terms of importance to least important (E.g. Cost is 60% of the reason to outsource and 40% due to technology that has matured)?
d) What other drivers do you believe also play a factor in the above choice that does not form part of your top choices?
e) (Internal Note) Summarise Answer and confirm Summary is correct (Bullet points)
    i) (If relevant) Can you give an example for the main drivers you mentioned before
    ii) Unpack example (if necessary)
f) What do you believe there are the different cycles for the different industries?
g) What do you believe this trend of insourcing then outsourcing will evolve into in the future, and what factors will determine this continuation or end?
h) How do you believe different customers and industries will utilise this outsprinting service in the future?
    i) Is there any industry that will need outscoring more than any other?
    ii) Do you believe these industries will continue to experience the same trend (insourcing/outsourcing) going forward?
    iii) (Internal note – Summarise answers and confirm correctly summarised with interviewee)

4) Do you know of anyone else that I can interview for this research?

Thank you – End of Interview.