

**UNIVERSITY OF KWAZULU-NATAL**

**A FRAMEWORK FOR EVALUATING THE IMPACT OF BUSINESS PROCESS  
OUTSOURCING (BPO) ON THE OPERATIONAL PERFORMANCE OF THE  
MOBILE TELECOMMUNICATIONS INDUSTRY, SOUTH AFRICA**

**By**

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**College of Law and Management Studies**

**FACULTY OF MANAGEMENT SCIENCES**

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S. Mbanje

## **DEDICATION AND ACKNOWLEDGEMENTS**

This study is dedicated to my wife Catherine who provided love and care, my daughters Chioneso (Shylet) and Kudzai and my mother Nester Chioneso Mbanje and my late father J.J. Mbanje for the motivation and to have been “teachers” to me in my continual quest for more knowledge.

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## **ABSTRACT**

Mobile telecommunication service providers in developing countries, particularly southern African mobile telecom operators outsource a range of activities like logistics, assembly operations, manufacturing, and design. The results of such decisions have not been proved empirically. Empirical evidence on whether or not outsourcing is beneficial lacks in the industry. Furthermore, there has been a minimum focus on the effects of outsourcing on the operational performance of firms. In light of the above, the study proposes a CPP framework that can be used to evaluate the impact of business process outsourcing (BPO) on the operational performance of mobile telecommunications industry in developing Southern African countries with particular reference to South Africa using cost, productivity and profitability (CPP) as the underpinning quantitative performance metrics by taking into consideration the drivers, benefits, and risks of the business strategy. The study is informed by the positivism research paradigm using deductive approach. A descriptive research design was adopted for the collection of quantitative data. Chi square test were conducted to establish the statistically significant relationship between business process outsourcing and cost efficiency, productivity and profitability and the operational performance of mobile telecommunication firms. A structured closed-ended questionnaire was used to collect raw data using the drop-off method in which questionnaires were distributed to two hundred and ten employees of the two mobile communication companies. The findings of this current study reflect that majority of the participants alluded that there is an improvement in cost efficiency, increase in productivity and profitability after BPO thereby improving the operational performance of the mobile telecom operators. These results suggest that there is a statistically significant relationship between BPO and cost, productivity and profitability. The results were reflected in the proposed cost, productivity and profitability (CPP) framework as part of the business performance outcome. The results are important to corporate management as this avoid relying on managers' estimates in place of quantifiable metrics in deciding on whether to outsource or in source and can also assist management, policymakers and supply chain Practitioner in developing BPO policies.

**Key phrases** Business process outsourcing; operational performance; productivity; cost, profitability.

## isiZULU

### ABSTRACT

Abahlinzeki besevisi yezokuxhumana ngomakhalekhukhwini emazweni asathuthuka, ikakhulukazi opharetha bezingcingo zamaselula e-Afrika eseningizimu banikeza ngaphandle uchungechunge lwemisebenzi efana nokuhlela, ukuhlenganisa, ukukhiqiza, nokuklama. Imiphumela yalezi zinqumo ayizange ifakazelwe ngokwamandla. Ubufakazi obunamandla bokuthi ukukhishwa kwemisebenzi kuyazuzisa ukushoda embonini. Ngaphezu kwalokho, kube nokugxila okuncane emiphumeleni yokukhishwa kwemisebenzi ekusebenzeni kwamafemu. Ngokwalokhu okungenhla, ucwaningo luphakamisa uhlaka lwe-CPP olungasetshenziswa ukuhlola umthelela wokukhishwa kwezinqubo zebhizinisi (BPO) ekusebenzeni. ukusebenza kwemboni yezokuxhumana ngomakhalekhukhwini ekuthuthukiseni amazwe aseNingizimu ne-Afrika ikakhulukazi iNingizimu Afrika isebenzisa izindleko, ukukhiqiza kanye nenzuzo (CPP) njengesisekelo samamethrikhi okusebenza esilinganisweni ngokucabangela abashayeli, izinzuzo, kanye nobungozi besu lebhizinisi. Ucwangingo lwenziwa yi-positivism research paradigm kusetshenziswa indlela yokudonsela phansi. Kwamukelwa umklamo wocwaningo oluchazayo ukuze kuqoqwe idatha yobuningi. Ukuhlolwa kwe-Chi square kwenziwa ukuze kutholwe ubudlelwano obubalulekile ngokwezibalo phakathi kokukhishwa kwenqubo yebhizinisi kanye nokusebenza kahle kwezindleko, ukukhiqiza kanye nenzuzo kanye nokusebenza kokusebenza kwamafemu ezokuxhumana ngomakhalekhukhwini. Uhlu lwemibuzo oluvaliwe oluhlelekile lwasetshenziswa ukuqoqa idatha eluhlaza kusetshenziswa indlela yokushiya lapho imibuzo yasatshalaliswa kubasebenzi abangamakhulu amabili neshumi bezinkampani ezimbili zokuxhumana ngomakhalekhukhwini. Okutholwe kulolu cwangingo lwamanje kukhombisa ukuthi iningi labahlanganyeli likhombisa ukuthi kukhona ukuthuthuka ekusebenzeni kahle kwezindleko, ukwanda kokukhiqiza kanye nokwanda kwenzuzo ngemuva kwe-BPO ngaleyo ndlela kuthuthukiswe ukusebenza kokusebenza kwabaqhubi bezingcingo zamaselula. Le miphumela iphakamisa ukuthi kunobudlelwano obubalulekile ngokwezibalo phakathikwe-BPO nezindleko, ukukhiqiza kanye nenzuzo. Imiphumela yabonakala ohlakeni

oluhlongozwayo lwezindleko, ukukhiqiza kanye nenzuzo (CPP) njengengxenywe yomphumela wokusebenza kwebhizinisi. Imiphumela ibalulekile ekuphathweni kwebhizinisi njengoba lokhu kwagwema ukuthembela esilinganisweni sabaphathi esikhundleni samamethrikhi angabalulekayo ekunqumeni ukuthi bazonikezwa yini inkampani yangaphandle noma emthonjeni futhi kungasiza futhi abaphathi/ abenzi bezinqubomgomo/ Umsebenzi wochungechunge lokuhlinzeka ekuthuthukiseni izinqubomgomo ze-BPO.

**Imishwana engukhiye:** Ukukhishwa kwenqubo yebhizinisi; ukusebenza komsebenzi; ukukhiqiza; izindleko, inzuzo.

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# CHAPTER 1: INTRODUCTION OF THE STUDY

## 1.1 INTRODUCTION

Scholars have repeatedly alluded that, in times of rising competitive challenges and globalization, businesses must decrease costs, increase productivity and profits and create new opportunities by maximizing internal and external resources. Current business environment, lean businesses that focus on their core skills overcome those that keep all administrative activities internally. Several businesses are analysing which services outside suppliers can do better in order to improve client value connections over time (Lacity, Khan & Yan, 2017).

A significant advantage of business process outsourcing (BPO) is the capacity to shift swiftly to accommodate changes in today's economic climate (Christiansson and Rentzhog, 2019; Sandhu, Shamsuzzoha & Helo, 2017). South Africa is a potential global BPO destinations, with 222 500 jobs produced at the moment (BPESA, Key Indicator Report, 2016). In 2014, the South African BPO industry constituted 1% of world-wide BPO revenue, and by 2030, it is forecasted to account for 4% of global revenues (Deloitte, 2016). In South Africa, business process outsourcing (BPO) is a critical generator of economic growth and employment (Anwar and Graham, 2019; DTI, 2013; Pandey and Rogerson, 2014). According to Willcocks, Lacity, & Craig, (2015), South Africa is a potential Business Process Outsourcing site as suggested by the empirical literature.

Accordingly, the outsourcing of business processes in the South African telecom sector rose from a projected 185 contact centres in 1997 to well over a thousand by 2012 (Pandey & Rogerson, 2014). As indicated by BPESA, (2018), 228,642 individuals, with little over 38,600 in the offshore segment in 2017, were employed by the sector. In 2018, the South African telecoms sector grew by over 14% to R187 billion. Despite the growing interest in and the importance of BPO, little research has been conducted on the implications of the BPO on the operational performance of the companies quantitatively including the South African mobile telecommunication industry.

Despite many efforts within organizations toward BPO, research on real-world experiences remains in its infancy in the mobile telecom operators (Christiansson and

Rentzhog, 2019; Lahiri, 2016; Kivijarvi and Toikkanen, 2015; PiaEllimaki, Aragon-Correa&-Torres, 2021; Sandhu et al., 2017). The purpose of this research is to redress the existing knowledge gap and the limited body of literature by proposing a framework to evaluate the impact of BPO quantitatively in the South African mobile telecommunication industry using cost, profitability and productivity as the performance measurements. This also assisted the researcher to assess the knowledge acquired from the BPO implementation.

According to previous research, there is insufficient empirical evidence on the effects of BPO in general (Christiansson and Rentzhog, 2019; Kohlbacher, 2010; Tarhan, Turetken, and Reijers, 2015), and even less from an all-inclusive organizational standpoint (only parts of the company or a single project) and few evidences on evaluating its effects quantitatively (Christian and Rentzhog, 2019; Kohlbacher, 2010; Tarhan et al., 2015). The reported impact in the studies are mainly linked to the firm's advantages of a process-oriented approach (Kohlbacher, 2010; Tarhan et al., 2015; Dijkman, Lammers & de Jong, 2016; Movahedi, Miri-Lavassani & Kumar, 2016), or improved quality and developments in BPO performance, with fewer studies focusing on evaluating quantitatively organizational operational performance (Dijkman et al., 2016; Tarhan et al., 2015).

This study redressed the existing knowledge gap by developing a framework empirically evaluating the effects of BPO on the operational performance South African mobile telecom operators quantitatively. The framework also reflects the statistically significant correlation between BPO and cost efficiency, productivity and profitability. Though there is some research on BPO in Africa, the research primarily focused on broad industrial plans for economic development (Anwar and Graham, 2019; Beerepoot and Keijser, 2015; Benner and Rossi, 2016), with limited importance on BPO and its impact on the operational performance of the company quantitatively especially in Southern Africa special reference to South Africa mobile telecom operators (Patil and Wongsurawat, 2015; Khaki and Rashidi, 2012; Naz, Ali, Naz & Sadiq, 2013; Sandhu, Shamsuzzoha & Helo, 2017; Wino and Mutua, 2014) .This study bridges the gap by proposing a framework to empirically evaluate its impact on South Africa's mobile telecommunications industry using cost, profitability and productivity as the performance measurements.

Somjai, (2017), have considered business process outsourcing as a potential approach of controlling cost, improving productivity, (Antonioli, Mazzanti Montresor & Pini, 2015) improving profits and economies of scale (Christiansson and Rentzhog, 2019; Sandhu et al., 2017). BPO have also been used to improve the operational performance of companies (Christiansson and Rentzhog, 2019). Majority of the mobile telecommunications firms, including those in South Africa, are using it as a strategy in their business plans and as a significant management tool for better client interactions, business innovation, and competitive edge. Empirical evidence on whether or not outsourcing can reduce cost, improve profits and productivity lacks in the mobile telecommunication industry particularly in the southern Africa with special reference to South African. (Gerbl, Mclvor & Humphreys, 2016; Kivijarvi and Toikkanen, 2015), hence need for a framework to evaluate its impact on the firm operational performances so as to bridge the gap.

Mobile telecommunication firms must keep on being vigilant and aware of current and emerging market conditions in order to remain competitive. Companies must develop operative strategies that can create customers loyalty and also develop product and service that can address customer needs. BPO was identified as the appropriate strategy (Hanafizadeh and Ravasan, 2017 Sandhu et al., 2017). With the rate of technological acceleration, most industries including mobile telecommunications companies, should invest its resources in technology. If an organization's core business is telecom activities, the most significant investments should be in sustaining and progressing telecoms-specific technology rather than maintaining systems that are outside their core competency.

At the corporate level, "back-office" operations like finance, human resources and accounting, and information technology are seen as potential cost cutting (Mclvor, 2016). IT, management, production/manufacturing/assembling, logistics, sales and marketing, R&D, security, catering, legal, customer service/call centre, purchasing and procurement, payrolls management, human-resource outsourcing, network planning, maintenance, and operation of mobile network base stations, network infrastructure, tower management, Finance and accounting, resolving software problems and monitoring the network on capacity overload, spare parts management, billing and



equipment maintenance are examples of activities or services outsourced (Huo, Ye, & Zhao, 2015b; Shi, Zhang, Arthanari, Liu & Cheng, 2016; Zhu, Ng, Wang & Zhao, 2017) but empirical evidence on whether or not BPO reduces cost, improve productivity and profits is lacking in the mobile telecom operators in the Southern African countries particularly South Africa hence need for a framework to evaluate its impact on the operational company performance.

For developing and sustaining competitive edge, specifically in the modern time of innovation, organization functioning under the restrictions of ever-changing international market rivalry and persistent forces to rationalise and optimise the operational cost that should concentrate on achievables in the market and use the innovations established within different firms, both global leaders and small start-up companies (Lacity, Khan & Yan, 2016; Sobinska and Willcocks, 2016).

Information technology outsourcing and BPO have been driven by factors such as the need to cut costs, globalization, increased productivity, demanding customers, corporate restructurings, increased profitability, and information and communication technologies (ICTs) advances (Gerbl, Mclvor & Humphreys, 2016). BPO has been adopted as a strategy by most of the companies as one of the most significant, though debated trends, over the last decade but the findings of the empirical literature on evaluating the effects of BPO on the performance of an organization's operations are not conclusive within telecommunication industry particularly in Southern Africa special reference to South Africa mobile telecom operators. (Brewer, Wallin & Ashenbaum, 2014; Gerbl et al., 2016 Hanafizadeh and Ravasan, 2017; Lahiri, 2016; Kivijarvi and Toikkanen, 2015). This study becomes imperative in that it proposes a framework to evaluate its effects on the organization's operational performance so as to bridge the gap. Few studies were conducted in Kenya, Ghana and Nigeria but did not develop a framework and with limited consideration being focused on developing nation like South Africa.

According to Kaipia and Turkulainen, (2017), the growth in business process outsourcing over the previous two decades has been exceptional, and more organizations are outsourcing today than ever before and have adopted BPO including the south African mobile telecommunications industry so as to reduce cost, improve productivity, improve profitability and to focus on core competencies (Liu and Tyagi, 2017; Kabiraj and Sinha, 2016). Despite its rapid growth, the outcome remains unsolved (Brewer, Wallin and Asbenbaun, 2014; Brewer, Jiang and Qureshi, 2006; Kivijarvi and Toikkanen, 2015). There is limited empirical research conducted on a large-scale on whether outsourcing benefits or risk a company (Lahiri, 2016). For decades, organizations in numerous industrial sectors have adopted business process outsourcing as a primary business strategy including the mobile telecommunications industry, and South African companies have not been spared in implementing the strategy (Hanafizadeh and Ravasan, 2017; Kabiraj and Sinha, 2016).

However, there is limited views or knowledge on the real outcome of outsourcing (Kivijarvi and Toikkanen, 2015; Awino and Mutua, 2014). This discrepancy prompted the author to propose a cost, productivity, and profitability model (CPP) to establish the statistically correlation between BPO and organizational performance.

There is increasing body of literature on BPO, there is insufficient information on performance measurement using quantitative indicators in Southern Africa because most studies have been conducted in affluent nations. Mclvor, 2016; Hoodosi and Rusu, 2013). Furthermore, empirical studies attempting to quantify the effect of BPO on an organization's operational performance have yielded mixed results (Kivijarvi and Toikkanen, 2015, Lahiri, 2016). Few studies have been conducted in Kenya, Ghana and Nigeria, but no framework was developed to evaluate its impact. The current study becomes imperative in addressing the gap by developing a framework empirically evaluating the impact of BPO (independent variable) in the mobile telecommunications industry using cost efficiency, profitability and productivity (dependent variable) as the underpinning performance metrics/dimensions in the Southern Africa and special reference to South African mobile telecom operators.

The situation of BPO in South Africa was briefly discussed in this chapter and literature related to the “developing of a framework for evaluating the impact of business process outsourcing (BPO) on the operational performance of the mobile telecommunication industry, South Africa”. The background of the study, as well as the problem statement were also discussed. This was followed by the study’s objectives, research questions, theoretical framework of the study, the scope of the research and the expected knowledge contribution. This study seeks to address the primary aim of suggesting a framework that can evaluate the influence of BPO on the South African mobile telecommunication industry using productivity, profitability and cost efficiency as the performance measurements.

Mobile telecom service providers/operators are searching for ways to minimize costs, increase productivity, and increase income due to business economics (Eggert, Bohm & Cramer, 2017; Willcocks, 2010). In South Africa, financial services, legal process outsourcing, upselling and retention, and even corporate consultation are all becoming gradually popular (BPESA, 2015). International organizations can deliver particular high-value services and South Africa's unique value intentions, which comprise of favourable cultural affinity with the UK, time zone for UK-based clients, and a talented workforce (Anwar and Graham, 2019).

The government of South Africa pronged incentive programs for offshore BPO activities and is driving international firms' plans to set up operations in the country, whether by acquisitions, internal captive operations, or strategic partnerships with supplier and outsourcers (Anwar and Graham, 2019; BPESA, 2018). The BPO industry in South Africa contributes significantly to the country's GDP and creates jobs. The BPO sector contributes ZAR50 million to the country's annual GDP and employs around 215 000 people, according to Business Process Enabling South Africa (BPESA) (Deloitte, 2016).

As companies aim to save costs, increase efficiency, increase profits, and concentrate in limited core areas, BPO has become a strategic necessity (Awino and Mutua, 2014; Hanafizadeh and Ravasan, 2017). This declaration is maintained by a study by Sobinska and Willcocks, (2016) whose results revealed that as part of BPO, Polish businesses used a variety of IT services. In addition, 91 % reported outsourcing was

the preferred approach, followed by 26 % insourcing, 26 % cloud computing and 13 % offshoring. Although these data do not reveal the actual mix of sourcing methodologies, the current study is significant in attempting to assess the effects of BPO on the operational performance of the South African mobile telecom operators. This was also evident in the fact that outsourcing accounts for 51 percent of shippers' transportation costs and 36 percent of warehouse operations costs (Langley and Cag Gemini, 2015; Zhu, Ng, Wang, and Zhao, 2017), with less attention given to rapidly developing countries such as South Africa and its impact on telecom operators operational performance, resulting in the study bridging the knowledge gap.

The concept of BPO is developed when firms are in the process of completing the utilization of unique skills. Firms are strategically deciding to contract out what they are inefficient at and focus their resources on what they do best in order to improve their performance. As a result, BPO was developed out of a need to be more competitive (Awino and Mutua, 2014). Other than core competences, mobile telecom operators outsource important operations and services to vendors or providers extending from human resource to process design and tower management.

Presently, companies outsource numerous functions from information technology (IT) management to entire operations like human resources (Tjader, May, Shang, Vargas & Gad, 2014). South African mobile telecom operators' increasing the rate of industrial expansion make businesses to outsource in order to achieve a variety of objectives, including gaining opportunity to cost savings, specialized talents, new technology, and improved output (Anwar & Graham, 2019; Hanafizadeh and Ravasan, 2017; Sandhu et al., 2017). The results of the empirical literature on evaluating the effects of BPO on the firm operating performance are not conclusive (Brewer, Wallin & Ashenbaum, 2014; Lahiri, 2016; Kivijarvi and Toikkanen, 2015) hence this study becomes imperative in providing a solution in addressing the gap.

Outsourcing and in-sourcing should be balanced in terms of their influence on business potential (Nielsen and Mitchell, 2015). Before determining whether to produce in-house or buy from outside suppliers, a careful assessment of both options in terms of risk assessment, market conditions and return on investment is required, (Sandhu et al., 2017; Tate, Ellram, Schoenherr & Petersen, 2014) which most of the

studies in southern Africa especially the South African mobile telecom operators have to address hence need for the current study to bridge the gap.

Business process outsourcing has been defined as the “transferring responsibility for entire functions such as human resources, logistics, customer contact, and information technology (IT) services to both local and offshore vendors” (Mani; Srikanth & Bharadwaj, 2014; Mclvor,2016). Even though the mobile telecommunications business is moving toward BPO, the effects of this application on the firm's operational performance is still unclear (Brewer, Wallin & Ashenbaum, 2014; Khaki and Rashidi, 2012; Kivijarvi and Toikkanen, 2015).

Supply Chain practitioners should evaluate the fundamental basics of the success of businesses in terms of compatibility, competency, consistency, and continuity while designing the BPO contract. The strategic vision for BPO must drive the business relationship's operating philosophy, which should be reflected in the outsourcing contract's critical features, such as pricing, contract type, reward and penalty mechanisms, performance metrics and other provisions of non-pricing (Gunasekaran et al., 2015). Supply Chain practitioners must also verify that outsourcing businesses and their corresponding vendors have the proper combination of capabilities and know-how. The ways that generate the most benefits from outsourcing and vendor's relationships must be aligned (Sandhu et al., 2017).

Regardless of, the quickly increasing literature of BPO, there is hardly any account of performance measurement using quantitative metrics for decisions to outsourcing, and such initiatives have not been introduced in related publications to our knowledge, especially in developing countries, particularly in the Southern Africa and special reference to South Africa (Hoodosi and Rusu, 2013; Mclvor, 2016). Developing countries particularly Southern Africa and special reference to South Africa mobile telecom operators seem to be poorly represented in studies related to the field of business process outsourcing (BPO) performance implications, as well as concerns connected to outsourcing drivers, benefits and risks, as well as the relationship between BPO and operational performance of mobile telecom operators using

quantitative metrics hence not empirically tested especially in telecommunications companies. This is evident by the studies in China, USA, India, Persian Gulf, Iran, UK, Denmark, Finland, Germany, Turkey, and the Persian Gulf as the developed countries (Hanafizadeh and Ravasan, 2017; Hoodosi and Rush, 2013; Pratap, 2014; Huo, Liu, Kang, & Zhao, 2015a; Leuschner, Carter, Goldsby & Rogers, 2014; Liu, Huo, Liu, Zhao & Chan, 2015; Rajesh, Pugazhendhi, Ganesh, Muralidharan & Sathiamoorthy, 2011; Zhu et al., 2017; Patil and Wongsurawat, 2015; Modarress, Ansari & Thies, 2016). In light of the above, this study explored possible solutions and proposes a framework to evaluate the impact of outsourcing business processes using quantifiable metrics from a developing country perspective particularly southern Africa special reference to South African mobile telecom operators.

This research seeks to address the primary aim of suggesting a framework that can evaluate the impact of BPO on mobile telecommunications industry (business performance) using productivity, profitability and cost efficiency as the performance measurements. With reference to this study the word company, organisation, business and firm is used interchangeably

## **1.2 BACKGROUND TO THE STUDY**

Organizations must embrace new strategies and leverage innovative information technologies and solutions to be competitive in today's dynamic economic and technology environment (Lacity, Khan & Yan, 2016; Sobinska and Willcocks, 2016). Because the business environment is changing rapidly, management needs to adapt its strategies to new and changing circumstances. Likewise, investment is a necessary action that encourages and gives the company a competitive edge for forthcoming success and outsourcing is highly recommended for improving competitive position (Christiansson and Rentzhog, 2019; Espino-Rodriguez, Chun-Lai & Gil-Padilla, 2017; Gerbl, McIvor & Humphreys, 2016; Hanafizadeh and Ravasan, 2017; Kabiraj and Sinha, 2016; Vilko, 2013). The evidence of the results of BPO on the company operational performance has not been empirically proven since management use estimates that are devoid of empirical testing to avoid provides most of the evidence (Brewer et al., 2014; Lahiri, 2016; Kivjarvi and Toikkanen, 2015; Pratap, 2014;

Sen and Haq, 2010; Wayman, 2013; Pia Ellimaki, Aragon-Correa& Hurtado-Torres, 2021).

There has been extensive research around business process outsourcing (BPO) from a strategic perspective. These studies focused on the factors that influence outsourcing decisions, as well as the manner in which the contracting out decisions improve and aid strategic decision-making (Kroes and Ghosh, 2010; Diaz-Mora and Triguero-Cano, 2012; Sandhu et al., 2017). BPO is defined as a business strategy in which one or more business processes of an organization are contracted out to an external service provider (Baiye, 2012; Densai, 2012; Handfield, 2012; Mclvor, 2016). The aim is to keep operating costs low while focusing on the company's key skills. Examples, which have set global standards include companies such as Nike that outsource its entire shoe manufacturing activity (Pratap, 2014). If there is a high increase in surplus with a minor increase in risk, a company should consider business process outsourcing (BPO), while if there is a small increase in surplus or a large increase in threats, it is preferable to conduct the function in-house (Chopra and Meindl, 2016).

Outsourcing decisions are constantly relying on assumption that such decisions provide benefits to the company, be either the operational or strategic sphere, with the benefits outweighing the risks (Eikermann, Kemeter, Aichberger & Poetscher, 2013; Liu and Tyagi, 2017). However, no empirical evidence has been provided on evaluating its impact on company performance quantitatively in the South African mobile telecom operators.

### **1.2.1 Business process outsourcing in the South African Mobile Telecommunication industry**

MTN, Vodacom, Cell C, and Telkom are the four licensed mobile operators in South Africa. The government of South African views BPO as critical to job creation. In 2012, the South African BPO business was expected to have made US\$ 1.3 billion in sales (Anwar and Graham, 2019; BPESA, 2018; Frost and Sullivan, 2012). In 2018, South African telecom operators saw positive growth as total subscriptions, internet penetration, device ownership and data use all increased.

In 2018, the South African telecoms sector grew by over 14% to R187 billion. Telkom, which leads fixed-line telephony, and Vodacom and MTN, which dominate the mobile arena, are among the 56 companies profiled in detail. Cell C and Virgin Mobile are among the companies profiled fiber providers such as Vumatel, Vox, and Dark Fibre. (Anwar and Graham, 2019; BPESA, 2018; Frost and Sullivan, 2012).

Investment in Telecommunications According to ICASA's 2019 report, revenue from mobile communication services climbed by 28.5 percent from R15.2 billion in 2017 to R19.5 billion in 2018. Despite tense market rivalry, South Africa's telecoms business, particularly the mobile segment, has risen fast in the previous 15 years (Deloitte, 2016). According to the Economist Intelligence Unit (EIU), mobile subscriptions are predicted to expand by 1.2 percent annually on average from 2015 to 2019, resulting in over 84 million members by 2019. (BMI South Africa telecommunication report, 2016; Deloitte, 2016).

As the world's most potential BPO destinations in 2007, South Africa was recognized. Furthermore, expanding infrastructure, government incentives, cost competitiveness and international client service all contribute to a thriving South African outsourcing, and business that is likely to expand even further in the years ahead.

The 2016 Business Process Enabling South Africa (BPESA) Key Indicator Report revealed that the BPO sector had created 222 500 jobs at the time (BPESA, 2018), but empirical evidence on the yields of BPO on the firm's operational performance, including in business logistics outsourcing, is inconclusive (Liu, Huo, Liu, Zhao & Chan, 2015; Rajesh et al., 2011; Zhu et al., 2017). The focus of this study was to establish a framework for quantitatively evaluating the impact of BPO in order to bridge the knowledge gap.

Over the last few years, the mobile telecom business in industrialized countries has experienced amazing expansion, creating enormous prospects for the telecom infrastructure industry (Anwar and Graham, 2019 Frost and Sullivan, 2012). Telecom Operators in established markets have already developed to sophisticated active infrastructure contracting out, whereas those in markets that are still developing, such



as South Africa and other southern developing countries, are just beginning to see the benefits of outsourcing (McIvor 2016).

The current situation in South Africa is that intense competition in the mobile telecom industry of southern developing countries, including South African mobile telecom operators has refocused all service providers to search for ways to minimize operational costs, improve productivity and profitability by outsourcing functions such as tower infrastructure management, billing, security, asset management, and other functions that require significant capital expenditure (BPESA, 2018; Anwar and Graham, 2019). Similarly, Vodacom and Metro Global Telecom Services (Pty) Limited in South Africa have adopted a BPO strategy to reduce costs, improve productivity and profits, although the results or trade-off of the impact of BPO on the firm's operational performance is still inconclusive (Anwar and Graham, 2019; Brewer et al., 2014; Lahiri, 2016; Kivjarvi and Toikkanen, 2015).

MTN, Vodacom, Telkom, and Cell C, for example, outsource services and activities like IT management, logistics, sales and marketing, research and development, security, catering, legal, customer service, purchasing/procurement, payroll management, human-resource outsourcing, network planning, maintenance, operation of mobile network base stations, network infrastructure, tower management, resolving software problems and monitoring the network on capacity overload (network operation services) spare parts management, billing and equipment maintenance and manufacturing/ assembling but there has been limited consensus on the actual impact of contracting out quantitatively. (Anwar and Graham, 2019; BPESA, 2018; Kivjarvi and Toikkanen, 2015; Wino and Mutua, 2014). This study becomes imperative in evaluating its impact on organisation's operational performance so as to bridge the gap.

BPO has helped in the mushrooming of a number of other companies such as Sweden's Ericsson, Germany's Siemens, Metro Global Telecom Services (Pty) Limited) and China's Huawei as their major international suppliers of technology, who are now part of the new supply chain system and a total mobile services revenue of 99,569,265,222 was realised in 2018-2019 (ICASA's report, 2019). As the answer to if outsourcing really improves firm performance, especially in the southern developing countries, including South African telecom operators is still unclear (Lahiri, 2016).

Addressing this question is critical, especially in the mobile telecommunications market, where companies in South Africa and globally are pursuing BPO as a cost-cutting and competitiveness strategy (Mclvor, 2016). Consistently, this study focused into possible solutions and proposed a framework for evaluating the effects of business process outsourcing using quantifiable metrics from the perspective of a developing country, particularly Southern Africa, with special reference to South African mobile telecom operators.

According to Shi, (2007) a “BPO service provider’s competence in the business management process, project and technology have a huge role in either the success or failure of a BPO project”. According to literature, reasons for outsourcing changes over time and motivations for outsourcing are not predominantly about cost discipline. Instead, the reason for outsourcing is to re-position strategically to enhance core competencies, to integrate services to a larger extent, to create higher value, and to exploit process performance (Khaki and Rashidi, 2012; Modarress, Ansari and Thies, 2016; Patil and Wong, 2015; Power, Desouza and Bonifaziet, 2013). The telecommunication service providers in South Africa that is, Vodacom and Metro Global Telecom Services (Pty) Limited outsource a range of activities to external service providers like logistics, assembly operations, manufacturing, and design but the results of such decisions have not been proved empirically.

There is a scarcity of empirical studies conducted on large-scale on whether outsourcing benefits or risk a company (Lahiri, 2016), and the mobile telecommunications industry is no exception. Consistently, there is limited empirical studies evaluating the operational performance implications of outsourcing using quantitative metrics in most industries including in the mobile telecommunications industry in developing countries particularly Southern Africa and special reference to South Africa (Anwar and Graham, 2019; BPESA, 2018; Brewer,2014; Khaki and Rashidi,2012 Kivijarvi and Toikkanen,2015). Limited attention has been given to the effects of outsourcing on a firm's operational performance (Lahiri, 2016; Aubuchon, Bandyopadhyay, & Bhaumik, 2012). The current study bridged the gap by proposing a framework to evaluate the impact of business process outsourcing (independent variable) in the mobile telecommunications industry in developing countries particularly Southern Africa and special reference to South Africa using cost,

productivity and profitability (dependent variable) as the underpinning quantitative performance metrics taking into consideration the drivers, benefits and risks of the business strategy.

In the global arena, outsourcing has become a well-liked and extensively accepted business strategy (Hanafizadeh and Ravasan, 2017; Sandhu et al., 2017; Willcocks, 2010). McIvor, (2016) defined Business process outsourcing as the “transferring responsibility for entire functions such as human resources, logistics, customer contact, and information technology (IT) services to both local and offshore vendors”. Power et al., (2013) defined “Business Process Outsourcing (BPO) as a method of sub-contracting or contracting various or a specific operation to a third party to reduce cost”.

This research is motivated by the effects of BPO on firms which remains unclear and under-researched since attention was primarily centered on the decision-making aspect of whether and where to outsource (Brewer et al., 2014; Lahiri, 2016; Pratap, 2014; Sen and Haq, 2010; Wayman, 2013). The South African mobile telecommunications companies (Vodacom and Metro Global Telecom Services (Pty) Limited) are outsourcing some of their operational activities but evidence of the results of BPO on their operational performance has not been empirically proven since management use estimates that are devoid of empirical testing provides most of the evidence. Numerous researches by (Bewer, Wallin & Ashenbaum, 2014; Liu and Tyagi, 2017) fail to address the impact of BPO of the firms' operational performance. Thus, the dilemma of whether outsourcing is a myth or a reality in terms of an organization's operational performance (Lahiri, 2016) remains unanswered. In light of the above, this study investigated potential solutions and proposed a framework for evaluate the impact of business process outsourcing using quantifiable metrics from the perspective of developing countries, particularly Southern Africa, with a focus on South African mobile telecom operators.

The problem of quantifying the benefit of sourcing efforts has been recognized by both organizations and academic publications (Huo, Liu, Kang & Zhao, 2015a; Liu, Huo, Liu, Zhao & Chan, 2015). Unfortunately, despite the fact that a large quantity of scholarly literature recognizes the challenge of measurement, it offers no remedies (Kivijarvi and Toikkanen, 2015; Blaskovich and Mintchik, 2011). Therefore the current

study becomes imperative in that it provided a solution through suggesting a framework to evaluate the impact of business process outsourcing on the operational performance of telecom companies using quantifiable metrics from a developing countries perspective particularly Southern Africa and special reference to South Africa, mobile telecom operators. Some of the main challenges which organizations have had with the measurement task are related to issues such as savings. The literature derived from the study will also address a wide array of outsourcing aspects from a Southern African developing country's perspective special attention is given to South African telecom operators.

### **1.3 PROBLEM STATEMENT**

Selected research has investigated and discussed the impact of contracting out services on the firm's operational performance evident by (Patil and Wongsurawat, 2015; Khaki and Rashidi, 2012; Naz, Ali, Naz & Sadiq, 2013; Sandhu, et al., 2017) but none of these has used the quantitative metrics to evaluate the effect of BPO on the operational performance of the organization.

Smith, (2012) in the United States, investigated the influence of contracting out on organizational operational performance and mobile Iranian telecommunication firms using qualitative measures such as quality and flexibility, Arvanitis and Loukis, (2012) investigated the performance of telecommunication companies as a result of outsourcing in both Switzerland and Greece using qualitative variables, Kannan, (2008) suggested a framework for BPO measurement using people, technology and process as the metrics, this gives the researcher room to bring in new knowledge on measuring the business performance quantitatively. Currently, contracting is generally considered an appealing option. The analytical model/framework proposed by Naz, et al., (2013) used the qualitative metrics such as flexibility, access to specialized skills & technology instead of the quantitative measures hence need for a new framework.

Sandhu, Shamsuzzoha, and Helo (2017) developed an outsourcing framework that focused on five key areas for decision-makers: business situation appraisal, business

competition estimation, architecture of value chain definition, geographical proximity, cultural affinity and it lacked the aspect of performance assessment of BPO quantitatively. Few studies were carried out in Kenya, Ghana and Nigeria but did not develop a framework; hence this study redressed the existing knowledge gap.

However, the above researches have not quantified the exact influence of BPO on organization's operational performance (Christiansson and Rentzhog, 2019; Brewer et al., 2014; Jiang, Frazier & Prater, 2006; Lahiri, 2016; Larsen, Manning & Pedersen, 2013) and the cost saving in the mobile phone can be problematic (Liu, Huo, Liu, Zhao & Chan, 2015; Patil and Wongsurawat, 2015) and "there is no direct relationship between outsourcing and improved organization operational performance" (Aranda and Gutierrez, 2010; Murray, Parente & Kotabe, 2012; Jiang and Qureshi, 2006; McIvor, 2016; Zhu et al., 2017).

The researcher is motivated by the current status quo in the South African mobile telecommunications industry which includes Vodacom and Metro global Telecom Services (Pty) Limited where the outsourcing decision outcome of telecommunications firms is always based on the hypothesis and theoretical information from executives, that outsourcing is useful to the company. Because this has never been tested empirically, this study suggested a further investigation on a framework for evaluating the effects of BPO on the operational performance of network companies. When management is questioned about the financial impact of BPO initiatives; the response is often that such initiatives cannot easily be quantified. Subsequently, it is necessary to count on managers' estimates instead of tangible metrics (Brewer et al., 2014; Jiang et al., 2006; Liu, Jayaraman & Luo, 2017). Most of the measurements are based on non-financial measurements (Patil and Wongsurawat, 2015). Establishing evidence of BPO results is important and useful to corporate BPO management as this will avoid relying on managers' estimates instead of quantifiable metrics. In light of the above, this study explored possible solutions and proposed a framework to evaluate the impact of business process outsourcing using quantifiable metrics from a developing countries perspective particularly southern Africa special reference to South Africa telecom operators.

This research addresses the prevailing literature gap in a framework that examine why the mobile telecommunication organizations in South Africa outsource and how they

measure organization's operational performance as part of the end result (Khaki and Rashidi, 2012; Lahiri, 2016; Liu, Huo, Liu, Zhao & Chan, 2015). There have been numerous studies devoted to outsourcing and its various aspects, but minimal research has been conducted on outcome measurement (Agndal and Nordin, 2009; Brewer et al., 2014; Jiang and Qureshi, 2006; Liu and Tyagi, 2017). Evidence also suggests that costs are not decreased as a result of outsourcing, although this is often expected in certain instances. Outsourcing "may improve a company's cost-efficiency but not necessarily productivity and profitability" Jiang et al ., 2006; Kivijarvi and Toikkan, 2015; Lahiri, 2016; This research added new knowledge resulting from the lack of researchers empirically evaluating the impact of BPO on operational performance of the organization in the mobile telecommunications industry using cost, productivity and profitability as the underpinning performance. The outsourcing decision frameworks by Patil and Wongsurawat, (2015); Mclvor, 2016) and Kremic, Tukul & Rom, (2006); Sandhu, Shamsuzzoha & Helo, (2017) as examples do not address issues of BPO performance measurement; hence the study attempted to fill the gap of the under-researched issue of business process outsourcing output measurement by suggesting a framework that quantitatively evaluated the impact of business process outsourcing in developing countries particularly Southern Africa and special reference to South Africa. This study bridged the gap by suggesting a framework to be adopted in evaluating the effects of BPO on the operational performance of the network companies quantitatively using cost, productivity and profitability as the underpinning performance metrics.

#### **1.4 AIM OF THE STUDY**

The primary purpose of this quantitative study is to empirically investigate the effects of BPO on the operational performance of the South African mobile telecommunications industry using productivity, profitability, and cost efficiency as the performance measurements.

#### **1.5 RESEARCH OBJECTIVES**

The study also seeks to examine the following objectives:

- To identify the drivers of outsourcing.

- To identify the risk of outsourcing
- To determine whether business process outsourcing improves cost-efficiency.
- To ascertain whether business process outsourcing increases productivity
- To establish whether business processing outsourcing increases profitability
- To suggest a framework that can evaluate the impact of BPO on mobile telecommunications industry (organization 's operational performance) using productivity, profitability and cost efficiency as the performance measurements

## **1.6 RESEARCH QUESTIONS**

The study also seeks to address the following questions:

- What are the drivers of outsourcing?
- What are the risk of outsourcing?
- Does business process outsourcing improves cost-efficiency?
- Does business process outsourcing increase productivity?
- Does business processing outsourcing increase profitability?
- What appropriate frameworks can be required to evaluate the impact of BPO on mobile telecommunications industry (Operational performance)

## **1.7 PRIOR RESEARCH AND THEORETICAL FRAMEWORK OF OUTSOURCING**

The outsourcing decision frameworks by Patil and Wongsurawat, (2015); Naz et al., (2013); Mclvor, 2016) and Kremic, Tukel and Rom, (2006); Sandhu, Shamsuzzoha et al.,(2017) as examples do not address issues of BPO operational performance measurement; hence the study will attempt to fill the gap of the under-researched issue of BPO output measurement.

The Patil and Wongsurawat, (2015) framework's strengths included issues related to survey on the understanding the outsourcing information technology-enabled services (BPO/ITES) organizations in India outsource their information technology (IT) tasks to external service providers, different drivers such as cost, strategy, and risk play a role. The framework also highlighted which of the drivers is considered to drive companies to outsource.

The analytical model by Khaki and Rashidi, (2012) on the study of the Iranian telecommunication sectors to explore how outsourcing affects operational objectives and performance. The analytical model has the benefit of including functional-goal variables such as cost reduction, quality, flexibility, and services. The model has a limitation in that it uses the qualitative metrics and does not include profitability and productivity as the quantifiable performance metrics.

The outsourcing framework by Sandhu et al., (2017) on the study on, "Is outsourcing always a positive strategic?" For decision-makers, critical evaluation for project business success focuses on five specific areas: business scenario evaluation, business rivalry estimation, value chain architecture definition, geographical closeness, and cultural affinity. Rather of working alone with potential suppliers/partners, the framework encourages collaborative networking among suppliers. During the outsourcing decision-making process, the framework also indicates that evaluating the suppliers' capability/capacity, cost analysis, culture, trust and commitment, and so on is a highest concern. The framework again lacks the aspect of BPO performance management using quantitative variables.



The above frameworks have a limitation of failing to address issues relating to performance management of evaluating the impact of BPO on organizational performance using quantifiable performance metrics and at the same time the frameworks do not indicate the outcome measurements of the BPO and its impact on organisation's operational performance. The greatest limitation of these frameworks is that they do not address the correlation between BOP (independent variable) and cost, productivity and profitability (dependent variable), hence need for a new framework to bridge the gap especially in the developing countries particularly Southern Africa and special reference to South Africa mobile telecom operators.

The current study adopted the framework by Kremic, Tukel and Rom, (2006) as the one underpinning the study. The framework provides the researcher insights on the drivers that motivate companies to embark on BPO as the starting point, benefits and the risks associated with such endeavor. This framework provides benchmarks and also do have relevant concepts that the current study can utilize.

The Kremic, Tukel and Rom framework 'strengths included issues related to survey on the benefits, risks and decision factors (potential factors to consider) and other strategic issues in BPO but literature is lacking on offering guidelines on decision support and the issues of evaluating the impact of BPO on the performance of mobile telecommunications companies using quantitative metrics (Lahiri, 2016; Larsen, Manning and Pedersen, 2013) and BPO results hence need for a new framework. Kremic et al., (2006) produced a risk and benefit scale that has been utilized as a starting point in several discussions. This scale is part of the body of recent research on outsourcing, which is limited to data from 210 studies from around the globe. In light of the above, this study explored possible solutions and proposed a framework to evaluate the impact of business process outsourcing using quantifiable metrics form a developing country perspective particularly southern Africa special reference to South Africa mobile telecom operators.

This study attempted to fill the gap by Kremic et al., (2006) framework and the other frameworks of the under-researched issue of BPO output measurement quantitatively by suggesting a new framework that was able to address problems relating to evaluating the effects of BPO on the organization's operational performance of the South African mobile telecom operators using cost, productivity and profitability as the performance metrics underpinning the study.

Below is the conceptual framework that underpins the study and needs to be extended so as to address issues of BPO measurements in the mobile telecommunications industry and the resulting effect (business performance). See Figure 1.1 below

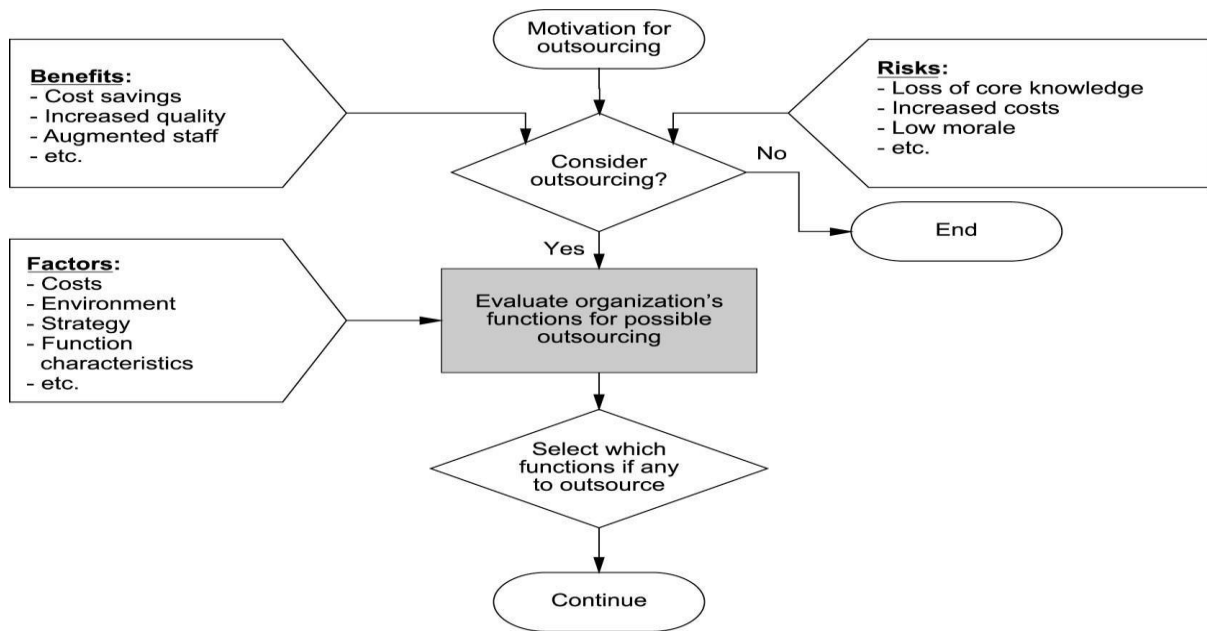


Figure 1. 1 Outsourcing decision framework

Adapted from Kremic et al., (2006)

The preceding framework fails to adequately address the issue of measuring BPO quantitatively, the researcher is motivated to fill the gap by quantitatively evaluating the impact of BPO on the mobile telecoms industry's operational performance. The new framework to be developed outlined the outputs of the BPO process, which served as a guide for determining whether BPO is appropriate and how the process may be managed to improve mobile communications firms' operational business performance.

Below is a proposed new conceptual framework for evaluating the influence of BPO on the mobile telecommunications industry's operational performance utilizing cost, productivity, and profitability as performance measures. The conceptual framework enabled telecommunications organizations to incorporate performance measurement factors into BPO procedures and to create a connection between BPO and organizational performance.

The new proposed cost, productivity, and profitability (CPP) business process outsourcing performance measurement conceptual framework (conceptual model) is depicted below which bridges the gaps of the authors' frameworks by addressing the issues of BPO measurements in the south African 's telecommunications companies, and the resulting effect (operational performance) See Figure 1.2

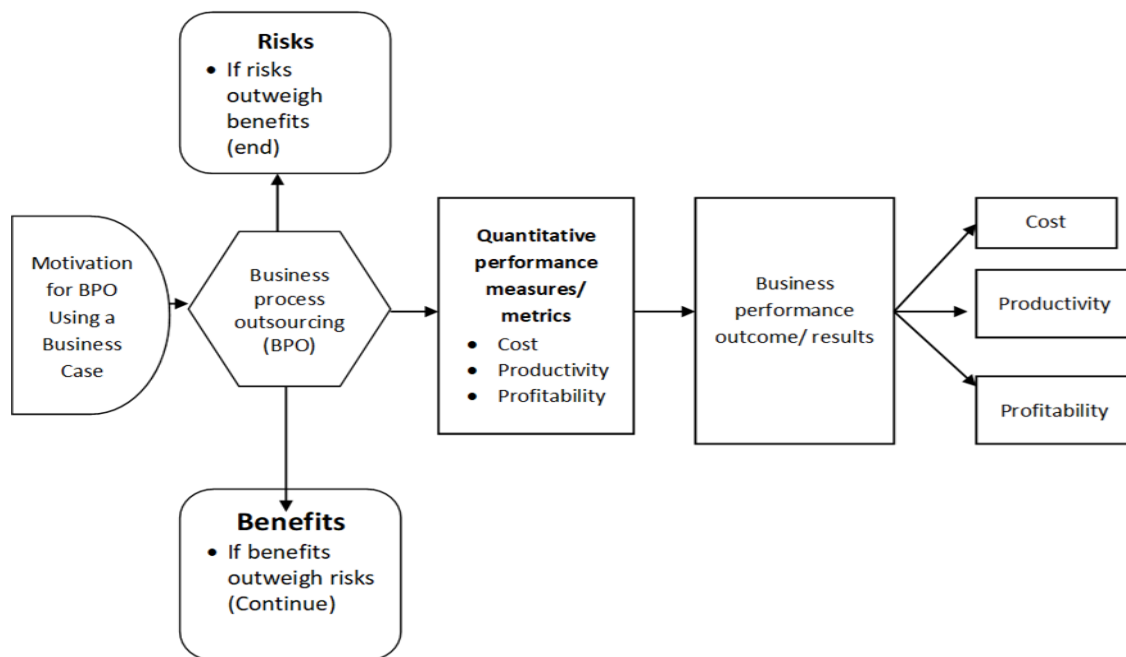


Figure 1. 2 Proposed cost, productivity and profitability (CPP) business process outsourcing performance measurement framework

Source: Author

The above proposed conceptual framework (CPP) is not only logically sound in evaluating the impact of BPO but also helpful in answering “how” and “why”, in terms of relationships. The framework would be decisive to further capture the relationships among various variables of BPO implementation and thus the relationship between BPO and cost, profitability and productivity. This study will indeed help to implement BPO initiatives more competently and successfully

The research questions of this current research are more focused on post-performance results. The researcher, therefore, utilized a framework that helps show logical connections linking outsourcing choice to its results subsequently. The objectives were therefore developed while considering what motivates outsourcing and the tangible benefits that result from it by applying a TCE-RBV “synthesis” hence the development of the proposed cost, productivity, and profitability (CPP) framework above which redressed the existing knowledge gap.

The proposed framework provided more objective evaluations, performance measures which are used in the mobile telecommunications industry to evaluate the adoption of BPO (independent variable) and its effects on cost, profitability and productivity (dependent variable). The framework extends the contribution of the work done by various authors like Patil and Wongsurawat, (2015); Khaki and Rashidi, (2012); Mclvor, (2016) and outsourcing framework by Sandhu et al., (2017) who did not include quantitative performance measurements in their frameworks. The other limitations of these frameworks were lacking the issue of addressing the relationship between BPO (dependent) and cost, productivity and profitability (independent variable). The proposed framework, however, considers how financial metrics provide more objective evaluations of BPO impact hence bridge the gap.

The proposed new conceptual framework utilized cost, productivity and profitability to evaluate the effects of BPO on the performance of the South African mobile telecom industry. It also included performance measurement factors into BPO operations and establish the relationship between BPO and company performance in order to fill in the gap left by existing frameworks.

Along with such benefits, the conceptual framework stated that organizational managers should focus on the downsides of outsourcing, such as a negative influence on employee morale and the possibility of transferring costly expertise and in-house knowledge of suppliers. This important technological transfer and knowledge could be risk to the success of manufacturing companies in the future. The conceptual framework offers useful guidance to the mobile telecom industry professionals, researchers, civil engineering and managers about BPO and whether it is sustainability practice, which influence the mobile telecom operators and should be considered while making strategic decisions regarding on BPO.

## **1.8 SCOPE OF THE STUDY**

The study concentrated on the literature referring to evaluating the impact on BPO on the organisation's operational performance of the mobile telecommunications industry. The study examined the three key constructs for evaluating the impact of BPO on an organization's operational performance as cost, productivity, and profitability. Different

frameworks underpinning the study were discussed, and literature concerning the drivers and risks associated with BPO was also discussed.

The research tried to explain any empirical evidence to establish whether there are any relationship/effects between BPO and the organisation's operational performance using the above three constructs. The research was confined to UKZN, Mpumalanga, and Cape Town, Gauteng. Finally, the study focused on South African mobile network operators which included Vodacom and Metro Global Telecom Services (Pty) Limited.

## **1.9 EXPECTED CONTRIBUTIONS TO KNOWLEDGE**

The current research has academic as well as business (practical) significance. The research also added literature to current trends in the area of BPO in the context of Southern African emerging countries, especially South Africa. As a result, the study is projected to broaden the perspectives connected with the comprehension of current advancements in the field of evaluating the impact of BPO on the operational performance of the mobile telecom in South Africa and Southern Africa at large.

There is a limited body of knowledge available on literature relating to evaluating the impact of BPO quantitatively. The findings of the current study are relevant to mobile telecom operators in South Africa and other readers especially students investigating similar topics as part of secondary data. The study redressed the existing knowledge gap.

The findings of the study extended the literature concerning BPO through evaluating its impact on the mobile telecom operators, and the results will assist management in developing BPO policies.

The literature derived from the study also addressed a wide array of outsourcing aspects from a developing country's perspective, particularly Southern Africa and special reference to South African mobile network operators. The proposed framework provided benchmarks and can also be used as a reference point by companies in the same industry, including developing countries, particularly Southern Africa in making business process outsourcing decisions.

From a business standpoint, this study contributed to the literature and proposed a framework that will assist mobile telecommunications operators in evaluating the

impact of BPO on operational performance using quantitative measures. The importance of the framework lies from a business perspective, in that management can comprehend the significance of the correlation between the said variables.

The Framework will also reflect different risks that the mobile telecom operators are exposed to. Supply chain practitioners can use a direct intervention mechanism to mitigate the risk-on-the path of performance transmission, allowing them to control and avoid BPO risk. Supply chain practitioners can also lessen the impact of the challenges by lowering the risk of outsourcing and risk loss minimization.

The findings would guide policymakers/management to resolve the challenges in the mobile telecommunications companies with a more comprehensive targeted approach and design of accurate measures for the purpose of implementing the BPO policy. The proposed framework was designed to support the decision for outsourcing and assist in the measurement of the results of BPO.

The results are important and useful to corporate management as this avoided relying on managers' estimates in place of quantifiable metrics in considering whether to outsource or keep it in-house and can also assist management in developing BPO policies.

The proposed conceptual framework will guide supply chain practitioners prior to deciding on outsourcing. Managers must assess the cost-benefit analysis, which is regarded as a critical managerial issue in most firms. This review procedure continues the fundamental choice about outsourcing's benefits and drawbacks (Schmeisser, 2013). Outsourcing is a managerial decision based on both rewards and risks. It has unique restrictions, which the structure acknowledged as well.

The conceptual framework proposed that organizational managers should pay attention to the downsides of outsourcing, such as a negative influence the morale of employees and valuable experience transferring challenges and inside information to vendors. Its informed management about the advantages and drawbacks of BOP. In the coming days, this critical technological transfer and knowledge could be damaging to the success of manufacturing organizations.

## **1.10 OVERVIEW OF THE OUTLINE OF THE CHAPTERS**

### **Chapter 1: Introduction**

The chapter gave an overview of the discussion of the investigation's context from both a practical and theoretical viewpoint, as well as the problem statement, the study aims and its link to the context. The study research question and objectives were explained. Theoretical frameworks underpinning the study and scope of the study are also highlighted. Lastly the contribution of the study is discussed from both academic and business (practical implications).

### **Chapter 2: Theoretical literature review**

This chapter analyzed existing literature relevant to the research topic and objectives. A critical evaluation and analysis of BPO concepts and key literature on the drivers, challenges and advantages of BPO in the telecommunication communication industry was also discussed.

### **Chapter 3: Review of empirical literature**

This chapter provided a detailed account on different frameworks underpinning the study. Relationship between BPO and three constructs (cost, productivity and productivity) and the empirical evidence between three constructs and BPO were discussed. Lastly the relationship between BPO and operational performance of the mobile telecom operators was also discussed

### **Chapter 4: Methodology**

In this chapter, the process of selecting methods of conducting research and the suitability of the chosen method(s) to the context of the study was discussed. The population, sampling approach and justification for the selected sample(s) was also discussed. The preparation, collection for analysis and basic approach to analysis, a discussion of the method(s) and limitations of the approaches and evidence of understanding research methods that are basic in the context of the research question and objectives was also discussed. Finally, the study ethical considerations and limitations was also discussed.



## Chapter 5: Data analysis, interpretation and discussions of findings

Evidence of data preparation for analysis using descriptive and chi-square was discussed. The relevance of current theory and fieldwork findings to the context of the research question and aims was discussed. There was also a discussion on evidence obtained from the fieldwork and the linkage with the existing literature. The discussion of significant results and associated literature related to the research question and objectives was also examined.

## Chapter 6: Summary of findings, Conclusions and recommendations.

The summary of the current study results obtained from the data collection procedure was discussed and were based on the current study objectives or research questions. The conclusion and recommendations were discussed in relation to the findings of the study.

### **1.11 SUMMARY**

This chapter begins by giving a brief background to the study in which the South African telecommunications companies/mobile operators which includes Vodacom and Metro global Telecom Services (Pty) Limited are outsourcing some of its activities, but the results of the outsourcing have never been tested empirically. As a result, this study proposed a framework for evaluating the effects of BPO on the operational performance of network firms, as this was the study main focus. The organizational background leads to the author outlining the problem statement, research objectives and research questions.

The scope of the study and anticipated contribution to knowledge of a study of this nature were also emphasized. Finally, this chapter provides as a guideline or an introduction to the second chapter. The second chapter discussed various researchers and authors' perspectives on the meaning and scope of BPO, critical reviews of BPO theories, drivers of BPO, risk of BPO, benefits/advantages of BPO and finally the services/activities outsourced.

## **CHAPTER 2: THEORETICAL LITERATURE REVIEW**

### **2.1 INTRODUCTION**

Over the last few years, the rise in mobile customers has necessitated massive potential in the mobile telecommunication infrastructure business. Because of high competition characterising mobile telecom business, all operators are looking for ways to save costs while improving revenue and productivity by outsourcing tower infrastructure management activities, which require significant construction and operational expenditures (Patil and Agarwal, 2013; Lai and Padilla, 2017, Rodriguez, Liu & Tyagi, 2016; Zhu et al., 2017).

As companies attempt to save expenses and specialize on limited core activities, business process outsourcing become a strategic priority (Eggert et al., 2017; Hanafizadeh and Ravasan, 2017). Corporate reorganizations, more demanding customers, improvements in ICTs and offshoring, have all fuelled the growth of outsourcing of IT (Information technology) Gerbl, Mclvor, Loane & Humphreys (2015). While outsourcing motivations have been extensively studied, limited literature dwelled on the outcomes, drivers and risks associated with decisions to outsource, and whether or not these results were aligned with the strategic purpose that prompted outsourcing in the first place ( Brewer, Ashenbaum & Ogden, (2013,2014). As a result, the following research topic is considered in this study: What are the driving forces or motivation, performance benefits and risks for business process outsourcing. The present study bridged the gap by identifying the drivers/motivation, performance benefits and risks for business process outsourcing (BPO) from the developing countries perspective particularly Southern Africa and special reference to mobile South Africa telecom operators. Both academics and practitioners will benefit from the study before deciding whether to in-source or outsource.

Companies have developed different techniques in recent years to address issues such as cost, productivity, profitability, quality, and service speed, to name a few. Downsizing, the deletion of some activities or processes, and the development of relationships through franchising, contracting, or leasing arrangements are all instances of these decisions, and mobile telecom operators are not exempted (Kabiraj and Sinha, 2016).

The current business strategy known as business process outsourcing has constantly attracted attention of scholars, supply chain practitioners, consultants, decision-makers, politicians, and the general public (Lahiri, 2016; Sandhu et al., 2017, Kedia and Lahiri,2007; Mclvor,2016). As it suffers with drastically lower growth, excess capacity, rising costs, rampant growth of new technology and high financial prospects the mobile telecommunication industry is being challenged to innovate and implement BPO.CEOs are searching for methods to save expenses, increase productivity, generate income, and combine operating systems that are stubbornly different. Only when incremental capital expenditures are expected to result in significant reductions in operational expenses are they approved (Eikermann et al., 2013; Brewer, Wallin & Ashenbaum, 2014).

Transportation, warehousing as well as purchasing services account for a large portion of logistics outsourcing in South Africa mobile telecom operators. However, there is an increase for the need of strategic modern logistics services, intensive information technology to be considered in the mobile telecommunications industry as it is part of operational performance (Monczka, Handfield, Giunipero & Patterson,2016; Langley and Capgemini, 2015; Zhu, Ng, Wang & Zhao, 2017). Southern African developing countries seem to be poorly represented in studies related to the field of business process outsourcing (BPO) performance operational implications and on issues relating to drivers, benefits and risk associated with outsourcing as evident by the studies in China, USA, India, Persian Gulf, Iran, UK, Denmark, Finland, Germany, Turkey, and Persian Gulf as the developed countries (Hoodosi and Rusu, 2013). The current study is critical in filling the gap by developing a conceptual framework that empirically investigates and evaluates the impact of BPO on the mobile telecommunications industry's operational performance using cost efficiency, profitability, and productivity as the study's performance metrics. In developing the framework, the study also identifies the drivers, risk and benefits of BPO as the starting point before deciding whether to in-source or outsource from the developing countries context particularly Southern Africa with special reference to South African mobile telecom operators.

Researchers have begun giving their attention on BPO in various industries including the mobile telecom industry (Wuyts, Rindfleisch, & Citrin, 2015; Jayaraman, Narayanan, Luo & Swaminathan, 2013; Deng, Mao & Wang, 2013). This is unsurprising given the fact that array of BPO-related concepts continues to develop. Business process outsourcing is currently being driven by continuous improvement and business process redesign. There has been inconsistent in empirical studies with reference to the yields of how the operational performance of the firm is affected by BPO including in business logistics outsourcing (BLO) (Huo, Liu, Kang & Zhao, 2015a; Leuschner et al., 2014; Liu, Huo, Liu, Zhao & Chan, 2015). This strategy of BPO is also common in the mobile telecommunications industry hence necessary to evaluate its effects on the operational performance of the firm.

For example, studies on satisfaction with information system (IS) outsourcing as part of BPO is just 33percent, compared to 70–80percent for non-Information Technology contracted out activities. According to a poll, only 70 out of 160 outsourced IS projects were continued and 90 terminated their present outsourcing arrangements by switching suppliers or returning to in-house development (Goria and Somers, 2014). Despite the publication of several "review" articles on outsourcing, one topic remains unanswered. Does outsourcing actually boost corporate performance? (Lahiri, 2016). BPO operations in the mobile telecommunications business are expected to grow, and the industry will focus more on its core capabilities while outsourcing other tasks to suppliers.

This research has to answer this question by suggesting a framework that tended to evaluate the impact of BPO in the telecom industry using cost efficiency, productivity and profitability as the performance metrics underpinning the study and also taking into consideration the drivers, benefits and risks associated in using the business strategy from a developing countries' perspective particularly Southern Africa with special reference to South Africa. However, there are few empirical investigations that examine these BPO theoretical approaches (Lahiri, 2016; Murray and Parente, 2012 Zhu et al., 2017). Much of the BPO study has been issues of cost and macroeconomic consequences such as national competitiveness and possible job losses (Liu and Tyagi, 2016). Furthermore, information systems (IS) and international business (IB)

have dominated contemporary literature in this field (Jensen, 2012; Gerbl, Mclvor & Humphreys, 2016).

The researcher now questions if it is possible to accurately measure the current performance of external network operation services. When the majority of operations linked to operational services are given to external service providers, the focus is on overall cost reduction, revenue growth, network quality and reliability, all of which are critical for an operator's success (Claussen, Kretschmer & Oehling, 2012). Currently, key performance indicators, audits and service benchmarks are included by network operators in outsourcing agreements with third-party service providers to determine network quality and costs by looking at coverage of network in general and the number of breakdowns (Friedrich, Weichsel, Miles, and Rajvanshi, 2009; Tokman, Richey, Deitz, and Adams, 2012; Espino-Rodrguez, Lai, and Padilla, 2017). As a result, the researchers concluded that assessing network operating service performance is practical and worthy of consideration hence proposing a framework to evaluate its impact on mobile telecom operators.

According to Hanafizadeh and Ravasan, 2017; Kabiraj and Sinha, 2016, business process outsourcing is a core business strategy that has been implemented by firms and different sectors for decades, along with the mobile telecommunications industry and South African companies have not been spared in implementing the strategy and is where supply chain functions are performed by external service providers (Chopra and Meindl, 2016). Outsourcing as a strategic function can be influenced by an overarching strategy of an organization (Antelo and Bru, 2010; Brewer et al., 2014; Jensen and Pedersen, 2012; Mclvor, 2016). Companies have been compelled to examine their processes objectively and critically as a result of competitive pressures. For a long time, companies have effectively outsourced manufacturing activities, business services and even entire business lines. The contract manufacturing industry has recently benefited from implementation of BPO which was launched by the electronics and pharmaceutical industries (Gerbl et al., 2016; Lacity et al., 2016; Mclvor, 2016).

Most of the companies in most industries, telecommunications operators, especially mobile operators, have long turned to various outsourcing schemes in hopes of cutting

costs, improving productivity, improving revenue and focusing on their operational strengths—the “my mess for less” approach. And like the operator above, though they have reduced costs, they have not for the most part achieved the results they had hoped (Eikelmann et al., 2013; Liu and Tyagi, 2017). Given its wide use and acknowledgment as the basis of competitive advantage (Wee, Peng and Wee, 2010) and expanding engagement of CEOs, a study of BPO literature revealed that there is limited research on efficient performance management during outsourcing (Willcocks, 2010). In line with the above, the study aims to evaluate the impact of BPO capabilities and its overall impact on the operational performance of South African mobile network operators, which is still subject to considerable uncertainty (Murray and Parente & Kotabe 2012; Lahiri, 2016; Brewer et al., 2013).

The study explores into the potential for more research into the benefits of BPO. In the mobile telecommunications industry, this research on BPO effects, empirically investigates the relationship between the decision of BPO and the firm productivity and profitability, cost efficiency as well as business strategy drivers and risks.

This chapter examines the drivers, benefits and risks of outsourcing in the mobile telecommunications business in detail as there is little attention on identifying these in South Africa as more focus has been given to developed countries like Denmark, UK, Iran, Germany, Turkey, China, USA, India, USA and Persian Gulf as evident by studies by Sandhu et al., 2017; Patil and Wongsurawat, 2015; Modarress, Ansari & Thies, 2016). Few studies conducted by Emmanuel, (2013) in Nigeria; Smith, (2012) in Kenya did not address issues relating to the drivers, benefits and risks of outsourcing, this study concentrated on developing countries in Southern Africa in order to help the researcher in developing a framework that would help telecom operators decide on BPO destination. Scholars, practitioners, and policymakers must determine whether and how BPO is beneficial to a company. However, there has yet to be published a complete evaluation of scientific evidence that can answer this question (Lahiri, 2016).

From an academic research perspective, the study contributes a Business process outsourcing framework that is to be used to evaluate its impact on the mobile telecommunications industry. As was noted in Brewer *et al.*, 2013, 2014; Lahiri, 2016, "There aren't enough conceptual frameworks or actual evidence to show how BPO affects a company's operational success." On the same note, this study provided the potential solutions and proposed a framework for evaluating the influence of business process outsourcing, using quantifiable metrics from a developing country perspective particularly southern Africa special reference to South Africa.

The chapter also focused on literature relating to the drivers, risks and benefits of BPO as the starting point in developing a framework that can evaluate the impact of BPO in mobile telecommunications industry using cost, productivity and profitability as the performance measurement metrics underpinning the study. The chapter outlines the meaning and scope of business process outsourcing (BPO), types of BPO, theories relating to BPO in which the researcher utilized the synthesis of Agency theory, Transaction cost economies (TCE) Resource-based view (RBV) and Knowledge-based perspective. The research also focused on the drivers; risk and lastly the benefits of BPO from the Southern African developing countries point of view as there is little empirical research done in developing countries particularly Southern Africa and special reference to South Africa since much of the evidence is available for developed countries like UK, India, China, Denmark, Finland, Iran, Germany, Turkey, China, USA, India and Persian Gulf.

The current study's aim is to evaluate the effects of BPO (independent variable) on the mobile telecommunications industry, including correlation between the BPO process and the performance of the firm using productivity, profitability, and cost- efficiency (dependent variables) as the underpinning performance measurement also taking into consideration the drivers, benefits and risk associated with business strategy from the developing countries perspective particularly Southern Africa and special reference to South Africa.

### **2.1.1 Meaning and scope of business process outsourcing**

In recent years, “business process outsourcing (BPO) has evolved as a recommended strategic business practice throughout the globe that happens to be one of the largest growth areas in outsourcing market” (McIvor, 2016; Panda, 2012). Outsourcing is a concept where a product that was previously manufactured or a service that was previously provided internally is delegated to external service providers (Laundon and Laundon, 2017; CFL, 2019). A well-defined approach is essential for maximizing outsourcing's benefits while minimizing its drawbacks. In most agreements on outsourcing, the service provider undertakes to carry out the process at a lower cost than the host organization using service level agreements (SLAs) to evaluate their performance of service providers (Eggert et al., 2017; Monczka, Markham, Carter, Blascovich & Slaight, 2005).

### **2.1.2 The concept Business process outsourcing as an element of strategy**

As companies have been shifting their business processes to online, BPO has become gradually significant in the current international economy and refers to transferring “responsibility for entire functions such as human resources, logistics, customer contact and information technology (IT) services to both local and offshore vendors” (Gerbl et al., 2016:1038). Business Process Outsourcing is a critical component of Information Technology-enabled business “processes which involves the vendor taking responsibility for executing a process and delivering it to the client as a service” (CFL, 2019; Mani, Barua & Whinston, 2010:40).

The phrase "outsourcing" comes from an American term that denote "outside resourcing." In economies, the word also means the use of outside resources to grow a firm (Troaca and Bodislav, 2012:51; Aubuchon, 2012:289).

In the literature, outsourcing is defined, “as contracting with another company or organization to perform a function (such as input production) that is afterwards acquired as a service” (Kabiraj and Sinha, 2016:282). Outsourcing is a broad-based phenomenon with a variety of definitions. CFL, (2019) defined “outsourcing as a strategic decision by a company to reduce costs and increase efficiency by hiring



another individual or company to perform tasks, provide services or handle operations that were previously done by the company". It was suggested by Diaz-Mora and Triguero-Cano, (2012:1632) that BPO, "is transferring some of the company recurring internal activities to outside providers through a contractual arrangement." As for Kahai, Sara & Kahai, (2011:115) Outsourcing is the "practice of one firm hiring another to perform tasks that were originally performed in-house." Kroes and Ghosh (2010:126) "defined it as the allocation of business activities from a source internal to an organization to a source outside of the organization".

Outsourcing can also be defined as "the practice of turning over all or part of an organization's function to other vendors" (Peslak, 2012:14). Contracting out of services is the process of contracting a business function to another company or individual. Outsourcing is regarded as a non-essential component of a company's operations. Broadly, business process outsourcing (BPO) is the "transfer of business processes from within an organization to external service providers" (Kroes and Ghosh, 2010:126).

Business Process Outsourcing is defined by Kakumanu and Portanova, (2016:149) as a "whole process of shifting particular or all company functions such as accounting or human resource to a supplier or service provider. Non-core functions such as administering travel activities, management of payroll processes, accounts receivable/payables, HR administration issues, and numerous call center applications are similar across different businesses". Mobile telecom operators can save significant money by outsourcing labor-intensive specific services. Power et al., (2013) defined Business Process Outsourcing (BPO) as a "method of sub-contracting or contracting various or a specific operation to a third party to reduce cost".

According to Gartner Group, (2019), business process outsourcing includes "delegation of a business process to an external service provider who owns, administers and manages it, according to a defined set of metrics". BPO encompasses "contracting with one or more BPO service providers (vendors) for the provision of execution of business process operations as per the client organisation's requirements" (Outsourcing Insight, 2018:13). Fawcett, Ellram & Ogden, 2014 alluded

that BPO includes everything from logistics to accounting, administration and information technology.

For the purpose of this study, the researcher subscribes to the synthesis of definitions offered by (CFL, 2019; Chopra and Meindl, 2016; Mclvor, 2016 & Pingali, Shah and Rovenpor, 2019:4) as the ones underpinning the current study. CFL, (2019) defined “outsourcing as a strategic decision by a company to reduce costs and increase efficiency by hiring another individual or company to perform tasks, provide services or handle operations that were previously done by the company”. Chopra and Meindl, (2016) defined business process outsourcing are a “key business strategy in which supply chain functions are performed by a third-party”.

The term "business process outsourcing" is also used to describe the process of “transferring responsibility for entire functions such as human resources, logistics, customer contact, and information technology (IT) services to both local and offshore vendors” (Mclvor,2016:322). BPO is also known as the “contracting of business activities and functions to third-party providers to enhance process effectiveness and efficiency while reducing costs. BPO helped in improving the speed, accuracy, and consistency of the client’s operations through process optimization, standardization, and automation” (Pingali, Shah & Rovenpor, 2019:4). Traditionally, BPO services in North America included outsourcing of services such as payroll, accounting, and customer service. Suppliers for such processes were Certified Public Accounting firms, payroll firms, and customer care companies.

Knowledge Process Outsourcing (KPO), Business Process Outsourcing (BPO) and Information Technology (ITO) are the three types of contracting out of services. Harward, (2013) identified three categories of outsourcing as business process outsourcing (BPO), Technology services outsourcing (TSO) and knowledge process outsourcing (KPO). The process of legal outsourcing has surpassed the growth of ITO as the fastest expanding field of outsourced services (Alkali, Abbott, Dasuki, Quaye, 2016:24). The contracting out of telecommunication networks, computer centre operations and application development to external contractors is known as MIS outsourcing (Laudon and Laudon, 2017).

Outsourcing technology processes is “explained to involve technological innovations of electronics, commerce, network infrastructures application and telecommunication as well as website developments”. The utilization of external suppliers to perform the function of business process of IT that involves, “programming, application services and infrastructure,” known as IT outsourcing. It's frequently referred to as a BPO subcategory (Lacity et al., 2016; Patil and Wongsurawat, 2015:61). Although internal workers can handle these tasks, the business chooses to outsource them to specialized suppliers in order to provide superior service (Emmanuel, 2013:82; Naz et al., 2013:684). "The utilization of external service providers to offer IT services that were previously provided internally" is another definition of IT outsourcing (ITO) (Han and Mithas, 2013; Kivijarvi and Toikkanen, 2015; 157). A third party controls the complete the process of business, such as accounting, procurement, or human resources, in most BPOs. Offshoring occurs when the outsourced site is found outside of the primary company's country (Ghodeswar and Vaidyanathan, 2008; Laudon and Laudon, 2017; Sobinska and Willcocks, 2016:61).

Knowledge process outsourcing “refers to the practice of outsourcing such aspects such processes animation, medical processes, research and development (R&D), engineering, technical services, market research, legal processes, financial planning and risk management” (Lacity and Willcocks, 2013:168; Lacity et al., 2016::500). Knowledge processes are those that necessitate competitive knowledge, analytical thinking and judgment, as well as highly specialized abilities (Lacity and Willcocks, 2013:168; Edvardsson and Durst, 2014:795). KPO services include research, consulting, and analysis.

The researcher adopted Knowledge Process Outsourcing (KPO), Business Process Outsourcing (BPO), and Information Technology Outsourcing (ITO), technology process outsourcing and MIS outsourcing for this investigation. These classifications are relevant in this study as it examines the nature of activity, work and process that should be outsourced as this has an influence of on the business especially in the telecommunications industry on mobile telephone operators. These categories have really been explained in detail and the BPO strategies has also been discussed. These

Categorizations provide benchmarks and also do have relevant concepts that this present study can draw upon.

## **2.2 CRITICAL REVIEW OF THEORIES OF BUSINESS PROCESS OUTSOURCING AND RELATED CONCEPTS**

The primary theories on drivers of BPO are discussed briefly in this chapter to comprehend BPO from an organizational standpoint. This section highlighted the various theories that builds the drivers or motivators of BPO. The guiding theories are beneficial and appropriate to the present research of mobile telecom operators as they examine some of the reasons/ drivers/motivators of outsourcing. The researcher utilized the four theories (TCE, RBV, KBV and Agency theory) to develop a new framework that can be adopted to evaluate the influence of BPO on the performance of the organization through operational activities of mobile telecoms with the use of profit, cost and productivity as the performance measurements or metrics underpinning the study.

RBV and TCE, as well as agency theory, have been merged in recent research to provide insight on BPO arrangements. In order to explain the drivers of BPO, the researcher used the RBV, TCE, Knowledge-based view (KBV), and Agency theories as theoretical models. To understand business process outsourcing, academics have employed a variety of theoretical views (Lahiri, 2016). RBV views contracting of services as a way for clients to obtain a competitive advantage by gaining access to vendors' particular competencies (Hanafizadeh and Zare Ravasan, 2017; Tokman et al., 2012).

Transaction cost economies (TCE) also “considers asset specificity and associated threat of opportunism by vendors to determine what can be outsourced without compromising the client’s interests” (Rodríguez et al., 2017; Large, Kramer & Hartmann, 2011). Transactional cost economies (TCE) and Resource-based view (RBV) provide basis for the analysis of outsourcing. Agency theory and transaction Cost Economics are the most significant theories that have been adopted to analyze contracting out arrangements (Huang, 2014). These theories are also relevant to the

mobile telecom operators and provide relevant concepts that the present study can draw upon. They can be used as referent point and bench mark by the current study.

While outsourcing research is guided by a variety of theoretical traditions, a large percentage is grounded on two of them: the RBV (Huang, 2014), and transaction cost economics (TCE), to analyse performance and asset specificity, as well as outsourcing (Rodríguez, Lai, & Padilla, 2017; De Vita & Tekaya, 2015), the two theoretical viewpoints are required. The "RBV considers the strategic benefits of outsourcing, while the TCE focuses more on the economic approach" (Redondo-Cano & Canet-Giner, 2010); Agency theory explains that production experience accumulates as external service providers gain more exposure in managing a mobile network infrastructure than mobile operators.

Below are the various empirical studies or theories adopted by researchers in explaining different theories of drivers of BPO. These theories assisted the researcher to build the drivers or motivators of BPO to be included in the proposed CPP framework.

Hanafizadeh and Zare Ravasan, (2017) conducted a study on the analysis of service contracting out decisions empirically: In e-banking services. This research is based on a variety of viewpoints and theoretical frameworks such as core competency theory TCE, agency theory and RBV. The study "empirically investigated the effect of service observability, cultural fit and perceived loss of organizational knowledge, external pressure, market volatility and suppliers' power amongst other factors on e-banking services outsourcing decision".

Aligned to the above is the study by Yap, Jalaludin and Lee, (2016) on the factors that influence ICT outsourcing among Malaysian manufacturers. The results indicated that there was clearly "evident that networks and telecommunications services are ranked first, third and fourth, respectively, as the most outsourced ICT functions by the surveyed manufacturers" and the study also integrates elements from resource-based theory and the TCT to provide empirical data on ICT outsourcing.

Complementing the above on theories of drivers of BPO is the study by Rodriguez et al., (2017) entitled, does contracting out services reduce the effects of asset specificity on performance? An application in hotels in Taiwan. The study aimed to examine type of governance made a difference (outsourcing or in-sourcing) “moderates the relationship between asset specificity and performance. The relationship between asset specificity and performance is analysed, as well as the question of whether the performance determines an increase in outsourcing”. The research was conducted in a representative sample of Taiwanese hotels. A total of 585 activities related to the main hotel sections were examined. "Transaction Cost Economics (TCE) and the Resource-Based View of the Firm (RBV)" are two study models that present different assumptions relevant to the study.

A study conducted by Zhu, Ng, Wang, and Zhao, (2017) on the importance of contracting out service management process in enhancing the usefulness of logistics outsourcing as a strategy to minimise costs and intensifies flexibility. The study confirmed a projected model centred on research information gathered from 250 publicly listed subsidies in the Chinese manufacturing sector. The study used the "resource-based view" to provide an overview on the impact of the contracting out management process, "which is an operational mechanism by drawing upon resource-based views."

The study by Gerbl, Mclvor and Humphreys, (2016) "making the business process outsourcing decision: why distance matters". The study includes a detailed case study investigation of a variety of decisions to contacting six German firms, with a theoretical foundation of "transaction cost economics (TCE) and the resource-based view (RBV)."

A survey study by Gorla and Somers, (2014) on the "impact of Information Technology (IT) outsourcing on information systems" success utilized the most common theories used to examine contracting out of service arrangements are transaction cost economics and agency theory.

Additionally, Mclvor, (2016) developed a framework to guide BPO decisions by combining the client's resource situation with the vendor's potential for opportunism.

Mclvor's (2016) framework to investigate "outsourcing of procurement activities by US-based electronics manufacturing firms" and found RBV and TCE have complementary impact on decisions of contracting; although TCE explained the scope of contracting out services, RBV explained service contracting outperformance. Studies also have improved the understanding of service contracting out issues, further research is needed to learn the "how" of contracting out of services (Yang, Wacker & Sheu, 2012), "to address the question which Hatonen and Errikson, (2009) posed: "why do some succeed and other fails in their outsourcing endeavours"?"

Assessing the business importance of IT contracting out of services: a systems approach in Finland was the subject of a study undertaken by Kivijarvi and Toikkanen in 2015, with the aim of examining information technology (IT) outsourcing measurement systems. The TCE and RBV were both adopted in the research.

Although the above studies are not directly linked to mobile telecommunications industry lessons can be drawn from the studies that are of benefit to the current study about the theories of BPO. The above studies provide benchmarks with which the current study can utilize. Findings indicated by above studies complement previous studies and are useful in the present study. The current research bridges the gap by concentrating on the Southern developing countries with especially attention to telecommunications industry in South Africa by identifying the drivers, motivators and reasons associated with BPO.

The resource-based theory, agency theory, transaction cost theory and knowledge-based view were adopted as the theories underpinning the current study. The present study tried to explain some of the theoretical models as explained by some of the authors in detail as these also seem to apply in the telecommunications industry.

### **2.2.1 Transaction cost theory or economies**

TCE is amongst the widely used theoretical frameworks for the study of information technology outsourcing (ITO) (Liang, Wang, Xue, & Cui, 2016). TCE is a theory that focuses on decisions of contracting out has been regarded as a solid theoretical

foundation for analysing decisions to outsource IT services (Hanafizadeh and Zare Ravasan, 2017).

The idea behind transaction cost economies (TCE) indicate that a company will manage itself in such a way that transaction costs are minimized (Zhu et al., 2017). Coase's transaction-cost ideas are extremely similar to business process outsourcing theory (1937:387; Lahiri, 2016:465) which "explain that the organizing of a company's production is based on minimizing the costs of each and every stage". Transaction cost economics (Williamson, 1985, 2008:6), is also "based on the idea that there are costs in using an outside service provider". These additional expenses are incurred as a result of actions like the creation of contract and search costs (Kivijarvi and Toikkanen, 2015). As a result, mobile telecom operators must evaluate the production and transaction costs of completing a transaction both internally and in the market externally). In-house production is favoured if transaction costs become too high. Other academics used the idea to explain procurement decisions in the automobile sector, such as choosing between contracting out or manufacture automobile components internally (Yap et al., 2016). When transactions are cheaper and created by external service provider, transaction cost economies suggest that the organization should outsource.

According to Williamson (1975, 1991:270), the transaction cost theory refers to "costs of acquiring and handling the information about the quality of inputs, the relevant prices and the supplier's reputation. One incurs costs when buying a product or a service". Additional expenses such as search expenses, transaction expenses, contracting expenses and coordination expenses are widely used to evaluate whether to contracting out or produce goods or services internally, in addition to market prices (Kar and Pani, 2014). Initially popularized by Williamson (1975, 1985) and his analysis, the idea states that a corporation has two options when obtaining products and service: to manufacture or to buy. Consistently, it "calculates whether purchasing a product or service from the market or producing it in-house is cheaper." Transaction cost economics, a mobile telecom organization must determine which sourcing decision is the most cost-effective in order to reduce transaction and production costs



by calculating various transaction costs on top of actual production costs and comparing the options (Kivijarvi and Toikkanen,2015; Rodriguez, Lai, & Padilla,2017).

The operational cost is mostly controlled by the outsourcing arrangements (Vilko, 2013; Liu and Tyagi, 2017). In-sourcing and outsourcing concepts mainly focus on the decision-making level and operation cost, which is mostly determined by the contract (Vilko, 2013; Liu and Tyagi, 2017). The transaction cost theory (Williamson, 1975 and 1991:270; Todorova, 2014) states that outsourcing reduces costs, and this study used this idea. Because of opportunistic behaviour, the TCE forecasts that in the existence of "high asset specificity," functions are performed in-house. TCE claims that when a supplier-buyer relationship has a high level of asset specificity, large transaction costs are incurred to protect costly opportunism. As a result, the most efficient governance structure is the organization (internalization) rather than the market (outsourcing) (De Vita & Tekaya, 2015; Yap, Jalaludin & Lee 2016). The communications industry needs to consider the issues of asset specificity in deciding whether to in source or outsource.

Williamson, (1985) and Espino-Rodriguez et al., (2017) defined transaction costs as "the comparative costs of planning, adapting and monitoring task accomplishment under various structures." TCE offers an "external" viewpoint on contracting out services because it establishes the limits of the company by determining the probability of a service or activity to be carried out within the organisation's structure or contracted out to the market (Gorla and Somers, 2014;). TCE's theoretical tenants are those activities applying to the investment of certain assets and/or a high magnitude of insecurity are mostly performed internally (Williamson, 1985; Rodrguez, Lai, & Padilla, 2017; Sutton, 2012).

From a "transaction cost economics stand point, outsourcing certain activities in favour of external providers (i.e. buy) rather than internalizing those activities within the firm hierarchy (make) allows firms to lower transaction costs related to production" (Lahiri,2016). Organizations endeavour to minimise costs (direct and indirect costs) by developing collaborations or providing structures or practices that lead to competitive advantage (Rodrguez et al., 2017; Leuschner et al., 2014). Transaction costs economics (TCE), indicates that, "network operators can achieve production cost

efficiencies through economies of scale and specialization, if they outsource” (Kivijarvi and Toikkanen, 2015; Hecker and Kretschmer, 2010).

The "degree to which the assets utilized to undertake an activity can be redeployed for alternative applications and by alternative users without diminishing production value" is defined as asset specificity (Williamson, 1996, 2008:6; Rodriguez, Liu & Tyagi, 2017). Physical or human assets that are difficult to redeploy are involved in activities that are made up of specialized assets. Human assets are very important in the mobile telecommunications industry. Human assets have long been acknowledged as critical to performance and competitive advantage (Rodriguez, et al., 2017). The organization's distinctive human and physical assets enable it to reduce cost, innovate and achieve product or service criteria, i.e., quality.

In summary, experienced external service providers of network operating services can benefit from economies of scale and other cost savings, permitting them to avail services at reduced costs than in-house network operators' vendors. This theory was used in this study to investigate the effects of cost on the performance of the mobile telecommunications industry. To analyse performance and asset specificity, as well as business process outsourcing, a theoretical approach is required. (De Vita & Tekaya, 2015; Espino-Rodriguez et al., 2017).

This theory is relevant for the purposes of this study because it examines cost considerations as one of the reasons/drivers of outsourcing. As a result, the researcher used it as one of the underpinning models in developing a new framework for assessing the impact of BPO on the performance of the organization in the mobile telecom industry and it also contains concepts that this study can use.

### **2.2.2 Resource-based view (RBV) theory**

Resource-based view indicates that “firm as a bundle of assets and resources that if employed in distinctive ways can create competitive advantage” (McIvor and Humphreys, 2016; Lacity *et al.*, 2016; Barney, 1991:100; Jayaraman et., 2013; Hanafizadeh and Zare Ravasan, 2017). If resources are utilized efficiently to perform a function, activities or business processes, they can create a competitive edge in the

mobile telecommunications industry (Liu et al., 2015). As a result, when enterprises lack the resources and capabilities to achieve the desired result, business tasks of mobile telecom companies should be outsourced to third parties (Yap, Lim, Jalaludin & Lee, 2016).

RBV can demonstrate how mobile telecom firms can use agreements to benefit the required resources of external service providers without having to move the organization's borders (Huang, 2014). These "resources should also be unique in order to provide the organization with a meaningful competitive advantage" (Kivijarvi and Tokkanen, 2015). In other words, the resources should be scarce and difficult to obtain by other businesses. Kivijarvi and Toikkanen, (2015) conducted studies that explains ICT implementation outsourcing using both the resource-based and TCT theory. However, in describing the adoption of a human resource information system in large Spanish enterprises in diverse sectors, resource-based justifications gained greater support than transaction cost propositions, according to the study.

"Activities composed of resources that are valuable, rare, inimitable and non-substitutable will lead to obtaining the competitive advantage and make up the core competences." In the outsourcing environment, explicit assets and fundamental competencies are interchangeable phrases and they make up strategic assets. The term core "competences also describe the strategies comprising the activities that the firm performs better than its competitors" (Espino-Rodrigues, Lai and Gil-Padilla, 2017; Lacity *et al.*, 2016).

Contracting out, according to the RBV perspective, is a way for clients to acquire a performance edge by gaining access to vendors' niche expertise (Tokman et al., 2012 Hanafizadeh and Zare Ravasan, 2017). The RBV is considered as a "valuable theoretical framework for analysing the influence of both firm- and process-level factors such as internal capabilities in BPO and the strategic importance of the process on the BPO decision" (Jayaraman et al., 2013:315). RBV takes a more "internal" approach, arguing that "competitive advantage can be acquired by effectively exploiting precious, uncommon, imperfectly imitable, and non-substitutable physical, technological, and human resources." (Yap et al., 2016; Barney, 1991). "Activities in

which the firm maintains a superior resource position or capabilities are likely to be retained in-house, whereas those for which resource position or capability is weak are candidates for outsourcing” (Brewer, Ashenbaum & Ogden, 2013,2014) hence this study utilized this theory in that the mobile telecom companies can utilize the theory in its BPO endeavour.

Outsourcing, according to the firm resource-based perspective, permits customers to obtain opportunities to access to experienced skills and resources possessed by the service provider organizations. Clients can channel more time on fundamental competencies and improve competitiveness by working with suppliers and benefiting from their unique advantages (Lahiri, 2016). Mobile telecom companies should concentrate their efforts on areas where they may get a competitive advantage in the marketplace. As a result, businesses preferably focus their competences and locate processes that are crucial to their competitive advantage (Gerbl et al., 2016).

Espino-Rodriguez et al., 2017; Hanafizadeh and Zare Ravasan, 2017; Barney, 1991; Helfat and Peteraf, 2003) argue that the resources of a company and competencies permitit to gain a competitive advantage. RBV has “emerged as a very popular theoretical perspective to explain how firms' resources and capabilities lead to differences in firmperformance” (Shi, Arthanari, Liu & Cheng, 2016; Lacity *et al.*, 2016 Crook, Ketchen, Combs & Todd, 2008; Kivijarvi and Toikkanen, 2015). Heterogeneously distributed resources, “across competing firms have imperfect mobility and makes this heterogeneity persist over time” (Barney, 1991; Wernerfelt, 1984). In order to be a source of competitive edge for mobile telecom operators, the firm’s resources must bevaluable, inimitable, scarce and non-substitutable (Barney, 1991; Rodriguez et al., 2017).

This idea highlights that the core resources of a firm are the primary and significant drivers of sustainable competitive advantage and profitability (Barney, 1991). RBV contends that “resources are heterogeneously distributed across firms and are imperfectly transferred between firms” (Barney, 1991). Resources are “categorized into three groups: physical resources such as plant, equipment, location and assets; human resources such as management team, knowledge and skills; and

organisational resources such as culture and reputation” (Rodríguez et al., 2017). A company resources permit the implementation of plans to enhance its competitive advantage.

Resource Based View highlights the “specificity of assets, particularly human assets embedded in firm-specific routines, language and skills, as critical to the firm's performance” (Barney, 1991; Rodríguez et al., 2017). Human capital “specificity refers to the degree to which the skills, knowledge and experience of a firm's personnel are specific to the requirements for dealing with another firm” (De Vita, Tekaya, & Wang, 2011). Businesses retain critical resources internally, allowing them to maintain a competitive advantage and remain relevant (Gerbl et al., 2015). This theory (RBV) is essential and useful with reference to the current study since higher performance in organizational activities vs rivals suggests why such activities are undertaken within the organization (Huang, 2014; Mclvor, 2016). As a result, a company's ability to invest in building a competence and maintaining excellent performance determines whether or not to outsource. When there is no benefit to doing the tasks internally, the mobile telecom industry can get complementing capabilities from outside vendors.

Due to the possible fact that, it is precise and fits with the discrepancy between the ideas of resource, capability and ability, the researcher subscribes to the synthesis of definitions of (Mclvor and Humphreys, 2016; Lacity et al., 2016, Devita et al., 2011; Gerbl et al., 2016) for the purposes of this study. Resources are defined as “stocks of available factors held or controlled by the firm”. In the framework of BPO, the “information technology (IT) infrastructure is an important resource but resources like knowledge and skills residing in the employees are even more critical in the mobile telecommunications industry”.

This theory is relevant to the current study because it looks at the specificity of assets, like machinery, human resources, for instance, management team, knowledge, and skills, IT infrastructure, equipment, location, and assets and organizational resources, such as culture, reputation and also financial as part of the reasons/ drivers of outsourcing. Resource Based View is critical to the study of contracting out service, as the achievement of higher performance in firm's processes applicable to

competitors would explain why such activities are performed in-house (Gerbl et al., 2015; Hanafizadeh and Zare Ravasan, 2017), the RBV was adopted as one of the underpinning theories in developing the new framework for assessing the influence of BPO on the performance of organizations in the mobile telecommunications industry.

### **2.2.3 Knowledge Based View (KBV)**

The KBV indicate that, “quality of a product or service is highest if the providing company integrates activities in which it has greater capabilities than external suppliers. Activities in which external suppliers have more production experience and higher organizational skills should be purchased on the market” (Edvardsson and Dust, 2014; Gilley and Rasheed, 2004; Claussen, Kretschmer & Oehling, 2012). Outsourcing has been proven to be beneficial and can actually “strengthen core competences by the means of cooperative learning, (Park, Im & Kim, 2011), gaining best- in-class knowledge and reducing suppliers’ opportunism by networking with high embedded suppliers” (Edvardsson and Dust, 2014). “Knowledge process outsourcing (KPO) include research and development (R&D), engineering, technical services, market research, legal processes, financial planning and risk management” (Lacity and Willcocks, 2016). The mobile telecom operators need to identify which of the activities can offer value to the company and can be outsourced.

Knowledge-based view suggests that “organizations generate sustained competitive edge with resources that are rare, valuable, imperfectly imitable and not substitutable” (Barney 1991). Firms with the same transactions and scale should end up having the same vertical integration hierarchy if there is no heterogeneity in competencies and resources (Claussen et al., 2012). Recently, researchers recognise the specificity of functions as most significant for boundary choice. The effectiveness of “producing as well as governing an activity internally increases with the degree to which this activity is central to a company” (Edvardsson and Dust, 2014). As a result, activities within the company can be managed more effectively. knowledge-based view (KBV) , however, does not recognise how effective an external purchase will be, rather it emphasizes, “the greater use it makes of firm-specific language and routines, and hence the more efficient is internal governance” (Claussen et al., 2012; Lacity and Willcocks, 2016).

This theory is relevant for the purposes of this study because it explains how production experience grows and that external providers gain more exposure in knowledge of running a mobile network infrastructure than network operators. Furthermore, external service providers provide more structured functions for performing network operational services. This therefore justifies why network operational services will experience quality services. As a result, the researcher utilized it as one of the underpinning theories in developing a new framework for evaluating the impact of BPO on the performance of firms in the mobile telecommunications industry, and it also has relevance.

#### **2.2.4 Agency theory**

An agency relationship, according to this notion, is borne as a result of the correlation between the supplier and the BPO customer enters into a contract. Because the organization buying services is ultimately accountable for the quality of its product/service, regardless of whether components of the services and/or products are contracted out from to suppliers. (Lacity et al., 2016). The client firm hires an agent (e.g., an external IS vendor) to perform particular responsibilities (namely, IS functions), the result is an agency arrangement (Gorla and Somers, 2014).

This theory aims to address two issues that can arise in agency interactions (Whipple and Roh, 2010). The first happens when the BPO customer's and service provider's aims are different and the client finds it challenging to confirm what the service provider can offer (Saxena and Bharadwaj, 2009). A firm buying services characterizes the principal (telecom companies) who has outsourced services or functions from a supplier. From a broader viewpoint, one potential competitive advantage is the capacity to sustain supply chain continuity by minimising "the disruption of product, service and information along the supply chain" (Mbanje and Lunga, 2015).

This theory focuses at the revenue consequences of outsourcing network services. Companies have utilized experienced suppliers in both international and domestic destinations for outsourcing business activities, which is likely to entail forming a partnership with the supplier." As a result, the agency theory was used in the current research by Youngdahl, Ramaswamy & Dash, (2010). When parties cooperate

through the division of labour, theory examines the situation (Eisenhardt 1989). It focuses on circumstances in which a principal delegated work to an agent. The primary notion of analysis is to find a way to accomplish each other's objectives (Claussen, Kretschmer & Oehling, 2012).

According to the logic of agency theory, network operators can outsource mobile network operation services to improve quality, reduce costs, and increase productivity and performance. As a result, the agency theory is seen as critical in the development of a conceptual framework for BPO (Claussen et al., 2012). The agency theory was adopted in this study as it focuses on contractual governance and relationship building as a means of lowering risks, such as vendor opportunism. This theory also addresses issues relating to how outsourcing professionals can generate sustainable value with a supplier of services while still upholding a buyer-service provider alliance; hence the researcher adopted it as one of the models supporting the study in the development of a new framework for evaluating the effect of BPO on the performance of mobile telecoms operators.

The researcher utilized the RBV, TCE, Knowledge based view (KBV) and Agency theories as the theoretical models that assisted the researcher in identifying and explaining the drivers of BPO, hence assist the researcher in developing a new framework. These theories were the ones underpinning the study. These theories provide benchmarks and also do have relevant concepts that this present study can draw upon.

### **2.3 DRIVERS OF BUSINESS PROCESS OUTSOURCING**

The Section below highlighted the literature relating to drivers or motivators that triggers companies to venture into BPO including the mobile telecommunication industry. These studies provide benchmarks and also do have relevant concepts that the current study can utilise. The current research tries to bridge the knowledge gap by focusing on the southern African countries with especially attention to mobile telecommunications industry in South Africa by identifying the drivers or motivators or reasons associated with BPO. In this section, some of the major drivers are briefly discussed so as to understand BPO from an organizational standpoint.



Organizations differ in terms of resources and competencies, which has an impact on their business process efficiency. To acquire a competitive advantage over their competitors, businesses should execute operations in-house for which they have strategic resources and expertise. On the contrary, “business functions should be outsourced to third parties when firms lack such resources and capabilities to meet the expected outcome” (Baily, Farmer, Crocker, Jessop & Jones, 2015; Ikerionwu, Edgar & Gray, 2016; Kar and Pani, 2014; Lacity *et al.*, 2016) but little empirical research has been done in developing countries to identify the drivers of BPO in the mobile telecommunications industry particularly in Southern Africa and special refenceto South African mobile telecom operators.

As companies attempt to minimize expenses and specialize in inadequate number of core functions, BPO has become a strategic priority (Hanafizadeh and Ravasan, 2017; Sandhu *et al.*, 2017). The rise of globalization, more demanding clients, the restructuring of business processes and advancement of ICT, played an important in the growth of IT outsourcing (ITO) (Gerbl *et al.*, 2015).

Companies tend to have different motivation in utilizing business process outsourcing. Companies outsource functions for cost-cutting initiative, while others use contracting out services to offload activities where the company do not have competitive edge, allowing core capabilities to remain internal. Brewer *et al.*, (2014) indicated that, “outsourcing as a growth strategy, leveraging their supply base to meet rapidly increasing customer demand, to gain access to new markets or to gain access to external resources that are infeasible to develop in-house” hence the current study has to establish what motivates the mobile telecommunications industry to embark on business process outsourcing in South Africa.

Notwithstanding the academic understanding that “outsourcing can result in *gains* for the firm if properly executed” (Lahiri,2016; Grimpe and Kaiser,2010) little attention has also been given on what actually drives the mobile telecommunications industry to embark on BPO in the Southern Africa developing countries especially South Africa as majority of the literature are focused in developed countries. Furthermore, the majority of outsourcing research has concentrated on multinational firms in

industrialized countries (Hoodosi and Rusu, 2013), evident by various studies by Patil and Wongsurawat, (2015) in India; Modarres, Ansari & Thies, (2016) in the Persian Gulf; Lau and Zhang, (2006) in China, Lahiri, (2016) in USA and Ghodeswar and Vaidyanathan, (2008) in India. Most of these studies are from developed countries therefore it becomes necessary to also establish whether these drivers are relevant in Africa. The studies by Khaki and Rashidi, (2012) and Mclvor, (2016) although confined to telecommunications industry but they still focus on developed countries which makes this research prudent to bridge the gap.

Despite the possible fact that some of the aforementioned studies does not directly relate to telecom operators, they provide benchmarks and also do have relevant concepts that can be used in this research. The current research tries to bridge the knowledge gap by focusing on the developing countries with especially attention to mobile telecommunications industry in South Africa by identifying the drivers associated with BPO.

The reasons for outsourcing, especially in production was cost minimisation like labour costs, transportation costs and other related expenses. Outsourcing has recently been characterized by strategic considerations, “to include focusing on core competencies; gaining access to unique resources, skills and talents and capabilities possessed by other firms, such as the current technology and infrastructure; this has been particularly true of service firms” (Benton, 2014; Edvardsson and Durst, 2014; Mbanje and Lungu, 2015; Bily et al., 2015; Di Gregorio, Musteen & Thomas, 2009; Ikerionwu, Edgar & Gray, 2016; Sobinska and Willcocks, 2016).

In terms of outsourcing motive, two theoretical models, transaction cost economics (TCE) and the resource-based view (RBV), are among the most widely used in the literature (Lacity et al). (2016). Hitt, Ireland & Hoskinsson, (2011), contended that from RBV perspective, competence includes the knowledge of when to acquire, develop and divest the firm's resources. The TCE organizations are hesitant to invest in equipment, facilities and other uncontrollable costs that may drive the production cost above that of obtaining the same goods and services from the market (Brewer, Ashenbaum and Ogden, 2013). The researcher adopted the four theoretical models

namely TCE, RBV, KBV and Agency theory in identifying and explaining the drivers of BPO. Below are some of the empirical studies on the drivers for BPO.

A study conducted by Sobinska and Willcocks, (2016) in Poland on the current trend of IT outsourcing management and performance, the rationale for IT sourcing decisions is to permit more focus on internal core activities, supplement inadequate resources, minimise expenses and access to advanced services.

Similarly, a study by Hanafizadeh and Zare Ravasan, (2017) on empirical examination of contract out decision: with reference to e-banking service operations. According to the findings, 9 from a total of “11 assumed factors (i.e. perceived complexity, perceived cost, service observability to the client, the cultural fit between client and supplier, perceived loss of organizational knowledge, prior outsourcing experience, external pressure, market volatility, and suppliers’ power)” affect the outsourcing decision by e-banking services. The data also revealed that the nature of service and the customer's IT competences had no bearing on the outsourcing decision.

Another study by Ahmed, Ahmad and Weinhardt, (2014) in which telecom industry outsourced business activities in Pakistan. The results found out that essential drivers satisfied by outsourcing in the telecommunication industry include cost reduction of day-to-day operations, capital expenditure optimization, flexibility, and access to new technologies.

Other studies conducted by Sandhu, Shamsuzzoha & Helo, (2017), on whether outsourcing always work? Measuring business performance. The results indicated that companies embark on BPO as a result of business competition, technology advancement, production flexibility, customization, sources of innovation, knowledge transfer and quality assurance

A study by Patil and Patil, (2014) on the evaluation of outsourcing of telecom operations. The outcomes shown that primarily the key reason for contracting out services was governing operational costs but over the period of time significant factors like flexibility in control of investments and resources, sharing of revenue, sharing of

risk, special skills acquisition, competencies and establishing long term strategic connection were also discovered.

Complementing the above results is the study by Ikerionwu, Edgar, and Gray, (2016) on the development of service providers' BPO-IT framework. The findings suggested that the reduction in service processing cost; maintaining the privacy of client's operations; expanding the scope of the engagement; competitive advantage, quick turnaround time delivery of SLA within a short time, and quality software that translates to improved services are some of the reasons for BPO.

Similarly, Modarress, Ansari and Thies, (2016) conducted a study with the goal of identifying the obstacles, benefits, risks, and motivations of petroleum businesses in the Persian Gulf when it comes to a strategy of outsourcing. While the petroleum organizations are well performing, the results confirmed that they are faced with massive operational costs that stem from the ageing infrastructure, constrained access to new technologies, lack of human capital, incompetent fragmented business processes and strategies to outsourcing toward cost savings and the overt and covert resistance of management and employees are significant barriers for the creation of continuous process”.

Although the some of the research mentioned above are not directly connected to the telecommunications business, they do provide insight into the drivers of BPO that this study might use, therefore this study becomes relevant and apparent in identifying the actual drivers of BPO in the telecom operators in developing countries

The review of related business services sourcing literature: an update and future directions by Lacity et al., (2016) discovered that the wide groups of obtaining incentives (e.g. cost reduction and availability to talents), transaction attributes (e.g. service criticality), and client company factors influenced both ITO and BPO decisions (e.g. prior performance).

Complementing the above results is the study by Khaki and Rashidi, (2012) on determining the effects of contracting out services on operational objectives and performance in the Iranian telecommunications industry, with the goal of examining the tendency to outsourcing and its influence on operational objectives and performance. The results “found out that the reasons for outsourcing include cost reduction, improved quality, flexibility and better organizational performance which include financial performance and non-financial performance”.

Another study conducted in India by Patil and Wong, (2015) on assessing BPO/ITES firms, in which the aim was to comprehend the several roles “drivers such as cost, strategy and risk play when business process outsourcing/information technology enabled services (BPO/ITES) firms in India outsource their information technology (IT) functions to third-party vendors. The results indicated that Practitioners need to consider all three drivers cost, strategy and risk into consideration when firms in India outsource information technology (IT) functions to third-party vendors”.

Complementing the above findings is the study by Ghodeswar and Vaidyanathan, (2008) on BPO: an approach to getting closer to international niche, whose goal was to review the numerous types of outsourcing, their drivers and processes and to recognize global competences that host organizations could leverage. The findings indicated that, “Drivers of outsourcing emanate from organisational initiatives, improvement focus, financial and cost objectives, or growth objectives”. Most of the core and non-core important business functions, spanning a wide range of industries and operations, are increasingly being outsourced, allowing host organizations to have access to world-class skills.

Similarly, Lau and Zhang (2006) did a study on the "Drivers and Obstacles of Outsourcing Practices in China," with the goal of examining the fundamental elements that encourage Chinese companies to outsource and the challenges they face in comparison to the scenario in Western industrialized countries. The results found out that “economic factor is a strong motivation for outsourcing in China, of which cost reduction, cost saving, and capital investment reduction are the main concerns”. Outsourcing is used to speed benefits of re-engineering, focus on core expertise,

improve facilitate market penetration and flexibility, among other strategic reasons. “Environmental factors like information technology (IT) development and capability of supplier can influence organizations’ decisions to outsource”.

Although some of the above studies are not directly linked to the mobile telecommunications industry lessons can be drawn from the studies that are of benefit to the current study about the drivers of business process outsourcing. Several studies were conducted in countries that are developed. The above studies provide benchmarks and also do have relevant principles that can be used in this research. Findings from the above studies complement previous studies and are useful in the present study. The current research tries to fill in gap by concentrating on the Southern African developing countries with especially attention to mobile telecommunications industry in South Africa by identifying the actual drivers/motivators/reasons associated with business process outsourcing.

Yap et al., (2016) alluded that, some of the main reasons for outsourcing included, “financial reasons thus reducing cost, generating additional profits and reducing capital outlays with periodic payments” Technical motives for BPO are “quality improvement, gaining access to new talent and technology, the easy availability of vendors with expertise, and economies of scale”. With respect to the strategic drivers, the common ones are “shortage of skilled workers and cost-reduction opportunities”. Strategic reasons comprise of “refocus on innovation and core-competencies, leading organisations are shrinking their business cycles and tightening feedback loops and increasing quality standards” (Baily et al., 2015; Brown and Wilson, 2005, 2015; Ghodeswar and Vaidyanathan, 2008).

Four factors are transforming the telecom industry from within putting new pressures on the traditional telecom business model, and thus forcing operators to rethink how and what they outsource, and why they should do so. According to Eikelmann, Kemeter, Aichberger &Poetscher, (2013) the four driving forces transforming the telecom industry include “economic efficiency, capabilities, partnership integration and technology convergence”.

The drivers of BPO were classified by Ghodeswar and Vaidyanathan, (2008) include, “organizational, improvement, financial, cost and revenue”. Pratap,(2014) and Lacity *et al.* (2016) defined them as motives and included cost, greater focus on core competencies. Brewer *et al.*,(2013, 2014) more specifically suggested strategic drivers of contracting out services: “to include cost reduction, core competence focus and growth and flexibility” and lastly the study by Kremic *et al.*, (2006) on outsourcing decision support: "cost-driven outsourcing, strategy-driven outsourcing, and politically-driven outsourcing" are among the motivators identified in a study of challenges, advantages and decision factors. Lyson and Farrington, (2018) and Benton, (2014) included “quality, finance and co-operation as some of drivers”. Chopa and Meindl, (2016) alluded that factors to be considered in making a BPO include “economic factors, risks and strategic factors, business strategy and firm focus.

Reduced manufacturing costs, fixed costs, investment in capital, overhead and downsizing are among the goal of mobile telecommunications companies. Outsourcing, which is more closely linked to core competence plans, is another way for companies to increase quality (Monczka *et al.*, 2016; Mbanje and Lungu, 2015; Bengtsson and Dabhilkar, 2009; Wallenburg, Cahill, Goldsby & Knemeyer, 2010; Sutton, 2012). Making inferences to this study, the study subscribes to the synthesis of literature related to drivers/motivators/ reasons from different authors.

The present study tried to explain some of the drivers/motivators alluded by the above authors in detail as they also seem to apply in mobile telecommunications industry. In this section, some of the major drivers are briefly discussed to provide an insight on BPO from an organizational point of view.

### **2.3.1 Organisational driver**

The mobile telecom organization-led initiative's major aims are to improve flexibility to deal with dynamic company operations, need for services and products, exploit

developing technology and increase shareholder value by focusing on core business. (Patil and Wongsurawat, 2015). The mobile telecommunications corporation can also predict which current essential functions will become less important as market dynamics change.

Knowledge transfer (access to talent) through outsourcing firms can assist mobile telecom companies. Outsourcing firms collect knowledge by transferring human resources from outsourced firms to outsourcing vendors (Sandhu et al., 2017). Outsourcing conveys vital information and experience from the offshore organizations to the contracting out firms so as to strengthen their reliability and confidence (Cheng et al., 2010). As a result of these activities, employees have a career path that is stronger and more dedication and energy in core functions (Jensen and Pedersen, 2012; Zacharia, Sanders & Nix, 2011).

Outsourcing the tactical aspects of the management team's job tasks frees them up to pay attention on associated strategy challenges such as the positioning of the market together with its new product development. In labour-intensive service businesses, employees are "seen as significant assets" (Diaz-Mora and Triguero-Cano, 2012; Jensen and Pedersen, 2012; Ghodeswar and Vaidyanathan, 2008, Yu and Lindsay, 2011). BPO allows resources to be redirected from non-core tasks to activities that yield a higher return on customer service.

### **2.3.2 Improvement driver**

When a company internal skill set becomes insufficient as a result in dynamics in business, it may assign this activity to an experienced supplier who is extremely knowledgeable, employs skilled personnel and follows industry best practices (Pratap, 2014). This also applies to the mobile telecommunications industry in which it wants to tape expertise from the outside suppliers. BPO has also become a significant corporate technique for gaining a competitive advantage, as external service providers can manufacture products and services more efficiently and competently (Yap, Lim, Jalaludin & Lee, 2016).



The important “objectives of this initiative are to improve operating performance, obtain expertise, skills and technologies; improve management and control; improve risk management, acquire innovative ideas, improve credibility and image by associating with superior providers”. Quality, productivity, cycle time, timeliness, utilisation, and other performance indicators can be targeted for improvement (Fawcett, Ellram & Ogden, 2014).

When mobile telecom operators outsource, they become more adaptable, dynamic, and capable of adapting to take advantage of new opportunities. This is accomplished by allowing the host organization to deal with changes in work volume, reducing the uncontrollable cost of in-house workers and outsourcing the role to a supplier of service who will be paid only for work completed (Rodriguez et al., 2017; Ghodeswar and Vaidyanathan, 2008).

### **2.3.3 Financial driver**

The aims of business process outsourcing (BPO) are to minimise asset investment, avail resources for other usage and create income by moving resources to the supplier as a result, profitability is improved (Christiansson and Rentzhog,2019). “Reducing capital investment in transportation, warehousing, manufacturing, IT and employees in order to release capital for core business and to improve return on assets and cost is an important part of their survival strategies in order to enhance competitiveness and flexibility” especially operators in the mobile telecommunications industry (Liu and Tyagi, 2017; Lau and Zhang, 2006; Patil and Wongsurawat, 2015, Prajapati, Kant & Tripathi, 2020).

When mobile telecom companies outsource, “non-core functions to external suppliers, lower cost and access to best-in-class innovations in those functions are obvious benefits; more importantly though, key resources like financial and managerial bandwidth can then be more gainfully used into those activities where the firm scores over its competitors” (Chopra and Meindl, 2016). This can also be applied in the mobile telecom industry. Nike and Reebok’s experience which concentrate on the designing and marketing of footwear, their core competences, while contracting out production processes, is cited in support of this viewpoint (Pratap, 2014).

The host organization's investment in modernizing business procedures is reduced by outsourcing them. Contracting out services can also enhance financial metrics by removing the requirement to indicate return on equity from non-core capital investments (Fawcett, Ellram & Ogden, 2014). If a firm is considering growing its activities into a new geographical region, BPO is a realistic and crucial option to establishing the necessary capabilities. It also aids in the reduction or control of operational expenditures. "Access to an outside provider's lower cost structure is one of the most compelling short-term benefits of BPO. Other benefits sought by organisations are cost reduction with enhanced performance and conversion of fixed costs into variable costs" (Deloitte and Touche, 2014; Liu and Tyagi, 2017).

Service providers of the mobile telecom industry can deal with changing demand more proficiently due to "economies of scale, automation, process maturity, and investment in the latest technology" (Ghodeswar and Vaidyanathan, 2008; Sutton, 2012). Cost cutting assumes economies of scale. In terms of money, economies of scale benefit both the vendor and the client. Because the suppliers have experience and gain opportunities to new technologies and equipment, purchasing services rather than developing in-house is more cost effective hence need for BPO. This saves money on infrastructure construction (capital investment) and lowers opportunity costs. Cost concerns may be minimized if contract services were obtained at a specified cost (Naz et al., 2013).

#### **2.3.4 Cost reduction driver**

The objectives of outsourcing decisions would be to reduce cost (Pia Ellimaki, Aragon-Correa & Hurtado-Torres 2021). "Outsourcing network-activities including order entry, provisioning, service rollout, and field maintenance, as well as base station maintenance, can result in significant cost savings and process efficiency" (Hanafizadeh and Ravasan, 2017; McIvor, 2016; Rodriguez et al., 2017; Liu and Tyagi, 2016; Zhu et al., 2017; Eggert et al., 2017). Mohr et al., (2011) backed up the claim as well (Kar and Pani, 2014).

Cost savings are the key incentive for network operations outsourcing, according to mobile telecom operators, who "anticipate operational expenses savings of 20 to 30

percent, especially in the mobile network" (Friedrich et al., 2009). Outsourcing sub-assembly activities to competent vendors with lower wage structures than the corporation can help save money (Hanafizadeh and Ravasan, 2017; Yap et al., 2016; Mclor, 2016). Telecommunications companies must assess the operations and transaction costs of completing a transaction within their own organizations (in sourcing) and in the market (outsourcing). In-house production is favoured when transaction costs become too high (Kar and Pani, 2014).

There is "still a lack of consensus in the scientific literature on whether outsourcing can be based solely on costs or getting rid of problematic functions" (Vilko, 2013; Immonen, Tahvanainen, Viljanen, Vilko, Laaksonen & Partanen, 2009). Several research papers and numerous business publications argue that BPO helps a company to minimize costs and focus on its core strengths, while also emphasizing the trade-off between outsourcing benefits and higher coordination and transaction costs (Liu and Tyagi, 2017). External experts can provide network operation services at a lesser expense than in-house operators' branches (Hecker and Kretschmer, 2010; Sobinska and Willcocks, 2016).

According to Mohr et al., (2011), 66% of CEOs concentrate their contracting out efforts on minimization of expenses. Reduced manufacturing costs, uncollable costs, capital investment, overhead and downsizing are all aims for the company to reduce costs. (Brewer et al., 2013; Bengtsson and Dabhiikar, 2009; Wallenburg et al., 2010). Several studies concur that the primary goal of BPO is to reduce costs and improve efficiency. According to "neoclassical economy theory, cost curtailing is done from assumed economy of scale. Economies of scale are advantageous to both vendor and client in terms of money" (Naz, Ali, Naz & Sadiq, 2013; Kar and Pani, 2014). For common applications such as BPO, the suppliers can upgrade and offer software once for all, spreading the expenses over multiple customers. Economies of scale aid in cost-cutting. Because the supplier has experience and access to up-to-date software and technology, it is possible to construct software at a lower cost than if it were developed in-house. This also aids in the development of a solid relationship.

Business process outsourcing involves the “transfer outsourcing firms’ assets to a vendor can convert fixed amortization and operating expenses to variable usage charges”. On the implementation aspect, BPO can decrease uncontrollable costs, full-time human capital costs as well as other overhead expenses by utilizing arrangements that give development capabilities on a need-to-know basis. The contracting out of services can help businesses minimize expenses (Ikerionwu, Edgar & Gray, 2016; Liu and Tyagi, 2017). Outsourcing for the minimisation of expenses can "decrease fixed investments in internal processes and facilities" (Diaz-Mora and Triguero-Cano, 2012; Kotabe Murray & Parente, 2012) and permits finances to be deployed in increased-productivity functions within the organization, lowering expenses even more (Nayak et al., 2007). Rodriguez, Lai & Padilla, (2017) describe outsourcing as a "source of cash for enterprises as assets are transferred to vendors."

The presence of suppliers of external services with skills in production scale economies, is largely assumed in business process outsourcing for cost reduction (Kar and Pani, 2014; Jensen and Pedersen, 2012; Mohr, Sengupta & Slater, 2011; Weigelt and Sakar, 2012; Sobinska and Willcocks, 2016; Pratap, 2014). Furthermore, the mobile telecom operator can continue to undertake the functions for which they have gained efficiencies, minimizing expenses both in-house and outside the organization. In addition to selecting a minimal-cost service provider, items or activities can be contracted out to a higher-quality service provider to minimise the buying of organization’s overall quality cost (Yu and Lindsay, 2011; Brewer et al., 2013; Rodriguez et al., 2017).

Because of company competitiveness, outsourcing potential is basically indicated by the magnitude of demand in the market and the competitiveness of the business. The remarkable expansion in numerous of evolving contracting out destinations is moving organizations to become even more global, and incumbents are being forced to spread their services across different global regions in order to benefit from cost savings (Sandhu et al., 2017, Pia Ellimaki, Aragon-Correa &Hurtado-Torres 2021).

### 2.3.5 Revenue driver

Outsourcing helps companies to profit from vendors (Monczka et al., 2016). An “outsourcing strategy can improve organizational performance, lower innovation costs and improve competitiveness” (Rodríguez et al., 2017). The transferring of assets from the telecom operator to the supplier is one example of expanding revenue. “Equipment, facilities, vehicles and licenses used in current operations have a value and are, in effect, sold to the provider as part of the transaction, resulting in a cash infusion” (Kivijarvi and Toikkanen, 2015; Prajapati, Kant and Tripathi, 2020, Fawcett et al., 2014).

Outsourcing process skills enhances a mobile telecom company's financial efficiency by boosting the return on its invested capital. BPO allows businesses to expand their process capabilities without investing in new equipment or recruit new employees. When these procedures are operating effectively from offshore locations, the financial benefits increase. Furthermore, BPO arrangements eliminate the demand for capital assets, resulting in minimising uncontrollable costs and a lower break-even point (Liu and Tyagi, 2017).

Rodríguez et al., (2017) alluded that the primary purpose of this initiative are to “achieve aggressive growth by gaining increased market access and leveraging the service provider’s best-in-class processes, capacity and systems. Most organisations have a finite capacity and limited capabilities”. Increasing volume could take long to design, test and build facilities, necessitating a significant investment and resulting in lost market opportunity owing to increased "time to market." Even if such expansion cannot be financed internally, the host firm can attain higher sales and production levels (Rodrguez et al., 2017).

Table 2. 1 below provides the summary for the outsourcing drivers

**Organizational drivers**

- To achieve a greater focus on core business
- To increase flexibility to deal with ever changing business conditions
- To gain access to products, services and emerging technologies
- To assign operational issues to an outside expert
- To have greater thrust on market positioning and new product development
- To redirect resources from non-core activities to greater focus in serving the customer

**Improvement drivers**

- To improve operating performance, quality, timeliness, and productivity
- To obtain expertise, skills, and innovative ideas
- To obtain technologies which otherwise will not be available
- To improve management and control of operational processes including risk management
- To improve credibility and image by associating with superior providers
- To eliminate the fixed cost of internal staff by moving the function to a supplier
- To become more flexible, dynamic to meet the changing opportunities

**Financial and cost drivers**

- To reduce investment in assets
- To reduce the invested capital funds in non-core business functions
- To expanding its operations into a new geographical region
- To reduce or control operating costs
- To access an outside provider's lower cost structure
- To achieve cost reduction with enhanced performance
- To handle varying demand more efficiently because of economies of scale

**Revenue drivers**

- To achieve aggressive growth objectives by gaining increased market access
- To leverage on the service provider's best processes, capacity and systems
- To expand capacity to design, test and build new products and services
- To stretch its limits in handling the increased volume of business
- To manage demand efficiently through outsider's automation, process maturity and the latest technology
- To focus on enablers of business growth and strategies to fulfil the

Source: Ghodeswar and Vaidyanathan, (2008)

### **2.3.6 Company can benefit from increase competitiveness through quality improvement**

BPO enhance the gaining of state-of-the-art technology and the use of high-powered performance arrangements which culminates to increased assurance of quality in the entire development process of products. (Sandhu et al., 2017). It achieves modern transformation in quality through contracting out the service with a new service level agreement

The improvement of performance improvement has become a primary aim for telecom operators in BPO arrangements. The drivers for BPO have progressed from a key focus on cost minimisation, to an increasing emphasis on performance transformation in areas such as quality, functionality, and service (Ikerionwu, Edgar & Gray, 2016). Progressively, “organisations and vendors have been employing process improvement techniques such as Six Sigma, benchmarking, process mapping and lean thinking to deliver performance improvement in BPO arrangements” (Malik and Blumenfeld, 2012). Given the presence of process improvement concepts in BPO practice, limited academic research has been carried out in this area.

Regardless of the current rise of research in BPO (Handley, 2012, 2013; Lahiri, 2016; Mani et al., 2010), there is limited consideration on how BPO process affect company performance. As the telecom operators concentrate on increasing business processes they have implemented numerous approaches such as total quality management, continuous improvement and business process engineering (Trkman, 2013).

### **2.3.7 Access to innovation and niche capabilities**

Maintenance and Operations, as well as a adoption of state of art technology and extensive collaborations with telecom equipment vendors, provide a competitive advantage and a thorough grasp of our telecom IT infrastructure. Vendors take advantage of their knowledge by offering telecom service providers end-to-end maintenance and operations services (Kivijarvi and Toikkanen, 2015; Prata 2014). Dynamic innovation is a process by “which clients’ providers to deliver many

innovations each year that improve the client's performance in terms of operational efficiency, process effectiveness and/or strategic impact" (Lacity and Willcocks, 2015)

Because of its resource diversification, the strategy of BPO is considered source of new products/services. Outsourced firms typically have better technology and capabilities, which enhance internal product innovation capacity, thus South African mobile telecom operators can profit from innovation. Firms are increasingly turning to outside knowledge service providers to help them advance radical or gradual breakthroughs (Sandhu et al., 2017).

Lacity, Khan, Yan & Willcocks, (2010) "reviewed 164 empirical ITO articles published between 1992 and 2010 in 50 journals and Lacity, Solomon, Yan & Willcocks, (2011, 2016) reviewed 87 empirical BPO articles published between 1996 and 2011 in 67 journals. Academic research that investigated outsourcing drivers found that clients mostly outsource information technology and business process services for operational reasons – to reduce costs, improve process performance, access skills, increase scalability and/or speed deliver" (Lacity and Willcocks, 2014; Fawcett et al., 2014; Caruth and Caruth, 2010).

With shifting market dynamics, mobile telecom operators can actively develop dominant capabilities that the end consumer will value over time, as well as develop unique sources of influence in the value chain, resulting in intellectual advantages and increased profitability in highly competitive marketplaces (Ghodeswar and Vaidyanathan, 2008). Telecom communications industry can benefit from "manufacturing knowledge-based organisations in R&D, product design, process design, logistics, market research, advertising, marketing, and distribution and customer services" (Ghodeswar and Vaidyanathan, 2008; Weigelt and Sarkar, 2012; Pratap, 2014).

South African mobile telecom enterprises can benefit from working with supplier who have global competences by gaining opportunities to new technology, procedures and tools that they may not have access to otherwise. BPO can give better structured



techniques, procedures, and documentation, as well as a competitive advantage through increased skills, which guarantees that external suppliers are partnered with at the proper time in the innovation cycle, allowing access to niche capabilities and innovation (Pratap, 2014; Unal and Donthu, 2014).

### **2.3.8 Gain Access to other world class operational capabilities**

In the business world the foundation and backbone of any organisation is the adoption of Information technology and software services. “Capabilities can be acquired to facilitate application and systems development, ERP implementation, fortifying cyber-security, providing infrastructure support and database management” (Yap, et al., 2016; Kivijarvi and Toikkanen, 2015; Beulen, Tiwari & Van Heck, 2011). The “capabilities can encompass general accounting and audit, compliance, accounts payable and receivables, management reporting, credit and tax services, insurance processing and billing systems” (Blaskovich and Mitchik, 2011). In today's changing environment, operations support services are critical to any company performance. This comprises re-engineering, facilities management, worldwide delivery and sourcing, and logistics and dispatch services, among other things (Hitt, Ireland & Hoskisson, 2015). Suppliers who are specialized in the design and service delivery, permitting them to compete on price with clients. Vendors have the process improvement expertise that the client firm lacks for rethinking and transforming process performance (Youngdahl and Ramaswamy, 2008; McIvor, 2016). These skills are aimed at assisting the host organization's operations in becoming more efficient. “Back office transaction processing is an important sector in shared services, which is responsible for performing prime tasks such as ATM and transaction processing, payment processing, forms management, general transaction processing and accounts receivables processing” (Vitasek and Manrodt, 2012; Kivijarvi and Toikkanen, 2015). Service providers can provide the mobile telecom companies with economies of scale (Ghodeswar and Vaidyanathan, 2008; Lacity and Willocks, 2014, 2016).

HR services are becoming gradually multifaceted and outsourcing specialists enable the “client organisation in developing HR strategies and policies, sourcing and selecting employees, leading and managing employees, creating rewards and

incentive programmes, administering benefit and retirement programmes, and managing payroll” (McIvor, 2016; Sandhu et al., 2017).

The company could benefit from the outside service provider's expertise (Sandhu et al., 2017). Organization may concentrate on its core competencies as one of the important advantages of contracting out services (Gerbl et al., 2016). Marketing services are a key part of many organizations' operations. This allows for the outsourcing of a wide range of services. Marketing programs, printing and publishing, advertising, sales and sales management, strategic planning, business communication, publications, and web creation are all skills that mobile telecom operators get. This ensures that the telecom operators achieve higher levels of success, as well as the adding of value to the customer and a reduced time to market. Client networking services require “unique set of capabilities that facilitate the building of customer contact centres, enable CRM and telesales, warranty administration, order processing, and customer feedback” (Lacity *et al.*, 2016; Brown and Wilson, 2005, 2015).

These are critical qualities that a host organization in the services industry must develop in order to maintain a competitive edge over time. Figure 2.1 below summarises the world class operational capabilities that a firm can benefit from outsourcing including the mobile telecom industry.

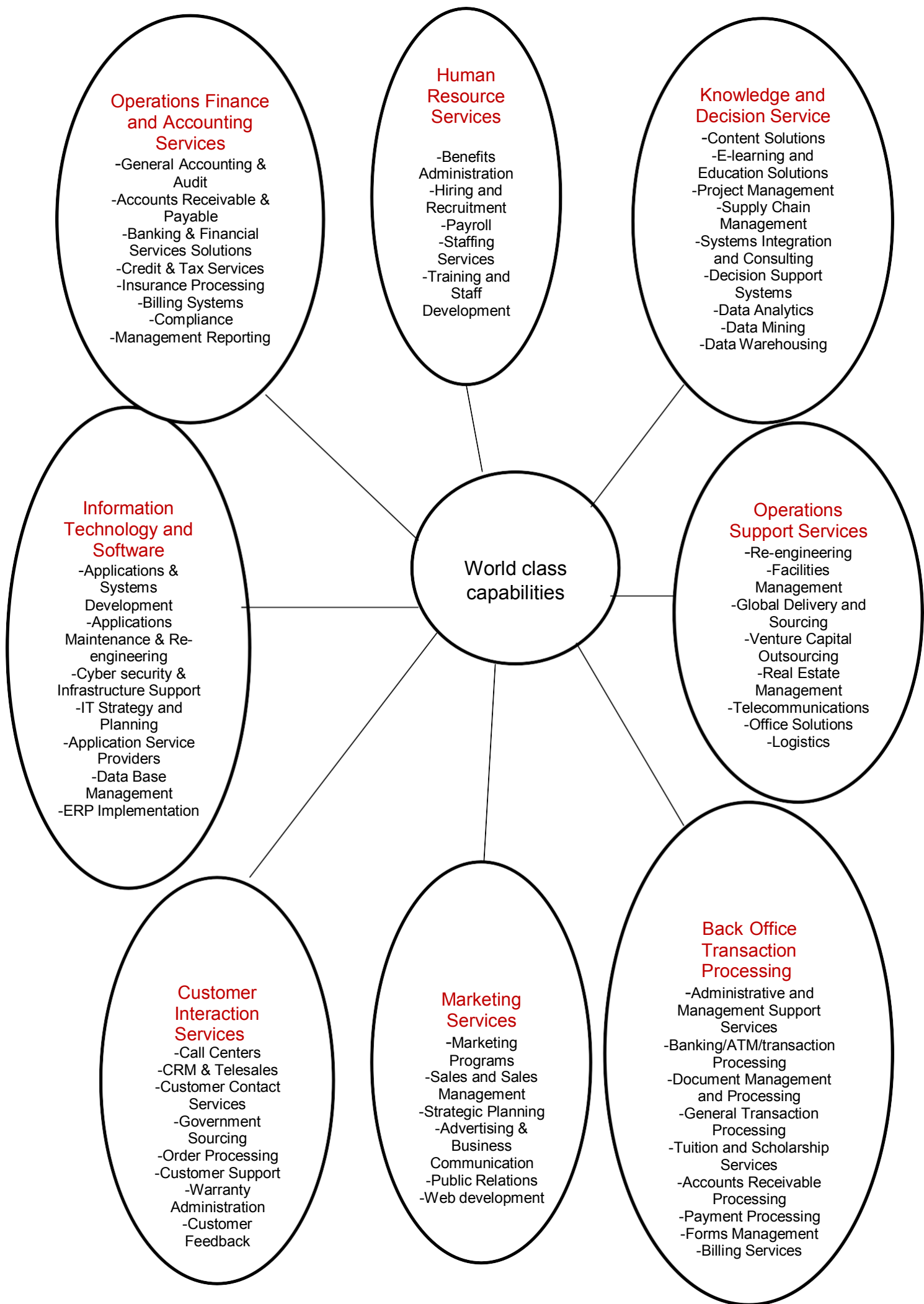


Figure 2. 1 World class capabilities accessed by host organization

Source: *Brown and Wilson, (2005, 2015)*

### **2.3.9 Partnership integration and building relationships**

Agency theory, emphasizes the association between principal and agent as advantageous to both sides, best explains this motivator. It is valuable for a parent organization to consider and form a long-term relationship with a supplier of service so as to eradicate sources of fear and uncertainty (Leuschner et al. 2014; Zhu et al .,2017; Eikermann et al.,2013 ). Giving vendors end-to-end responsibility for a large scope of network management allows operators to steer the outsourcing partner on the right level of detail and share the risks appropriately, and lets them set the right incentives for vendors to optimize service delivery. At the same time, outsourcing vendors are evolving to become true service partners that are more strongly combined into operators' delivery chains, taking much more accountability for the implementation of BPO and its complications (Hitt et al., 2015; Yang and Zhao, 2016).

For performance improvement, firms should adopt a “relational contracting arrangement as it emphasises the mutual trust, shared risks and rewards, commitment, and joint action needed to make such a close relationship work” (Sandhu et al., 2017). The strategic influence of the contracted-out business process on the principal corporation, as well as the level of supplier replacement that is available, determine the relationships between the mobile telecom operators and vendors. Another vendor cannot readily replace a vendor who provides services further up the value chain.

“Dyadic relationship between the telecom operators and a service provider is mainly based on an exchange perspective in which these two partners are working in synergy to create a new value together, higher than what each one individually can achieve” (Whipple and Roh,2010;). Extreme synchronization between the suppliers and the customers is required in many outsourcing relationships (Vitasek and Manrodt, 2012).The main focus of “relationship is however has been on relational governance mechanisms, such as trust, commitment and relational norms” (Chu and Wang, 2012; Yang, Zhao, Yeung & Liu, 2016; Leuschner et al., 2014), transactional mechanisms,

such as “contract control” (Huo et al., 2015b; Yang et al., 2016), and “integrative mechanisms, such as collaboration” (Chen et al., 2010).

Supplier selection should not be fully relying on functional considerations but should focus more on examination of the supplier's strategic orientation and cooperation goals (Sandhu et al., 2017). “Sharing information, learning and experiences often facilitate in building a higher level of trust and a better atmosphere for strengthening ongoing strategic business relationship” (Zhu et al., 2017).

### **2.3.10 Greater focus on core competencies**

A core competence is defined as a "capacity that enables access to a wide range of markets, contributes significantly to perceived consumer benefits of the end product, and is difficult to copy" by competitors (Chopra and Meindl, 2016; Lacity et al., 2016; Prahalad and Hamel, 1990; Brewer et al., 2013, 2014). Core competences are those procedures that require a grouping of physical and human capital which are responsible for the firm's explicit and tacit knowledge, that can result in improved performance, that is why even telecommunication companies outsource (Prajapati, Kant and Tripathi, 2020). Thus, the “specific assets are superior assets that are sources of competitive advantages, leading to lower costs and higher quality, as well as better organizational outcomes”, (Rodriguez et al., 2017). The resource-based view is strongly connected to the concept of keeping the company key competencies in-house while outsourcing the rest (Kivijarvi and Toikkanen, 2015).

In addition, Lacity et al., (2016) discovered that the sourcing of incentives was diverse. The primary objectives of the Polish IT BPO were to permit the company to concentrate on its core business while also gaining access to resources. Capabilities or competences are the skills, knowledge and technology that a firm has and that are critical to its strategic position (Kotabe et al., 2012; Liu et al., 2015). These key competencies are the foundation for the organization's capacity to outperform the competition, so they must be protected and cultivated. Strong capacity levels are suggestive of "core capabilities" to be preserved internal, according to the TCE-RBV framework and these activities are also in which the firm has already made asset-specific investments (Brewer et al., 2013).

Core competence-driven contracting out of services enables telecom operators seeking resources to concentrate their activities and resources on their core skills while entrusting other tasks to external providers (Jensen and Pedersen, 2012; Fawcett et al., 2014; Sandhu et al., 2017). “Core competencies often involve advanced or knowledge-based tasks that separate firms from competitors (Jensen and Pedersen, 2012) and might include superior ability in R&D activities, skill intensive production, customer relationship building, market intelligence, and system integration” (Mohr et al., 2011; Diaz-Mora and Triguero-Cano, 2012; Jensen and Pedersen, 2012; Yu and Lindsay, 2011). By eliminating operations that do not complement these abilities, firms can improve the value of service delivery (Zacharia, Sanders & Ni, 2011; Hsiao et al., 2010). Scholars have repeatedly referred to outsourcing as a significant mechanism for transferring non-core activities and using the freed resources to enhance the organization's core strengths, in addition to cost and innovation-related benefits (Pratap, 2014).

Contract out services, non-core activities help the mobile telecommunications business to focus on the concentration of managerial attention and resources on the tasks that it excels at, while relying on management teams from other firm to monitor duties where the outsourcing firm has a competitive advantage. This emphasis can help the company achieve better results by allowing it to be more efficient, innovative, and knowledgeable to tasks (Bolat and Yilmaz, 2009). Telecom companies can reinvest in those freed resources in growing their core businesses in order to gain sustainable competitive edge.

### **2.3.11 Growth and flexibility**

Business process outsourcing (BPO) allows “organizations to create lean supply chains that can quickly change to meet changing requirements, demands, or technologies hence company can improve productivity through operational efficiency” (Tsai, Lai, Lloyd & Lin, 2012; Sandhu et al., 2017). TCE-RBV predicts that a company's strategic use of external means for the implementation of actions carried out traditionally by the enterprise's personnel, who use internal means of the enterprise allows the allocation of certain support functions (non-core) from the organizational structure and entrusting their implementation to specialized, external organizations for growth.

Shifting the volume gained from outside vendors can be faster and require less effort than internal activity reorganization (Yu and Lindsay, 2011) "Rather than being tied to existing technological capabilities, organizations that have outsourced goods and services can switch suppliers as new technologies become available and to meet changing market conditions" (Diaz-Mora and Triguero-Cano, 2012; Gilley and Rasheed, 2000). Access to new market, increasing market share, or speed to market is through the efforts of a supply chain partner rather than in-house efforts, BPO expansion makes sense. BPO's expansion and flexibility strategy approaches Porter's "focus" competitive strategy in certain ways.

Outsourcing is being considered by mobile telecom operators as a way to boost flexibility in the use of warehousing capacity and transportation, while decreasing IT investment risks (Yap et al., 2016). Instead of being bound by prevailing technological capabilities, telecom companies that outsource activities can swap vendors when technologies emerge and market conditions shift (Diaz-Mora and Triguero-Cano, 2012; Gilley and Rasheed, 2000).

Outsourcing for expansion, as an example, can be regarded as a strategy to widen a company competitive reach in a more efficient manner than developing similar skills in-house. An intensive effort to gain market share and scope, for example, might be perceived as easier to achieve if the associated production needs were fulfilled by investing in plants and people internally however, companies still choose to outsource. (Jensen and Pedersen, 2012; Kotabe et al., 2012). Creating and delivering value will therefore require appropriate use and proper configuration of key resources. In this context of RBV, can be perceived as a specific bundle of resources and competences, primarily those that contribute to the implementation of a specific value proposition.

According to RBV, decisions regarding: the type, number (quantity) and quality of resources available at a given time, as well as the way they are combined and used, are going to determine organization's competitiveness, thus indicating the possibility of achieving its basic goals (Barney, 1991).

According to Tsai et al., (2012, “outsourcing allows organizations to create lean supply chains that can quickly change to meet changing requirements, demands, or technologies”. BPO “brings flexibility in an organization which helps in designing a small responsive organization these smaller responsive organizations in turns responds quickly to the changing business environment along with access to the resources and experts” (Naz et al., 2013). Mobile telecom operators should also note that flexibility will enable organisation to avoid dependency with suppliers whose technology become obsolete due to product lifecycles and pressures from market trends (Mclvor, 2016).

### **2.3.12 Reduced risk exposure**

By outsourcing some of the activities the mobile telecommunications company can reduce risk by converting its uncontrollable costs into controllable costs. Companies also believe that suppliers are able to cope with demand fluctuations through economies of scale and have greater scope for different sources for additional capacity (Liu and Tyagi, 2017; Mclvor, 2016). Other benefits may be “cost restructuring, operational expertise, catalyst for change, risk management, reduce time to market and tax benefit, etc” (Khan, Javed & Khan, 2013).

The risks of outsourcing can be reduced by using many service providers for different portions of a project rather than relying on a single service provider (Zhu et al., 2017). Many outsourcing agreements become incompatible as a result of additional expectations brought on by environmental uncertainty (Pratap, 2014). Due the monitoring process, flexibility can protect customers from poorly performing vendors, they cannot protect them from the risk of losing valuable technology when contracting out knowledge-intensive tasks like research and development (Grimpe and Kaiser, 2010).

### **2.3.13 Economic Efficiency and capacity constraints**

Operators now face constant pressure on margins, caused by decreasing average revenues per user and the massive investments they must make in new infrastructure such as fiber and technology to keep up with soaring data traffic. This pressure demands that they continue to improve their cost efficiency, requiring



them to build highly efficient operations that can deliver their growing range of products and services with greater levels of speed and quality. Consistently, they need to persist to be flexible enough to withstand significant changes in their business models, such as splitting up their networking and services operations, moving to network sharing, or selling assets (Eikermann et al., 2013).

Management of capacity in a circumstance where market demands surpass the organization's production capability due to constraints emanating from the firm's capacity, firms turn to outsourcing (Sandhu et al., 2017). Firms must investigate the possibilities of growing capacity or outsourcing a portion of the entire manufacturing process so as to satisfy clients' requests and increase total earnings (Solli-Saether and Gottschalk, 2015).

#### **2.3.14 Technology Convergence**

Numerous writers agree that technological progress is an important driving force to stimulate economic growth and improve environmental quality (Lacity *et al.*, 2016; Wang and Song, 2017). Recently, some developed countries have adopted the “innovative globalization” outsourcing strategy to attract talent and form agglomerations of highly talented professionals in technical fields (Lewin, Massini & Peeters, 2009). The telecom operators can also benefit from technological advancement from the service provider

Investing in cutting-edge technology is both expensive and risky. Due to the rapid evolution of the technology market, keeping up with the latest developments and solutions is becoming increasingly difficult, necessitating the use of BPO in South African businesses. It is simple, to gain opportunities to upgraded technology through contracting out, which allows for the creation of supply base and long-term supply of capabilities particularly in science and engineering (Sandh et al., 2017).

From existing data and research, outsourced businesses are mainly “technology- or knowledge-extensive, which is favourable for developing countries to focus on, not only to increase the competitive force of their core businesses but also to improve the technological level and realize scale economies” (Shen, 2016). The way that operators

manage their technological infrastructure is changing: Network and services systems are now essentially highly integrated IT platforms (Yap, Lim, Jalaludin & Lee, 2016; Kivijarvi and Toikkanen, 2015). Business support systems are becoming increasingly real-time, processing network events and feeding the information to billing and customer analytics systems as they happen. As operators adapt their organizations and processes to reflect this change, they must also adjust their outsourcing strategy to benefit from greater vertical integration with vendors (Eikelmann et al., 2013; Lacity and Willcocks, 2014).

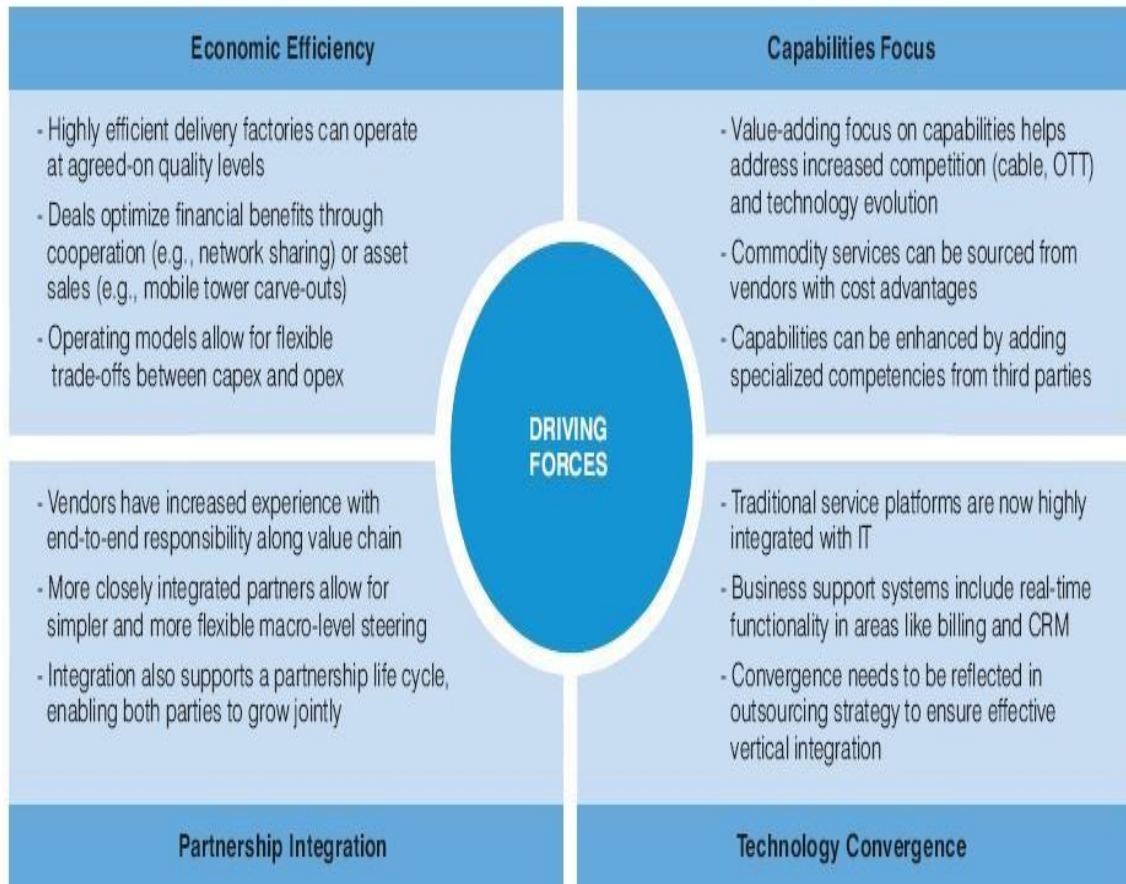
### **2.3.15 Capabilities Focus**

Telecom operators are no longer competing solely with other operators. Instead, all kinds of players, including cable companies, providers of over-the-top (OTT) services, and digital content providers, are entering their space from adjacent markets. The increase in competition and the rapid evolution of technology are forcing operators to keep those innovation capabilities strong (Kabiraj and Sinha, 2016). To innovate effectively, however, they must first determine their strategic value proposition—or “way to play”—given their current strengths and position in the marketplace.

This analysis will reveal the distinctive capabilities they will need to capture market opportunities. With that strategic clarity, they must embark on a cost savings program, focused on noncore activities that will enable them to finance the build-up of those capabilities (Eikelmann et al., 2013). Operators can further enhance their distinctive capability set by integrating new capabilities from service providers seamlessly into their value chains.

Table: 2.2 summarizes the four factors driving the move to re-sourcing in the telecommunications industry in Europe (economic efficiency, capabilities, partnership integration and technology convergence).

Table 2. 2 The four factors driving the move to re-sourcing



Source: Eikelmann, Kemeter, Aichberger and Poetscher, (2013)

## 2.4 RISK AND CHALLENGES OF BUSINESS PROCESS OUTSOURCING (BPO)

This section addresses the risk and challenges that companies are exposed to when they adopt BPO as a strategy in managing operational activities like cost reduction, improve in profitability. These challenges may also be applicable to the telecommunication industry. Although some of the studies are not directly linked to mobile telecom operators and most focused on developed countries but provide benchmarks and also do have relevant concepts that this present study can draw upon. In this section, some of the major risks and challenges of BPO are briefly examined to understand Business process outsourcing from organisational viewpoint.

The learning curve for an emerging supplier might increase the risk of BPO for businesses that lack domain knowledge and operational experience with telecommunications firms.

Several core and non-core operations and processes have been outsourced to various suppliers by mobile telecom operators nowadays, which pose a major risk in that the vendors may fail to provide deliverables in time and not meeting the quality standards set in the service level agreement (Patil and Agarwal, 2013) but little empirical research has been done in developing countries to identify the risk and challenges of BPO in the mobile telecommunications industry particularly in Southern Africa with South Africa being a closer reference as most of the studies focused on the developed countries.

The risk associated with the implementation of BPO on the mobile telecom industry received far less attention from researchers in literature of contracting out services among local firms in developing countries, particularly Southern Africa, with special reference to South African telecom operators, as most studies focused on developed countries.

Evidence on risks implications of BPO is surprising rare especially in the mobile telecommunications industry of the Southern African countries. The current research sought to bridge the gap by concentrating on the developing countries with especially attention to Southern African countries and with reference to South Africa's mobile telecom operators by identifying the challenges/risks associated with business process outsourcing.

BPO is a high-risk operation, with the rule of thumb being "high risk, high reward" (Naz et al., 2013). A warning from "outsourcing advocates that negative consequences may be greater than the benefits achieved high transaction costs, high monitoring and management costs, loss of control, loss of skills and experience as disadvantages of outsourcing" (Vilko, 2013; Chopra and Meindl, 2016) defined them as risk of using third-party in BPO. Literature has reviewed some of the risks to include communication challenges, difficulties in enforcing the stipulations of the contract, financial problems, lack of trust towards the provider, data and security challenges, reluctance to share information and knowledge, lack of experience in the sourcing relation management, lack of experience in the provision of IT services on the part of the provider and lack of involvement in the sourcing relation management processes on the part of the provider (Lacity et al., 2016). Below are the empirical studies on the risk and challenges on outsourcing.

A study by Gopalan and Agarwal, (2019) on employee retention constraints in the Business process outsourcing Industry: An Empirical research of challenges and mitigations, revealed that the BPO industry does not offer a consistent career path or opportunities for advancement. Employees in the BPO industry are unstable, and their BPO experience is not considered if they want to change jobs.

Similarly, a study by Sobinska and Willcocks, (2016) on IT outsourcing management in Poland– trends and performance. The results illustrated the most problems of IT BPO as communication (52%); organisation (48%), “difficulties in enforcing the stipulations of the contract” (26%), financial limitations (22%), “lack of trust towards the provider” (13%), data/information security (13%), unwillingness to share information/knowledge (13%), “lack of experience in the sourcing relation management on the part of the client organisation” (9%), “lack of experience in the provision of IT services on the part of the provider” (4 percent); and “lack of involvement in the sourcing relation management processes on the part of the provider” (4%)

Consistent to the above findings is the study by Aswini, (2018) on “Advantages and Disadvantages of Outsourcing. “The findings revealed, that confidential data and technology is compromised and many hidden costs and lack of client attention are some of the shortcomings of outsourcing.

Aligned to the above is the study conducted by Patil and Agarwal, (2013) on the difficulties in contracting out of telecom tower management-system integrators (SI) viewpoint in India revealed that some of the “challenges and risks of Greenfield telecom operators include loss of jobs, loss of functions and lack of co-operation by the service provider, reduction in strategic control, potential for information leaks, regulators face challenge of ensuring a level playing ground for all operators with no treat of cartels”.

Another study, that examined the impact of risks on the success of business process outsourcing projects: Knowledge management competencies' moderating roles, was conducted by Zhang, Liu, Tan, Jiang, and Zhu, (2018). The results suggested that

BPO project satisfaction is negatively impacted by social system, technological system, and project management hazards, according to empirical findings.

Similarly, Kivijarvi and Toikkanen, (2015) also conducted a study that was aimed to determine the business value of IT contracting out: a systems approach, with the goal of examining information technology (IT) outsourcing measurement systems in Finland. The study identified the following as some of the “risks could include information privacy, difficulties in quantifying indirect or hidden costs, absence of standardized process, loss of control, loss of knowledge to name a few”.

The above findings are aligned to the study done by Lau and Zhang, (2006) focused on the “Drivers and obstacles of outsourcing practices in China”, the findings of the study found out that Chinese firms are exposed to challenges and risks in outsourcing business processes. They include the “lack of capable service providers, loss of control, poor transportation and IT infrastructure, presence of local protection regulations, and lack of overall post-outsourcing measurement”.

Another study conducted by Khaki and Rashidi, (2012) on the impact of contracting out services on operational performance objectives in the Iranian telecommunications industry. The study found out that some of the “disadvantages include that supplier gain knowledge of the product being manufactured, they may use that knowledge to begin marketing the product on their own, lose touch with new technological breakthroughs, declining innovation by the outsourcer and difficulty of bringing back the firm activities”.

Also, the study conducted by Modarress, Ansari & Thies, (2016) in which the purpose of was to determine the obstacles, benefits, risks, and motivations of petroleum organizations in the Persian Gulf when it came to outsourcing strategies. The findings indicated that while the petroleum companies are confronted with “massive costs of operation that stem from the aging infrastructure, human capital deficit, inefficient fragmented business processes and lack of access to new technologies, outsourcing strategy toward cost savings and the overt and covert resistance of management and employees are significant barriers for creation of continuous process”. While

outsourcing may save expenses across the supply chain, it also creates a distracting barrier due to the fear of the unknown in a diverse variety of cultures, infrastructures, and sequential processes that necessitate resiliency for operations continuity.

Although some of the above studies are not directly linked to mobile telecom operators and most focused on developed countries but provide benchmarks and also do have relevant concepts that the current study can utilize. Findings from the above studies complement previous studies and are useful in the present study as they reflect the risks/disadvantages of BPO in developed countries. Lessons can be learnt from these studies. The current research tries to bridge the gap by emphasising the current study on developing countries with especially attention to Southern Africa particularly South Africa by identifying the risks or challenges associated with business process outsourcing in mobile telecom industry.

However, there are frequently risks connected and the benefits must outweigh the risks for outsourcing to be considered viable. Perceived challenges and advantages are useful criteria for forecasting the desire to business process outsourcing, according to Gewald and Dibbern, (2009), and perceived successes outweigh perceived challenges (Vilko, 2013).

The present study tried to explain some of the risks or disadvantages alluded by some of the authors in detail as these also seem to apply in the telecommunication industry. In this section, some of the major risks or challenges are briefly reviewed to understand their effects on BPO.

#### **2.4.1 Loss of supply chain visibility**

Third-party participation reduces supply chain visibility, making it more challenging for the firm to respond swiftly to local customer and market demands. This invisibility can be damaging to extensive supply chains that are difficult to manage (Chopra and Meindl, 2016), and telecom firms are no exception. The telecom operators should be mindful of a supply chain that isn't visible.

By using an intermediary, a company stand a chance of losing contact with its clients (Somjai, 2017). For companies that sell directly to consumers and have a large density of customers around their distribution centres, the loss of client interaction has a substantial impact (Moncka et al., 2016). An intermediary service provider's added distance from the client or end-user may hinder external or internal customer contact and connections with the organization (Somjai, 2017).

#### **2.4.2 Lack of control of activities performed by the service provider**

Current outsourcing operations are centred on providing continuous and systematic support and reorganizing firm departments, regardless of their industry. Many people, including executives and workers, are opposed to or sceptical of this new strategy. Their primary concerns are a lack of control and a fear of becoming dependent as a result of the outsourcing deal (Sakas, Vlachos & Nasiopoulo, 2014; Fawcett et al., 2014). One of the most regularly mentioned obstacles to outsourcing in the literature is loss of control over the contracted-out activity (Jain and Natarajan, 2011). This could also apply to the mobile telecom companies.

In some cases, a third-party labour issues and the environment can have a substantial negative influence on the firm's status; for example, Nike has had issues with numerous of its service providers regarding labour standards and the environment, and reputational damage from supplier actions can be mostly destructive to organizations with strong brands (Chopra and Meindl, 2016). This can also apply to the telecom operators.

#### **2.4.3 Threat of future price increase by the service provider**

According to Chopra and Meindl, (2016), agreements between telecom operators and suppliers should include performance metrics with incentives so as to benefit from gains of contracting out. For instance, cost-plus pricing of external services brings incentive risks and this method of pricing removes incentive for external service provider to innovate further to minimise expenses. Potentially higher cost of services from the service provider due to contractor high profit margins can be expected.



Despite differing perspectives on BPO, TCE and RBV theories can be demonstrated to have an impact on a telecom company's unique resource limits. TCE implies that when contracting out a particular and uncommon resources, the suppliers might threaten future price rises and contract termination by using the negotiating power it possesses after the contract is signed. The additional work required to handle this risk could significantly increase transaction costs. Despite their variances, Espino-Rodríguez and Padrón-Robaina, (2005) found that these two ideas complement each other in their examination of outsourcing.

#### **2.4.4 Supplier develops unique hard-to-replicate expertise**

Business process contracting out of non-core activities to a particular vendor may enable that service provider to develop core competency of its own at the expense of its customers in coming years when it begins to charge a price premium to the contracting out company (Brewer, Ashenbaum and Ogden, 2013).

This is supported by the study of Hanafizadeh and Ravasan, (2017) on an empirical study of decision to outsource services: e-banking services. Loss of a firm's knowledge was found to be undesirably associated to the extent of ITO adoption in the study. Despite, the provision of innovative services to the bank, a major portion of the new required knowledge remains on the supplier's side and cannot be transferred to the bank when "outsourcing knowledge intensive processes/services."

A firm may choose a function of supply chain to be internally managed, if the contracting out of services will substantially lead to intensification of the external service provider power. If a total loss of competence significantly increases the external service provider's position, it is better to keep part of the supply chain function internal (Chopra and Meindl, 2016). As a result, telecom operators must monitor suppliers to avoid the practice.

#### **2.4.5 Lack of current knowhow and firm's value-adding uniqueness**

Firm losses knowledge and technology to perform activity internally (Fawcett, Ellram and Ogden, 2014). When companies wrongly outsource essential talents, they incur plenty of negative consequences. Telecom companies may lose touch with the know-

how that allows them to innovate and adapt to changing market conditions (Monczka et al., 2016; Weigelt and Sakar, 2012). BPO's output has consequences, such as losing touch with emerging breakthrough technologies that provide chances for product and process innovation. Outsourcing may be detrimental to a company's long-term competitive advantage in such circumstances (Sandhu et al., 2017).

Outsourcing those cores, differentiating activities may lead to serious damage of the firm's value-adding uniqueness (Hanafizadeh and Zare Ravasan, 2017, Kotabe et al., 2012), resulting in incapacitated firms to efficiently compete (Weigelt and Sakar, 2012; Mohr et al., 2011; Brewer, et al., 2013).

#### **2.4.6 Supplier dependency**

Conflict may arise when, external vendors fails to cement the collaboration with telecom operators during the outsourcing of business processes (Mbanje and Lungu, 2015). The gap emanated from employees who have been adapted to outsourcing a particular service or activity to external service providers and are incapacitated to work otherwise. Furthermore, close integration increases the danger of supplier captivity, making it harder to switch providers and limiting strategic flexibility (Hanafizadeh and Zare Ravasan, 2017). There is a possibility of distorting the organizational boundary and increasing the probability of risk transfer across parties involved in the outsourcing process.

Dependence on suppliers, loss of expertise and information interchange and reduced connection with other functions turned out to be the most difficult BPO aspects. If the outsourcing failed, the danger of knowledge loss was not regarded essential, despite the fact that recovering it could be challenging. When an outsourced service is transferred outside of the organization, understanding of the process is frequently lost (Kivijarvi and Toikkanen, 2015; Metters, Metters, King-Metters, Pullman & Walton, 2006).

The research is more broad-based from a strategic and owner's standpoint, as cabling is primarily viewed as a basis of sustainable competitive edge. The transfer's intricacy is viewed solely as a risk: any problems could result in financial and other

consequences. The loss of tacit knowledge by the telecom companies in the form of talents and skills held within the firm could also cause some difficulties, which should be considered more thoroughly if contracting out of services is to proceed (Fawcett et al., 2014; Vilko, 2013).

#### **2.4.7 Loss and leakage of confidential data and information**

External service outsourcing, necessitates the sharing of demand information as well as, in certain cases, intellectual property. Leakage is always a risk when an external supplier also serves competitors. If intellectual property leakage is a concern, keeping the function in-house is the better alternative (Chopra and Meindl, 2016; Sobinska and Willcocks, 2016). The "loss of company secrets and other intellectual property that the vendor may be exposed to" is regarded as a potential risk (Aswini, 2018; Mbanje and Lungu, 2015; Klepper and Jones, 1998). The security of personal information is jeopardized. There will be a loss of control by the principal over confidential data and intellectual property (Aswini, 2018).

Business process outsourcing increases the probability risk of losing critical information to rivalries of a firm (Kivijarvi and Toikkanen, 2015; Sobinska and Willcocks, 2016). The primary risk incurred in a long-term is related to the sensitive information security, which means that more confidential information will be shared throughout this time, and trust among firms will be reinforced as a result. Overall, the advantages of outsourcing appeared to outweigh the disadvantages (Vilko, 2013; Fawcett et al., 2014).

#### **2.4.8 Poor service quality**

Another risk associated with outsourcing is that the vendor's products or services may be compromised in terms of quality for the purpose of profit (Chopra and Meindl, 2016). It should be emphasized that in many circumstances, the two parties' objectives may be at conflict, since the external vendor seeks to maximize its benefits and profits. Variables at individual level, such as "work motivation" (Trivellas, 2011), and at the firm's level, such as "organizational culture" (Trivellas, Reklitis & Santouridis, 2006), "strategy" (Trivellas, Reklitis & Konstantopoulos, 2007), "R & D operations" (Trivellas, 2012), and leadership style" (Trivellas & Drimoussis, 2013);

Trivellas & Reklitis, 2014) should also be considered as factors that can affect service delivery. The creation of appropriate decision remains a major difficulty in all circumstances (Sakas & Kutsikos, 2014), and it should be a major study topic in the next years.

#### **2.4.9 Loss of skills**

There is a concern that telecom businesses may lose the expertise and capacities required to undertake key knowledge processes (Edvardsson and Dust 2014). Furthermore, robust identification with a firm outsourcing the services results in sabotaging of outsourcing efforts and weaken source organization processes (Monczka et al., 2016).

BPO outcomes are out of reach with evolving advancing of technologies, which provide potential for innovation of processes, products and services. In the long-run, BPO may destroy the competitive edge in such circumstances. There is also a significant risk of outsourcing organizations' creativity decreasing as a result of their dependence on contracting out of different functions. It may also result in reduction of the competitiveness of research and development, as firms regularly substitute outsourcing for innovation (Sandhu et al., 2017)

#### **2.4.10 Lack of competent supplier/service provider**

The major outsourcing issue found is a lack of suitable service providers, such as the incapacity to offer adequate transportation networks, bad transportation tools, old-designed warehouse services, a lack of skilled human capital, and inadequate IT capabilities outsourcing (Edvardsson and Dust 2014). It's worth noting that each of the logistics companies is regarded as a dependable, quality service with the scope and scale to fully meet customers' needs. When outsourcing, mobile telecom operators should use certain criteria to select suppliers. Due to a bad choice or selection of service providers, the company may be unable to achieve promised deliverables/benefits (Sobinska and Willcocks, 2016).

#### **2.4.11 Resistance from employees**

Resistance from employee unions of the mobile telecom companies due to fear of job loss and change may lead to low employee productivity and motivation. Management and employee resistance are key roadblocks to the construction of a continuous process (Modarress, Ansari and Thies, 2016). Business process outsourcing (BPO) creates a disrupting resistance evolving from various complex range of organizational culture, infrastructures and systematic processes that enhance agility for the continuing of operations.

Employees may be discharged or redeployed, their work may restructure, or they may be transferred to the vendor's employment and its various circumstances if a function is outsourced (Chopra and Meindl, 2016; Gopalan and Agarwal, 2019). The aforementioned assumptions are backed by the study of Emmanuel, (2013) study, which sought to determine the impact of contracting out activities on the performance of Nigerian mobile phone companies. The study aimed at examining if mobile providers' outsourcing practices result in job losses and to figure out how to evaluate their effectiveness using key performance indicators. The findings suggested that the implementation of BPO leads to increased unemployment rates and retrenchment in mobile telecom providers.

#### **2.4.12 Failure to consider hidden costs**

Additional risks include not considering some of the hidden costs like quality costs, service provider relationship management, internal coordination, external model deployment (including supplier search, evaluation, and contracting, physical asset transfer, travel, and training) and supply chain risk management (Aswini, 2018 Somjais,2017; Monczka et al.,2016; Benton ,2014). Tjader, Shang & Vargas, (2010) described several costs and risks to include switching and monitoring costs, training and transportation of employees (Somjai, 2017).

Below is a framework summarizing the driving forces, obstacles & problems, anticipated outcomes and challenges of outsourcing? With reference to the findings of

the study in china, a framework for making decisions to outsource in China is shown below in Figure 2.2

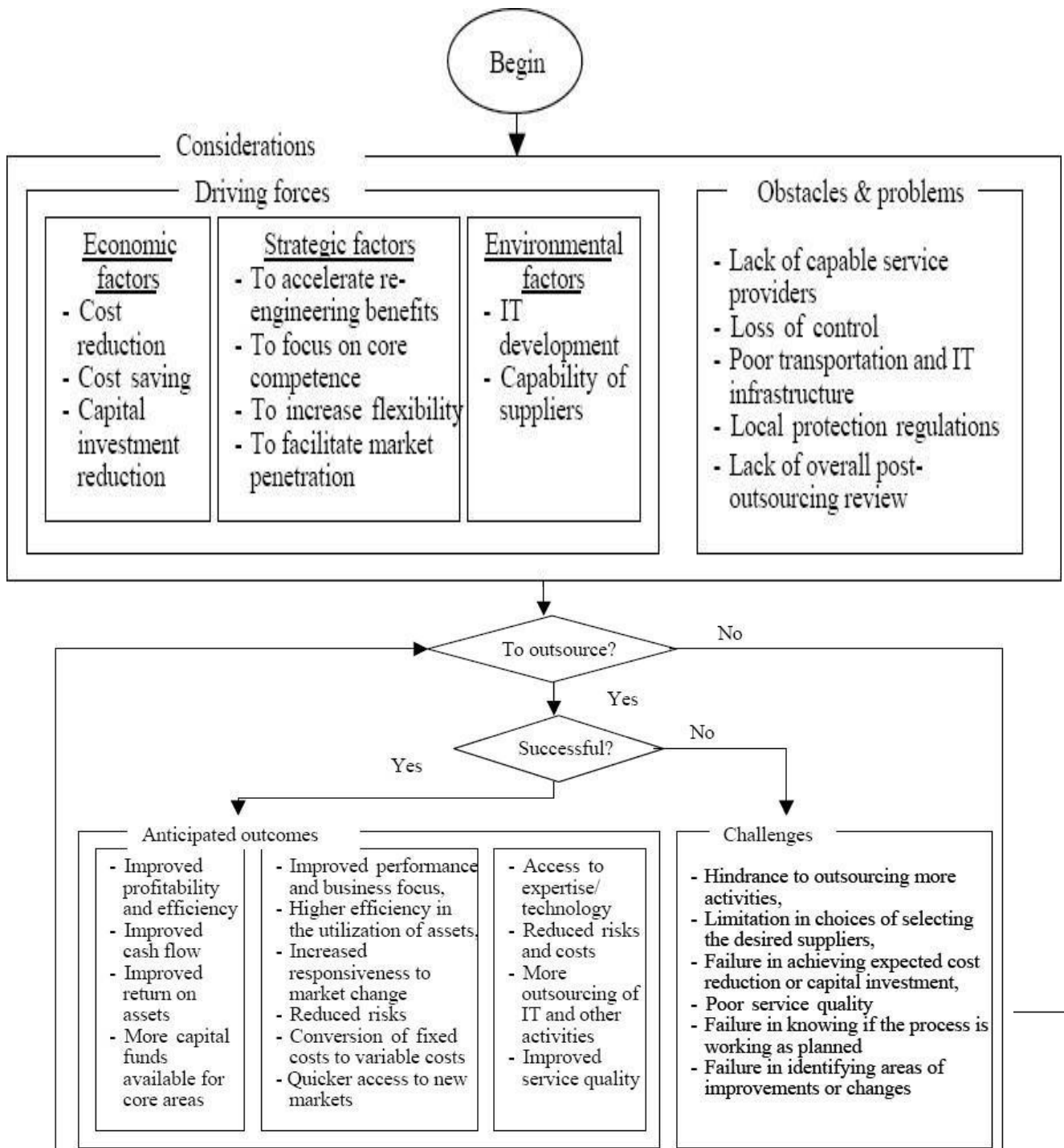


Figure 2. 2 A Proposed framework for making outsourcing decisions in China

Source: Lau and Zhang, (2006)

When making outsourcing decisions in China, the framework emphasizes that companies should evaluate both economic and strategic implications. In order to ensure cost-effectiveness, firms need to engage in a comprehensive identification and analysis of cost and all expenses related with the contracting out of a particular activity. In order to achieve long-term success, decisions to outsource should be developed from a strategic viewpoint and thoroughly incorporated into the planning of business processes. A thorough examination of IT development as well as a thorough examination of the service provider's capabilities are required.

When considering to outsource, organizations should be informed of the influence on client service levels, in order to reduce the chance of failure. China's business climate has become increasingly dynamic as a result of massive investment in logistical infrastructure and rapid economic development. The arrival of providers of global logistics into the Chinese market would undoubtedly boost the employment of third-party logistics providers (3PLs). For enterprises in China, the contracting out of services will turn out to be one of the most operative business methods for achieving cost-efficient performance and long-term success.

These results are relevant for this present study as it examines some of the reasons/drivers of outsourcing, risks (obstacles, challenges) and benefits relating to BPO and lastly the anticipate outcomes hence it will assist the researcher in developing the new framework that evaluates the impact of BPO on the performance of the mobile telecommunications industry. The study has relevant theories that the current study can utilize. The framework lacks the performance measurements instead it only anticipated the outcome without providing how to measure the outcome, hence paves the way for the next chapter which addresses various frameworks proposed and shortage of measurements to evaluate the impact of BPO on the firm's performance thereby triggering the researcher to fill the gap by suggesting a new framework that incorporates performance measures.

## **2.5 BENEFITS AND ADVANTAGES OF BUSINESS PROCESS OUTSOURCING**

In this section, some of the major benefits and advantages of BPO are discussed to enhance understanding of BPO from organisational perspective. This section also reviewed the empirical studies on the benefits of BPO.

The mobile telecom industry can “enjoy the key benefits of logistics outsourcing, including cost reduction, customer service improvement, and core competence enhancement, by obtaining access to complementary resources from 3PL providers” (Moncza et al.,2016;Yeung Zhou, Yeung & Cheng, 2012; Liu et al., 2015), such that economies of scale may be achieved, skills can be accessed at a minimal expenses and the activities and services quality can be enhanced (Mclvor,2016 ) but little empiricalresearch has been done in developing countries to identify the benefits of BPO in themobile telecommunications industry particularly South Africa. Evident as being shownby the studies by Modarress et al., (2016) in the Persian Gulf; Kivijarvi and Toikkanen,(2015) in Finland; Khaki and Rashidi, (2012) in Iran; Kremic, Tukul and Rom, (2006) in the USA in which all these studies are from developed countries. The present studybridged the gap by establishing the benefits of BPO from the Southern African developing countries perspective special reference to South Africa telecom operators.

Although several frameworks advocate for the utilization of management of performance tools like benchmarking and cost analysis, there is limited literature on the merits and drawbacks of the contracting out of services. These studies provide benchmarks and also do have relevant concepts that the current study can possibly draw upon. The current research tries to bridge the gap by concentrating on developing countries with particular attention to Southern Africa attention given to South Africa by identifying the benefits and advantages associated with BPO in the telecommunications industry.

Some of the significant advantages of outsourcing non-core functions to outside service provider include minimised costs and access to advanced innovations in those activities. More importantly, resources such as non-financial and managerial bandwidth can then be more effectively utilised in those activities where the organization outperforms its rivalries (Prata, 2014).



In this section some of the empirical studies are explained to support the benefit of BPO. The current study tried to explain some of the theoretical evidence on benefits alluded by the some of the authors in detail as these also seem to apply also in the telecommunication industry. In this section, key benefits are briefly discussed so as to expand a better understanding of BPO from an organizational standpoint.

According to the study by Ahmed, Ahmad, and Weinhardt, (2014) on business contracting out in the Telecommunication industry in Pakistan, the benefits of outsourcing in the telecom organization include acquiring new capabilities, complementing existing know-how, relocating, and focusing on resources.

Complementing the above results is the study by Kivijarvi and Toikkanen, (2015) on assessing the value of business on Information Technology (IT) contracting out: a systems approach in Finland, which had the goal of examining information technology (IT) outsourcing measurement methods, adds to the preceding conclusions. The study identified the following as some of the “benefits could include cost savings, lower labour costs, transforming the fixed in-house costs more toward variable costs, lowering risk, better efficiency, access to newer technologies and access to talented workforce, to name a few”. Although the above study is not directly linked to the telecom industry lessons can be drawn from this study that are of benefit to the current study with reference to the benefit and risk of BPO.

A study by Awino and Mutua, (2014) on BPO strategy and performance of Kenyan state firms backs up the aforesaid conclusions. The findings revealed that Kenyan state enterprises were contracting out and that BPO contributed positively to the firm overall performance. Thus, the study “provides empirical evidence to support that, BPO benefits as pertains to its contribution to enhancing performance will be realized by the corporations who will adopt the right type of strategies”.

The above findings are in line with the study conducted by Kremic, Tukel and Rom, (2006) on the contracting out of decision support: a survey of risks , benefits and decision factors in USA, “results indicated that cost saving, reduced capital expenditure, greater flexibility, increase focus on core functions, access to latest

technology, increased speed, transfer fixed costs to variable, quality improvements and access to skills and talent are some of the expected benefits of outsourcing”.

Aligned to the above findings is the study by Espino-Rodriguez, Lai, and Padilla, (2017) on the effects of contracting out services to mitigate the asset specificity on performance, aligns with the previous finding. A hotel application in Taiwan. The findings revealed that hotels would boost outsourcing of their activities not only limited to cost reduction but improvement of quality as well."

Similarly, a study conducted by Modarress, Ansari, and Thies, (2016) with the goal of identifying the obstacles, benefits, risks, and motivations of petroleum businesses in the Persian Gulf when it comes to outsourcing strategy. The findings indicated that while companies dealing with petroleum “are challenged with huge operational costs that emerge from human capital deficit, inefficient fragmented business processes, the aging infrastructure, and lack of access to new technologies, the contracting out of services leads to saving of expenses.

The above studies focused more on industrialized countries hence many empirical researches are needed in developing countries particularly Southern Africa with special to South Africa. Although some of the above studies are not directly linked to the mobile telecom industry lessons can be drawn from the studies that are of benefit to the current study with reference on benefits of business process outsourcing.

Findings from these studies complement previous studies and are useful in the present study as they show the benefits of business process outsourcing. The current research attempts to cover the gap by focusing on the developing countries with especially attention to Southern Africa particularly South Africa by identifying the benefits/ advantages associated with BPO in the mobile telecommunications industry.

Another study conducted by Khaki and Rashidi, (2012) focused on the effect of the contracting out of services on operational objectives and performance in Iranian telecom industries found out that some of the “advantages of outsourcing include cost reduction, quick response to changes in the environment, reduction of manufacturing costs and investment in plant and equipment, promote completion among outside

suppliers, thereby ensuring availability of higher quality goods and services in the future and improved financial performance”.

Outsourcing can also improve business performance as well as “improved delivery metrics, increased learning and acquiring of new skills, improved innovation, and increased access to international markets and materials are lower costs, access to superior capabilities and innovation of specialized suppliers and freeing up of firms resources for better focus on its core competencies which provide it sustained competitive advantage” (Ikerionwu, Edgar & Gray, 2016; Pratap, 2014; Zacharia et al., 2011). Additional key benefits that management expects identified in their BPO engagements include convenience and flexibility in project development, implementation and scaling up, management of change, technical risk mitigation, enlarged productivity and quality service, cash savings, and optimal use of external supplier knowledge, equipment, and experience (Jain and Natarajan, 2011).

By gaining access to complementary resources from 3PL providers, these businesses can realize the rewards of logistics contracting out, like cost reduction, better-quality customer service and improved core competencies (Liu et al., 2015).

The present study tried to explain some of the benefits alluded by the some of the authors in detail as these also seem to apply also in the telecommunication industry. In this section, key benefits are briefly discussed so as so expand improved understanding of BPO from an organizational standpoint.

### **2.5.1 Value creation to the organisation though improved processes**

This benefit is described by the resource-based view (RBV), which explains why telecom companies keep their key competencies in-house and outsource everything else. Telecom companies can tap into the crucial resources of Third-party suppliers, through agreements without changing the boundaries of the company. For the company to gain a meaningful competitive edge, the resources acquired from external service providers should be unique. In other words, the resources should be few and difficult to come by (Moncza et al., 2016; Kivijarvi and Toikkanen, 2015).

According to transaction cost theory, “when a firm has already integrated its operational functions, the decision to outsource such functions to the market should be made if it is necessary to create or protect firm value” (Jensen and Pedersen, 2012). Telecom operators can better concentrate on their most activities that are value-creating by contracting out services from knowledgeable organizations, they can also leverage on the potential effectiveness of activities offered by external service suppliers. Furthermore, as the contracting out of services from external suppliers grows, costs decrease thereby also minimising the investments in facilities, equipment and labour. Outsourcing seems to have a straightforward and persuasive justification (Jiang et al., 2006; Liu and Tyagi, 2017).

### **2.5.2 Quality improvements through access to newer technology**

Telecom firms save costs because of superior quality and execution excellence, as well as productivity advantages from innovative people practices, top-notch business processes and a world-wide delivery model (Kivijarvi and Toikkanen, 2015). The outsourcing firm or telecommunications provider may realize that the other organization is, for example, improved competitive edge, effective, and inventive than the internal service provider (Ikerionwu, Edgar & Gray, 2016).

A study by Espino- Rodriguez, Lai, and Padilla (2017) on the effect of contracting out on asset specificity on performance in a hotel application in Taiwan revealed that hotels will increase outsourcing of their activities also aimed for quality improvement rather than cost reduction only.

Telecommunications firms may typically increase quality through outsourcing, a performance indicator that is more closely linked to core competence strategies (Sandhu et al., 2017). Client organizations can get access to a wide range of knowledge bases through R&D outsourcing, but this information can only be translated to market-ready innovation if they maintain a high internal R&D intensity (Bertrand and Mol, 2013, Pratap, 2014).

### **2.5.3 Focus on core competences**

Researchers have consistently referred to BPO as a major method for transferring non-core functions and using unconstrained services to enhance core capabilities, in addition to cost and innovation-related benefits of the organization hence telecom operators can also benefit from BPO by concentrating on their core business (Prajapati, Kant and Tripathi, 2020, Chopra and Meindl, 2016; Lacity *et al.*, 2016; Pratap, 2014).

The technical and firm competences utilized in mechanical, operations, research and development, instrument and control, maintenance and distribution constitute these core competences. According to a large number of studies, a firm core capability needs a framework to shield them within the firm (Modarress, Ansari, & Thies, 2016), as they are the crucial bases of inimitability essential for a firm to survive under economic, political and competitive setbacks, thereby improving quality (Monczka *et al.*, 2016).

### **2.5.4 Cost reduction and the ability to transform fixed costs into variable costs**

BPO economic gains is that it “allows the outsourcing firm to reduce its fixed costs such as expenditures on equipment, information technology, fixed salaries of employees, etc., and convert those into a variable cost in the form of the purchase price that the outsourcing firm then pays the outside industry” (Hanafizadeh and Ravasan, 2017; Liu and Tyagi, 2016; Moncza *et al.*, 2016; Somjai, 2017).

In most cases, the outsourcing firm can save cost on fixed expenditures such as equipment, facilities, information technology, rents, employee salaries, insurance and logistic and administrative costs (Deloitte and Touche, 2014; Sobinska and Willcocks, 2016). When companies outsource and subsequently compete on price, the change of uncontrollable costs to controllable expenses means that they compete with lower fixed costs and greater controllable costs, permitting them to keep their pricing higher (Somjai, 2017; Liu and Tyagi, 2016; Tabuchi, 2011; Sutton, 2012). Regardless of the positive increment of cost efficiency through BPO, firms segment their cost

savings with their clients so as to gain a competitive edge (Hanafizadeh and Ravasan, 2017; CFL, 2019).

### **2.5.5 Enjoyment of economies of scale**

Outsourcing has been demonstrated to increase core competencies through cooperative learning (Park et al., 2011)," obtaining unique information thereby decreasing supplier opportunism by networking with experienced service providers," according to research by (Bhalla and Terjesen, 2013; Edvardsson and Durst, 2014).

Companies can manage to free their administration from some activities as a result of outsourcing, limiting their obligations to the control of third-party suppliers and permitting them to concentrate on more essential operations, which can provide them a competitive advantage. The benefits of contracting out services are related to the ability of these companies' executives to work behind the scenes on the production line. Securing an employment relationship with the outsourcing firms' human capital is one of the most substantial aspects of the contracting out deal (Lacity et al., 2016).

Outsourcing's growing popularity and ubiquity in modern times has been documented through research. Along with success stories and benefits, outsourcing failures led to serious risks in form of loss of present and future capabilities of firms outsourcing their processes. Outsourced process management has evolved into a skill set worthy of further growth and refinement by modern businesses (Pratap, 2014).

### **2.5.6 Creation of partnership**

Telecom operators who form strategic agreements with their external service suppliers might benefit from higher quality and more efficient IT procedures (Kivijarvi and Toikkanen, 2015). The rise of BPO models that focus mostly on cooperation (Chen et al., 2010), interactions (Gadde and Hulthén, 2009), logistics (Yang and Zhao, 2016; Lai et al., 2013), and the sharing of information and coordination of process (Yang and Zhao, 2016; Lai et al., 2013). (Liu et al., 2015) improves collaboration between telecom operators and service providers. Integration with 3PL providers, according to Yang and Zhao, (2016), can reduce exchange uncertainty and improve outsourced performance.

Business process outsourcing (BPO) process promotes the creation and management of contracts with an out-side service providers for skill delivery that were previously offered by the company's internal services. Sandhu et al.,(2017) argue that the “skills and competencies of supply chain partners can be viewed as a resource to be leveraged for competitive advantage, in this case by selecting the right functions to outsource to more capable partners”. To improve management, the organization skill and knowledge gap should be bridged through focusing on core capabilities and gaining access to new technical skills and information. The way the relationship between the organization and the vendor is managed at the business level determines the success of the relationship (Marinagi, Trivellas, & Sakas, 2014). Increased quality, organization focus, external capabilities, refocusing on scarce resources for alternative usages, minimized cycle time, minimized risks, flexibility, turn fixed costs into variable costs, and reduced control operating costs are some of the benefits of outsourcing (Benton ,2010).

## **2.6 SERVICES AND ACTIVITIES OUTSOURCED: OUTSOURCING OF BUSINESS PROCESSES FOR ENHANCED COMPETITIVENESS**

Business processes in the long run are “considered as the means through which organisations carry out their work and improving the performance of business processes would improve the productivity and quality of the organisations, thereby making them more competitive” (Gerbl et al., 2016; Saxena and Bharadwaj, 2009). With its concentration on both basic logistics functions, such as transportation and warehousing and innovative logistics services, such as purchasing, logistics information improvement and financial services, logistics contracting out has gradually become an important factor of corporate strategy (Zhu et al., 2017; Huo et al., 2015b; Shi et al., 2016) and the mobile telecom operators seem to be outsourcing the above activities, the current study also established the actual services or activities that the mobile telecom operators are outsourcing from a developing countries perspective particularly South Africa.

Nowadays operators of mobile network outsource “less critical functions like field services or inventory management and later include larger scale network operations functions like maintenance of the base stations of the mobile network” (Friedrich et

al., 2009, Claussen et al., 2012). Evidence is also provided by most of the studies on the services/activities outsourced by the telecommunications industry in developed countries evident is shown by the studies of Claussen, et al., (2012) on the performance inferences of the contracting out of service in the mobile telecommunications industry in UK, Patil and Wongsurawat, (2015) in India and little empirical research in the Southern Africa developing countries. These studies provide benchmarks and also do have relevant concepts that can be used by the current study. The current research attempts to bridge the gap by concentrating on the developing countries with especially attention to South African telecom operators by identifying the services/activities associated with business process outsourcing in the mobile telecommunications industry.

Current outsourcing is primarily connected to IT, operations, HR, legal, real-estate, procurement, and sales/marketing support functions (Sandhu et al., 2017), finance, procurement and operations (Deloitte's Global Outsourcing and Insourcing Survey, 2012).

As companies attempt to save expenses and concentrate on limited number of key areas, the contracting out of services has become a strategic priority (Sandhu et al., 2017). Organizations have been moving accountability such as human capital services, logistics, customer interaction, and information technology (IT) services to both local and offshore suppliers as business process outsourcing (BPO) has developed (McIvor, 2016). Even though some of the studies might not directly be related to the telecom industry but they offer a benchmark and also does have applicable concepts that the current study can utilize.

The current research study tried to explain some of the services outsourced as explained by the some of the authors in detail as they seem to also apply in the telecommunications industry. In this section, some of the major services or activities are briefly explained to comprehend BPO from organisational standpoint. Various authors have contributed to research on the services/ activities to be outsourced. Below are some of the empirical studies aligned to services or activities outsourced



A study conducted by Yap, Jalaludin and Lee, (2016) on the factors that influence ICT contracting out services in Malaysia's locally owned manufacturers, "the results indicated that there was clearly evident that networks and telecommunications services are ranked first, third and fourth, respectively, as the most outsourced ICT functions as part of BPO by the surveyed manufacturers". Because networks and telecom services seem to be considerably standardized, the contracting out of services appears to be a worthwhile option. Furthermore, the Malaysian Communications and Multimedia Commission (MCMC) termed network strategists and network engineers as the most challenging job roles to fill in Malaysia in December 2015. "Storage management and printer maintenance are ranked second and fourth, respectively". Application operations are ranked lower among the outsourced ICT tasks in terms of scheduling and control. The surveyed manufacturers outsourced either partially or completely 68 percent of all stated ICT functions.

Another study conducted by Patil and Wongsurawat, (2015) on Information technology (IT) contracting out by BPO/ITES firms in India, with the goal of understanding the roles various drivers such as cost, strategy, and risk play when BPO/ITES firms in India contracting out their information technology (IT) activities.

Similarly, a study conducted by Mclvor, (2003) focused on outsourcing insights from telecommunications industry in UK found out those companies in the telecommunications equipment manufacturer "outsources assembly operations, manufacturing, logistics and design". A number of more adventurous operators have begun moving to a second generation of outsourcing and changing the whole domains such as IT, mobile network operations and cable networks to suppliers.

This have been supported by the study of Gerbl, Mclvor & Humphreys, (2016) in that companies in the United States and Europe can now move a substantial quantity of "back office work and call centres to developing countries and operate it swiftly irrespective of geographical locations or physical presence". However, this has the unintended consequence of causing employment losses in industrialized countries. According to the study of Ghodeswar and Vaidyanathan, (2008) on BPO: a way to

accessing world-class skills in India, suggested that “Data entry, transaction processing, call-centres, customer support, etc. are among the numerous business processes commonly outsourced”.

Although, most of the above studies are from developed countries and not directly linked to the telecom industry lessons can be drawn from this study that are of benefit to the current study with reference on benefits of business process outsourcing. Findings from these studies complement previous studies and are useful in the present study as they show the different services or activities that can be outsourced in different industries including the mobile telecommunications industry.

Most businesses, including the mobile telecommunications industry, commonly outsource business functions such as human resources (HR) management, information technology (IT), payroll and logistics (Ghodeswar and Vaidyanathan, 2008; Promsivapallop, Jones, & Roper, 2015). Majority of network operators contract out less crucial activities like field services or inventory management first, then expand the initial contract to incorporate a broader scale of network operational functions (Friedrich et al., 2009; Espino-Rodriguez, Lai, & Baum, 2012).

In the domain of commercial services, the tendency toward outsourcing both domestically and overseas – has been particularly apparent (Promsivapallop, Jones, & Roper, 2015). The phenomenon of business process outsourcing has grown as companies outsource entire functions including finance, human resource management, customer service, logistics and information technology (IT) to suppliers of service, a process known as "unbundling" (Jayaraman et al., 2013; Yap, Lim, Jalaludin & Lee, 2016; McIvor, Humphreys, McKittrick & Wall, 2009; Sako, 2009; Mani et al., 2010; Lacity et al., 2016; Gerbl et al., 2016).

The telecommunications industry is currently in a transitional period, with functions such as "research and development" (Jensen and Pedersen, 2011; Martinez-Noya, Garcia-Canal & Guillen, 2012), "logistics" (Irina, Liviu & Ioana, 2012), "vending" (Unal and Donthu, 2014), "procurement" (Brewer et al., 2014), and "human resources" (companies such as Nike, contract out the entire business process in the shoe

manufacturing (Leavy, 2005), is an example that not only exists but develops, setting worldwide standards (Pratap 2014). South African telecommunications industry is not spared from this concept hence this research becomes prudent.

Several researchers included outsourcing to include financial services Currie, Michell and Abanishe, (2008), IT outsourcing " (Holzweber, Mattsson, Chadee & Raman, 2012; Patil and Wongsurawat, 2015); "legal processes" (Lacity and Willcocks, 2013); "advanced manufacturing and scalability" (Chen, Sun and McQueen, 2010). Some of these activities, such as IT and accounting, were formerly thought to be support tasks in outsourcing organizations (Kremic et al., 2006). The telecommunications industry is also following the same trend of outsourcing some of the above activities hence this current study adopted some of the activities in developing its questionnaire.

Organizations consider BPO to provide practically all of the services they require, while limiting their own personnel to the essential duties that define the company's operations (Caruth, Haden, and Carut, 2013; Ghodeswar and Vaidyanathan, 2008). The telecommunications industry is also following the same trend of outsourcing some of the above activities.

Some of the services outsourced included "maintenance and operation of the base stations of mobile network, resolving software problems and monitoring the network on capacity overload (network operation services) spare parts management (Field services) others like billing and sales" (Friedrich et al.,2009). The present study adopted most of the activities in developing the questionnaire to establish the exact services that the telecom operators in developing countries are outsourcing.

Contracting out of essential activities or functions like "engineering, research and development (R&D), manufacturing and marketing are being considered by corporations and even common in mobile telecommunications industry ( Khan, Javed & Khan, 2013). It will be more important to develop the ability to govern and exploit crucial capabilities, regardless of whether they are located within or outside the organization (Gottfredson, Puryear & Phillips, 2005). Increasingly, the nature, scope

and scale of contracting out services is being driven by competitive pressures and the desire for improved financial position across businesses around the world (Ghodeswar and Vaidyanathan, 2008).

The current study is more significant because it focused on the overall activities or services of BPO, such as marketing, research, finance/accounting, information technology, production, logistics, sales and development, security, catering, legal, customer service, purchasing/procurement, payroll management and human-resource outsourcing, maintenance and operation of mobile network base stations, resolving software problems and network monitoring.

## **2.7 SUMMARY**

The chapter focused on a systematic exploration of related literature on the theories of BPO that gave birth to the drivers/motivators, risks and benefits of outsourcing in the mobile telecommunications industry as the starting point in developing a framework that can evaluate the impact of BPO on telecommunications industry using cost, productivity and profitability as the performance measurement or metrics underpinning the study. The chapter also outlined the meaning and scope of BPO, theories relating to BPO in which the researcher utilized both the Resource based view (RBV), Transaction cost economies (TCE), Agency theory and the Knowledge based view (KBV) as the theoretical models underpinning the study.

Lastly the chapter focused on the literature relating to drivers, risk and benefits associated with business process outsourcing from various studies in developed countries like UK, India, China, Denmark, Finland, Iran, Germany, Turkey, China, USA and Persian Gulf. Although some the studies are not directly linked to mobile telecom operators but provide a benchmark and a reference point to the current study. The studies also do have relevant concepts that the current the study can utilize. Findings from the above studies complement previous studies and are useful in the present study as they reflect the risks/disadvantages of BPO in developed countries. Lessons can be learnt from these studies. The current research tries to bridge the gap by focusing on developing countries with especially attention to Southern African countries with particular attention to telecom operators in South Africa by identifying

the risks and challenges associated with business process outsourcing in the mobile telecommunications industry.

The next logical step of the study was to conduct an empirical examination of the suggested model so as to determine its relevance to the South African mobile industry and the rest of the Southern African region. The next chapter focused on the literature relating to business process outsourcing theoretical frameworks, performance metrics underpinning the study and the relations between business process outsourcing (independent variable) and cost, profitability and productivity (dependent variables) as the performance metrics underpinning the study. Empirical evidence concerning the relationship of three constructs and BPO was discussed. Lastly a new framework was developed (suggested) addressing the gaps of previous frameworks.

## CHAPTER 3: REVIEW OF EMPIRICAL LITERATURE

### 3.1 INTRODUCTION

Competitiveness, severe global rivalry, increasing client demands and growing supply chains have forced corporations to contract out their services to external service providers and the mobile telecom operators has not been spared from embarking into the same strategy of business process outsourcing (Zhu, Ng, Wang & Zhao,2017; Hsiao, Kemp, Van der Vorst & Omta, 2010a; Yeung, Zhou, Yeund & Cheng,2012). The contracting out of manufacturing, services and other economic operations is a common occurrence in most industries and is a widespread phenomenon in modern business including the mobile telecommunications industry (Liu and Tyagi,2017; Kabiraj and Sinha,2016). Several studies have assessed the effect of outsourcing on a company operational success, with the majority of them employing qualitative performance measurements like quality, flexibility while others only consider cost as the quantitative metrics (Zhu et al ,2017; Sandhu et al., 2017). In light of the above, this study explored possible solutions and propose a framework to assess the influence of BPO using quantifiable metrics from a developing countries perspective particularly southern Africa special refence to South Africa mobile operators.

Organisations have resorted to business process outsourcing (BPO) to improve operational performance (Gerbl et al., 2016; Rodríguez, Lai &Padilla, 2017; Deng, Mao & Wang, 2013; Sandhu et al., 2017). Regardless of the academic perspective that “outsourcing can result in *gains* for the firm if properly executed (Bolat and Yilmaz 2009; Grimpe and Kaiser 2010; Singh 2009) and *pains* if inadequately formulated and implemented” (Brewer, 2014), there is a limited empirical literature conducted on large-scale as to whether BPO profits or risks a company (Lahiri, 2016).

Despite being positioned third in the Global Services Location Index, there have been inadequate empirical literature on scope of Information Communication and Technology and telecom service contracting out in Malaysia (Magiswary, Murali & Maniam, 2007). Furthermore, the majority of outsourcing research has concentrated on multinational firms in industrialized countries (Hoodosi and Rusu, 2013). Developing countries particularly Southern Africa and special refence to South Africa seem to be poorly represented in studies related to the field of BPO performance

implications evident by the studies in developed countries in China, USA, India, Persian Gulf, Iran, UK, Denmark, Finland, Iran, Germany, Turkey, India and Persian Gulf as examples. Few studies were conducted in Kenya, Ghana and Nigeria but no framework was developed to evaluate BPO quantitatively. The present study becomes imperative in addressing the gap by empirically evaluating the effects of BPO (independent variable) in the mobile telecommunications industry using cost efficiency, profitability and productivity (dependent variable) as the underpinning performance metrics/dimensions. The study focused on the impact of BPO in the developing country particularly Southern Africa and special reference to South Africa mobile operators.

Empirical studies have been done by scholars from many academic disciplines so as to understand the phenomenon of BPO and to educate the management communities as well as the academic. Nevertheless, there have been limited attempts to conduct an all-inclusive evaluation of the available literature that offers solutions to a simple yet important question in the mobile telecom industry such as whether or not outsourcing really enhance firm operational performance (Lihiri,2016). Frameworks proposed in the studies conducted by Patil and Wongsurawat, (2015); Naz, Ali, Naz, and Sadiq, (2013); Sandhu et al., (2017) failed to address the issue of evaluating the influence of BPO on organization performance using quantitative metrics hence the need to conduct a study on BPO performance implications in the mobile telecommunications industry.

Many organizations, on the other hand, have had diverse outcomes with BPO and have not been able to obtain the required operational performance increases. Some claim that businesses are yet to understand the consequences of BPO and performance management (Lahiri, 2016; Liu, Jayaraman & Luo, 2017). “Organisations have outsourced poorly performing processes without understanding the causes of poor performance” (Hitt, Ireland & Hoskisson, 2015; Yang and Zhao ,2016) especially in logistics outsourcing like transportation and warehousing, the planning level decisions and distribution network management are common activities in the basic contracting out of services.

This is evident by the studies based on an “interview conducted by Robinson, Lowes, Loughran, Moller, Shields & Klein, (2008), 75% of service providers felt that clients were not well prepared and lacked a well-developed strategy in outsourcing process”. According to a recent study by Fersht, (2014), about half of the 189 global clients in various industries (like accounting, finance, health management and retailing,) who contract out some functions overseas reported cost minimization failures with limited additional of value in their operation (Liu, Jayaraman & Luo,2017).

However, this study tends to contradict with the above findings. The research conducted by Claussen, Kretschmer, and Oehling, (2012) on the performance consequences of BPO in the UK telecoms companies results “revealed that as expected by mobile operators that opted for external contracting, operators who are outsourcing network operation services improves profitability and that outsourcing of network operation services also has a positive effect on revenues which is primary driven by reduction of operations expenditures, reduces costs and increasing revenues in the long run if mobile network operation services are outsourced”. According to the study, small mobile network operators can increase their profitability by contracting out network operation services. As a result, the current study is prudent to establish a framework that incorporates quantitative performance measures so as to determine the true association between BPO and cost, profitability and productivity in developing countries, particularly in Southern Africa, with a focus on South African mobile operators.

Organizations also have difficulty in evaluating service provider performance during the BPO arrangements because they are yet to define appropriate performance measurements for the process prior to contracting out of services (McIvor, 2016). While studies examine when and why organizations adopt outsourcing, they don't look into whether BPO has a meaningful effect on an organization operational competence (Claussen et al., 2012). By concentrating on network operational activities in the mobile telecom market, the study was able to address this gap.

Organizations have been outsourcing business operations to independent supplier in both international and domestic locations, which include forming a collective association with the external service providers (Youngdahl, Ramaswamy & Dash 2010;



Mani, Srikanth, & Bharadwaj, 2014; Oshri and Van Uhm, 2012, 2015; Lahiri and Kedia, 2011; Lampel and Bhalla, 2011) but limited studies have surveyed the operational outcomes of contracting out functions (Lahiri,2016) especially in the developing countries, particularly Southern Africa and special refence to South Africa mobile telecomoperators. This study becomes imperative in addressing the gap through suggesting a framework to evaluate the impact of BPO in the mobile telecommunications industry.

Furthermore, the literature agrees that outsourcing and performance management must be linked to the organization's business plan (Liu, Huo, Liu, Zhao & Chan, 2015; Pratap, 2014; Schmeisser, 2013). In the new millennium, BPO is considered a critical constituent of a company's attractiveness (Kroes and Ghosh, 2010). Many years of empirical studies have yielded too broad prescriptive components. One classifying activity as "to be outsourced" or "to be maintained in-house" (McIvor, 2010), and the other providing a large list of Do's and Don'ts for reducing contracting out challenges (Lungescu, Pampa & Salanta, 2011; Wayman, 2013).

Companies must futurise/ forecast the "whether" and "what" questions and instead treat BPO as an organizational strategic capability, determining which measures to employ to evaluate the impact of BPO on operational company performance (Wayman, 2013; Pratap, 2014). In the new millennium, outsourcing is becoming more professional (Gandhi, Gorod & Sauser, 2012). Despite being in its infancy stage, of professionalism, with no consensus on "standards of competence and what it would take to manage it efficiently, particularly empirically assessing its influence" on operational business performance, including that of mobile telecom providers (Willcocks, 2011; Lungescu et al., 2011; Pratap, 2014).

Thus, the current study begins filling in this gap by developing a business process outsourcing framework with quantifiable metrics viz cost, productivity and profitability in evaluating the effects of BPO on the operational company performance. For the purpose of this study in empirically evaluating the influence of BPO (independent variable) on the operational performance of the mobile telecom companies, the researcher adopted the direct measures in the form of cost, profitability and

productivity (dependent variable) as the underpinning metrics to evaluate the impact of business process outsourcing (BPO).

Measurement of outsourcing success, values of business, actual savings, real expenses and benefits is complex for organizations (Blaskovich and Mintchik, 2011). Difficulties in “quantifying indirect or hidden costs, an insufficient base for comparison, contradictory criteria, absence of standardized processes, etc. make the measuring effort difficult and challenging, if not impossible” (Kivijarvi and Toikkanen, 2015) hence this study becomes apparent in establishing a framework to assess the influence of BPO in the telecommunications industrial sector. In light of the above, this study explored possible solutions and propose a framework to evaluate impact of BPO using quantifiable metrics from a developing country perspective particularly southern Africa special reference to South Africa mobile operators.

This chapter focused on various theoretical frameworks by Patil and Wongsurawat, (2015); Naz et al., (2013); Khaki and Rashidi, (2012); Mclvor, 2016), Sandhu et al., (2017) their strength and weakness in addressing the impact of BPO on mobile telecommunications industry was also discussed. In this section, some of the major theoretical frameworks are briefly reviewed to understand the relationship between BPO (independent variable) and cost, profitability and productivity (dependent variables) from organisational perspective. The framework by Kremic et al., (2006) underpins the study. Findings from these studies complement previous studies and are useful in the present study as they assist the researcher in identifying the gaps.

The current study proposed a framework that empirically evaluated the impact of business process outsourcing in the mobile telecommunications industry. The framework by Kremic et al., (2006) was considered as the one underpinning the current study. The performance measurements or metrics such as cost, productivity and profitability were discussed and what other authors are saying on their relationship with BPO. The empirical literature on the effects of BPO on the mobile telecommunications industry using cost, productivity and profitability was also discussed. Also discussed was the literature on the correlation between BPO

(independent variable) and each of the quantitative performance metrics, cost, productivity and profitability (dependent variable).

### **3.2 CRITICAL REVIEW OF THEORETICAL FRAMEWORKS FROM DIFFERENT STUDIES**

In this section, some of the major theoretical frameworks are discussed in brief to understand BPO from a firm's viewpoint. Although some of the frameworks may not directly be linked to the mobile telecommunications industry lessons can be drawn from these studies that are of benefit to the current study with reference to evaluating the impact of BPO.

The management of performance and its significant role is not contested in the contracting out of business process, it does not seem to have been well researched in most industries including in the mobile telecommunications industry literature (Aubuchon, Bandyopadhyay, & Bhaumik 2012; Lahiri, 2016). Brewer *et al.*, (2013, 2014) alluded that "there appears to be some ambiguity and some doubt concerning the connection between outsourcing implementation and the expected operational performance improvements" as no framework has addressed the relationship quantitatively.

Frameworks on outsourcing seem to believe that decision making should be the strategic focus, thus, involving more than an analysis of costs (Patil and Wongsurawat, 2015; Lahiri, 2016). However, these frameworks do not seem to give considerable attention towards the way performance management has to be integrated into the process of outsourcing and inadequate evidence focus on the benefits and risks of implementing the techniques in contracting out activities mostly in the south African mobile telecommunication industry and also on performance management from developing countries point of view (Hoodosi and Rusu, 2013) however lessons can be drawn from them that benefit the current study. In light of the above, this study explored possible solutions and propose a framework to assess the effects of BPO using quantifiable metrics form a developing country 'perspective particularly southern Africa special refence to South Africa.

Due to lack of frameworks and measurement, academics and practitioners have found it difficult to measure BPO. Kivijarvi and Toikkanen, (2015) and Blaskovich and Mintchik, (2011) “argue that researchers have since long had problems in measuring Information Technology Outsourcing (ITO) as part of BPO success and providing empirically tested frameworks”. A similar framework is proposed in the next section and shall empirically be evaluated (Lahiri, 2016; Brewer *et al.*, 2013, 2014). Yapi, Lin, Jalaludin & Lee, (2016) indicated that there is some evidence on the advantages and risks of implementing these techniques to decisions of taking external services especially in the mobile telecommunication industry including South Africa and on performance management in southern developing countries. The measurement of actual benefits remains a big problem for organizations. The same is true when looking at the measuring of costs or risks and opportunities included in the contracting out transactions. The mobile telecommunications industry is not spared in the measurements issues. According to Kivijarvi and Toikkanen, (2015) “the proposed framework forms a basis to resolve the measurement problems and even support the actual sourcing decision”.

Due to the prevailing business environment contracting out of services on a large-scale, both locally and offshore, is mandatory to fully understand BPO and the performance management in the context of business services since many outsourcing frameworks in the existing literature on operations now focuses only towards manufacturing (Wuyts, Rindfleisch & Citrin, 2015; McIvor, 2016). Therefore, this study presented different frameworks and then suggested the BOP framework which bridged the gap. The outsourcing decision frameworks by Patil and Wongsurawat, (2015); Naz, Ali, Naz & Sadiq, (2013); Khaki and Rashidi, (2012) and Sandhu *et al.*, (2017) as examples do not address issues of BPO performance measurement; hence the study attempted to fill the gap of the under-researched issue of BPO output measurement.

Below are some of the frameworks that have been proposed to evaluate the impact of BPO implementation on the operational performance of the mobile telephone operators and most of them have failed to address the issues of performance management in BPO using quantitative metrics such cost, productivity and profitability hence need for another framework .Most of studies were confined to the developed

countries like Iran, Germany, UK, USA, India, China, Italy, Denmark and Finland however the present study focused on developing countries hence bridging the gap. With reference to the current study the framework by Kremic et al., (2006) is the one underpinning the study.

Although some of the frameworks may not directly be linked to the mobile telecommunications industry lessons can be drawn from these studies that are of benefit to the current study with reference to evaluating the impact of BPO. These frameworks provide benchmarks and can be used as reference point and also do have relevant concepts that the current study can utilize.

Below are some of the studies that provide this study with insight that this study can draw upon on especially on identifying the gaps. Findings from these frameworks are useful in the present study as they assist the researcher in identifying the gap and suggest another framework addressing the issues relating to evaluating the impact of BPO in the mobile telecommunications industry mostly in countries that are still developing.

The current study aims to propose the BPO framework after evaluating different frameworks, with the purpose of bridging the knowledge gap. In order to do that relevant literature on different types of the frameworks were reviewed to understand the relationship between BPO and cost, profitability and productivity from an organisational perspective.

In this section, some of the major frameworks proposed by various authors are briefly reviewed to understand the relationship between BPO and cost, profitability and productivity from organisational perspective and assisting in creating the research gap

### **3.2.1 The Patil and Wongsurawat's proposed framework for BPO/ITES firms in India opting for IT outsourcing**

Patil and Wongsurawat, (2015) conducted a study on information technology (IT) contracting out services by business process outsourcing/information technology enhanced services (BPO/ITES) organizations in India, which resulted in the

development of the framework. The aim of the study was to figure out what impact most drivers such as strategy, cost and risk when Indian BPO/ITES companies are contracting out their information technology (IT) tasks to external service providers. The proposed framework is shown in Figure 3.1.

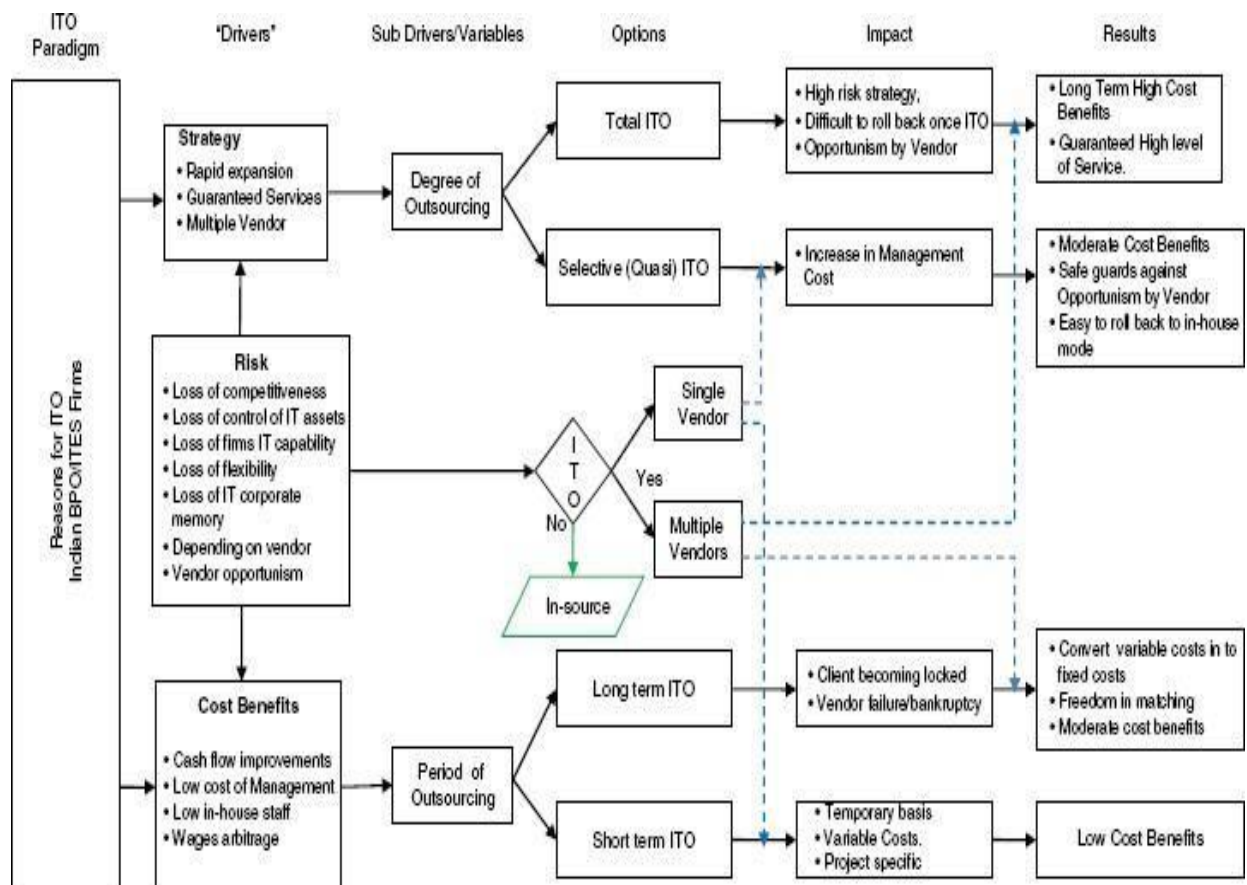


Figure 3. 1 Proposed framework for BPO/ITES firms in India opting for IT outsourcing

Source: Patil and Wongsurawat, (2015)

The frameworks’ “strengths included issues related to survey on the understanding the roles that a number of variables such as cost, strategy and risk play when business process outsourcing/information technology enabled services (BPO/ITES) firms in India outsource their information technology (IT) functions to third-party vendors”. The framework also highlighted which of the drivers is considered to drive companies to outsource. These results assisted management in identifying the key driver for BPO and to make decision based on these findings which contested the existing claim that the significant advantage of contracting out is noticeable minimizing of cost. Actively

involved practitioners in the IT outsourcing process perceive other “strategic” drivers as being more important as compared cost savings only. The results of this survey confirmed that cost savings cannot be easily dismissed as a prominent decision to consider in outsourcing

The framework has limitations in that it does not address issues relating to performance management and evaluating the impact of BPO on organizational performance using quantifiable performance metrics. In addition, the framework does not indicate the outcome measurements of the BPO and its impact on business performance. The greatest limitation of this framework is that it does not address the relationship between BOP (dependent) and cost, productivity and profitability (independent variable). Finally, the framework failed to consider how financial metrics provides more objective evaluations of BPO impact hence new framework had to be suggested to bridge the gap especially in the developing countries particularly southern Africa especially South African mobile operators. The next study also showing a gap is shown below.

### **3.2.2 The Naz, Ali, Naz and Sadiq Business Process Conceptual Framework**

The analytical model proposed by Naz et al., (2013) focused on the influence of outsourcing ICT solutions on organization performance in the Pakistan Telecom Sector. A total of 54 responses were collected via internet survey from project managers, project directors and upper management in the telecom industry. The effect of contracting out on the performance of Pakistani telecom firms was investigated in this study. Indirect and Direct connection between the contracting out constructs and performance of an organization were analysed. “The direct association reveals that cost effectiveness, flexibility, access to skill and technology has positive impact on organization performance”. The study adopted the qualitative performance metrics as flexibility, access to skills and technology and only cost was the quantitative metrics. See Figure 3.2 for proposed framework.



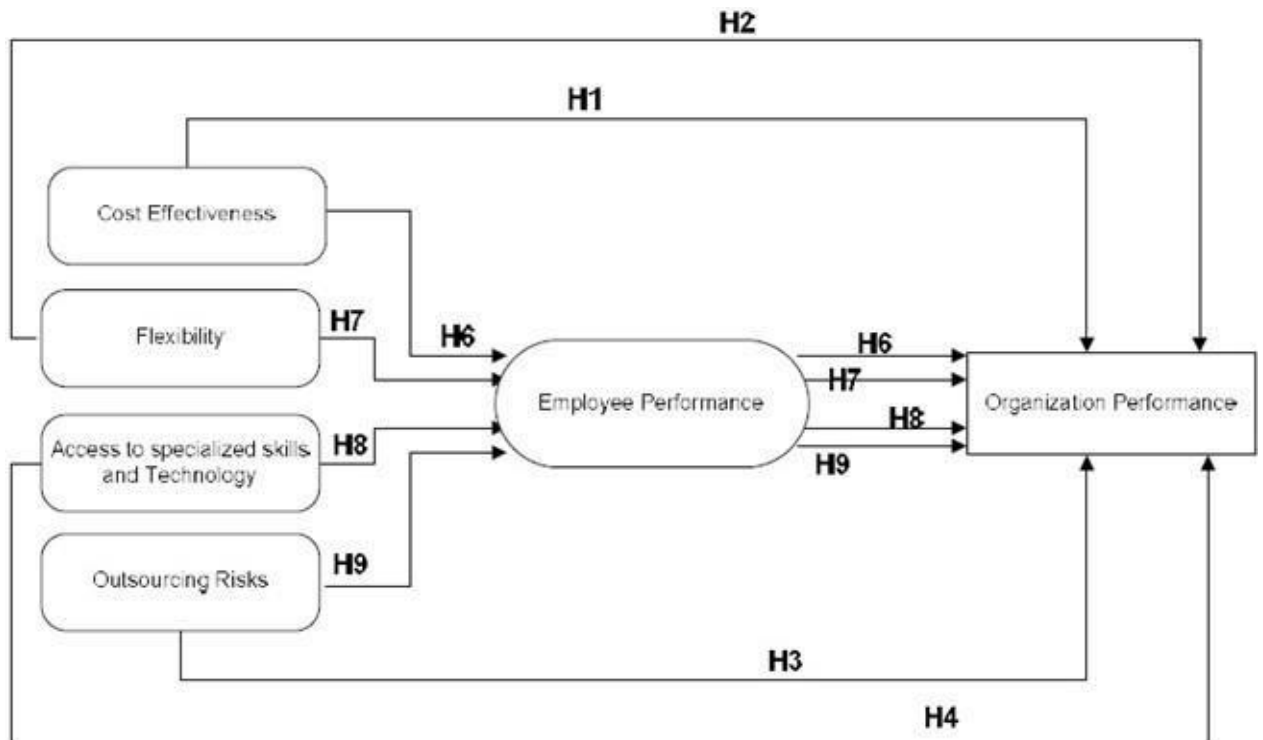


Figure 3. 2 Naz, Ali and Sadiq proposed conceptual framework of Business process outsourcing

Source: Naz et al., (2013)

The proposed conceptual framework does have strength according to Naz et al., (2013), in that it has the motives for evaluating, describing and explaining the reasons for outsourcing. It also attempted to identify the activities and functions that organization outsource and examines the impact of outsourcing on the organization's performance. Finally, the study examined the impact of outsourcing on cost effectiveness, flexibility, access to specialized skills & technology and outsourcing risks. The framework assisted the researcher in identifying the motives for BPO. This framework provides benchmarks and also do have relevant concepts that the current study can utilize.

Some of the hypotheses developed included the following: Cost effectiveness which obtained from outsourcing carries an impact on the performance of the organisation which is positive, outsourcing brings flexibility which impacts on performance of organizations in a positive way, Outsourcing brings with it access to experienced skills and advanced technology which has positive effect on the firm's performance, risks

that come with outsourcing only emerge as a result of negative impact on performance of an organization, the association between cost effectiveness and organizations performance is mediated by employee performance, flexibility and organizations performance is mediated by employee performance, access to specialized skills and technology is mediated by employee and organizational performance. Outsourcing risks and organizations performance are also mediated by employee performance.

However, this study does have limitations in that the hypotheses developed were not addressing the quantitative metrics such as productivity and profitability, but it addresses cost only. The major limitation to this study lies in the effects that contracting out services has on the organization's performance is based upon perceived findings more than quantifiable dimensions i.e. connections between BPO (independent variable) and profitability and productivity (dependent variables) is not addressed hence need for another framework. The framework also used the qualitative metrics instead of the quantitative measures hence need for a new framework. This study again did not consider all the financial measurements to provide more objective assessment of BPO impact on mobile telecommunications industry hence new framework to bridge the gap especially in the developing countries. The next study also showing a gap is shown below.

### **3.2.3 Analytical model of the outsourcing impact**

The analytical model was developed by Khaki and Rashidi, (2012) on the study on Iranian telecommunication organizations with reference to the effects of contracting out services on operational performance and objectives. This study had 38 active companies surveyed in the identified production of communication equipment in Iran. The study dealt with the manager's perception on the telecommunications industry on outsourcing effects on operational strategy. Special attention was paid to the issues that are associated with flexibility, developed quality, cost reduction and better services. See Figure 3.3 that depict the analytical model of the effects of outsourcing.

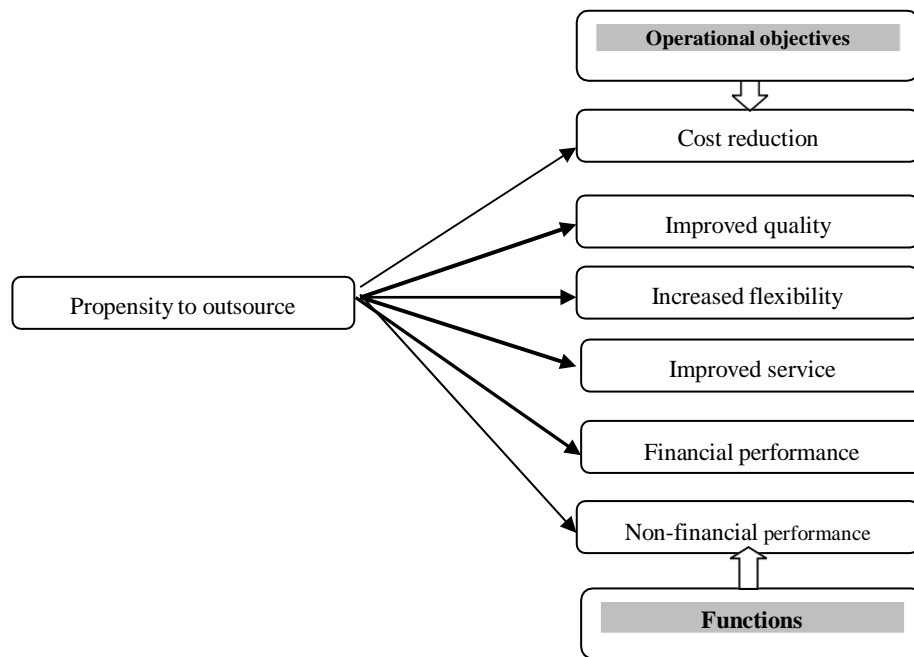


Figure 3.3 Rashidi and Khaki Analytical model of the outsourcing impact

Source: Khaki and Rashidi, (2012)

The analytical model has the benefit of including functional-goal variables such as quality, cost reduction, flexibility and services. The following are some of the hypotheses: Propensity to contracting out operations and activities has a positive impact on the operations goal of increased services, cost reduction and quality and lastly, propensity to contract out functions has a positive effect on the operations goal of increased productivity. The study clearly shows which variables were used to measure outsourcing impact.

The model however has limitations in that it adopted the qualitative metrics and excluding the profitability and productivity as the quantifiable performance metrics. The hypotheses do not include profitability and productivity and at the same time the model does not indicate the outcome measurements of the BPO and its impact on business performance. The greatest limitation of this model is that it does not address the relationship between BOP (independent variable) and productivity and profitability (dependent variables) hence a new framework. Again, this study failed to consider the outcome of the financial metrics so as to offer more objective assessments of a mobile telecommunications industry. The impact that BPO has on profitability and productivity dimensions must not be ignored, hence a new framework should be suggested and is

necessary so as to bridge the gap especially in the developing countries particularly Southern Africa with special reference to South African mobile telecom operators. This study provides benchmarks and also do have relevant concepts that the current study can utilize. The next study also showing a gap is shown below

### **3.2.4 The Mclvor four-stage outsourcing framework**

The framework developed by Mclvor, (2016), on the study on outsourcing insights from the telecommunications industries in UK in which the goal of the study was to find out what was driving the processes that could affect the process of outsourcing in the telecommunications industry. The outsourcing framework is based on the understanding that the firm could outsource production and service activities where it has no chance of developing strategic advantages. This framework was developed from literature review and interviews that took place with senior supply chain practitioners in 12 organizations from most sectors. Mclvor, (2016) says that 'there is a fusion of numerous perspectives to come up with an outsourcing-specific framework that in cooperates the process of making decisions that include value chain analysis, core competency thinking and supply base analysis. The framework, as shown below proposes a value chain approach. This framework provides benchmarks and also do have relevant concepts that this present study can draw upon. See Figure 3.4 for the four –stage outsourcing framework.

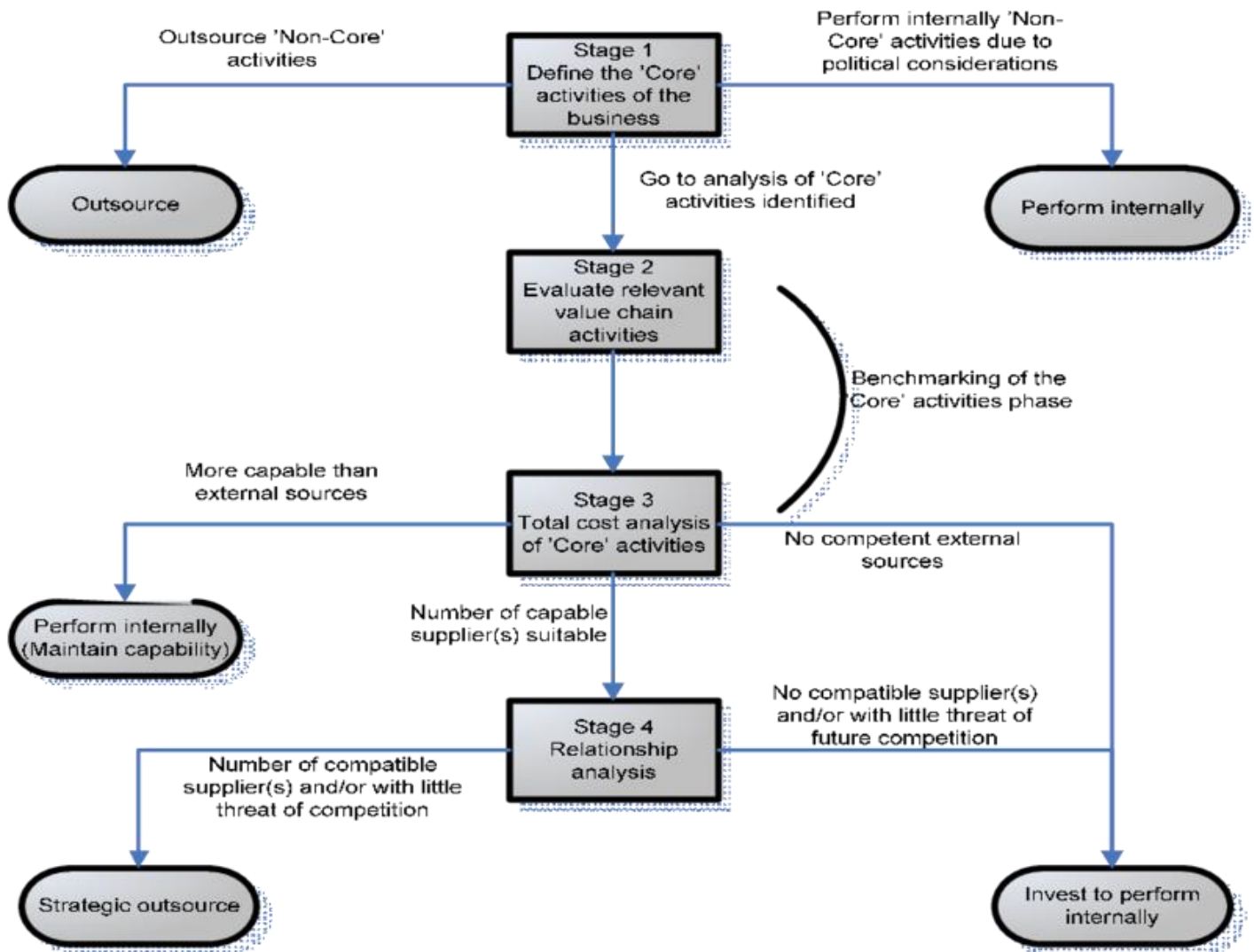


Figure 3. 4 McIvor four-stage outsourcing framework

Source: Adapted from McIvor, (2009)

The four-stage outsourcing decision frameworks by McIvor, (2009, 2016)' s strengths included; the proposal of a value chain approach to the contracting out process, it was able to address problems accompanying the outsourcing process, such as identifying the drivers, rationale or processes that trigger the BPO in the telecommunication industry, core competency thinking in which the activities of the organization that are core and non are identified and defined value analysis in which the competences of the sourcing organizations in the core activities identified in relation to potential external sources and the costs associated with either retaining the activity in-house or

outsourcing the activity should be determined and measured and the supply market identified . The framework proposes that all non-core activities should be outsourced. At the end these stages the analysis may lead to either keeping the activity internally or outsourcing the activity. Lastly if the preferred option is to outsource then next is to develop relationships with a supplier which maximizes the benefit to the customer.

The framework has assisted management in outsourcing some of the assembly operations, piece part manufacturing and design but lacked the component of evaluating quantitatively the impact of BPO on the company performance. However the framework did not include the quantitative measurements in evaluating the impact of business process outsourcing. The greatest limitation of this framework is that they do not address the correlation between BOP (independent variable) and cost, productivity and profitability (dependent variable), hence need for a new framework to bridge the gap especially in the developing countries.

The limitation of this four-stage framework was that it did not however show the BPO measurements and results. This framework, like others, does not address the relationship between BPO (independent variable) and cost, productivity and profitability (dependent variable). Another limitation of the framework is that the effects of contracting out services on the performance of the organization is based on supposed findings rather than direct measures for quantifiable dimensions including profitability and productivity, which encourages the researcher to search into how BPO can be measured in order to evaluate its impact on the organization.

The above frameworks by Patil and Wongsurawat, (2015); Naz et al., (2013); Rashidi and Khaki, (2012); Mclvor, (2016) and Sandhu et al., (2017) has limitation of failing to address issues relating to performance management of evaluating the impact of BPO on organizational performance using quantifiable performance metrics and at the same time the frameworks do not indicate the outcome measurements of the BPO and its impact on business performance. The greatest limitation of these frameworks is that they do not address the correlation between BOP (independent variable) and cost, productivity and profitability (dependent variable), hence need for a new framework to bridge the gap especially in the developing countries.

### **3.2.5 Kremic, Tukel and Rom Outsourcing decision Framework**

The current study adopted the framework by Kremic, Tukel & Rom, (2006) as the one underpinning the study. The framework provides the researcher insights on the drivers that motivate companies to embark on BPO as the starting point, benefits and the risks associated with such endeavor. This framework provides benchmarks and also do have relevant concepts that the current study can utilize.

The Kremic, Tukul and Rom framework ‘strengths included issues related to survey on the benefits, risks and decision factors (potential factors to consider) and other strategic issues in BPO but the literature is lacking on offering guidelines on decision support and the issues of evaluating the influence of BPO on the performance of mobile telecommunications companies using quantitative metrics (Lahiri,2016; Larsen, Manning and Pedersen, 2013; Kremic et al., 2006; Jiang, Frazier & Prater, 2006) and BPO results. This study attempted to fill the gap by Kremic et al., (2006) framework of the under-researched issue of BPO output measurement quantitatively by suggesting a new framework that will address problems relating to evaluating the influence of BPO on the performance of the mobile telecommunication companies using cost, productivity and profitability as the performance metrics underpinning the study.

Below is the framework that underpins the study and need to be extended so as to address issues of BPO measurements in the mobile telecommunications industry and the resulting effect (business performance).

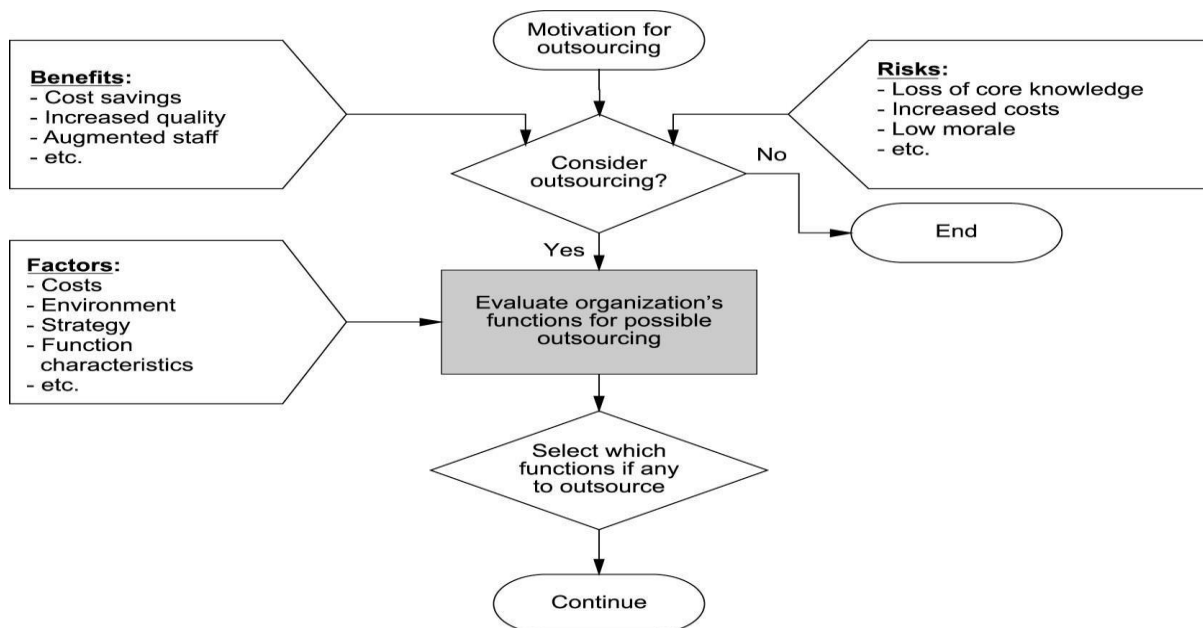


Figure 3. 5 Kremic, Tukul and Rom Outsourcing Decision Framework



Adapted from Kremic et al., 2006

The above framework fails to adequately address the issue of BPO measurements quantitatively and therefore motivates the researcher to cover the gap by quantitatively evaluating the impact of BPO on the performance of the mobile telecommunications industry.

The proposed new framework included the quantitative performance measurements, to offer more objective assessment of BPO (independent variable) impact on cost, profitability and productivity dimensions (dependent variable) in the mobile telecom industry. The suggested framework had to extend the contribution of the above work by various authors.

Below is the suggested new framework that was adopted to assess the effects of BPO on the operational performance of the mobile telecom industry using cost, productivity and profitability as the performance measurements underpinning the current study. The framework integrated the performance measurement considerations into BPO processes and to establish the correlation between BPO and business performance hence assist management in making a knowledgeable decision whether to obtain services internally or externally. Below is the suggested framework that bridged the gap of the other frameworks which lacked the quantitative evaluation of the influence of BPO on the operational performance of mobile telecom operators in South Africa.

### **3.2.6 The conceptual model of the study**

With reference to previous literature and subsequent postulated relationships, the proposed Cost, productivity and profitability (CPP) business process outsourcing performance measurement framework (Conceptual model) is shown in Figure 3.6 below

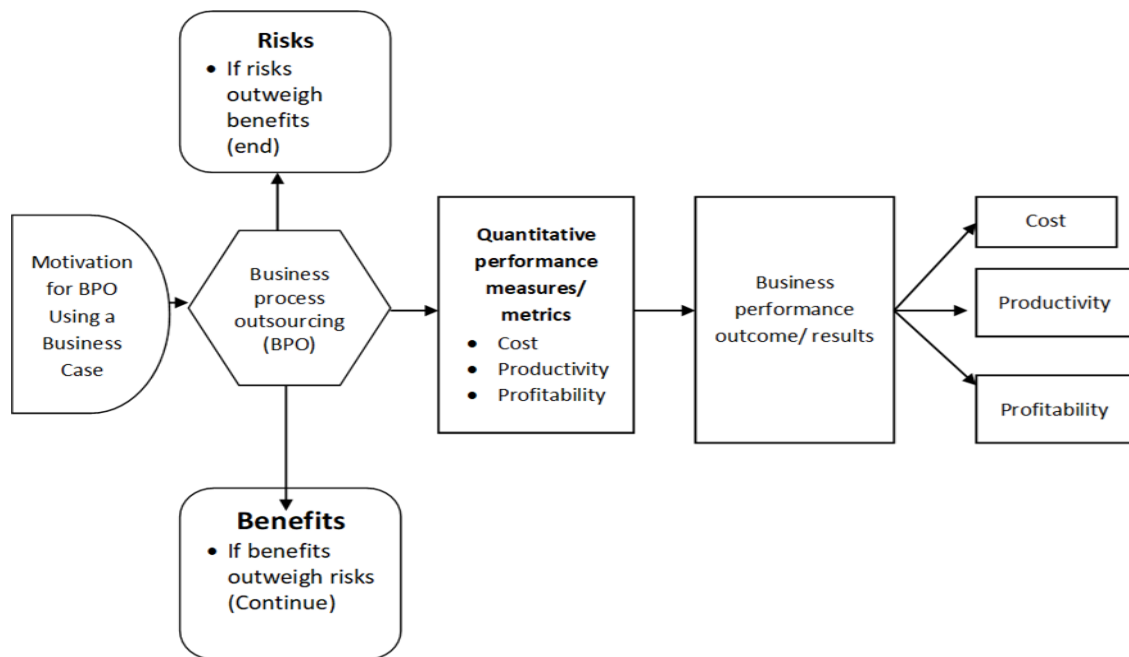


Figure 3. 6 Suggested cost, productivity and profitability (CPP) framework

Source: Researcher's own construct

The above framework from the perspective of practitioner poses a fundamental significance of adoption-related evaluating measurements for BPO within telecom operators, the related decision makers are assisted in evaluating the above-mentioned features in their associated companies before any attempt to make outsourcing decision. This framework will indeed help to practice well for the implementation of BPO initiatives more competently and successfully

The above proposed conceptual framework is not only logically sound in evaluating the impact of BPO but also helpful in answering “how” and “why”, in terms of relationships. The framework would be decisive to further capture the relationships among various variables of BPO implementation and thus the relationship between BPO and cost, profitability and productivity.

The research questions of this research are more focused on post-performance results. The researcher, therefore, utilized a framework that helps show logical connections linking outsourcing choice to its results subsequently. The objectives were

therefore developed while considering what motivates outsourcing and the tangible benefits that result from it by applying a TCE-RBV “synthesis” hence the development of the proposed cost, productivity, and profitability (CPP) framework above. Resource-based view (RBV), Transaction cost theory, agency theory and knowledge-based view was adopted to give a conceptual model which is multi-faceted.

The proposed framework included the quantitative performance measurements to provide more objective evaluations of a mobile telecommunications industry of BPO (independent variable) effects on cost, profitability and productivity dimensions (dependent variable) that extends the contribution of the work done by various authors like Patil and Wongsurawat, (2015); Sandhu et al., (2017) who did not include quantitative performance measurements in their frameworks. The other limitations of these frameworks were their lack of addressing the relationship between BPO (dependent) and cost, productivity and profitability (independent variable). The proposed framework, however, considers how financial metrics provide more objective evaluations of BPO impact to bridge the gaps.

Furthermore, the proposed new framework avails opportunities to evaluate the effects of BPO on the performance of the mobile telecom industry using cost, productivity, and profitability as the underpinning performance metrics. It could also integrate the performance measurement considerations into BPO processes and will be able to establish the correlation between BPO and business performance in order to bridge the gaps of the other frameworks.

### **3.3 EMPIRICAL EVIDENCE ON THE RELATIONSHIP BETWEEN BPO AND COST EFFICIENCY, PRODUCTIVITY AND PROFITABILITY**

This section addresses the relationship of BPO and the three constructs (cost, productivity, profitability). In this section, the empirical evidence is briefly reviewed to understand the correlation between BPO (independent variable) and cost, profitability and productivity (dependent variable) as the underpinning performance metrics from organisational perspective. These studies will assist the researcher in the discussions of the final results and comparing with the existing literature and finally developing the framework. Despite the possible fact that some of the studies are not directly aligned

to mobile telecommunications industry but they would serve as a benchmark in the current research. Lessons can be drawn from the studies that benefit the current study.

A series of researchers have discovered a link between a company operational effectiveness and outsourcing (Hanafizadeh and Ravasan, 2017; Modarress et al., 2016; Khan and Javed, 2013; Naz et al., 2013; Pounder et al., 2011). The scientific literature is still divided on whether outsourcing should be focused only on cost or on ridding the company of inefficient operations (CFL, 2019; Vilko, 2013; Immonen et al., 2009; Zhu et al., 2017).

The study conducted by Lahiri, (2016) on the relationship between BPO and operational performance of organizations yielded varied results. Outsourcing can have a constructive, undesirable, diverse, moderated, or no substantial influence on a company, according to the research.

Other studies claim that “outsourcing can lead to reduced costs” (Jiang et al., 2006; “increased productivity” (Elmuti, 2003; Antonioli, Mazzanti Montresor & Pini, 2015); profitability (Espino-Rodríguez and Padro’n-Robaina, 2005; Sandhu et al., 2017) and quality (Elmuti, 2003). The findings of the current study compliment earlier research studies result that contracting out of services significantly can have increasing organizational operational performance (Christiansson and Rentzhog, 2019; Bolat and Yilmaz, 2009).

Smith, (2012) also explored into outsourcing and supply chain performance among Kenyan mobile phone service providers. The association between the contracting out of service and the performance of the supply chain among mobile phone suppliers was examined in this study. Operational system response, logistic process reaction, supplier network sensitivity and competitive edge were used to assess supply chain performance. "The results of the study proposed that supplier network reaction has the biggest influence on contracting out of services, while operating system reaction has the most negative influence on outsourcing". Customers' demands for increased product volume and changes in product mix are responded to quickly by the supply chain system.

Complimenting the above findings is the study by Yap et al., (2016) on the Determinants of ICT Contracting out among Malaysian-owned manufacturers. The results of this study have significant consequences for a several parties. “As more than two-thirds of the ICT functions are either fully or partially outsourced to external service providers, locally owned manufacturers should identify the ICT functions which are highly standardized and routine that can be managed internally, for instance, applications operation and telecommunication line maintenance”. Companies in the manufacturing should be able to recognize ICT activities that need particular ICT and human assets and can be outsourced to a third party to avoid incurring excessive internal costs. For instance, “storage management and network maintenance may be difficult and costly to maintain without the expertise who are scant and more expensive to recruit”

In this section, the empirical evidence is briefly reviewed to understand the correlation between BPO (independent variable) and cost, profitability and productivity (dependent variable) as the underpinning performance metrics from organisational perspective.

### **3.3.1 Relationship between business process outsourcing and cost efficiency**

It has been observed that when competition and pressures increase from shareholders it also forces for the increase in value which pushes other organisations to find ways to reduce labour costs across processes in business through the application of BPO (Liu et al., 2015).

In this section, some of the major empirical evidence is briefly reviewed to understand the relationship between BPO and cost from organisational perspective. Findings from these studies complement previous studies and are useful in the present study as they show a positive the relationship between BPO and cost efficiency and otherwise. This relationship is discussed in depth in continuing a discussion.

#### **3.3.1.1 Positive effect of BPO on the firm’s cost efficiency**

Below is some of the empirical evidence relating the positive relationship between BPO and cost efficiency. Although some of the studies are not directly related to mobile

telecommunications industry but it would serve as a benchmark in the current research. Lessons can be drawn from the studies that benefit the current study.

A study by Pia Ellimaki, Aragon-Correa & Hurtado-Torres, (2021) on the scope of services outsourced and efficiency: Customer firm's absorptive capability viewpoint of knowledge-intensive services. The findings imply that when evaluating, integrating and leveraging the knowledge rooted in an extended set of activities given by an outsourced service provider, efficient customers can strategically control transaction costs.

Similarly, in another study by Ikerionwu, Edgar, and Gray, (2016) on the expansion of suppliers' BPO-IT framework, the results of the study proposed that some of the benefits of BPO include reduced service processing costs, maintaining client confidentiality, expanding the scope of engagement, rapid turnaround time delivery of SLA within a short time, competitive advantage, and quality software that transforms to quality services.

Aligned to the above findings is the research conducted by Eikelmann et al., (2013) few years ago on how second-generation telecoms outsourcing was regaining control and innovation in Central Europe is consistent with the previous study. A mobile operator with more than 10 million users committed to outsource their networking and IT operations to at least two worldwide vendors. The immediate outcome was a 20 to 25 percent reduction in operating costs, with additional annual savings expected.

Complementing the above results is the study by Hanafizadeh and Ravasan, (2017) on an empirical analysis on outsourcing decision: the case of e-banking services in Iran, is similar to the previous conclusions. The findings revealed that cost reduction was a primary motivator for domestic ITO decisions as well as domestic and offshore BPO. Total cost of ownership, cost of excess resource capacity, integration expenses, future service innovation costs, labour costs connected to service maintenance, cost of potential future service provision adjustments, all are the costs associated with ITO.

The results also illustrated that can be “implied that it is preferred for banks to exploit outsourcing benefits such as time and cost savings, access to specialized resources, focus on core competences through outsourcing services to captive service providers”. Furthermore, when compared to market vendors, captive vendors can ensure data security and privacy issues since the bank has control over the firm’s structure, systems, procedures, human capital, and so forth.

The results are supported with the other studies conducted by Liu and Tyagi, (2017) on “outsourcing in trying to convert fixed costs into variable costs: A competitive analysis”. The results showed that when services, production and various economic functions are outsourced, it represents a pervasive phenomenon obtaining in many industries. This “popular practice has the economic benefit of allowing the outsourcing organisation to experience a reduction in its fixed costs which include expenditures on equipment, IT, fixed salaries of employees, etc”. This contributes in the transformation of the benefit into a controllable cost in the form of the purchase price, which the company may subsequently pay to the industry on the outside.

Complimenting the above finding is a study conducted by Modarress, Ansari & Thies, (2016), whose aim was to determine the obstacles, benefits, risks, and motivations of petroleum businesses in the Persian Gulf when it came to outsourcing strategies. The findings “indicated that while the petroleum companies are faced with massive costs of operation that stem from the aging infrastructure, human capital deficit, inefficient fragmented business processes and lack of access to new technologies, outsourcing strategy toward cost savings and the overt and covert resistance of management and employees are significant barriers for creation of continuous process”. According to the data, oil and gas exporters have a mixed but generally positive view of contracting out services and BPO might save costs in the whole of the supply chain.

The above results of cost reduction are aligned to another study by Patil and Agarwal, (2013) on constraints in contracting out of telecom tower management-systems integrators (SI) perspective in India revealed that network infrastructure contracting out is gradually gathering acceptance across markets that are developing, “effective way to cut down costs, while reducing time to market with mobile operators around

India are poised to make their impact felt in the Middle East and Africa (MEA) and the world”.

Although some of the above studies are not directly linked to the mobile telecom industry, lessons can be drawn from the studies that are of benefit to the current study with reference to how BPO can reduce costs if properly implemented and can be used as reference point or benchmarks. Findings from the above studies complement previous studies and are useful in the present study as they show a positive the relationship between BPO and cost efficiency.

The above assertion of cost reduction is also in agreement to the study conducted by Khaki and Rashidi, (2012) focused on the contracting out of service and its effect on operational objectives and performance of the Iranian telecom industries revealed that “managers believe that outsourcing has a great impact not only on the cost reduction but also on other goals of operational strategies, hence outsourcing lead to cost reduction, improve quality, increases flexibility, better financial and non-financial performance and services”

These findings are also in line with the study conducted by Claussen, Kretschmer & Oehling, (2012) on performance consequences of contracting out in the mobiletelecom industry in UK, illustrated that “an emerging trend in outsourcing practices offirms. While initially firms outsourced peripheral activities to cut costs, firms are now much more inclined to outsource activities much closer to the core business”. The research established a trend in which a decrease in costs, revenue increase and improved profitability were gained by operators through outsourcing mobile network operation services in the long term.

Also supporting the results of cost reduction is a study conducted to measure the effects of contracting out of service on the performance of organizations in the telecom sector of Pakistan outsourcing ICT by Naz, Ali, Naz & Sadiq, (2013), in which the direct and indirect connection between the contracting out constructs and organization performance was examined, also supports the results of cost reduction. Cost



efficiency, flexibility, skill availability and technology all have a substantial impact on performance of companies, according to the direct association.

This study also “reveals that the strong communication between vendor and client reduces the negative impact of outsourcing risks on employee and organizations performance. The result of indirect association shows that employee performance acts as a positive mediating variable and improves the organization’s performance”. Employees are more productive when they have access to current knowledge, skills, and technology as a result of outsourcing. The results also indicate that the transfer of knowledge should take place on either side, rather than only from the service provider to the customers.

Additional findings of the study concluded that “cost reduction, flexibility, access to specialized skills & technology are the basic constructs of outsourcing which increases the efficiency of the employees and improves the organizations performance leaving a gap in the research failing to address the relationship between organisational performance and profitability and productivity hence this research becomes apparent”.

In a survey by Purchasing Magazine, more than 50% of “outsourcing firms surveyed cited cutting the fixed costs of transportation/distribution costs, freeing up or reducing staff, focusing on the core business and cutting internal administrative costs as major reasons for outsourcing” (ADT Total Source,2012). Small Business Authority, (2012) and Regus, (2010) “describe fixed costs on marketing staff, designers, and office space as being converted to variable costs”; similarly, ADP Total Source, (2012) “mentions fixed costs on HR, payroll, and compliance; and Berry-Wehmiller International Resources mentions fixed costs involved in engineering services as examples of fixed cost being converted to variable cost by outsourcing” (Barry-Wehmiller International Resources, 2012).“These services are offered on a fee-for-service basis, which helps your business become more flexible by transforming fixed costs into variable costs (Outsourcing Your Voice CMR, 2013).”

Similar to the above results is another study by Han and Mithas, (2013) that indicated that contracting out of service is negatively connected with non-IT operating costs.

This is better achieved when organizations also invest in internal IT systems, in particular IT labour. Concentrating on IT, production process outsourcing and performance of manufacturing plants, Bardhan, Whitaker & Mithas, (2006), found that "IT investments and production outsourcing relate to lower costs of goods sold and higher improvement in product quality. That is, IT-enhanced production outsourcing permits organizations to achieve both cost minimization and improvement of quality".

Similarly, a study by Jiang et al., (2006), on empirically evaluating the influence of contracting out on enterprises' operational performance in the United States. Cost-efficiency, productivity and profitability are among the firms performance measurement. According to the current study findings, "outsourcing can increase a firm's cost efficiency, but it does not increase both productivity and profitability." Other empirical studies, according to Emmanuel (2013), show that "outsourcing does not result in cost reduction" (Espino-Rodr'guez and Gil-Padilla, 2005), or increase productivity and profitability (Jiang et al., 2006), quality (Espino- Rodr'guez and Padro'n-Roba).

Out of 165 firms surveyed from 24 global industries in the Strategic Contracting out Survey, conducted jointly by CAPS Research and A.T. Kearney, 58 % "transform fixed expenses into variable costs" as one of the main outsourcing reasons (Monczka, Markham, Carter, Blascovich, & Slaight, 2005). Outsourcing converts specific fixed expenses to variable costs, according to studies and industry assessments (Liu and Tyagi, 2017).

Although some of the above studies are not directly linked to the telecom industry lessons can be drawn from the studies that are of benefit to the current study with reference to how BPO can reduce costs if properly implemented and can be used as reference point or benchmark. Findings from the above studies complement previous studies and are useful in the present study as they show a positive the relationship between BPO and cost efficiency.

### **3.3.1.2 Negative effect of outsourcing on the firm's cost efficiency**

However, some of the studies tend to disagree with the above findings of cost reduction but instead suggested an increase in costs. The results by a study from Fersht, (2014) which indicates that "for the 189 global clients in various industries (e.g., finance, accounting, retailing, and health management) that outsourced their services overseas, about 50% stated the failures of cost reduction without adding extra value in their supply chain operation" (Liu, Jayaraman and Luo,2017).

The findings are also supported by a study conducted by Patil and Wongsurawat, (2015) on Information technology (IT). They said that "outsourcing by business process outsourcing/information technology enabled services (BPO/ITES) firms in India in which the purpose of the research was to understand the roles various drivers such as cost, strategy and risk play when business process outsourcing/information technology enabled services (BPO/ITES) firms in India outsource their information technology (IT) functions to third-party vendors". These findings go against the general position claiming that cost reduction is a key benefit of outsourcing.

"While improved cost metrics remain an important motivation for outsourcing, it was discovered in a survey of over 700 organizations from the UK, USA, and continental Europe spanning diverse sectors such as financial services, telecommunications and pharmaceuticals, that cost was losing ground to the other prominent motivation, which is the desire to access new technologies, capabilities, and best practices" (Pratap, 2014). According to a study conducted by Jain and Natarajan, (2011) in the Indian banking business, banks prioritise customer service enhancement, new skill access, and other aspects over pure cost reductions.

The study conducted by Kivijarvi and Toikkanen, (2015) is aligned with the findings of the aforementioned study, in which the "framework provides a structure for proper evaluation of alternative measurement systems in the IT outsourcing" The comparison of final findings to the most generally used ITO theories, such as the resource-based approach and transaction cost economics, it's noteworthy that particular factors like outsourcing costs and an emphasis on core capabilities weren't weighed any higher.

Although the above studies are not directly linked to the telecom industry, lessons can be drawn from the studies that are of benefit to the current study with reference to how BPO can reduce costs if properly implemented and can be used as reference point or benchmarks. Findings from the above studies complement previous studies and are useful in the present study as they show both positive and negative the relationship between BPO and cost.

### **3.3.2. Relationship between business process outsourcing and profitability**

Previous studies have indicated that when parties that are involved in sharing norms, they generate strong social bonds that brings out behaviours that are desirable which discourages deviant behaviour (Zhu et al., 2017; Ng, Zhao, Fan & Rungtusanathan, 2014). Studies also established that “links which built by BPO have positive links and have capacity to improve financial performance of an organisation because they can effectively alleviate users’ dependence on 3PL providers” (Christiansson and Rentzhog, 2019; Chu and Wang, 2012; Movahedi et al., 2016) and “can safeguard users by attenuating 3PL providers’ intentions for opportunism” (Huoet al., 2015b, 2016).

In this section, some of the major empirical evidence is briefly reviewed to understand the relationship between BPO and profitability from organisational perspective. Findings from the studies complement previous studies and are useful in the present study as they show a positive the relationship between BPO and profitability. If business process outsourcing is done correctly and efficiently, it will raise the firm's value while lowering operational costs (Khan and Javed, 2013). In the next section, these relationships are discussed further in detail.

#### **3.3.2.1 Positive effect of outsourcing on the firm’s profitability**

Below is some of the empirical evidence relating the positive relationship between BPO and firm’ profitability. Although some of the studies are not directly related to mobile telecommunications industry but it would serve as a benchmark in the current research. Lessons can be drawn from the studies that benefit the current study.

Prajapati, Kant and Tripathi, (2020) conducted a study on an integrated framework for prioritizing outsourcing performance objectives and the results indicated that outsourcing adoption include increasing dominance in core activity, ability to increase or decrease capacity, improved financial performance, optimum resource use and increased market share.

Complementing the above results is the study by Christiansson and Rentzhog, (2019) on the Lessons from the "BPO journey" in a public housing company: toward a BPO strategy complements the aforementioned findings. The results indicated that higher satisfaction of customer, improved innovative capability, improved operational performance, improved satisfaction of employees increased profitability.

The findings are also in line with the study by Sandhu et al., (2017) on Does Outsourcing Always Work? A crucial assessment for the project's commercial success. According to the results of the study, 'outsourcing management promoted various resource functions such as financial savings, improved capability to focus on strategic issues, gaining opportunities to technology and experienced expertise and the ability to demand measurable and enhanced service levels.'

The findings are complemented by a study conducted by Khaki and Rashidi, (2012) on outsourcing and its influence on operational objectives and performance in the Iranian telecom industry. According to the survey, "outsourcing could lead to improved financial and non-financial and service."

The findings are largely consistent with another study, on operational excellence through business process orientation by Movahedi et al., (2016). Financial, operational, and customer analysis" were divided into three key constructs in an intra- and inter-organizational analysis. On the financial side, satisfaction had a positive effect, with improved organizational value, market sensitivity, market share and competitiveness, profitability, cost reduction, lower (inventory) costs, increased earnings/sales/profits, equity ratio, net profit margin and operating profit and new jobs. (Tarhan et al., 2015; Kohlbacher, 2010).

The results are also in line with the study conducted by Rodríguez, Lai & Padilla, (2017) on whether contracting out of services moderates the effects of asset specificity on performance. These authors stated that “an application in Taiwanese hotels, however, indicated a positive relationship between financial performance and the increase in outsourcing, in contrast to the predicted relationship”. This relationship exists in the sense that hotels with high levels of customer satisfaction might consider outsourcing as a means to boost their bottom line. Hotels that outsource more and are more impacted by their competitive strategy have higher financial performance.

The results are also in agreement with the study by Emmanuel, (2013) on the impact of BPO practices on the performance of mobile telephone companies in Nigeria. The aim of the research was to identify important performance indicators for evaluating mobile phone operators' effectiveness. After BPO, the results indicated that, most mobile phone companies in Nigeria performed well in terms of income, use, and network quality, according to the statistics.

Similarly, Claussen, Kretschmer & Oehling, (2012) conducted a study on the performance inferences of BPO in the mobile telecom industry in UK, results “revealed that as expected, mobile operators who showed preference for external outsourcing, their operations improved profitability and that outside contracting of network operation services showed a positive effect on revenue primary driven by reduction in operations expenditures, reduced costs and increasing revenues in the long-term”.

According to, Thouin, Hoffman and Ford, (2009) examined the role of “information technology (IT) outsourcing on the performance of US firms. Specifically, they focused on the level of network and telecommunications services outsourcing on firms' financial performance”. Over 27 Information Technology services were outsourced, including benefit realization, help desk support, and hardware maintenance and support. The findings found that “higher levels of network and telecommunications services outsourcing is associated with superior financial performance”. So as to increase business performance, the authors contended that 'low asset specificity' IT operations, involving those that are commodities, are supposed to be contracted out (Lahiri, 2016).

The above assertion that BPO results in profitability increase is supported by another study conducted by Agrawal and Haleem, (2013) examined the “effects of IT outsourcing on firm performance and in the manufacturing and services in which cost efficiency, productivity, profitability, growth, cash management, market ratio and market value were used as performance measures”. The study found “out that outsourced IT improved performance in cost efficiency, productivity, profitability, growth, cash management, market ratio and market value” (Lahiri, 2016).

Similarly, the study by Bolat and Yilmaz, (2009) found out that “Cooperation with a vendor has led to significant improvement in organizational effectiveness, productivity, profitability, quality, continuous improvement, quality of work life and social responsibility levels”. Hotel management consider that outsourcing has enhanced performance of an organization.

Although some of the above studies may not directly be linked to the telecom industry, lessons can be drawn from the studies that are of benefit to the current study with reference to how BPO can improve profitability if properly implemented and can be used as reference point or benchmarks. Findings from the above studies complement previous studies and are useful in the present study as they show a positive relationship between BPO and profitability.

### **3.3.2.2 Negative effect of outsourcing on the firm profitability**

Consistently, some of the empirical studies tend to disagree with the above findings which states that BPO can improve profitability. Some studies however, suggested that there is lack of sufficient evidence to make such conclusions that BPO has significant impact on the firm’ profitability. Logistics outsourcing, according to Cho et al., (2008), has a disadvantageous effect on profitability, satisfaction of customers and the organization’s overall performance. (Hsiao et al, 2010a) found out that “logistics outsourcing decisions, such as transportation, packaging, transportation management and distribution network management, have no direct effect on service performance” (Zhu et al., 2017).

According to a study conducted by Jiang, Frazier, and Pratel, (2006) on the impact of contracting out on firms' operational performance, contracting out firms invest their unconstrained resources or cost savings from outsourcing for the growth their internal competitive advantage. Research found "insufficient evidence to conclude that outsourcing has a significant impact on firms' profitability". More so, outsourcing firms' productivity and profitability do not improve much in such a short period of time, and outsourcing firms must continue to reduce their profit margins owing to price competition. As a result, there is no clear increase in profitability. The results also indicate "that there is no significant increase in profitability; therefore, the results seem to signify that there is" no correlation between BPO and increase in profitability".

This is a substantial shift from earlier anecdotal and conceptual research, which has found that contracting out of service has a considerable impact on corporate profitability. Another reason outsourcing may not have had a substantial impact on profitability could be due to cost savings reinvestment. In such instances, outsourcing firms are better able to reinvest those released resources in the growth of their core businesses to pursue future competitive advantages). BPO not only changes profitability, but it also aggravates the productivity gap between contracting out organizations and suppliers (Jiang and Qureshi, 2006).

### **3.3.3 Relationship between business process outsourcing and the firm's productivity**

In this section, some of the major empirical evidence is briefly reviewed to understand the relationship between BPO and productivity from organisational perspective. Findings from these studies complement previous studies and are useful in the present study as they show a positive the relationship between BPO and productivity and otherwise. These correlations are discussed in depth in continuing a discussion.

#### **3.3.3.1 Positive effect of outsourcing on the firm's productivity**

Below is some of the empirical literature relating the positive relationship between BPO and the firm' productivity. Although some of the studies are not directly related to



mobile telecommunications industry but it would serve as a benchmark in the current research. Lessons can be drawn from the studies that benefit the current study.

A study on an integrated framework for prioritizing contracting out performance objectives by Prajapati, Kant, and Tripathi, (2020). The most performance outcomes as a result of outsourcing adoption include increasing dominance in core activity, improved financial performance, ability to increase or decrease capacity, optimum resource use and increased market share.

Consistent to the above finding is the study by Ikerionwu, Edgar & Gray, (2016) on the development of supplier's BPO-IT framework findings suggested reduction in service processing cost; upholding the privacy of customer's operations, improved quality of services and improved client and provider' competitiveness.

Similarly, the above assertion of improved productivity due to BPO is supported by the findings of Frank & Obloj, (2014) "empirical research has found a positive relationship between high firm-specific human capital and productivity". These functions are considered to have knowledge-specific assets that are not transferred easily and are unique, as having a limited ability to be applied in other work settings (De Vita, Tekaya & Wang 2011; De Vita and Tekanya, 2015). These characteristics become necessary for the sake of obtaining competitive edge. In order to gain competitive edge, resources must be heterogeneously distributed across all firms that are competing and the heterogeneity has to persist over time.

The above results are consistent with a study conducted by Antonioli, Mazzanti Montresor & Pini, (2015) on "outsourcing and Firm Productivity in a Specific Local Production System: Evidence from Reggio Emilia (Italy)". Their results showed that the link between "contracting out and productivity will only give positive findings when considering the externalization of high value-added activities.

These findings collaborate with the results of the study by Rodríguez et al., (2017) suggested that "asset specificity positively influences activity cost and quality for both the internal and external governance structures". Frank and Obloj (2014) showed "that

high human asset specificity affects greater productivity". These findings are also in agreement with those indicated by Cruz, Haugan & Rincon, (2014) in the field of medical device maintenance. They conclude that "specificity can reduce activity costs; improve productivity which can make the hotel more competitive in developing its activities".

In terms of production, Sandhu et al., (2017) investigated whether outsourcing always works. A crucial evaluation for the project's business potential. The findings also agree with other studies that have found out that by implementing a BPO approach that permits outside expert groups to focus on specific tasks, manufacturing enterprises can improve the quality of their production processes by concentrating more narrowly on what they do well.

The findings are also consistent with the research conducted by Naz, Ali, Naz & Sadiq, (2013) on the effects of outsourcing of ICT on organisations performance in Telecommunication sector in Pakistan "found that there is additional flexibility to processes and services, access to state of the art technology, access to current knowledge and products, professional trainings, reduced capital investment, reduced operating cost and reduced headcount positively impact the employee performance, which improves productivity and the organization performance".

The findings are also in agreement with the study by Smith, (2012) who also examined the contracting out of service and supply chain performance among mobile telephone service provided in Kenya. This study suggested that "the relationship between outsourcing and supply chain performance among mobile phone service providers". "Results of the study indicated that supplier network responsiveness has the greatest impact on outsourcing while operating system responsiveness has the greatest negative effect on outsourcing". Supply chain system "responds rapidly to charges in product volume demanded by customers and to changes in product mix demanded by customers".

Further findings reveal that the supply chain efficiently expedites emergency client orders, quickly reconfigures equipment to provide mitigations to the changing demand,

quickly changes production processes to meet changing demand, and quickly adjusts capability to support changing requirements (Emmanuel, 2013).

Similarly, the study by Han and Mithas, (2013) found that “ITO helped industries to produce more output as well as to increase labor productive. Yet companies are becoming more and more interested in other benefits than just cost savings or improved efficiency”. However, when engaging in the contracting out of services, organizations need to consider the associated challenges (Kivijarvi and Toikkanen, 2015).

Various literature that focused on explaining the association between productivity growth and outsourcing. Abraham and Taylor, (1996) find that organizations “contract out” services with the objectives of smoothing the cycles of production and gaining from specialisation. Elmuti, (2003) also “provided support for empirical evidence for an outsourcing-productivity relationship. He found that outsourcing accounted for about 40 per cent of the variance in productivity” (Bolat and Yilmaz, 2009). Raa and Wolff, (2001) find a positive correlation between the rate of contracting out and the growth or productivity (Jiang and Qureshi, 2006).

Again, although some of the above studies are not directly linked to the mobile telecom industry lessons can be drawn from these studies. There are of benefit to the current study with reference to the relationship between BPO and productivity and that BPO improve productivity and these studies can also be used as reference point or benchmarks. Findings from the above studies complement previous studies and are useful in the present study as they show a positive relationship between BPO and productivity. Lessons can be drawn from the studies that benefit the current study

### **3.3.3.2 Negative effect of outsourcing on the firm’s productivity**

However, some empirical evidence tends to differ with the assertion of a positive relationship between BPO and productivity, the studies indicated that there is no significant impact on the firm with reference to productivity after outsourcing. Below are some of the empirical studies.

Arvanitis and Loukis, (2012) examined firm performance in the Swiss and Greek countries where outsourcing was done. The study explored the factors that determine organisational propensity to outsourcing various processes while analysing its impact on firms' innovative performance. Outsourcing in this study involved activities of R&D information and communication technologies. The study was a comparison of Swiss and Greek firms' performance. This study on firms in Greece and Switzerland in the manufacturing and services revealed that "outsourcing enhances innovation performance, particularly process innovation, but has a weak positive effect on labour productivity".

The results are supported by the study conducted by Jiang et al., (2006) who empirically evaluated the impact of outsourcing on a firm's performance and suggested that "there is insufficient evidence to conclude that outsourcing firms obtainsignificant productivity growth". On the contrary, it was established that the productivityof firms that outsource is worse when compared to those that do not outsource. Theysay "here a positive sign indicates productivity improvement". This study depicts that there is no correlation between productivity and outsourcing.

The above results are consistent with Broedner, Kinkel & Lay, (2009) who investigated the "productivity effects of German manufacturing firms in investment goods industries and found that outsourcing has a strong negative impact on firms' labour productivity". The authors also "found that outsourcing increases expenses or decreases revenues for firms and, as a result, outsourcing firm exhibit lower productivity than non-outsourcing or vertically integrated firms".

### **3.4 RELATIONSHIP BETWEEN BUSINESS PROCESS OUTSOURCING (BPO) AND ORGANISATION'S OPERATIONAL PERFORMANCE**

This section addresses the correlation between the BPO and the operational performance of the organisation. Some of the studies are not directly linkedto the mobile telecom industry lessons can be infered from these studies. Thereare of benefit to the present study with reference to the correlation between BPO and organisation's operational performance and the studies can also be used as reference point or benchmarks. In this section, various empirical studies from different authors

are briefly reviewed to understand the relationship between BPO and organisation's operational performance from organisational perspective.

The link that exists between outsourcing and the operational performance of an organisation tends to receive moderately greater consideration in studies on management, as "a case of making more by doing less" (Antonioli, 2015; "especially for big companies, namely, multinational conglomerated companies that shift their activities in different countries through foreign direct investment (FDIs)". The relationship at that is crucial in these firms are seen to appear moderated, at worst conditioned, by the environment in firm's market as well as the strategy that the organisation would have adopted to compete in. The satisfaction of customer, enhanced operational performance, greater profitability (Movahedi et al., 2016), and employees' satisfaction are all reported effects in the literature for business process-oriented firms (Kohlbacher, 2010).

Outsourcing has been studied by various researchers (Ikerionwu, Edgar & Gray, 2016; Hanafizadeh and Zare Ravasan, 2017; Modarres et al.,2016; Lahiri,2016; Lacity *et al.* 2016; Sandhu et al.,2017) to establish its relationship with the operational performance of organizations. These studies "established there is a direct link between outsourcing and the operational performance of an organization. The belief was that, an increase in outsourcing will result in an increase in organization's operational performance and vice versa". The studies established a correlation between contracting out of services and the operational performance of an organization. These studies focused on outsourcing such as BPO of Human resource, Logistics and IT.

The study conducted by Lahiri, (2016) in USA on does the contracting out of services Really Improve Firm Performance? The outcomes of empirical studies and research aim on the correlation between BPO and operational performance of organizations are diverse. The "findings indicated that outsourcing can produce positive, negative, mixed, moderated or no significant impact on the firm".

While outsourcing maybe seen to bring performance benefits theoretically, Bustinza et al.'s (2010) looked at the question to see if this is the case always. There are

numerous inconsistent presentations in the existing literature which has caused the current researcher to sought for more theoretical and empirical explanations. One widely held viewpoint links the findings' inconsistency to the misperception of the impact of various types of logistical outsourcing factors on business performance (Huo et al., 2015a; Leuschner et al., 2014; Liu et al., 2015; Rajesh et al., 2011).

There is further consensus, however, in how the “literature links BPO and performance management with the business strategy of the organisation” (Kivijarvi and Toikkanen, 2015 ) but no framework to address the operational performance using quantitative metrics especially in the South African mobile telecommunications industry has been developed (Brewer, Ashenbaum & Ogden, 2013, 2014; Lahiri, 2016) hence the current study tried to bridge the gap by suggesting a framework that can evaluate the influence of BPO on the operational performance of mobile telecom operators in the southern African countries particular South Africa using cost efficiency, profitability and productivity as the performance metrics underpinning the study.

A study by Sobinska and Willcocks, (2016), the organizations studied used several types of IT services sourcing. The contracting out of services was the preferred model for 91% of companies, followed by cloud computing (26%), insourcing (26%) and offshoring (13%), though these figures fails to disclose the specific mix of approaches used in sourcing. Complementing the above results is the study by Lacity et al., (2016), whose findings indicated that 48% of studies found positive effects from outsourcing IT and business services, 30% found negative consequences, and 21% found no meaningful changes in performance after outsourcing. The need for the current study arose from the conflicting findings in the literature, which prompted scholars to seek theoretical and/or empirical explanations. One common explanation for the mismatch is that different forms of logistics outsourcing have varied effects on different firm performance (Huo et al., 2015a; Leuschner et al., 2014; Liu et al., 2015; Rajesh et al., 2011). These results have shown that the performance impact of outsourcing logistics have been hitherto inconclusive.

The varying results in the literature motivates the current study in attempting to assess the effects of BPO on the operational performance of organizations using cost efficiency, productivity and profitability as the measurements

Below are some of the empirical studies relating the relationship between BPO and operational performance of the organization. Although some of the studies are not directly related to telecommunication industry but it would serve as a benchmark in the current research. Lessons can be drawn from the studies that benefit the current study.

A study by Christiansson and Rentzhog, (2019) who conducted a research on "Lessons from the "BPO journey" in a public housing company: Toward a BPO Strategy." The findings revealed that BPO leads to increased satisfaction levels of customers, improved innovative ability, higher operational performance, improved satisfaction of employees and increased profitability.

Similarly, to the above result is the study by Perera and Weerakkody, (2018) on the effects that Business Process Outsourcing (BPO) has on Organization's operational performance in the Western Province in Sri Lanka. The findings of the study indicated that outsourcing led to cost efficiency and to improved organization's operational performance. And also, both quality improvement and technology adaption outsource led to improve organization's operational performance with reducing cost efficiency.

The above results are consistent with a study by Ikerionwu, Edgar & Gray, (2016) on the development of the BPO-IT framework from the service providers. The findings indicated that the implementation of the developed framework could improve operational performance of the organization through decreasing the turnaround time in processing customer service, lower costs, higher service quality and improved customer, provider attractiveness, and privacy of customer operations. Outsourcing customers can establish the basis for a long-term partnership by using a selection process to find the best service provider.

Complementing the above findings is another study on operational excellence through business process orientation by Movahedi et al., (2016). The results specified that,

there is improved operational complexity, duplication of functional expertise, enhanced overall business performance, connectedness of inter-departments, control, communication, and flexibility, greater connectedness, minimised inter-functional/departmental conflicts, and realization progress/project success, standardization and integration of IT architecture, and minimization in inventory/required space for production (Kohlbacher and Reijers, 2013; Dijkman et al., 2016).

Similarly, a study by Awino and Mutua (2014) on business process outsourcing strategy and performance of Kenyan state firms backs up the abovementioned conclusions. The data revealed that Kenyan state corporations were outsourcing and that BPO had a positive impact on the companies' overall performance. As a result, the research "provides empirical evidence to support that, BPO's benefits as pertains to its contribution to enhancing performance will be realized by the corporations who will adopt the right type of strategies".

The results are supported by the analytical model developed by Naz et al., (2013) on the "study on the Impact of ICT Solutions: Outsourcing on Organizations Performance in Telecom Sector of Pakistan". The findings "suggest that the additional flexibility to processes and services, access to state-of-the-art technology, access to current knowledge and products, professional trainings, reduced capital investment, reduced operating cost and reduced headcount positively impact the employee performance, which improves the organization's operational performance".

The above findings are aligned to another study conducted by Khan and Javed, (2013) on the contracting out of services, minimization of cost and Firm's Performance: Empirical studies from Banking Sector of Pakistan. The aim of the study was to evaluate the relationship or effects of outsourcing and minimization of cost on the organization's performance. "The findings mentioned that empirical evidence of the banking sector of Pakistan suggested that if a firm introduces outsourcing activities and do it in a cost-effective manner, a greater firm's performance can be achieved".

This is also supported by another study by Kroes and Ghosh, (2010) in which the business performance measures were in terms of profit margins, ROS, ROA (return



on assets) and sales over assets found out “that congruence between firms’ outsourcing drivers and competitive priorities positively affects supply chain performance which in turn affects firms’ business ‘s operational performance” (Lihiri,2016).

Similarly, the results of research conducted by Bolat and Yilmaz, (2009) on the effect/relationship between contracting out of services and organisational performance in Turkey in hotels indicate “that the organization operational performance level after outsourcing was significantly higher than before outsourcing for all seven of the organizational performance dimensions”. “Organizational effectiveness (difference 0.6417), productivity (difference 0.6583), profitability (difference 0.5750), quality (difference 0.5917), continuous improvement (difference 0.9188), quality of work life (difference 0.4167) and social responsibility (difference 0.5125) levels afteroutsourcing were significantly higher than before outsourcing”. The outcomes of this study back up previous research results that contracting out can help organizations improve their performance.

The other study which supported the positive effect of BPO on organizational operational performance was the study by Weigelt and Sarkar, (2012) who investigated that banks in the United States. “on outsourcing for the adoption of internet services (emerging technology) and analysed the trade-off between efficiency gains (cost reduction) and loss of adaptability (responsiveness)”. Account balance inquiry, non-traditional services, bill presentment, bill payment, credit/loan/mortgage, investment, insurance, and CRM were all included in this study's scope of outsourcing. Their analysis “found that outsourcing results in efficiency gains in service delivery up to a certain point, butit also negatively affects adaptability”. Contracting out of services was found to be related with efficiency benefits of up to 64.3 percent.

Consistent to the above study is the assertion that specificity can impact on the performance of activities, and it can also positively influence a better organizational outcome”. In this regard, Thouin et al., (2009) found that organizations with lower levels of asset specificity outperform organizations with increased levels of asset specificity in terms of financial performance. According to these arguments, increasing

outsourcing can have an adverse impact on the relationship between asset specificity, activity, and organizational performance (Rodrguez, Lai, and Padilla,2017).

However, some studies tend to differ with the assertion of a positive correlation between BPO and the operational performance of businesses, studies also indicated a no significant connection on the firm with reference to organizational performance after outsourcing. Below are some of the empirical studies:

The negative effect of BPO on organization's operational performance is supported by Butler and Callahan, (2014) who evaluated the impact of administrative human resource outsourcing (HRO) announcements on short-term capital market responsiveness and long-term operating performance. The results indicated that "administration HRO announcements and equity capital market response had a positive relationship." Service companies and companies that outsource transactional HR duties received a stronger positive reaction. The findings also noted a "negative relationship between suboptimal outsourcing and long-run operating performance".

The findings of the aforementioned study are corroborated by a study by Zhu et al., (2017) on the significance of contracted out processes of management in improving the effectiveness of logistics outsourcing. The decisions to outsource Logistics services such as transportation, packaging, transportation management, and management of distribution network, according to the research, have no direct effects on service performance. These results appear to suggest that the performance impact of logistics contracting out have been inconclusive so far with (Hsiao et al, 2010a) concurred with these findings.

The above results are also consistent with the study by Cho, Ozment & Sink, (2008), who examined, the effects of logistics competences and logistics service contracting out on business performance, in an e-commerce market setting. "Their study found that logistics outsourcing has a significant negative association with firm performance, profitability, customer satisfaction and overall performance". They also discovered that

logistics outsourcing has no effect on the connection between logistics capabilities and business performance.

Similarly, Broedner et al., (2009) assessed the productivity impact of German manufacturing organizations in the goods investment industries and revealed that outsourcing has a substantial negative influence on labour productivity. Organizations outsourcing services included manufacturers of machinery, electrical engineering products, finished metal products, and precision instruments. The scholars also found that “outsourcing increases expenses or decreases revenues for firms and, as a result, outsourcing firm’s exhibit lower productivity than non-outsourcing or vertically integrated firms”.

A Similar study which supported the negative effect of Business process outsourcing (BPO) on operational organization’s performance of online retailers, Pentina and Hasty, (2009) found evidence “that companies that outsource e-commerce functions such as website hosting and site design do not achieve higher online sales performance compared with firms that do not outsource similar functions, but develop in-house”. The authors concluded that while outsourcing to third-party providers may be a good strategy in the early stages of multichannel retailing, developing e-commerce-related competencies in-house is optimal in the later (advanced) phases.

Again, although some of the above studies are not directly linked to the mobile telecom industry lessons can be drawn from these studies. There are of benefit to the current study with reference to the correlation between BPO and organisation’s operational performance and these studies can also be used as reference point or benchmarks. Findings from the above studies complement previous studies and are useful in the present study as they show both negative and positive correlation between BPO and operational performance of the organisation. Lessons can be drawn from the studies that benefit the current study.

### **3.5 MEASUREMENTS OF BUSINESS PROCESS OUTSOURCING (BPO) AND ORGANISATION'S OPERATIONAL PERFORMANCE**

Due to the fact that in the mobile communication industry, performance management has grown increasingly difficult as organizations outsource larger and more sophisticated tasks (Hwang, Chen & Lin, 2016). In particular, the management of performance can often be more complex in business services compared with that of manufacturing. For instance, “without a proper 3PL selection process (Hwang et al., 2016), effective performance measures in outsourcing processes and an appropriate supplier control process, user firms can run the risk of loss of control over 3PL providers, difficulty in evaluating supplier competence, and supplier opportunism” (Zhu et al., 2017; Gadde and Hulthén, 2009; Lau and Zhang, 2006).

However, the literature emphasizes the importance of effective the management of performance as a most important effect on successful services outsourcing (Liu et al., 2015; Huo et al., 2015a; Mclvor, 2010, 2016). Moreover, there is consensus in the literature on the need for linkage BPO and management of performance with the business strategy of the organisation (Kivijarvi and Toikkanen, 2015; Youngdahl et al., 2007) but no framework to address the quantitative metrics especially in the mobile telecommunications industry has been developed (Brewer et al., 2013, 2014; Lahiri, 2016; Mclvor, et al., 2009) hence present study tried to bridge the gap by suggesting a framework that can assess the effects of BPO on the performance of mobile telecom operators in the developing countries using cost efficiency, profitability and productivity as the performance metrics underpinning the study.

It is prudent that prior to BPO, the mobile telecom operators must be aware of the important indicators of process performance in comparison to service providers or rivals. In addition to costs, the relative performance on a variety of other aspects such as flexibility, quality, and service should be considered (Claussen, Kretschmer & Oehling, 2012). This current study focused on cost, productivity and profitability as the underpinning performance metrics to evaluate business process outsourcing impact on the performance of the mobile telecommunications industry.

Below are some of the empirical studies relating to the measures of performance that can be adopted to evaluate the impact of the relationship between BPO and operational performance of organizations. These can also be applicable to mobile telecom operators. Even though some of the studies are not directly linked to telecommunication sector they can also serve as a yardstick in the present research. Lessons can be drawn from the studies that the current study can utilize.

A study conducted by Peslak, (2012) adopted an indirect measure of performance to assess performance in a study. Others used a combination of "pure financial metrics" (e.g. ROA, ROS) and "non-financial metrics" (e.g. R&D outlays, supplier relations) (Gilley, Greer, and Rasheed, 2004), perceived direct effects of outsourcing, changes in innovation capability and overall plant operating performance (Lahiri, 2016; Weigelt and Sarkar 2012; Bengtsson and Dabhiikar, 2009), as well as efficiency and adjustments.

Another study by Bolat and Yilmaz, (2009) examined the effect of outsourcing on organizational performance and adopted seven organizational performance measurements categorised as: "organizational effectiveness, productivity, profitability, quality, continuous improvement, quality of work life, and social responsibility, but there are no measurements."

Study conducted by Jiang, Frazier, and Prater (2006): organizational performance measurements were divided in categories of six by "cost efficiency, productivity, profitability, growth, cash management and market ratios." These measures are intended to offer a thorough assessment of the firm's financial characteristics at the time of outsourcing. The emphasis of this study is on the organization's operational performance rather than its financial qualities. Three of these six categories of measuring performance, cost efficiency, productivity and profitability were used in the current study to evaluate the effects of contracting out service on organizational level performance, providing evidence about BPO influences on cost-efficiency, productivity, and profitability.

The study tried to explain the performance measures that may be used to evaluate the influence of BPO on the mobile telecoms industry's performance. The performance measures that support the study are shortly described in this part to better understand BPO from an organizational standpoint. The current study adopted cost efficiency, productivity and profitability as the measures of performance underpinning the study to assess the operational performance of the mobile telecom operators. Below are some of the empirical studies and theoretical explanations of the three constructs.

### **3.6. PERFORMANCE MEASUREMENTS OF BUSINESS PROCESS OUTSOURCING**

In this section, the performance metrics to be included in the new framework are briefly reviewed to understand the relationship between BPO and cost, profitability and productivity from organisational perspective.

Organizations experience challenges in determining actual savings, the success of outsourcing, business values, real costs and rewards even in the telecom industry. "The inability to quantify indirect or hidden costs, an insufficient base for comparison, contradictory criteria, absence of standardized processes, etc. make the measuring effort difficult and challenging, if not impossible" (Mclvor, 2016; Monczka, 2005; Blaskovich and Mintchik, 2011; Mclvor et., 2009; Lahiri, 2016; Kivijarvi and Toikkanen, 2015).

Bennett, Betis, Gopala and Milbourn, (2017) defined performance "as a multi-dimensional notion, which is the degree to which a firm manages to accomplish its predetermined goals". Generally, according to Neely, Gregory & Platts, (1995), "a measure is a metric which records an observable value like performance. A performance measure is a metric used to quantify the efficiency and/or effectiveness of an action" and the measurement of performance in the process of quantifying actions. Kivijarvi and Toikkanen, (2015) defined "a performance measurement system as a set of related metrics used to quantify the efficiency and effectiveness of actions".

Scholars suggested a variety of metrics for businesses to use, including "hard or direct measures such as return on assets (ROA), return on investment (ROI), return on

equity (ROE), profit margin, sales" (Bertrand ,2011), "labor productivity" (Gorg and Hanley ,2005), "extent of sales and internationalization" (Di Gregorio et al. ,2009), "innovation and innovation performance (Singh ,2009). Some researchers utilized "soft or indirect measures of performance such as service receiver satisfaction" (Grover, Cheon & Teng, 1996), incremental and radical innovation (Li et al., 2008), product and process innovation (Nieto and Rodr'guez, 2011), and "customer performance evaluation" (Nieto and Rodr'guez, 2011; Lahiri, 2016). These measures can also be used as a reference point by the mobile telecom operators.

Other researchers used different performance metrics to measure firm's performance as such these included "direct measures such as absolute value (return on sales (ROS) for the industry" (Mauri and de Figueiredo 2012), "growth, productivity, profitability, financial dependence" ( Hijzen *et al.* 2010), " labour productivity" (G"org *et al.* 2008), "gross margin and on-time delivery rate"( Bardhan, Mithas,& Lin, 2007), "cost reduction and time to market" (Bengtsson, von Haartman & Dabhilkar, 2009), "innovation and innovation performance" (Grimpe and Kaiser 2010), "delivery reliability, lead time and flexibility" (Lahiri,2016).

Several scholars have also adopted a combination of indirect and direct measures such as "organizational quality, financial performance, employee welfare" (Espino-Rodriguez and Padr'on-Robaina 2005), "plant cost and quality change of finished products" (Bardhan *et al.* 2006), "financial performance (profitability, sales growth, ROA, cash flow) and non-financial performance" (lifestyle, independence and job security) (Kamyabi and Devi 2011).

Findings from these studies complement previous studies and are useful in the present study as they show which measures have been adopted in various industries. These measures are applicable in terms of these measures of performance for the firm which this study draws on except that most of these organizations investigated do not indicate whether they are in the mobile telephone providers. Lessons can be drawn from the studies that benefit the current study.

Emmanuel, (2013) conducted a study with the purpose of examining the impact of contracting out practices on mobile telephone operator's performance in Nigeria. The study was to examine whether mobile providers' outsourcing practices result in job layoffs and to figure out how to evaluate their effectiveness using key performance indicators. According to the results, all external service providers have assumed full accountability for all contracted out services, and most of operators have not created new job roles for employees whose functions have been outsourced. Average revenue per user, minutes of use, and getting few network requests are KPIs for evaluating Telecommunication companies' performance.

Another study conducted by Smith, (2012) applied four performance measurements for Telecom operators in Kenya, ranging from "operational responsiveness, logistics, supplier, and comparative advantage," whereas the current study adopted productivity, cost, and profitability as performance measurements to evaluate the performance of telephone service providers in South Africa.

For the purpose of this study in empirically evaluating the impact of BPO (independent variable) on the operational performance of the mobile telecommunications industry, the researcher adopted the direct measures in the form of cost efficiency, profitability and productivity (dependent variable) as the underpinning performance metrics/ dimensions.

In this section, the performance metrics to be included in the new framework are briefly reviewed to understand the relationship between BPO and cost, profitability and productivity from organisational perspective.

### **3.6.1 Cost efficiency as a measure to evaluate the impact of business process outsourcing in the mobile telecommunications industry**

Cost efficiency is one of the primary drivers for business process outsourcing (BPO). Several research papers and more publications on the industry made the point that outsourcing permits an organisation to minimise costs allowing them to focus on core competencies (Hanafizadeh and Ravasan, 2017; Liu and Tyagi, 2017). The biggest achievement sought through outsourcing is reduction in costs (Liu et al., 2015;



Espino -Rodriguez, Lai & Padilla,2017 ; Liu and Tyagi,2017 ; Zhu et al.,2017 ; McIvor et al., 2009) hence it becomes imperative to use cost efficiency as one of the measurements for assessing the effects of BPO on the performance of mobile telecommunications operators, therefore cost efficiency is one of the dimensions underpinning the study inevaluating business performance.

"Cost reduction" is defined by Naz et al., (2013) as "the process of maximizing profit by employing cost-effective methods and operating under the assumption of economies of scale." Economies of scale benefit both the suppliers and the customers financially. The vendor gains knowledge as well as access to new technology and equipment, reducing the cost of purchasing services rather than developing them internally. This has the potential to reduce opportunity cost by lowering infrastructure construction costs (capital investment). "Cost uncertainty may be eliminated if contract services are obtained at a fixed cost" (Liu et al., 2015).

Theoretically, BPO is expected to give reduction in costs, to gain benefits from service provider's competences and services permit direct firm towards core capabilities. However, practically, a number of studies have established that proportions of outsourcing can deliver unacceptable results to the client (Pratap, 2014; Robinson *et al.*, 2008). Large proportion of supply chain practitioners in several studies have indicated occurrences of the absence expected benefits or having reversed decisions to outsource (Brewer, Wallin & Ashenbaum 2014, Liu and Tyagi, 2017). In a report compiled by Deloitte & Touche on outsourcing (2014) "fixed costs on Information Technology, Human Resources, Finance and Accounting, and procurement as the big four types of fixed costs being changed to variable costs by outsourcing" hence it becomes apparent to use cost to evaluate the impact of BPO.

Scholars argued about their recommendation not to outsource the organization's core competencies in the aim of lower costs and enhanced innovative capabilities (Diaz-Mora and Triguero-Cano, 2012; Weigelt and Sakar, 2012; Zacharia et al., 2011). BPO arrangements that "transfer firms' assets to a vendor can convert fixed amortization and operating expenses to variable usage charges. On the application side, BPO can reduce the commitment to fixed-cost, full-time human resource expenses and other overhead costs through contracts that provide development skills on an as-needed

basis". As a result, BPO can improve organizations' cost efficiency hence it becomes imperative to use cost as one of the metrics for measuring the effect of BPO on the performance of telecommunications operators so as to verify the assertion.

The researcher used the following sub-constructs as the underpinning study to measure or describe a firm's cost efficiency: cost of labour, operational expenses/cost, total cost of ownership, capital investment, developmental cost, investment in research & development (R & D), elimination of the fixed cost of in-house staff by moving the function to a service provider and an improvement in selling, general, and administrative expenses.

### **3.6.2 Productivity as a measure to evaluate the impact of business process outsourcing in the mobile telecommunications industry**

Productivity metrics "can be measured from the ratios of outputs and inputs. Output is measured through the total revenue or sales of the firm, while inputs are measured through the number of employees and the total assets or inventory required to generate the output" (Bolat and Yilmaz, 2009). Fawcett, Ellram and Ogden, (2014) defined productivity as the "outputs generated by an activity to the resources consumed by the activity and is usually expressed as a ratio". It becomes imperative to consider productivity to evaluate the impact of BPO on the mobile telecommunications industry; therefore, productivity is one of the dimensions underpinning the study in evaluating business performance.

Metrics measuring productivity growth include market share expansion and revenue growth are linked to an outsourcing approach (Broedner et al., 2009; Bengtsson et al., 2009). "Improved delivery metrics, higher learning and acquisition of new skills, improved innovation, and increased access to international markets and resources" are some of the other areas of improved performance targeted through outsourcing (Zacharia et al., 2011; Bengtsson et al., 2009; Wallenburg et al., 2010; McIvor et al., 2009).

Firms can benefit from both dynamic (productivity growth) and static (productivity level) specialized improvements by the contracting out of service. Organizations make more

effective use elements of production in those (more skill-intensive) stages that remain in-house by contracting out their least skill-intensive activities. They gain from a variety of learning-by-doing benefits as a result of this (Antonioli, Mazzanti, Montresor & Pini, 2015).

Instead, a less "standard" externalization strategy that seeks dynamic efficiency (e.g., through innovation outcomes) by externalizing high-value-added services such as "R&D," "Human Resource Management (HMR)," and, more broadly, the so-called "Knowledge Intensive Business Services" (KIBS) could have a positive productivity impact (Antonioli et al., 2015).

The researcher considered assets turnover, inventory turnover, increase in market share, increase in sales, reduction in customer response cycle time, economies of skill, improvement in new technology and improvement in process and employee productivity as the underpinning sub-constructs to measure a firm's productivity.

### **3.6.3 Profitability as a measure to evaluate the impact of Business process outsourcing in the telecommunications industry**

Arguably the crucial variable for evaluating the performance of a firm is profitability. This is so because it measures the return that organization's gain from their investments. "Essentially, the profitability of outsourcing is grounded on vendors' cost advantage based on economies of scale" (Kivijarvi and Toikkanen, 2015). Therefore, it is apparent to use profitability to evaluate the impact of BPO in the mobile telecommunications industry, therefore profitability is one of the dimensions underpinning this study in evaluating business performance.

Profit has been defined by Baily, Farmer, Crocker, Jessop & Jones, (2015) as "value generated by the organisation's activities". Gitman, (2009) defined "profitability as the link between costs and revenues produced by the firm's assets both fixed and current in productive activities. The literature has shown that other benefits of outsourcing on top of cost reduction do exist (Espino- Rodríguez et al., 2012). Bolat and Yilmaz, (2009) indicated that "in the hotel sector that was a significant increase in

organizational effectiveness, profitability, quality and continuous improvement have taken place after using outsourcing”.

Outsourcing allows the possibility of realising profits from a sound link with providers (Rodriguez et al., 2017). “An outsourcing strategy can improve organizational performance, lower innovation costs and improve competitiveness” according to (Elmuti, 2003). This implies that organisations will seeks to cover up for their internal resource shortcomings and skills through the addition or replacement by forming links with other organizations (Sallimat, Cullen & Umesh,(2008). Outsourcing agreements that are well- planned and implemented have been shown to have a significant influence on customer service (Narasimhan and Talluri, 2009), resulting in increased and sustained profitability (Broedner et al., 2009). At the same time, the risks of contract out of services are numerous and varied (Gandhi et al., 2012). It is clear that profitability can be used as a metric to empirically evaluate the effects of BPO on an organization's performance, hence profitability is one of the dimensions underpinning the study in evaluating business performance.

Some of the dimensions include return on assets (ROA), return on investment (ROI), return on equity (ROE), sales, profit margin and net profit margin (sales) and cash generation by transferring assets to the service provider to establish an organization's profit picture.

Bowersox, Closs, Cooper & Bowersox, (2013) and Jiang, Frazier and Prater, (2006) defined, “Return on assets (ROA) measures as how much the firm earned for each dollar of investment. It is the broadest measure of profitability and management effectiveness, independent of financing strategy”.

When all other factors are equal, organizations with a greater return on assets are considered as criteria for the selection of new investments (Bertrand 2011). As a result, return on investment (ROI) is the measurement of the return on a shareholder's capital.

Net profit margin on the other hand, measure the contribution of each sales dollar which is kept by the firm as net profit or net profit margin measures how much of every sales dollar produced during the period is profit or calculated as a percentage of net profit divided by net sales (Bowersox et al., 2013). When net profit is rising, it indicates more effective management in sales and expenses. When decreasing, it indicates margin of less-effective management. "Differences of return on assets and net profit margin among competitors in the same industry reflect how each company responds to changes in competition (and demand for the product or service) and changes in managing sales volume, sales price, and costs" (Bertrand 2011).

Increases in return on assets and net profit margins can be achieved by cumulative sales volume, price, or minimised costs. However, there is a chance that management's current efforts to uphold the company return on assets or net profit margins will have long-term negative consequences, when a company fails to leverage on the benefits of Research and Development or the upgrading of its facilities and equipment. This kind of decision may result in the decrease in expenses and with an increase in profitability over a short period of time (Bertrand 2011; Jiang and Qureshi, 2006; Bolat and Yilmaz, 2009). However, such a decision would normally affect future profitability and lead to decline as the products of the organization, plant and machinery starts depreciating in value. In the context of such business strategies, it is very important for telecommunications operators to calculate their profitability. Asset turnover measures the "efficiency of management in utilizing assets or is the ratio of total sales divided by total assets" (Bowersox et al., 2013). Asset turnover also indicates how much in total sales volume the firm would have generated against the actual capita invested in assets by the organisation.

The researcher used hard or direct measures to measure or describe a firm's profitability, like return on assets (ROA), return on investment (ROI), return on equity (ROE), profit margin, sales and net profit margin (sales), and cash generation through the transfer of assets to the suppliers of service as the underpinning subconstructs to give the firm's profit indication. Profitability is one of the dimensions underpinning the study in evaluating business performance.

### **3.7 SUMMARY**

The impact of BPO on the mobile telecoms industry business operational performance is evident from the brief theoretical explanation. The literature unpacked the three main constructs of evaluating the impact of BPO on business performance which include cost, productivity and profitability. The proposed framework further displayed the relationship between BPO and business operational performance using the above three constructs. The framework was developed in light of the above discussion, and in line with the aim of the current research, which is to propose a framework for evaluating the effects of business process contracting out services using quantitative indicators from the perspective of developing countries. Theoretical literature on the relations between business process outsourcing (independent variable) and cost, profitability and productivity (dependent variables) as the performance metrics underpinning the study was also discussed.

This chapter also focused on various theoretical frameworks by Patil and Wongsurawat, (2015); Naz et al., (2013); Khaki and Rashidi, (2012); Mclvor, (2009, 2016) and Kremic, Tukul & Rom, (2006) as examples, their strength and weakness in addressing the impact of BPO on mobile telecommunications industry was also discussed. Some of the major theoretical frameworks were briefly reviewed to understand the correlation between BPO (independent variable) and cost, profitability and productivity (dependent variables) from organisational perspective.

The framework by Kremic et al., (2006) underpin the study. Most of the framework failed to address the quantitative performance measurement of the operational performance of BPO in the telecom industry. This study attempted to fill in this gap by proposing a business process contracting out framework with quantifiable metrics viz cost, productivity and profitability in evaluating the impact of BPO on the business performance. In empirically evaluating the effects of the BPO (independent variable) on the performance of operations of the mobile telecom industry, the researcher adopted the direct measures in the form of cost, profitability and productivity (dependent variable) as the underpinning/metrics dimensions of the study to evaluating the impact of BPO.

The performance measurements or metrics such as cost, productivity and profitability were discussed. Empirical literature on the effects of BPO on the mobile telecommunications industry was also discussed. Also discussed was the literature on the association between BPO (independent variable) and each of the quantitative performance metrics, cost, productivity and profitability (dependent variable). This research on BPO focused on empirically investigating the effects of BPO on the operational performance of the mobile telecom industry using costs, productivity and profitability as the performance metrics underpinning the study.

The research methodology was discussed in the next chapter, which covered topics such as the research design, research paradigm, sampling strategy, research approach, research strategy, data analysis and study limitations.

## **CHAPTER 4: RESEARCH METHODOLOGY**

### **4.1 INTRODUCTION**

The study is informed by the positivism research paradigm. Positivism explains the cause and effect relationship leading to outcomes and the approach encompasses the quantitative approach (Bryman & Bell, 2015). A deductive approach was used to test existing frameworks by measuring the study variables. The descriptive research was adopted as it allows the research to collect quantitative data on research objectives or questions. Descriptive research was employed to help “to obtain information concerning the current status of the phenomena and to define what exists with respect to conditions or variables within a situation” (Babbie, 2016). Descriptive statistics enhanced the making of sense of data that was gathered by summarizing and graphically displaying it (McKenzie, 2014). The data was appropriately coded in STATA program. Analysis, using descriptive statistics commands, was also carried out in the same program. The study mainly employs univariate analysis. This study employed descriptive statistics to establish the connection of the variables. The inferential statistics in the form of a chi square statistical test was used to establish the statistically significant relationship between BPO and cost efficiency, productivity and productivity.

The researcher adopted a quantitative research strategy (empirical research). The data acquired by the researcher was transcribed into numbers in order to verify statistical computations that led to specific results. A structured questionnaire with closed-ended questions was used for raw data gathering using the drop-off and collect method. The questionnaires were distributed to two hundred and ten (210) employees of the Vodacom and Metro Global Telecom services (Pty) Limited mobile telecommunication companies.

The scope within the context of the methodology and the selected statistical procedures was expanded and outlined in this chapter. The chapter provides an outline and overview of issues related to the methodology that was utilized in the entire process of the research and indicate how determining a suitable methodology supports the researcher to come up with valid results. This chapter outlined the research paradigm, research design and research approach to be adopted within the



Research. The justification of the research paradigm, research design, research approach and the sampling strategy used was also discussed. Chapter 4 also describes the data gathering instrument that was used to answer the research questions and test the proposed framework. The target population, sample strategy, data collection process and the analysis of data were also briefly outlined. Lastly the chapter also highlighted the reliability and validity including the limitations of the study and ethical issues of the methodology.

## **4.2 RESEARCH METHODOLOGY**

According to Sharan, (2014), "research methodology is viewed as the "data collection process to solve a specific research problem". Research methodology, according to Leedy and Ormrod (2015), is "new ways in which researchers use visual approaches and procedures to collect data and generate reports." Other scholars, such as Eriksson and Kovalainen (2015), described methodology as "the underlying concepts that provide the processes for managing the study process and design." A research methodology lays out the steps that a study will take to achieve any results or make any necessary recommendations. Research techniques includes data collecting in various forms, analysis and interpretation (Creswell, 2013).

## **4.3 RESEARCH PARADIGMS**

A research paradigm is a "set of basic and taken-for- granted assumptions which underwrite the frame of reference, mode of theorizing and ways of working in which a group operates" (Burrell and Morgan ,2016). Johnson and Christensen, (2010) define a research paradigm as a "perspective that is based on the set of shared assumptions, values, concepts and practices." Saunders, Lewis and Thornhill, (2019) describes a "research philosophy as a system of beliefs and assumptions about the development of knowledge in a particular field". A research philosophy or paradigm is a "fundamental assumption that guides a research inquiry to better understand a physical, psychological or social phenomenon" (Leedy & Ormrod, 2015). Lancaster, (2005) defines a research philosophy as "a method by which the researcher generates knowledge in the context of the research," whereas research paradigms or

philosophies are an important part of any research project because they guide in the collection of relevant data in an efficient and appropriate way.

#### **4.3.1 Justification for adopting Positivism**

Positivism relates to the “philosophical stance of the natural scientist and entails working with an observable social reality to produce law-like generalisations and it emphasises the positivist focus on strictly scientific empiricist method designed to yield pure data and facts uninfluenced by human interpretation or bias” (Saunders et al., 2019).

This research adopted the positivist position which is derivative of “natural science and is characterised by the testing of hypothesis developed from existing theory (hence deductive or theory testing) through measurement of observable social realities” (Halfpenny, 2014). Other notable scholars like Martin, (2014) alluded that this “position presumes the social world exists objectively and externally, that knowledge is valid only if it is based on observations of this external reality and that universal or general laws exist or that theoretical models can be developed that are generalisable, can explain cause and effect relationships, and which lend themselves to predicting outcomes”. The study is informed by the positivism research paradigm. A deductive approach was used to test existing frameworks by measuring the study variables. In addition, the study seeks to generalize the results to players in the industry. In line with positivism the researcher can assess the collected data to generate a suitable result. The intention is to obtain the research goals and objectives (Bryman & Bell, 2015).

Positivism focuses “purely on facts, gathered through direct quantifiable observation and experience and measured empirically using quantitative methods – surveys and experiments - and statistical analysis hence deductive” (Eriksson and Kovalainen, 2008 & 2015; Easterby-Smith, Thorpe and Jackson, 2008 and Halfpenny, 2014). The current research adopted positivism as it explains the cause and effect relationship leading to outcomes and the approach encompasses the quantitative approach (Bryman & Bell, 2015).

#### 4.4 RESEARCH DESIGN

The research design, according to Robson and McCartan, (2016), is "a blueprint for performing a study with optimum control over elements that can interfere with the validity of the findings." Hesse-Biber and Johnson, (2015), for example, defined a research design as "the researcher overall approach to addressing the research question or testing the study hypothesis." A study design, according to Niessen, Peschar, and Kourilsky, (2013), "serves to organize, arrange and execute the research to maximize the validity of the findings". A research design "echoes the purpose of the investigation, which can be one or more of the following: descriptive, exploratory, explanatory, evaluative, historical or predictive" (Saunders et al., 2019; Van Wyk, 2012).

This research adopted a descriptive research design as it involves collection of quantitative data such production figures; profitability, sales figures and establish the correlation relationships between BPO and mobile telecom firm performance (Sekeran and Bougie, 2013). Descriptive research was used to "collect information about the existing state of the phenomenon and identify what exists in terms of conditions or variables inside a situation" (Babbie, 2016). By summarizing and graphically showing the data, descriptive statistics assisted the researcher in making sense of it (McKenzie, 2014). Descriptive statistics describe the relationship between variables in a sample or population to summarize data in an organized manner (Kaur, Stoltzfus and Yellapu, 2018).

The researcher adopted the descriptive research because it allows the research to collect quantitative data on many types of research objectives or questions. Research known as "descriptive research intends to offer (it encapsulates) a correct and useable representation of the variables or factors that relate to the research question. Intrinsically, descriptive research is further structured than research that is exploratory" (Van Wyk, 2012).

Research that is fundamentally descriptive in nature was used "to help obtain information concerning the current status of the phenomena and to define what exists with respect to conditions or variables within a situation" (Sekeran and Bougie, 2013). Krishnaswamy, Sivakumar & Mathirajan, (2009) alluded that "descriptive research

involves, fact finding with adequate explanations" and is conclusive research that results in data that may be used to show relevant groups and units. The descriptive and inferential statistics were adopted so as to establish the degree of association among the variables (Awino and Mutua, 2014).

#### **4.5 RESEARCH APPROACH**

A quantitative research approach "examines relationship between variables, which are measured numerically and analyzed using a range of statically and graphical techniques" (Saunders et al., 2019). The researcher adopted the quantitative (empirical) research to test objective theories by means of investigating the relationship among the research variables. The researcher gathered data which was translated into numbers in an attempt to check statistical computations to specific conclusions. According to Creswell, (2013) research design involves "plans and procedures of research that span the decisions from broad assumptions to detailed methods of data collection and analysis", whereas research approaches are study procedures and strategies that cover all from general assumptions to detailed data collecting, interpretation and analysis methods" (Sekaran and Bougie, 2013).

#### **4.6 JUSTIFICATION FOR QUANTITATIVE RESEARCH**

The researcher adopted a quantitative research methodology as it is associated with deductive approach in which data are collected and analyzed to test theory (Saunders et al., 2019) and also to yield an exact outcome that was translated into generalizable statistical findings (Rubin, 2013).

This study adopted a quantitative research since it is a method for testing objective theories by focusing at the relationship between variables. Data was gathered and transformed to numerical form so that statistical computations could be made and conclusions obtained (Walter & Andersen, 2013). Quantitative research allows that currently constructed theories (on how and why phenomena happen) may be tested and confirmed. The data collection process is reasonably swift and the data is accurate, statistical and aimed to turn out solid solutions or results. "This different to where an opinion or response is drawn from common sense" (Domegan and Fleming, 2007; Johnson and Onwuegbuzie, 2004; Saunders et al., 2019).

According to Shukla, (2008), the quantitative research approach was selected for this study since data collection is quick and data processing takes less time. Questionnaires, surveys and experiments are used in quantitative research to collect data, which is then reviewed and tabulated in numbers, allowing the data to be described by statistical analysis (Eriksson & Kovalainen, 2015). The study was designed to summarize research findings using descriptive statistics to explore possible associations between variables for each construct and between constructs, as well as the influence of independent variable (BPO) on the construct cost, productivity, and profitability (dependent variable) (Schumacker & Lomax, 2016).

Quantitative approaches are also more “reliable and objective since they reduce and restructure complex problems to a limited number of variables as they look at relationships between variables and can establish cause and effect in highly controlled circumstances and they make the assumption that a sample is representative of the population” (Shukla ,2008; Schumacker & Lomax, 2016). Furthermore, systematic, regulated and distinct means of gathering and evaluating empirical data are more linked with quantitative research (Eriksson & Kovalainen, 2015).

#### **4.7 TARGET POPULATION AND SAMPLING STRATEGY**

The term "population" refers to all of the individuals or entities that make up the group being examined (Saunders et al., 2019). The population of this study included all employees of the two mobile telecommunication companies (Vodacom and Metro Global Telecom services (Pty) Limited mobile telecommunication companies) who include engineers, technicians, assembly operators, project managers, finance and accounting officials, sales and marketing executives and procurement executives.

The total target population of this study was 1035 participants made up middle and senior employees of the two mobile telecommunication companies who included engineers, technicians, assembly operators, project managers, finance and accounting officials, sales and marketing executives and procurement executives who are not involved in decision making of business process outsourcing so as to offer an unbiased and fair assessment of the practice in place (Yin, 2018). Neelankanvil ,(2015) defines a “target population as the total number of elements of a specific population relevant to any given research project”. For Jha (2014), a desired target population is

that for which results are ideally required, with the defined target population becomes the one actually considered in a study or a subset of the population (Saunders et al., 2019). The population frame of this study consists of mobile telecommunication industry.

A sample, according to Wiid and Diggines, (2018), is a subset of the population. In sampling, the researcher takes a sample of a population and utilizes it to derive conclusions about the entire population. According to the sampling technique, the researcher must choose participants that are relevant to the study goal. According to Sekaran and Bougie, (2013) each individual participant was a source of information that was unique in its contribution to the study.

The sample approach was probability sampling, with stratified cluster sampling getting special attention. This study used a stratified sample, in which employees were divided into groups based on their profession inside the company and then randomly selected. Because stratified sampling is the most effective method among all probability research designs, it was used in this investigation. All groups were sufficiently sampled to ensure that not just the entire population, but also relevant subgroups, were represented. It is also accurate, accessible and divisible into relevant strata to accommodate all sample units (Saunders et al., 2019).

Stratified cluster sampling using the participants' profession as a strata and the participants company as a cluster was adopted. The simplified formula for proportions provided by Yamane, (1967) was used to calculate the sample sizes. Neelankavil, (2008) defines stratified "sampling as a probability sampling technique in which the researcher divides the entire target population into different subgroups, or strata and then randomly selects the final subjects proportionally from the different strata". The Cluster sampling was also adopted as it is an economically efficient sampling technique in which the primary sampling unit is not the individual element in the population, but a large cluster of elements (Sekaran and Bougie, 2013).

The sample size of this study constituted 210 (selected with the sampling formula at 95% confidence) employees drawn from the two mobile communication companies randomly and proportionally specified. This is supported by the contribution of Tanaka, (1987) who alluded that a "population close to 7800 then a sample of 100, randomly

selected is considered statistically representative, so for a population less than 7800, then 100 subjects is even better.”

#### **4.8 DATA COLLECTION PROCESS**

A structured closed-ended questionnaire was used to collect raw data. The questionnaire was distributed to two hundred and ten (210) employees of the two mobile telecommunication firms, who included engineers, technicians, assembly operators, project managers, finance and accounting officials, sales and marketing executives and procurement executives, using a drop-off and collect technique. The respondents were requested to complete and return it within a prescribed 2-week period.

The instrument sought to collect information on the following variables: drivers of BPO, risk of BPO, impact of cost, productivity and profitability on BPO. With the support of the management of the target institutions; the researcher was accountable for distributing, gathering and protecting the research data, which was collected from each respondent. The questionnaire is a method/ instrument of data collection in which each person is asked to respond to the same set of questions in a predetermined order without the researcher being present (De Vaus, 2014; Ekinci, 2015).

A five-point likert scale was used in answering the questions that each respondent had to answer within the questionnaire. Respondents were asked to rank each variable on a five-point likert scale. All these questions had a satisfaction range that starts from strongly agree, agree, dont'know, disagree and strongly disagree, where the maximum score was strongly agree with a high score of 5, as contrasted to the minimum or low score of 1 for strongly disagree. Section “A” of the questionnaire captured the demographic information about the respondents and organization type and section “B” addressed opinion related questions on services to be outsourced, drivers of BPO, the relationship between BPO and the three constructs and lastly the risk of business process outsourcing.

#### **4.9 DATA ANALYSIS**

The data was appropriately coded in STATA program. Analysis, using descriptive statistics commands, was also carried out in the same program. The study mainly

employed univariate analysis. SPSS software was used to conduct descriptive statistics to establish association of BPO and cost efficiency, productivity and profitability. The chi square test was used to establish the statistically significant relationship of BPO and the three constructs used to evaluate the operational performance of South African mobile telecommunications industry. A Phi & Cramer's V test was also used to determine the strength of relationship between the variables. A preliminary descriptive analysis was used to find out cases of missing data and present socio-demographic analysis in meaningful format. The descriptive analysis was also done to gather the demographics of responses.

The descriptive statistics helped the researcher to identify the drivers and benefits of BPO and being numerical, will graphically summarize data and bring forth the underlying information on performance measures (Hair, Anderson, Tatham and Black, 2014). SPSS software Version 28.0 was used to analyze the data, which was based on deductive and descriptive statistics. This data was done in the form of a means for continuous variable (e.g. age) and frequencies for categorical data (e.g. qualifications). This was done to get to know the group we are dealing with.

Descriptive statistics (mean and standard deviations) were calculated for the research question on cost, productivity and profitability including risk of BPO and helps in making sense of the data that we gather by condensing and clearly exhibiting it (McKenzie, 2014). Results were illustrated by means of graphs, tables and plots. The purpose of the chi square test analysis was to predict changes in dependent variable (cost, productivity, profitability) in response to changes in independent variable (BPO). The chi square test was used to determine whether there was a statistically significant link between BPO implementation and the three factors.

To clarify the relationship between BPO (independent variable) and business performance using the three constructs which are cost, productivity and profitability (dependent variables) an inferential statistic in form of a chi square test was carried out. A correlation coefficient was adopted to quantify and depict the correlation, and it can inform us if the variables are positive or negative.



#### **4.10 RELIABILITY AND VALIDITY**

The researcher conducted a pre-test (pilot study) whereby 10 employees from the two (2) Mobile networks were given the questionnaire so as to refine the questionnaire, eliminate ambiguities in the manner in which research questions are crafted and improve its validity. The questionnaire pretesting was done to ascertain whether the questionnaire is well designed and capable to get all the data gathering objectives of the main survey.

The instrument content validity was established, as was the validity of the primary constructs of the study, which are cost, productivity, and profitability. Babbie, (2016) supports this procedure, defining "validity" as "the degree to which a study effectively measures what it claims to measure." Pilot testing, according to Rosnow and Rosenthal, (2012), is important for survey-based research because it ensures that questions are phrased correctly. It also ensures that there is no ambiguity about the meaning of a statement or question, and that leading questions (which may infer responses) are avoided.

The preliminary results from the pilot testing indicated that the instrument and questions were addressing the objective and research questions. All the 10 respondents answered all the questions and the preliminary results from the pilot test suggested that the adoption of BPO can result in the reduction of cost, improve productivity and profitability of the company

#### **4.11 ETHICAL CONSIDERATION**

Ethics can be defined as "what is or is not lawful to do. It may also be outlined as that which is in line with moral research procedures" (Crump, McDonnell, and Gureckis, 2013). In this study, the researcher ensured that principles of ethics are supported (Leedy and Ormrod, 2014, 2015) which include right to privacy, voluntary and informed consent, confidentiality and anonymity, informed consent and honesty are respected (Crump, McDonnell, and Gureckis, 2013). The process of ethical clearance as prescribed by the Human and Social Sciences Research Ethics Committee (HSSREC) of University of KwaZulu-Natal was followed and approval was granted before proceeding with the study. The researcher had to guard against the following types of harm:

#### **4.11.1 Right to Privacy**

This principle refers to an individual entitlement to confidentiality and privacy, which is a fundamental theory of ethics in research. For this reason, no names were included in the study.

#### **4.11.2 Voluntary and Informed Consent**

According to this principle, the researcher (as recommended by Leedy and Ormrod, 2014, 2015) communicated the content of the research and purpose to research participants. The research participants would be freely participated research, according to the researcher. To participate in the study, all individuals had to sign a consent form that was approved by the university. The participants were also told that the study had been approved by the organization.

#### **4.11.3 Confidentiality and Anonymity**

This principle assists the researcher to ensure that participants' confidentiality and anonymity is upheld. According to this principle, any identifying characteristics are removed from the information before it is widely disseminated. With reference to this research, the names of the participant would not be used for any other purpose and no information revealing their identity will be shared in any way.

#### **4.11.4 Informed consent**

According to the research, the participants were informed about the objective, benefits, nature and data gathering techniques used in the study. In addition, the researcher had to obtain permission from the management of the two mobile telecommunication firms for participants (workers) to participate.

#### **4.11.5 Honesty**

The researchers fully disclose unexpected results. The researcher attempted to generate the research findings in an absolute and honest manner, devoid of misrepresentation, exaggeration, or over claim.

#### **4.12 LIMITATIONS OF THE STUDY**

However, despite its contribution this study had number of limitations that may be noted: Time constraints for some respondents can force them to provide casual responses without evaluating the questions seriously because of their busy schedules of giving task accomplishments in the organization,

The study was confined to only companies in the South African telecommunications companies hence the results cannot be generalized to other sectors/industries, sample subjects are industry and country specific.

The reliability and validity of the research could be harmed by human error, the researcher is likely to face financial limitations insofar as travelling from province to province to collect the questionnaires from various branches of the company.

And lastly there might be reluctance of participants to take part in the study due to the belief that negative feedback may affect their careers.

#### **4.13 SUMMARY**

The research method that was adopted by the study were discussed in this chapter and how significant it is to draw up an appropriate and suitable research design and research approach if a researcher is to draw valid conclusions. It went on to highlight and explain how a descriptive design was used in this quantitative study, as well as how data was collected using a structured questionnaire from 210 participants, who included engineers, technicians, assembly operators, project managers, finance and accounting officials, sales and marketing executives and procurement executives from the two mobile telecommunication companies. The research paradigm was chosen to be positivism. The target population, sample strategy and sample size were all discussed, as well as the data collection process, data analysis and validity. The ethical difficulties and study constraints were also discussed in detail in this chapter. The following chapter focused on the data analysis and findings, as well as a discussion of the results in relation to the research objectives or questions.

## **CHAPTER 5: PRESENTATION OF RESULTS AND DISCUSSION**

### **5.1 INTRODUCTION**

The finding of the study and discussions are presented in this chapter. The data was appropriately coded in STATA program. Analysis, using descriptive statistics commands, was also carried out in the same program. The study mainly employs univariate analysis. A range of results presentation techniques were used such as normal bar graphs, stacked bar graphs, pie charts, flow charts and tables. The chapter has eleven sections. The statistically significant relationship between BPO (independent variable) and cost efficiency, productivity and profitability (dependent variables) among mobile telecom operators was also examined using a Chi square statistical analysis. A Phi & Cramer's V test was also used to determine the strength of relationship between the variables.

The first section provides a sample summary in form of participants' socio-demographic characteristics. Here, a table summarizing participants' age, gender, period within the organization, education level and departments they belong to is provided. Two hundred and ten (210) participants who comprise of middle and senior managers from two mobile telecommunication companies were drawn from ten departments constitute the sample of the study. Since the study aim is to propose a framework to evaluate the impact of BPO on the operational performance of the South African mobile telecommunication companies, the study objectives focused on the drivers of BPO, risks associated with BPO and three performance metrics (productivity, cost efficiency, profitability). The second section of the chapter identifies the activities or services that a commonly outsourced by the organizations. About ten of these commonly outsourced services are identified and their frequencies as determined by the number of participants who confirmed their outsourcing are documented.

With reference to the third section of the chapter, participants' perceptions on the primary reasons for outsourcing are reported. About fifteen of these reasons or drivers are proposed to the participants and the participants have to, using a 5-point Likert scale, express their degree of agreement with the existence of such a driver in the

company. A table that shows the percentage distribution for each driver, together with bar graphs per driver, are provided.

The fourth section identifies ten risks or challenges that are associated with the BPO in the companies under study. A table that shows the frequency of existence of such risks is used to give a summary of the risks. A stacked bar graph is also used for pictorial presentation of these common risks. Section five turns to cost efficiency performance metric and participants' perceptions with regards to a range of sub-constructs of this performance are reported. The perceptions of the participants were rated on a 5-point Likert scale that ranges from strongly disagree to strongly agree. Here, a table and bar graphs are used to present the results of these perceptions. Related to cost efficiency performance metric is the range of cost savings, expressed in percentages, because of the BPO and the time to realization of the cost savings. Section six gives a discussion of these ranges of cost savings and time to realization using tables and pie charts.

The seventh section focuses on the productivity performance metric and similarly captures the perceptions of the participants with regards to this metric on a 5-point Likert scale. Results for these perceptions are provided in form a table and a number of bar graphs. The eighth section gives turnover realized as a result of improvement in productivity and results presented in form a table and a stacked bar graph. Section nine employs the 5-point likert scale to assess the perceptions of participants with regards to the profitability performance metric. The sub-constructs of this metric are also presented in the table and bar graphs.

Section ten provides a detailed discussion of proposed cost, productivity and profitability BPO performance framework. This discussion resulted in the development of the CPP framework. The section draws from other sections in order to build up this framework. The final section gives a thorough discussion of the results obtaining in the study. This discussion is organized by the objectives of the study in order to clearly show how much these objectives were addressed by the exercise. Together, these sections provide a clear picture on the sample characteristics, services outsourced, participants' perceptions with regards to performance metrics, the proposed BPO performance measurement framework and the extent to which the study objectives were addressed.

## 5.2 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE SUBJECTS

In Table 5.1, a profile of the subjects is provided in order to have an idea about their age, gender, education, years of experience and departments they are attached.

Table 5. 1 Demographic characteristics of the respondents

Characteristic		Percentage (%)	Sample size (n)
Age	20 – 30	0.48	210
	31 – 40	30.48	
	41 – 50	60.48	
	51 – 60	7.14	
	60 <sup>+</sup>	1.43	
	<i>Total</i>	<b>100.00</b>	
Gender	Male	54.76	210
	Female	40.95	
	Prefer not to answer	4.29	
	<i>Total</i>	<b>100.00</b>	
Period workingfor the organization	<5 years	3.81	210
	6 -10 years	51.43	
	11 - 15 years	25.71	
	16 - 20 years	19.05	
	21 - 25 years	0.00	
	25 <sup>+</sup> years	0.00	
	<i>Total</i>	<b>100.00</b>	
Highest qualification	Matric	0.00	210
	Certificate	0.00	
	Diploma	11.43	
	Degree	41.43	
	Masters	43.33	
	PhD	3.81	
	<i>Total</i>	<b>100.00</b>	
Department in the organization	Accounts/Finance	10.00	210
	Human Resources	7.14	
	Engineering	11.43	
	Production	10.95	
	IT	12.38	
	Sales &Marketing	9.52	
	Procurement	10.00	

	Research & Development(R&D)	10.48	
	Logistics	9.05	
	Project Managers	9.05	
	<i>Total</i>	<b>100.00</b>	

As shown in Table 5.1, six in every ten of the sample subjects are in the age range of 41 to 50 years and three in every ten of the sample subjects are in the age range of 31 to 40 years. The middle age group dominates in the sample. About 55% (41%) are males (females).

Half of the sample has been working for the company for a period of 6 to 10 years, a quarter for a period of 11 to 15 years and a fifth for a period of 16 to 20 years. Its clear that the study subjects have substantial experience with the company and are thus well-informed to comment about the activities of the company.

The subjects in the sample have a minimum of a diploma (11%) in terms of education attainment. While about 41% of the subjects hold a degree, about 47 percent holds a postgraduate degree, where 43% have a Masters degree and 4% have a PhD. Subjects' experience and education level put them at a good position to participate in this study project that seeks to understand outsourcing issues by the company.

Subjects were drawn from ten departments and each department is reasonably represented such that the least represented department contributes about 7% (Human Resources) and the most represented department contributes about 12% (IT).

### **5.3 ACTIVITIES OUTSOURCED BY THE ORGANIZATION**

The study identified various activities or services outsourced by the mobile telecom operators. A range of activities or services were listed upfront and the subjects have to confirm whether the organization is involved in the outsourcing of such a service. The list of the services was informed by the literature review. Table 5. 2 provide the percentage of subjects who confirmed the outsourcing of the service.

Table 5. 2 Activities and Services outsourced by the organisation

<b>Activity/service</b>	<b>Subjects confirming Outsourcing (%)</b>	<b>Sample size (n)</b>
Spare parts management/Inventory management & operation	97.62	210
Assembly operations and maintenance of the base stations of mobile network	92.86	210
Building and managing network infrastructure(maintenance)	100.00	210
Property/Facility management	56.19	210
Monitoring the mobile network on capacity overload and breakdowns	96.19	210
Manufacturing of mobile network equipment, Handsets	95.24	210
Manufacturing of hard software components and resolving software problems	84.76	210
Network roll-out and management	100.00	210
Fleet management	84.29	210
Sales/Marketing	36.67	210
Other	0.47	210

As is shown in Table 5.2, outsourcing is very common in these mobile telecom operators (organization) with a substantial number of subjects confirming the outsourcing of the service. All the 210 subjects from the two mobile telecom companies responded to the question. Those highly outsourced services include building and managing network infrastructure (100%), network roll-out and management (100%), spare parts management (97%), monitoring mobile network on capacity overload and breakdowns (96%), manufacturing of mobile network equipment (95%) and assembly operations and maintenance of the base stations of mobile network (92%). Services such as manufacturing of hard software components and resolving software problems (84%) and fleet management (84%) are also highly reported as being outsourced. Just above half of the subjects (56%) reported that property/facility management is also outsourced while a mere 36% reported the outsourcing of sales or marketing. See Figure 5.1 below for the illustration



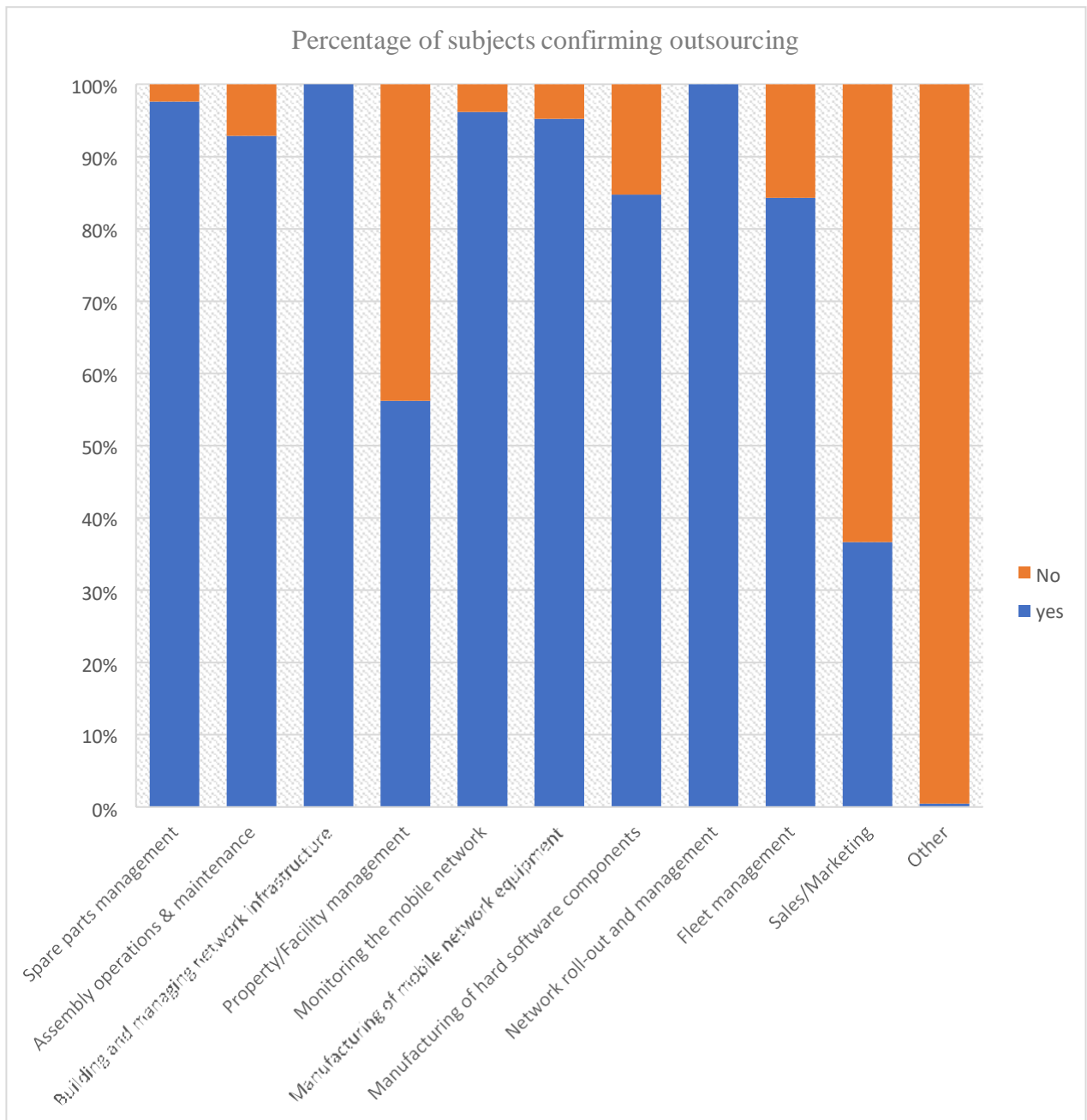


Figure 5. 1 Percentage of subjects confirming outsourcing

Except for the property management and sales or marketing, all the other identified services are reported as outsourced and highly so.

The findings of this current study reflect that majority of the participants alluded that there are many activities and services that the mobile telecom operators outsource and supply chain practitioners should consider these and are to be reflected in the new proposed CPP framework.

#### 5.4 SUBJECTS' PERCEPTIONS ON THE PRIMARY DRIVERS OF BPO IN THE ORGANIZATION

Research objective 1.1 of the study is to identify the drivers of BPO in the mobile telecom companies. Using a 5-point Likert scale ranging from strongly agree to strongly disagree, 210 subjects from the two mobile telecom operators were asked to indicate the extent to which they agree with the fifteen identified possible primary reasons or drivers of BPO.

Table 5. 3 Perceptions on the primary drivers of business process outsourcing

Primary reasons and drivers of BPO		Percentage on Likert scale	Sample size (n)
Reduction in capital investment thereby freeing up limited capital funds more available for core areas (Financial driver)	Strongly agree	14.76	210
	Agree	85.24	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
Company can gain access to newer or latest technology or access to world class capabilities	Strongly agree	99.52	210
	Agree	0.00	
	Don't know	0.48	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
Company can have access to unique resources, skills and talents	Strongly agree	99.52	210
	Agree	0.00	
	Don't know	0.48	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is cost saving/reduction (Cost driver)	Strongly agree	3.81	210
	Agree	58.57	
	Don't know	2.38	
	Disagree	32.86	
	Strongly disagree	2.38	
	<b>Total</b>	<b>100.00</b>	

Company can benefit from increase competitiveness	Strongly agree	85.24	210
	Agree	14.76	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
Company can focus on core competencies or business (Organisational driver)	Strongly agree	85.24	210
	Agree	14.76	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
Company can develop a relationship with the outsourced service provider (Relationship driver)	Strongly agree	19.05	147
	Agree	80.95	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
Company will improve on return on assets	Strongly agree	31.43	210
	Agree	10.95	
	Don't know	57.62	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
Company can improve operating efficiency through handling varying demand due to economies of scale	Strongly agree	0.95	210
	Agree	99.05	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
Company can provide an alternative to building the capability inside	Strongly agree	56.19	210
	Agree	43.81	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
To improve profitability (Revenue driver)	Strongly agree	55.71	210
	Agree	44.29	
	Don't know	0.00	

	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
Company can improve productivity through operational efficiency	Strongly agree	100.00	210
	Agree	0.00	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
Focus on enablers of business growth (Revenue driver)	Strongly agree	0.00	210
	Agree	100.00	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
Achieve competitive advantage by quality improvement (Improvement driver)	Strongly agree	8.10	210
	Agree	91.90	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
Company outsource due to politically-driven agenda	Strongly agree	5.71	210
	Agree	11.90	
	Don't know	72.38	
	Disagree	10.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	

In three of the fifteen identified possible reasons, all or almost all subjects strongly agreed with the assertion that they are the reasons for BPO. These reasons are that the company can gain access to newer or latest technology or access to world class capabilities (99.52%); the company can have access to unique resources, skills and talents (99.52%), and the company can improve productivity through operational efficiency (100%). In nine of the fifteen identified possible reasons, subjects perceived that they at least agree that such are reasons. The reasons perceived as such are that BPO leads to reduction in capital investment thereby freeing up limited capital funds more available for core areas (financial driver) (strongly agree = 14.76% and

agree = 85.24%); due to BPO, company can benefit from increase competitiveness (strongly agree = 85.24% and agree = 14.76%); BPO leads to company focusing on core competencies or business (Organisational driver) (strongly agree = 85.24% and agree =14.76%); as a result of BPO, the company can develop a relationship with the outsourced service provider (Relationship driver) (strongly agree = 19.05% and agree =80.95%); BPO leads to company improving operating efficiency through handling varying demand due to economies of scale (strongly agree = 0.95% and agree =99.05%); with BPO, company can provide an alternative to building the capability inside (strongly agree = 56.19% and agree =43.81%); BPO is aimed to improve profitability (Revenue driver) (strongly agree = 55.71% and agree =44.29%); BPO leaves company to focus on enablers of business growth (Revenue driver) (agree = 100%), and BPO helps company to achieve competitive advantage by quality improvement (Improvement driver) (strongly agree = 8.10% and agree = 91.90%). Among these reasons are financial drivers, organisational drivers, relationship drivers, revenue drivers and improvement drivers.

In the remaining three cases of these fifteen identified possible drivers, there is some variation beyond agree or strongly agree. For BPO as a cost driver, slightly above a third (35.24%) do not agree, strongly or otherwise, with the fact that outsourcing can drive costs down. However, close to a third (62.38%) either agree or strongly agree with BPO as cost reduction driver. While 17.61% either agree or strongly agree with BPO being politically driven, 72.38% felt that they do not have knowledge of such. On whether BPO improve the company's return on assets, just above 40% agree with that assertion while the remaining closet 60% do not have that knowledge.

It is clear to see that almost all the fifteen identified possible reasons or drivers of BPO are perceived positively by the subjects. In only one case is a situation where some subjects have negative perception about the identified reason of BPO (i.e. cost saving/reduction).

The findings of this current study reflect that majority of the participants alluded that there are many drivers that triggers the mobile telecom operators to embark on BPO and supply chain practitioners should consider these and are to be reflected in the new proposed CPP framework.

## 5.5 RISKS, CHALLENGES AND DISADVANTAGES OF BUSINESS PROCESS OUTSOURCING

Research objective 1.2 of the study is to identify the risks, challenges and disadvantages encountered by the mobile telecom companies in adopting BPO. Business process outsourcing (BPO) can be a source of risks and challenges in the organization. Studysubjects from the two mobile telecom companies were asked to indicate whether some selected risks and challenges were experienced in the organization as a result of BPO.

Table 5. 4 Risks, challenges and disadvantages of business process outsourcing

<b>Risks, challenges and disadvantages</b>	<b>Subjects confirming the item (%)</b>	<b>Sample size (n)</b>
There is potential loss of control over key/critical functions e g to reputation, if ethical issues arise (loss of control)	100.00	210
Company may experience risk of "lock in" to under-performing service provider (risk of lock-in)	31.90	210
Difficulty of ensuring service quality and consistency from the service provider (service quality insurance difficulty)	100.00	210
There is potential loss of in-house expertise, knowledge in the service area which may be required in future (in-house expertise potential loss)	100.00	210
Risk of loss of control over confidential data and intellectual property (confidential data control loss)	89.00	210
Added distance from the customer or end-user by having an intermediary service provider, may weaken external or internal customer communication and relationships with the company (loss of supply chain visibility)	94.76	210
Potentially higher cost of services from the service provider due to contractor high profit margins (contractor high profit margins)	100.00	210

Resistance from employee unions due to fear of job loss and change may lead to low morale and performance of the remaining employees (employee unions resistance)	97.14	210
Company may be unable to realize expected deliverables/benefits due to poor choice or selection of service providers (unable to realise expected deliverables)	99.52	210
Company may experience the risk of over dependence on a supplier (over dependence risk)	75.60	210

Notes: Percentage values provided are for number of subjects who confirmed that a risks, challenges and disadvantages exists in the organization as a result of BPO. See Figure 5.2 below for illustration

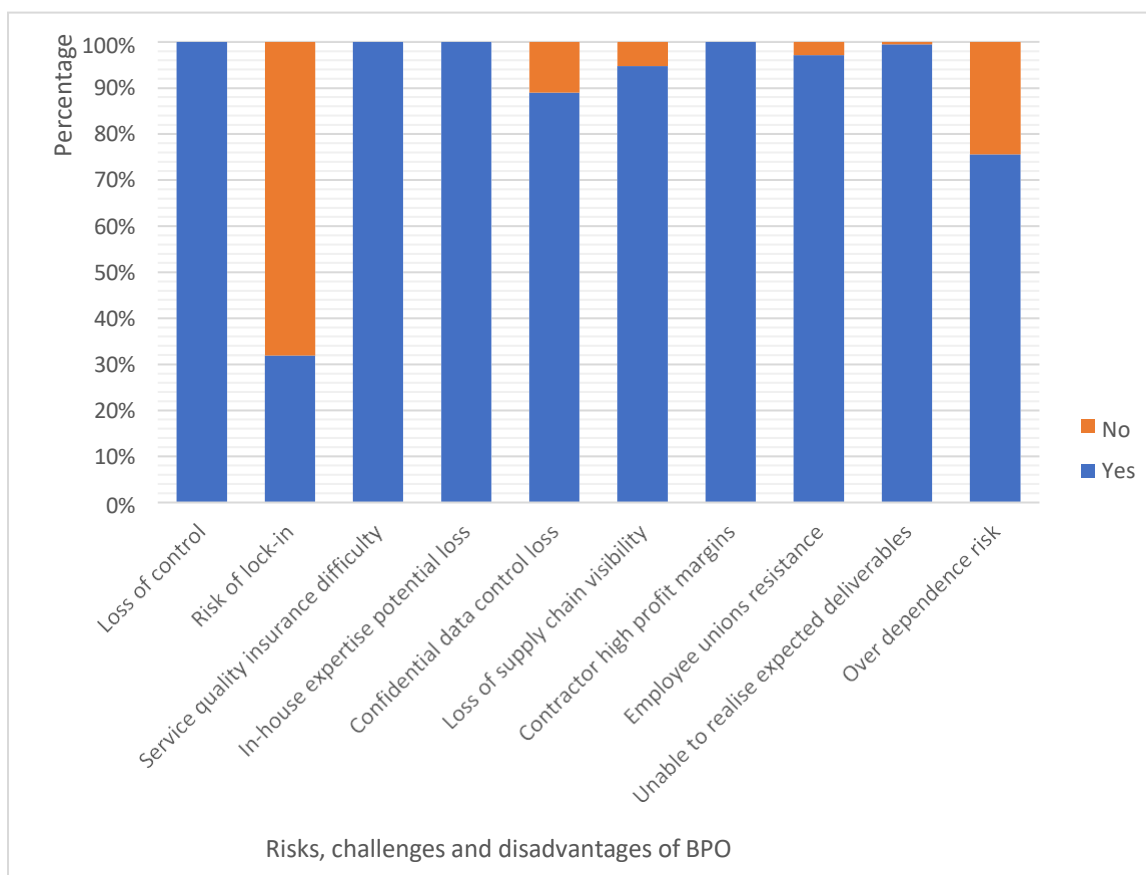


Figure 5. 2 Risks, challenges and disadvantages of business process outsourcing

As Table 5.4 and Figure 5.2 show, only the risk of lock-in (i.e. when company may experience risk of “lock in” to under- performing service provider) is uncommon (only 32% of the subjects agreed with the statement). All the other risks are considered to exist in the organisation by the subjects with percentages ranging from 75% for overdependence risk to 100% for four risks (i.e. loss of control, service quality insurance difficulty, in-house expertise potential loss, and contractor high profit margin).

## **5.6 PERFORMANCE METRICS – COST EFFICIENCY PERCEPTION**

Research objective two (2) of the study is to determine whether BPO improves cost efficiency in the mobile telecom operators/ companies. Using a 5-point Likert scale ranging from strongly agree to strongly disagree, 210 subjects from the two-mobile telecom /operators/ companies were asked to indicate the extent to which they agree with the eight identified possible impact of BPO on cost efficiency. The results are illustrated by Table 5.5 below.



Table 5. 5 Performance metrics – Perceptions on how cost efficiency is impacted by BPO

Performance Metric		Percentage on Likert scale	Sample size (n)
There is reduction in labour cost after outsourcing	Strongly agree	81.43	210
	Agree	2.86	
	Don't know	0.00	
	Disagree	1.43	
	Strongly disagree	14.29	
	<b>Total</b>	<b>100.00</b>	
There is reduction in operational expenses/cost after outsourcing	Strongly agree	81.43	210
	Agree	0.00	
	Don't know	0.00	
	Disagree	18.50	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is lower total cost of ownership after outsourcing	Strongly agree	3.81	210
	Agree	10.00	
	Don't know	73.81	
	Disagree	12.38	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is reduction in capital investment after outsourcing	Strongly agree	1.43	210
	Agree	98.57	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is reduction in developmental cost after outsourcing	Strongly agree	5.24	210
	Agree	94.76	
	Don't know	0.00	
	Disagree	0.00	

	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is reduction in investment in research & development (R & D)	Strongly agree	99.52	210
	Agree	0.48	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is an elimination of the fixed cost of internal staff by moving the function to a supplier	Strongly agree	92.86	210
	Agree	7.14	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is an improvement in selling, general and administrative expenses	Strongly agree	54.76	210
	Agree	0.48	
	Don't know	44.76	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
Overall business process outsourcing improves cost efficiency	Strongly agree	5.52	210
	Agree	42.94	
	Don't know	51.53	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	

With reference to the above Table, out of the eight possible variables or sub constructs (performance metrics) on the perceptions on how cost efficiency is impacted by BPO all or almost all subjects strongly agreed with the assertion that BPO have an impact on the cost efficiency of the mobile telecommunication companies. Majority of the subjects supported the five possible sub constructs/variables by strongly agree that there is reduction in labour cost after outsourcing (81.43%), there is reduction in operational expenses/ cost after outsourcing (81.43%) there is reduction in investment in research & development(R & D), (99.52%), there is an elimination of the fixed cost of internal staff by moving the function to a supplier (92.86%) and lastly there is an improvement in selling, general and administrative expenses (54.76%) after

the implementation of BPO. The other subjects supported the two variables/sub constructs that agree on the assertion that mobile telecommunication companies' cost efficiency is affected by implementation of BPO. Two of the possible variables/ sub constructs are BPO leads to reduction in capital investment after outsourcing (agree= 98. 57%) and reduction in developmental cost after outsourcing (agree=94.76%).

In the remaining one case of these eight identified possible variable/sub-constructs, there is some variation for BPO as a cost efficiency improvement. Other subjects indicated to have no knowledge that there is lower total cost of ownership after outsourcing (don't know =73.81%). Overall the subjects indicated that they are not being sure whether overall business process outsourcing improves cost efficiency (dont know= 51. 53).

Overall however as indicated on Table 5. 5 the results /outcomes indicate a linkage on the implementation of BPO and reduction of cost or improvements in cost efficiency. Respondents overall agree with the perceptions that BPO improves cost efficiency. There is justification for the organization to adopt BPO.

It is clear to see that out of the eight identified possible sub constructs seven agree with the assertion that implementation of BPO positively affect cost efficiency of the mobile telecom operators. The results suggest that there is a linkage between the adoption of BPO and the improvement in cost efficiency. In only one case where the results/outcomes indicate that the subjects are not sure on the link between BPO and cost efficiency. The results suggest that overall the subjects agreed that implementation of BPO improves cost efficiency of the mobile telecom operators therefore improves the operational performance of the company.

The findings from the descriptive statistics of this current study reflect that majority of the participants alluded that there is an improvement in cost efficiency after BPO thereby improving the operational performance of the mobile telecom operators. This justifies the need for BPO implementation.

As indicated earlier the results suggest a clear relationship between the adoption of BPO and improvement in cost efficiency. The results suggest that overall the subjects agreed that implementation of BPO improves cost efficiency of the mobile telecom

operators. The inferential statistics in the form of the chi square and Phi & Cramer's tests were conducted to test the statistically significant relationship (correlation) between implementation of BPO and cost efficiency.

Below are the Chi square statistical analysis and Phi & Cramer's V test to support the above descriptive analysis.

### 5.6.1 Chi-Square statistical test for association between business process outsourcing and cost efficiency

To support the results or findings from the descriptive analysis above on the relationship between implementation of BPO and cost efficiency a chi square and Phi & Cramer's V test for strength of association was conducted.

Table 5.6 and 5.7 below enables the researcher to find out how likely is it that the variables are independent. The purpose of the Chi square test analysis was to predict changes in cost efficiency (dependent variable) in response to the effects of implementation of BPO (independent variable). To clarify whether there is statistically significant correlation between BPO (independent variable) and business performance using cost efficiency (dependent variables) a Chi square test and Phi & Cramer's V Test for strength of association was carried out. As alluded before the coefficient is used to quantify and represent the relationship and it can tell us whether the variables have a positive or negative correlation and whether the correlation is low, moderate, or high") (Zach ,2021). Below are the results of the chi square and Phi & Cramer's V test for strength of association of BPO and cost efficiency.

Table 5. 6 Showing chi Square statistical test for association between business process outsourcing (BPO) and cost-efficiency

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	22.326	4	.001
Likelihood Ratio	23.195	4	.001
Linear-by-Linear Association	7.113	1	.008
N of Valid Cases	210		

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 3.54.

Table 5. 7 Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	<b>.326</b>	.001
	Cramer's V	<b>.326</b>	.001
N of Valid Cases		210	

There is a significance association between implementation of BPO and improvement in cost-efficiency Statistically, [ p-value (**.001**) < (**0.05a**)]. Since the p-value of (**.001**) is less than the significance level of (**0.05**). This means that statistically there is a significant association between business process outsourcing (BPO) and improvement in cost-efficiency. According to McLeod (2019), if the p-value less than **0.05 (p < 0.05)**, indicates statistical significance association between business process outsourcing and cost-efficiency. Henceforth, this infers that, an adoption of business process outsourcing results to an improvement in cost-efficiency thereby improving the operational performance of the South African mobile telecommunications companies. Phi & Cramer's V test for strength of association (**.326**) indicates that, there is a moderate association and or effect between the variables.

The findings of both the descriptive statistics and chi square test of the current study reflect that majority of the participants alluded that there is an improvement in cost efficiency after BPO thereby improving the operational performance of the mobile telecom operators. This justifies the need for BPO implementation. This finding is aligned and complimented by the chi-square and the Phi & Cramer's V Test for strength of association results as depicted on table 5.6 and 5.7 above.

## 5.7 COST SAVINGS DUE TO BPO IN AN ORGANIZATION

As alluded to earlier, close to two thirds of the subjects agreed to reduction in costs as a result adopting BPO in organization. In the current study, Figure 5.3 (pie chart) below show, a range of percentages of cost savings were provided and subjects had to select from the range. The ranges of 6 to 10% and 11 – 15% dominate as there are close to 40% of the subjects in each category. Almost one fifth of the subjects also reported that cost savings can be as high as falling with the range of 21 to 25%.

The pie chart below illustrates the range of cost saving which is realized by the mobile telecom operators after the adoption of BPO. Most of the subjects (40%) indicated a

cost saving after adopting BPO and realize profits ranging from 11-15% and (38%) subjects indicated a range from 6-10% and (18%) subjects indicated a range from 21-25%. The results suggest that the mobile telecom operators start to realize cost saving of range between 11-15% after BPO. This also justifies why telecom operators adopt BPO.

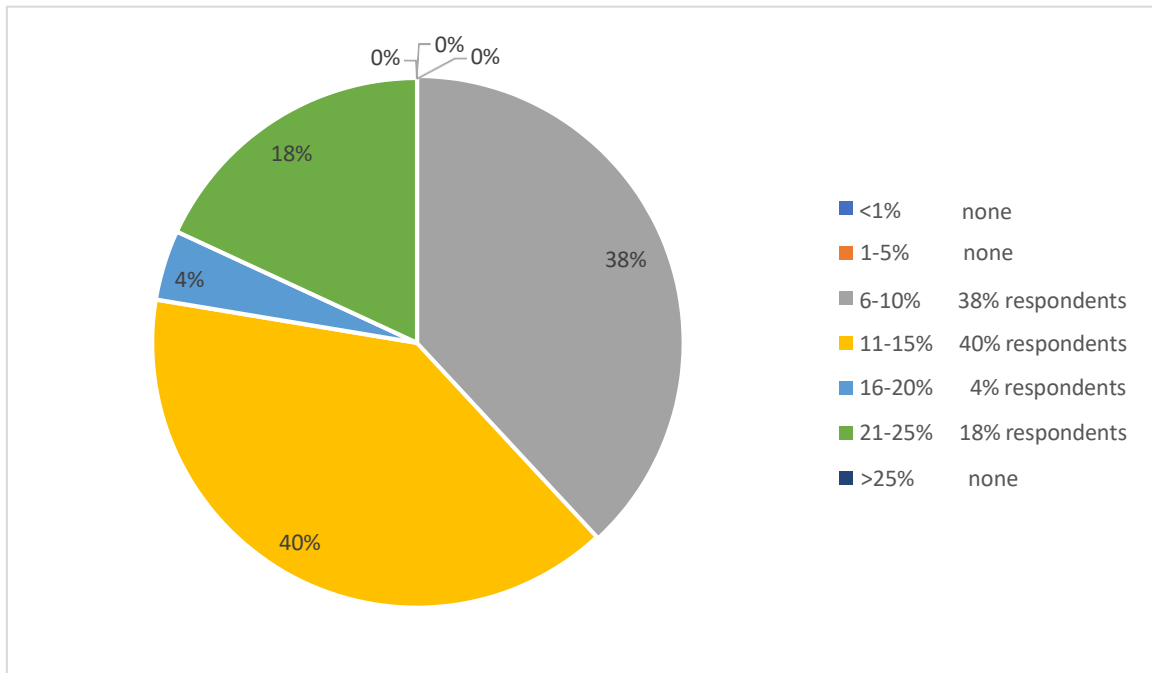


Figure 5. 3 illustrates the range of cost savings realized after BPO

The pie chart above depicts the range of cost savings realized after BPO. Given that all the subjects indicated that the cost savings are above 6%, there is justification for the organization to adopt BPO. Table 5.8 also support that these savings are realized as early as seven months after adopting BPO.

Table 5. 8 Period after which the organization realized cost savings

Time period	Percentage Frequency
1 - 6months	0.00
7 - 12 months	40.95
1 - 2years	45.71
> 2 years	13.33

The table 5.8 above illustrates the period when the mobile telecom operators realize cost savings after BPO. Most of the subjects (46%) indicated that there is cost saving after a period ranging from 1-2 years after adopting BPO by the mobile telecom companies and 40 % alluded a period from 7-12 months and lastly 13.33 % indicated a period ranging from above 2 years. The results suggest that most of the mobile telecom companies experience cost savings after 1-2 years after adopting BPO although the cost saving start to be experienced from 7-12 months. The results are supported by table 5.8 above. The results suggest that there is cost saving after BPO and realized as early as between 7-12 months hence justifying adopting BPO.

### 5.8 PERFORMANCE MEASUREMENTS ON THE INFLUENCE OF BPO ON PRODUCTIVITY

Research objective three (3) of the study is to ascertain whether BPO improves productivity in the mobile telecom operators/ companies. Using a 5-point likert scale ranging from strongly agree to strongly disagree, 210 subjects from the two-mobile telecom operators or companies were asked to indicate the extent to which they agree with the eight identified possible impact of BPO on productivity. The results are illustrated by Table 5.9 below.

Table 5. 9 Performance dimension/metrics – Perceptions on influence of BPO on productivity

Performance Measuremet		Percentage on Likert scale	Sample size (n)
There is an improvement in total revenue/ Sales(output) after outsourcing	Strongly agree	99.52	210
	Agree	0.48	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is an improvement of asset turnover after outsourcing	Strongly agree	0.00	210
	Agree	100.00	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
	Strongly agree	0.00	

There is an improvement in inventory turnover after outsourcing	Agree	100.00	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is an improvement in investing more in new technology after outsourcing	Strongly agree	0.00	210
	Agree	99.52	
	Don't know	0.48	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is an improvement in economies of skill after outsourcing	Strongly agree	99.52	210
	Agree	0.48	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is a reduction in customer response cycle time after outsourcing	Strongly agree	10.00	210
	Agree	8.57	
	Don't know	44.29	
	Disagree	37.14	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is an increase in market share after outsourcing	Strongly agree	8.10	210
	Agree	91.90	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is an improvement in process and employee productivity	Strongly agree	26.67	210
	Agree	73.33	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
Overall business process outsourcing increases productivity	Strongly agree	22.86	210
	Agree	77.14	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	



With reference to the above table out of the eight possible variables or sub constructs (performance metrics) on the perceptions on influence of BPO on productivity all or almost all subjects agreed with the assertion that BPO improves productivity of the mobile telecommunication companies. Majority of the subjects supported the five possible sub constructs/variables that agree on there is an improvement of asset turnover after outsourcing (100%), there is an improvement in investing more in new technology after outsourcing (99.52%), there is an improvement in inventory turnover after outsourcing (100%), there is an increase in market share after outsourcing (91.90%), there is an improvement in process and employee productivity (73.33%) Overall business process outsourcing increases productivity (agree= 77.14%).

The other subjects supported two variable/sub constructs (performance metrics) that strongly agree on the assertion that mobile telecommunication companies' productivity is affected by implementation of BPO. Two of the possible variables/ sub constructs are that BPO leads to an improvement in total revenue/ Sales (output) after outsourcing (strongly agree=99.52%) There is an improvement in economies of skill after outsourcing (strongly agree= 99.52%).

In the remaining case of these eight identified possible variable/sub-constructs, subjects who said that they are not being sure whether there is a reduction in customer response cycle time after outsourcing (don't know=44.21%).

Overall however as indicated on table 5. 9 the results /outcomes indicate a link on the implementation of BPO and improvement in productivity. Respondents overall agree with the perceptions that BPO improves productivity. There is justification for the organization to adopt BPO.

It is clear to see that out of the eight identified possible sub constructs seven agree with the assertion that implementation of BPO positively affect the productivity of the mobile telecom operators. The findings also suggest a clear linkage between adoption of BPO and improvement in productivity. Only one case where the results/outcomes indicate that the subjects are not sure on whether there is a reduction in customer response cycle time after the implementation of BPO. The results suggest that overall

the subjects agreed that BPO increases productivity of the mobile telecom operators therefore improves the operational performance of the company.

The findings of the descriptive statistics of this current study reflect that majority of the participants alluded that there is an improvement in productivity after BPO implementation, thereby improving the operational performance of the mobile telecom operators. This justifies the need for BPO implementation.

As indicated earlier the findings also suggest a clear linkage between adoption of BPO and improvement in productivity. The results suggest that overall the subjects agreed that BPO increases productivity of the mobile telecom operators. The inferential statistics in the form of the chi square and Phi & Cramer's tests were also conducted to test the statistically significant relationship (correlation) between implementation of BPO and productivity.

Below are the Chi square statistical analysis and Phi & Cramer's V test results to support the above descriptive analysis

#### **5.8.1 Chi Square statistical test for association between business process outsourcing (BPO) and productivity.**

To support the results or findings of the descriptive analysis above on the relationship between BPO and productivity, an inferential statistic in the form of a chi square test and Phi & Cramer's V test for strength of association was conducted.

Table 5.10 and Table 5.11 below enables the researcher to find out how likely is it that the variables are independent. The purpose of the Chi square test analysis was to predict changes in productivity (dependent variable) in response to the effects of implementation of BPO (independent variable). To clarify whether there is statistically significant relationship between BPO (independent variable) and business performance using productivity (dependent variable) a Chi square test and Phi & Cramer's V Test for strength of association analysis was carried out. The correlation coefficient is used to quantify and represent the relationship, and it can tell us whether the variables have a positive or negative correlation and whether the correlation is low, moderate, or high") (Ravid, 2014).

Below are the results of the chi square and Phi & Cramer's V test for strength of association of BPO and productivity.

Table 5. 10 Chi Square statistical test for association between businessprocess outsourcing (BPO) and productivity.

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	14.796 <sup>a</sup>	4	<b>.005</b>
Likelihood Ratio	14.190	4	.007
Linear-by-Linear Association	1.416	1	.234
N of Valid Cases	210		
a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 2.29.			

Table 5. 11 Symmetric Measures for association between BPO and productivity.

<b>Symmetric Measures</b>			
		Value	Approximate Significance
Nominal by Nominal	Phi	<b>.265</b>	.005
	Cramer's V	<b>.265</b>	.005
N of Valid Cases		210	

Statistically, [ p-value (**.005**) < (**0.05a**)]. Since the p-value of (**.005**) is less than the significance level of (**0.05**). This means that statistically there is a significant association between implementation of business process outsourcing (BPO) and increase in productivity. According to Saunders et al (2019) when the p-value is less than the significance level (**0.05**) shows enough evidence for a statistical significance. Phi & Cramer's V test for strength of association (**.265**) indicates that, there is a moderate association and or effect between the variables. Gagnier & Morgenstern (2017) indicated that an estimated value **0.20 - 0.40** is moderate effect or association. According to Zach (2021), the Cramer's V test is designed to determine whether the difference is large enough to declare the test is statistically significant.

The findings of both the descriptive statistics and chi square tests of the current study reflect that majority of the participants alluded that there is an increase in productivity after BPO thereby improving the operational performance of the mobile telecom operators. This justifies the need for BPO implementation. This finding is aligned and complimented by the chi-square results as depicted on table 5.10 and 5.11 above.

Table 5. 12 below show, a range of percentages of realization of improvement in productivity after BPO, were provided and subjects had to select from the range. The ranges of 6 to 10% dominated as 80% of the subjects alluded 6 to 10% is the range which the mobile telecom operators realize an improvement in productivity.

Table 5. 12 Range of turnover realized from BPO

Range	Percentage Frequency
< 1%	0.00
1 - 5%	0.00
6 - 10%	88.10
11 - 15%	0.00
16 - 20%	0.00
21 - 25%	3.81
> 25%	8.10

The 5.12 table above illustrates the range which the mobile telecom operators start to realize the improvement in productivity after adopting BPO. Most of the subjects (88%) indicated that improvements in productivity after adopting BPO ranges from 6-10% and 3.81% indicated the range of 21-25% and lastly 8.10 % indicated improvements of productivity to range above 25%. The results suggest that the mobile telecom companies experience an improvement in productivity within the range between 6-10% after adopting BPO. The results are supported by table 5. 12. Given that 88% of the subjects indicated that the mobile telecom operators/ companies will improve productivity within the range of 6% to 10% after adopting BPO. There is justification for the organization to adopt BPO. Table 5.12 above also support that these improvement in productivity.

Table 5. 13 Period after which the organization realized turnover due to BPO

Time period	Percentage frequency
1 - 6months	0.00
7 - 12 months	19.05
1 - 2years	80.95
> 2 years	0.00

The 5.13 table above illustrates the period in which the mobile telecom operators starts to realize an improvement in productivity after BPO. Most of the subjects (81%) indicated an improvement in productivity after adopting BPO and ranges from period 1-2 years and 19.05 % indicated a period ranging from 7-12 months. The results suggest that the mobile telecom operators/ companies experience an improvement in productivity within 1-2 years after adopting BPO. The adoption of BPO is justified because the productivity improvements are realized starting from the range of 7-12 months. The results are supported by table 5. 13 above.

Given that 81% of the subjects indicated that the mobile telecom operators/ companies improve productivity within the period ranging from 1-2 years after adopting BPO. Table 5.13 above also support that these improvement in productivity. The improvements in productivity are realized after a period of 1-2 years which signifies a long period of time. The results suggest that although there are improvements in productivity after BPO but are realized after a period of 1-2 years which signifies a long period of time but improvement in productivity would have been realized already between 7-12 months hence justifies the adoption of BPO.

## 5.9 PERFORMANCE METRICS ON PROFITABILITY PERCEPTIONS

Research objective four (4) of the study is to establish whether BPO increase profitability in the mobile telecom operators/ companies. Using a 5-point likert scale ranging from strongly agree to strongly disagree, 210 subjects from the two-mobile telecom /operators/ companies were asked to indicate the extent to which they agree with the eight identified possible impact of BPO on productivity. The results are illustrated by Table 5.14.

Table 5. 14 Performance metrics – Perceptions on influence of BPO onprofitability

Performance Metric		Percentage on likert scale	Sample size (n)
There is an improvement on return on assets(ROA) after outsourcing	Strongly agree	0.00	210
	Agree	100.00	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is an improvement on net profit marginafter outsourcing	Strongly agree	4.29	210
	Agree	8.10	
	Don't know	82.86	
	Disagree	4.76	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is an increased sales price after outsourcing	Strongly agree	0.00	210
	Agree	100.00	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is an improvement/Increased return that the firm's owners receive from their investments after outsourcing (ROI)	Strongly agree	0.00	210
	Agree	100.00	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is a specialization & economies of scaleafter outsourcing	Strongly agree	100.00	210
	Agree	0.00	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is an improvement in the growth of revenue after outsourcing	Strongly agree	100.00	210
	Agree	0.00	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	

	<b>Total</b>	<b>100.00</b>	
There is cash generation by transferring assets to the service provider	Strongly agree	50.48	210
	Agree	49.52	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
There is an improvement in return on equity(ROE)	Strongly agree	55.24	210
	Agree	44.76	
	Don't know	0.00	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	
Overall business process outsourcing increases profitability	Strongly agree	99.52	210
	Agree	0.00	
	Don't know	0.48	
	Disagree	0.00	
	Strongly disagree	0.00	
	<b>Total</b>	<b>100.00</b>	

With reference to the above Table 5.14 out of the eight possible variables or sub constructs (performance metrics) on the perceptions on influence of BPO on profitability all or almost all subjects strongly agree and others agreed with the assertion that BPO increases profitability of the mobile telecommunication companies. Majority of the subjects supported the five possible sub constructs/variables on strongly agree that there is a specialization & economies of scale after outsourcing (strongly agree=100%), there is an improvement in the growth of revenue after outsourcing (strongly agree=100%), there is cash generation by transferring assets to the service provider (strongly agree=50.48%), there is an improvement in return on equity (ROE) (strongly agree=55.24%). Overall business process outsourcing increases profitability (strongly agree=99.52%).

The other subjects supported the three variable/sub construct that agree on the assertion that mobile telecommunication companies' profitability is affected by implementation of BPO. Three of the possible variables/ sub constructs are that there is an improvement on return on assets (ROA) after outsourcing (100%), there is an

increased sales price after outsourcing (100%), and that there is an improvement/Increased return that the firm's owners receive from their investments after outsourcing (ROI) (100%).

In the remaining case of these eight identified possible variable/sub-constructs, subjects who indicated that they are not being sure whether there is an improvement on net profit margin after outsourcing (don't know=82.86%).

Overall however as indicated on Table 5.14 the results /outcomes indicate a linkage on the implementation of BPO and increase in profitability. Respondents overall agree with the perceptions that BPO increases profitability. There is justification for the organization to adopt BPO.

It is clear to see that out of the eight identified possible sub constructs (performance metrics) seven of those agree with the assertion that implementation of BPO positively affect the profitability of the mobile telecom operators. The results suggest that there is a clear linkage between the adoption of BPO and increase in profitability. Only one case where the results/outcomes indicate that the subjects are not sure on whether there is an improvement on net profit margin after outsourcing. The results suggest that overall the subjects agreed that BPO increases profitability of the mobile telecom operators therefore improves the operational performance of the company.

The findings of the descriptive statistics of this current study reflect that majority of the participants alluded that there is an increase in profitability after BPO thereby improving the operational performance of the mobile telecom operators. This justifies the need for BPO implementation.

As indicated earlier the results suggest that there is a relationship between adoption of BPO and increase in profitability. The results suggest that overall the subjects agreed that BPO increases profitability of the mobile telecom operators. The inferential statistics in the form of the chi square and Phi & Cramer's tests were also conducted to test the statistically significant relationship (correlation) between BPO and profitability. The purpose of the Chi square test analysis was to predict changes in profitability (dependent variable) in response to the effects of implementation of BPO (independent variable).

Below are the results of the inferential statistics as depicted on Table 5.15 and 5.16



Table 5:15 Chi Square statistical test for association between businessprocess outsourcing (BPO) and Profitability

Table 5. 15 Chi-Square Tests

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16.528 <sup>a</sup>	4	<b>.002</b>
Likelihood Ratio	16.050	4	.003
Linear-by-Linear Association	7.975	1	.005
N of Valid Cases	210		

a. 1 cell (10.0%) have expected count less than 5. The minimum expected count is 4.29.

Table 5. 16 Symmetric Measures for association between BPO and Profitability

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	<b>.281</b>	.002
	Cramer's V	<b>.281</b>	.002
N of Valid Cases		210	

The chi square test conducted found a significant association between implementation of BPO and profitability. Statistically, [ p-value (**.002**) < (**0.05a**)]. Since the p-value of (**.002**) is less than the significance level of (**0.05**), this means that statistically there is a significant association between implementation of business process outsourcing (BPO) and increase in profitability. Table 5.16 shows that Phi & Cramer's V test for strength of association (**.281**) also indicates that, there is a moderate association and or effect between the variables.

There is sufficient evidence to infer that there is a statistically significant correlation between implementation of BPO and increase in profitability of the mobile South African telecommunications operators or companies. With reference to the current study an implementation of BPO increases the profitability of operations in mobile Telecom operators.

The findings of both the descriptive statistics and chi square test of the current study reflect that majority of the participants alluded that there is an increase in profitability after BPO thereby improving the operational performance of the mobile telecom

operators. This justifies the need for BPO implementation. This finding is aligned and complimented by the chi-square and Phi and Cramer’s V statistical test results above.

**5.9.1 The range of profits which is realized by the mobile telecom operators after the adoption of BPO.**

The pie chart Figure 5.4 below illustrates the range of profits which is realized by the mobile telecom operators after the adoption of BPO. Most of the subjects (54%) indicated an increase in profitability after adopting BPO and realize profits ranging from 6-15% and (18.57 %) subjects indicated a range from 1-5% and (18.10%) subjects indicated a range from 16-20%. The results suggest that the mobile telecom operators realize an increase in profitability of 6-10% after BPO. This also justifies why telecom operators adopt BPO.

The pie chart below illustrates the range of profits which is realized by the mobile telecom operators after the adoption of BPO.

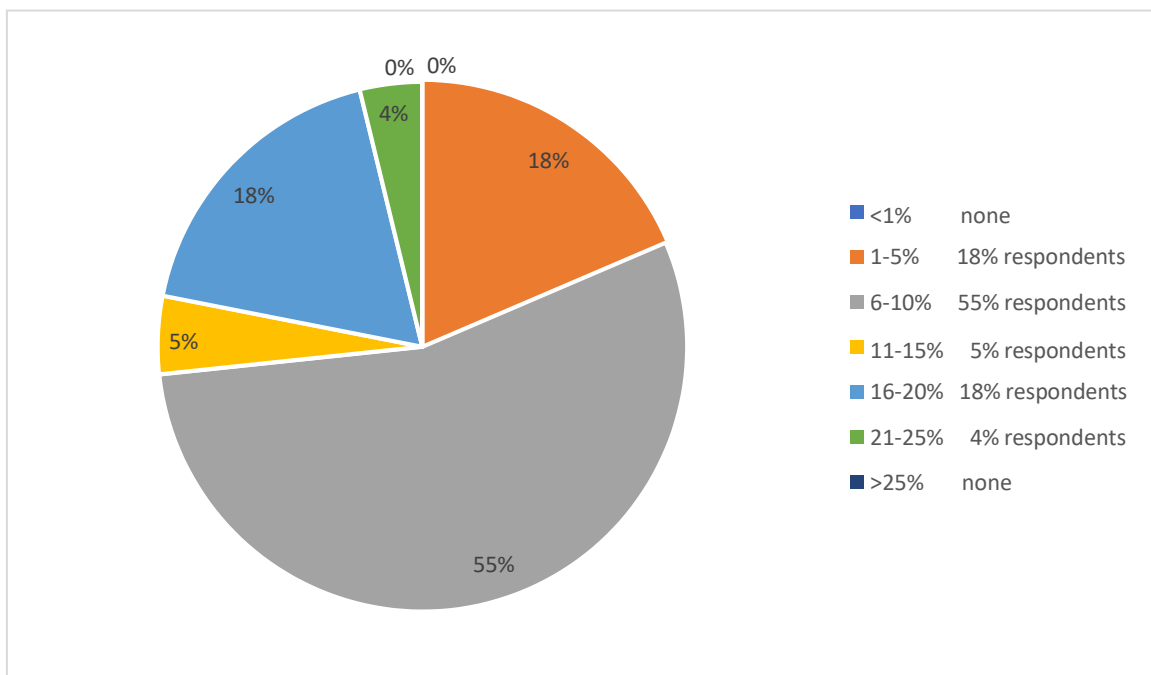


Figure 5. 4 Range of profits realized from BPO efforts

Given that 55% of the subjects indicated that the mobile telecom companies will realize profitability within the range of 6- 10% after adopting BPO. There is justification for the organization to adopt BPO. Figure 5.4 above also support that these increase in profitability.

Table 5. 17 Period after which the organization realized profits due to BPO efforts

Time period	Percentage frequency
1 - 6months	0.00
7 - 12 months	44.76
1 - 2years	55.24
> 2 years	0.00

Table 5.17 illustrates the period in which the mobile telecom operators starts to realize profits after the adoption of BPO. Most of the subjects (55.24%) indicated that an increase in profitability after adopting BPO ranges from 1-2 year and 44.76% indicated the range of 7-12 months. The results suggest that the mobile telecom companies experience an increase in profitability from 1-2 years but the profits will already be realized within 7-12 months hence the justification for BPO the results are supported by the above Table 5.17 that the mobile telecom companies will realize an increase in profitability within the period ranging from 1-2 years after adopting BPO. Table 5 .17 above also support that these increase in profitability. The results suggest that although there is increase in profitability after BPO but the profits are realized after a period of 1-2 years which signifies a long period of time but however within 7-12 months profits will be realized hence justifies adoption of BPO.

#### **5.10 PROPOSED COST, PRODUCTIVITY AND PROFITABILITY (CPP) BUSINESS PROCESS OUTSOURCING PERFORMANCE MEASUREMENT FRAMEWORK**

Research objective five (5) of the study is to suggest a framework that can evaluate the impact of BPO on mobile telecommunication industry using cost efficiency, productivity and profitability as the performance measurements.

Below is the proposed framework which included the quantitative performance metrics to provide more objective evaluations of a mobile telecommunications industry of BPO impact on cost, profitability and productivity dimensions .The framework extends the contribution of the work done by various authors like Patil and Wongsurawat,(2015); Khaki and Rashidi, (2012); Kremic et al., (2006); Naz et al., (2013); Mclvor ,(2016) and the outsourcing framework by Sandhu et al., (2017) who did not include quantitative performance measurements in their frameworks. The other limitations of these

frameworks were their lack of addressing the linkage between BPO and cost, productivity and profitability.

The suggested new (developed) conceptual framework was to be used to evaluate the impact of BPO on the operational performance of the mobile telecommunications industry using cost, productivity and profitability as the performance metrics. The conceptual framework afforded the telecommunications companies the opportunity to integrate performance measurement considerations into BPO processes and was able to establish the linkage between BPO and operational performance of the mobile telecom operators. Also included in the framework are the drivers and risks of implementation of BPO. The new proposed cost, productivity, and profitability (CPP) business process outsourcing performance measurement conceptual framework (conceptual model) is depicted below which bridges the gaps of the authors' frameworks by addressing the issues of BPO measurements in the south African 's mobile telecommunications companies, and the resulting effect (operational performance). See the proposed framework on Figure 5.5 below.

The findings from both the descriptive statistics and chi square test of this current study reflect that majority of the participants alluded that there is an improvement in cost efficiency, increase in productivity and increase in profitability after implementation of BPO thereby improving the operational performance of the mobile telecom operators. This result confirms that there is a statistically significant relationship between implementation of BPO and the three constructs (cost efficiency, productivity and profitability).

**5.10.1 Summary of the three inferential results: chi Square statistical test for association between business process outsourcing (BPO) and Profitability, cost-efficiency and profitability**

Table 5.18: showing Chi-Square Tests on relationship between BPO & Cost efficiency			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	22.326	4	.001

Likelihood Ratio	23.195	4	.001
Linear-by-Linear Association	7.113	1	.008
N of Valid Cases	210		
a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 3.54.			

Table 5.19: showing Chi-Square Tests on relationship between BPO & productivity

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	14.796 <sup>a</sup>	4	<b>.005</b>
Likelihood Ratio	14.190	4	.007
Linear-by-Linear Association	1.416	1	.234
N of Valid Cases	210		

b. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 2.29.

Table 5.20: showing Chi-Square Tests on relationship between BPO and profitability

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16.528 <sup>a</sup>	4	<b>.002</b>
Likelihood Ratio	16.050	4	.003
Linear-by-Linear Association	7.975	1	.005
N of Valid Cases	210		

b. 1 cell (10.0%) have expected count less than 5. The minimum expected count is 4.29.

These results from the inferential statistics above of the chi square tests and Phi & Cramer's V tests for strength of association suggest that there is a statistically significant relationship (correlation) between implementation of BPO and cost, productivity and profitability as reflected in the developed CPP framework as part of the business performance outcome. This signifies why mobile telecom operators implement BPO. The results on the chi square test illustrates statistically significant relationship (correlation) between BPO and cost efficiency, productivity and profitability are depicted on the developed CPP framework below. The CPP framework illustrates the positive relationship of the said variables. (See framework below).

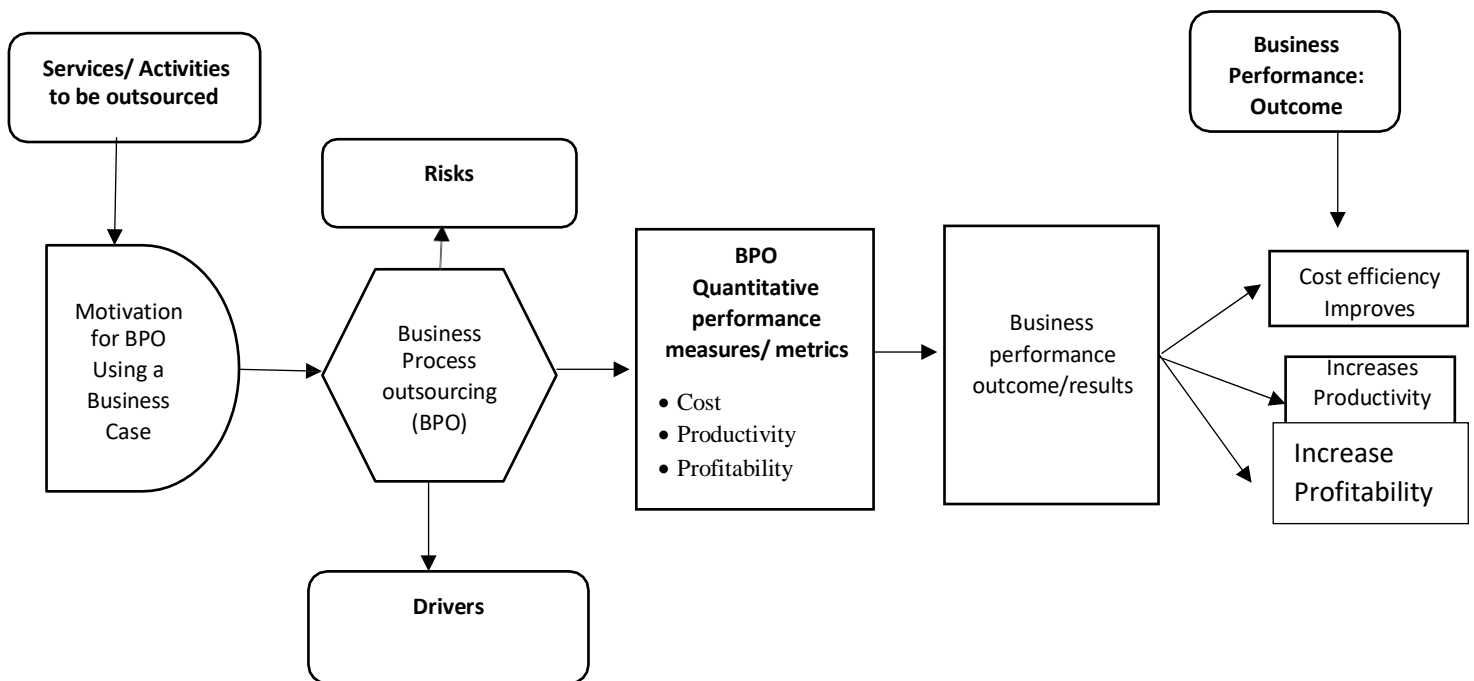


Figure 5. 5 Cost, productivity and profitability (CPP) business process outsourcing performance measurement framework

The research questions of this current research are more focused on post-performance results. The researcher, therefore, utilized a framework that helps show logical connections linking outsourcing choice to its results subsequently. The objectives were therefore developed while considering what motivates outsourcing, risks of BPO and whether BPO improves cost efficiency, improves profitability and productivity. The following are the results from the current study on the tangible benefits/outcome that result from BPO implementation and are indicated above and should be part of the developed conceptual framework on figure 5.5 above.

## 5.11 DISCUSSION OF RESULTS

The discussion of the findings from the questionnaire, focusing on linking the main results from literature review and key findings above from field work to form a foundation for a conclusion and recommendations were focused on in this section. Below are the findings from the quantitative study on evaluating the effects of BPO on the mobile telecom industry's operational performance in South Africa using cost profitability and productivity as the performance measurements? This resulted to the

development of the cost, productivity and profitability (CPP) framework above (Figure 5.5).

The findings are based on descriptive statistics as well as a chi square test. This study intends to empirically evaluate the impact of BPO on the company operational performance using cost-efficiency, productivity and profitability.

Below are the discussions of the results from the current study. The discussions are based on the research objectives/questions of the study.

#### **5.11.1 Objective 1.1: To determine the drivers of BPO**

The findings of the major drivers are briefly reviewed to understand BPO from mobile telecom operators/ organizational perspective were also discussed in this section. The current study suggests that, based on the respondents' views in the sample overall the key drivers are that there is a reduction in capital investment thereby freeing up limited capital funds available for the core areas, company can gain access to newer or latest technology or access to global competences, company can have opportunities for unique resources, skills and talents, there is cost saving/reduction(Cost driver) ,company can benefit from increase competitiveness, company can focus on core competencies or business (Organisational driver, and lastly company can develop relationship with the outsourced suppliers (Relationship driver).

The findings of the study reflected that majority of the participants alluded that there are different drivers that triggers the mobile telecom operators to embark on BPO. Managers should take into consideration the drivers and whether there are in line with the company goals. Below are the empirical studies supporting the finding

The above finding is aligned with the study by Sobinska and Willcocks, (2016) on the outsourcing management of IT in Poland: trends and performance. The motivation behind IT sourcing selections was described as allowing in-house concentrate on critical tasks, supplementing lack of own resources, lowering costs, and providing access to top professional services. The results are also aligned with another study by Ahmed, Ahmad, and Weinhardt, (2014) on the contracting out of services in the Telecommunication Industry: Case of Pakistan, which found that critical drivers met

by outsourcing in the telecommunication industry include cost reduction in day-to-day operations, capital expenditure optimization, flexibility and access to new technology.

The results are compatible with the empirical studies by Sandhu et al., (2017), on whether outsourcings always work? Crucial evaluation for project business success specified that companies embark on BPO as a result of business competition, technology advancement, production flexibility, customization, sources of innovation, knowledge transfer and quality assurance.

Complementing the above studies is the study by Patil and Patil (2014), on contracting out, with a special reference to telecommunication operations, supports the findings. The findings revealed that while cost management was initially the primary motivator for outsourcing, other motivations emerged over time, including risk sharing, the development of specialized skills and competencies, revenue sharing and the establishment of long-term strategic relationships.

The study by Ikerionwu, Edgar, and Gray, (2016) on the supplier development BPO-IT framework interviewees suggested that the reduction in service processing cost; maintaining the client's confidentiality; expanding the scope of the engagement; quick turnaround time delivery of SLA in a short space of time, competitive advantage and quality software that translates into quality services are some of the reasons for BPO. Similarly, Modarress et al., (2016) conducted a study with the goal of identifying the obstacles, benefits, risks, and motivations of petroleum businesses in the Persian Gulf when it comes to outsourcing strategy. The findings specified that while the petroleum companies are "faced with massive costs of operation that stem from the ageing infrastructure, human capital shortfall, incompetent disjointed business processes and lack of access to new technologies, contracting out strategy toward cost savings and the overt and covert resistance of management and employees are substantial barriers for the conception of continuous process.

Although some of the above empirical studies may not directly be linked to mobile telecommunications industry, lessons can be drawn from the studies that are of benefit to the current study. The above studies provide benchmarks with which the current



study can utilize. Findings indicated by above studies complement previous studies and are useful in the present study.

#### **5.11.2 Objective 1.2: To determine the Risks/disadvantages/challenges of BPO**

The findings of the major risks/disadvantages/challenges are briefly reviewed to understand BPO from the mobile telecom operators/ organizational perspective was discussed in this section. The current study suggests that, based on the respondents' views in the sample overall the key challenges/risk/disadvantages of BPO implementation by the mobile telecom operators include, potential loss of control over key/critical functions thus reputation and ethical issues arise, the company may be at risk of becoming "locked in" to an underperforming service provider, having trouble assuring service quality and consistency from the service provider, and maybe losing in-house skills and knowledge of services necessary for the future . The challenge of losing control over data privacy and intellectual property, as well as the additional distance between the client or end-user created by using an intermediary supplier of services, may hinder outside and in-house customer communication and interactions with the organization (loss of supply chain visibility), potentially higher cost of services from the service provider due to contractor high profit margins, resistance from employee unions due to fear of job loss and change may lead to low morale and performance of the remaining employees and company may be unable to realize expected deliverables/benefits due to poor choice or selection of service providers.

The majority of the respondents in this study alluded that mobile telecom providers are vulnerable to various risks. Supply Chain practitioners can use a direct intervention mechanism to eliminate the risk-on-performance transmission path, allowing them to control and avoid BPO challenges. Supply Chain practitioners can also lessen the impact of risk by lowering the risk of outsourcing and decreasing risk loss. Below are the empirical studies supporting the finding .

The results are compatible with the work of Gopalan and Agarwal, (2019) on the retention of employee constraints in the BPO Industry: An Empirical Study of Problems and Solutions. The findings revealed that the BPO industry does not offer a steady career path or opportunities for advancement. Employees in the BPO industry are unstable and their BPO experience is not considered if they wish to move jobs. The

employees in BPO industry feel unconfident and if they want to shift from their job their knowledge of BPO is also not considered. The results also are aligned with the study by Sobinska and Willcocks, (2016) on IT outsourcing management in Poland—performance and trends. The results illustrated the most problems of IT BPO as communication (52%); organization (48%), “difficulties in enforcing the stipulations of the contract” (26%), financial problems (22%), “lack of trust towards the provider” (13%), data/information security (13%), reluctance to share information/knowledge (13%), “lack of experience in the sourcing relation management on the part of the client organization” (9%), “lack of experience in the provision of IT services on the part of the provider” (4 %); and “lack of involvement in the sourcing relation management processes on the part of the provider” (4%).

Complementing the finding above is the study by Aswini, (2018) on “Advantages and Disadvantages of Outsourcing.” the findings revealed, the challenge of exposing the privacy of data and technology, many hidden expenses and inadequate customer focus are some of the disadvantages of contracting out services. Aligned to the above is the study conducted by Patil and Agarwal, (2013) on the constraints in contracting out services of telecom tower management-system integrators (SI) perspective in India revealed that some of the “challenges and risks of Greenfield telecom operators include loss of jobs, loss of functions and lack of co-operation by the service provider, reduction in strategic control, potential for information leaks, regulators face challenge of ensuring a level playing ground for all operators with no treat of cartels”. In line with the above studies, is the study by Zhang et al., (2018) on the impact of challenges on the performance of BPO projects: The regulating roles of knowledge management capabilities, backs up their findings. BPO project satisfaction is negatively impacted by social system, technological system, and project management hazards, according to empirical findings.

A study conducted by Kivijarvi and Toikkanen, (2015) on business value measuring of IT outsourcing: a systems approach in Finland, which surveyed information technology (IT) outsourcing measurement methods, complements the previous findings. The study identified the following as some of the “risks could include information privacy, difficulties in quantifying indirect or hidden costs, absence of standardized process,

loss of control, loss of knowledge to name a few". Another study conducted by Khaki and Rashidi, (2012) on contracting out and its effects on operational objectives and performance in Iranian telecommunication sectors discovered some of the same results and the "disadvantages include that supplier gain knowledge of the product being manufactured, they may use that knowledge to begin marketing the product on their own, lose touch with new technological breakthroughs, declining innovation by the outsourcer and difficulty of bringing back the firm activities".

Also consistent to the results is the work of Modarress et al., (2016) in which the study was to investigate the obstacles, rewards, risks, and motivations of petroleum businesses in the Persian Gulf when it came to the strategy of outsourcing. While petroleum companies face "massive operational costs that stem from aging infrastructure, human capital shortfalls, inefficient fragmented business processes, and lack of access to new technologies," the findings revealed that outsourcing strategies for cost savings, as well as management and employee overt and covert resistance, are important constraints to continuous process creation.

Although some of the above empirical studies are not directly linked to telecommunications industry lessons can be drawn from the studies that are of benefit to the current study. The above studies provide benchmarks with which the current study can utilize. Findings indicated by above the studies complement previous studies and are useful in the present study.

### **5.11.3 Objective 2: To determine whether business process outsourcing improves cost-efficiency.**

In this section, some of the findings on the linkage between BPO and cost efficiency (or whether BPO improves cost efficiency) are briefly reviewed to understand BPO from the mobile telecom operators/ organizational perspective. The current study suggests that, based on the respondents' views in the sample overall the key findings of BPO implementation by the mobile telecom operators with reference to cost efficiency include reduction in labour cost after outsourcing, there is reduction in operational expenses/ cost after outsourcing, there is reduction in capital investment after outsourcing, there is reduction in developmental cost after outsourcing, there is

reduction in investment in research & development(R & D) ,there is an elimination of the uncontrollable cost of in-house staff by moving the function to a external service provider, and lastly there is an improvement in selling, general and administrative expenses.

The results of the descriptive statistics, of the present study reflect that most of the participants alluded that there is improvement in cost efficiency after BPO thereby improving the operational performance of the mobile telecom operators. This justifies the need for BPO implementation.

These results are similar to the chi square tests, which confirm that there is a correlation or statistically significant relationship between implementation of BPO and improvement in cost efficiency thereby improving the operational performance of the telecom operators. Statistically, [ p-value (.001) < (0.05a)]. Below are the empirical studies supporting the results

These results complement previous research by Hanafizadeh and Ravasan, (2017) on the study providing empirical studies on outsourcing decision with reference to e-banking services in Iran. The results indicated that, the minimization of cost was one of the key driving forces, moving domestic and offshoring ITO decisions. In terms of ITO, costs entail total cost of ownership, expenses involved in excess capacity of resources, future service innovation costs, integration costs, labor costs related to maintenance of service, cost of potential future service provision changes and so forth. The findings are consistent with the other studies conducted by Liu and Tyagi, (2017) on “outsourcing in trying to convert fixed costs into variable costs: A competitive analysis”. The results showed that when production, services and most economic activities are outsourced, it represents a pervasive phenomenon obtaining in many industries. This “popular practice has the economic benefit of allowing the outsourcing organization to experience a reduction in its fixed costs which include expenditures on equipment, IT, fixed salaries of employees, etc”. This help converts the benefit into controllable cost in the form of the purchase price that the organization can then pay the external service providers.

Consistent to the above results is the study by Pia Ellimaki, Aragon-Correa & Hurtado-Torres, (2021) on the scope of contracted out services: a client organizations

absorptive capacity of knowledge-intensive services. The results suggested that, effective customers can bring transaction costs under control when accessing, assimilating and exploiting the knowledge rooted in an expanded set of services provided by external service provider. The findings complement the results of a study by Ikerionwu et al., (2016) on the development of service provider's BPO-IT framework interviewees' suggested reduction in service processing cost; upholding the privacy of customer's operations; expanding the scope of engagement; quick turnaround time delivery of SLA within a short time, competitive edge and finally, quality software that is translated to quality services as some of the benefit of BPO. Consistent to the above study is the research conducted by Eikelmann et al., (2013) Several years ago, on how second-generation telecommunications outsourcing was regaining control and innovation in Central European. Mobile operator who had more than 10 million subscribers agreed they outsourced with at least two global vendors to build and run their networking and IT operations. The findings reflected a savings of 20 to 25% in operating cost, with the expectation of further annual savings. The results also illustrated that it can be "implied that it is preferred for banks to exploit outsourcing benefits such as time and cost savings, access to specialized resources, focus on core competences through outsourcing services to captive service providers".

Similarly, the results of studies conducted by Modarress et al., (2016) in which the aim of the study was to identify the constraints, benefits, and the motives of petroleum companies in the Persian Gulf toward the strategy of outsourcing. The findings "indicated that while the petroleum companies are faced with massive costs of operation that stem from the aging infrastructure, human capital deficit, inefficient fragmented business processes and lack of access to new technologies, outsourcing strategy toward cost savings and the overt and covert resistance of management and employees are significant barriers for creation of continuous process". The results suggested that the oil and gas exporters have mixed but broad positive view of strategies to contract out service and BPO could provide savings in the entire supply chains.

The above results of cost reduction are aligned to another study by Patil and Agarwal, (2013) on limitations in outsourcing of telecom tower management-systems

integrators (SI) perspective in India revealed that network infrastructure contracting out is gradually gaining acceptance across developing markets as an “effective way to cut down costs, while reducing time to market with mobile operators around India are poised to make their impact felt in the Middle East and Africa (MEA) and the world”.

However, some of the studies tend to disagree with the above findings of cost reduction but instead suggested an increase in costs. The results by a study from Fersht, (2014) which indicates that “for the 189 global clients in various industries (e.g., finance, accounting, retailing, and health management) that outsourced their services overseas, about 50% stated the failures of cost reduction without adding extra value in their supply chain operation” (Liu, Jayaraman and Luo, 2017).

The findings above are also supported by a study conducted by Patil and Wongsurawat, (2015) on Information technology (IT). The purpose of the research was to understand the roles various drivers such as cost, strategy and risk play when business process outsourcing/information technology enabled services (BPO/ITES) firms in India outsource their information technology (IT) functions to third-party vendors”. These findings go against the general position claiming that cost reduction is a key benefit of outsourcing.

Complementing the above results, is the study conducted by Kivijarvi and Toikkanen, (2015) indicated that” frameworks provide a structure for proper comparison of alternative systems of measurement in the outsourcing of IT services”. When comparing the results to the most commonly used ITO theories, specifically the resource-based view and transaction cost economics, it is somewhat surprising that individual elements such as the cost of outsourcing and focus on core competencies were not weighed any higher in the final findings.

Although some of the above empirical studies may not directly be linked to telecommunications industry, lessons can be drawn from the studies that are of benefit to the current study. The above studies provide benchmarks with which the current study can utilize. Findings indicated by above studies complement previous studies and are useful in the present study.

#### **5.11.4 Objective 3: To ascertain whether business process outsourcing increases productivity.**

The major findings on the linkage between BPO and productivity (or whether BPO increases productivity) are briefly reviewed from mobile telecom operators/organizational perspective in this section. The current study suggests that, based on the respondents' views in the sample overall BPO implementation results in improvement in total revenue/ Sales(output) after outsourcing ,there is an improvement of asset turnover after outsourcing ,there is an improvement in inventory turnover after outsourcing, there is an improvement in investing more in new technology after outsourcing, there is an improvement in economies of skill after outsourcing, there is an increase in market share after outsourcing, there is an improvement in process and employee productivity and lastly overall business process outsourcing increases productivity.

The results of the descriptive statistics, of the present study reflect that most of the participants alluded that there is an improvement in productivity after BPO thereby improving the operational performance of the mobile telecom operators. This justifies the need for BPO implementation.

These results are similar to the chi square tests, which confirm that there is a correlation or statistically significant relationship between implementation of BPO and increase in productivity thereby improving the operational performance of the telecom operators. Statistically, [ p-value (.005) < (0.05a)]. Below are the empirical studies to support the finding

The above results are compatible with the study by Prajapati, Kant and Tripathi, (2020) on an integrated framework for considering the results of contracting out service performance. The results indicated that there is improved dominance in core activity, capabilities to increase or decrease capacity, improved financial performance, optimized resource exploitation and improved market share are the top five performance outcomes because of the implementation of outsourcing. Aligned to the above finding is the study by Ikerionwu, Edgar & Gray, (2016) on the development of

service provider's BPO-IT framework findings suggested reduction in service processing cost; maintaining privacy of client's operations, improved quality of services and improved client and provider' competitiveness. The findings are also consistent with the research conducted by Naz, Ali, Naz & Sadiq, (2013) on the effects of outsourcing of ICT on organizations performance in Telecommunication sector in Pakistan "found that there is additional flexibility to processes and services, access to state of the art technology, access to current knowledge and products, professional trainings, reduced capital investment, reduced operating cost and reduced headcount positively impact the employee performance, which improves productivity and the organization performance".

The above results complement the study conducted by Antonioli, Mazzanti, Montresor & Pini, (2015) on "outsourcing and Firm Productivity in a Specific Local Production System: Evidence from Reggio Emilia (Italy)". The results showed that the link between "outsourcing and productivity will only give positive results when taking into account the externalization of high value-added activities". It is, however, negative when there are low value-added activities. This occurs mainly when focusing on firms operating in mature industrial districts, who have socio-economic conditions that do not suffice to magnify the productivity premium of externalizing high value-added ones. The innovativeness of such firms will instead help by pointing to a developmental benefit derived from outsourcing. Aligned to the results is the study by Sandhu et al., (2017) on does outsourcings always work? A critical evaluation for project business success. The findings also agree with other studies that by adopting this strategy of BPO allows external service specialist firms to focus on specific function, manufacturing organizations may improve their production quality processes by concentrating more on the things they do best. Similarly, the above assertion of improved productivity due to BPO is supported by the findings of Frank & Obloj, (2014) "empirical research has found a positive relationship between high firm- specific human capital and productivity". The functions with these characteristics can be considered unique, composed of knowledge-specific assets that cannot simply transferred and as having a limited ability to be functional in other work settings (De Vita et al., 2011; De Vita and Tekanya, 2015). These characteristics become necessary for the sake of obtaining competitive advantage. In order to gain



competitive edge, resources must be distributed heterogeneously across all firms that are competing and the heterogeneity has to persist over time.

These findings are aligned with the study by Rodríguez et al., (2017) that suggested that “asset specificity positively influences activity cost and quality for both the internal and external governance structures”. Frank and Obloj, (2014) showed “that high human asset specificity affects greater productivity”. These findings are also in agreement with those obtained by Cruz et al., (2014) in the field of medical device maintenance. They concluded that “specificity can reduce activity costs; improve productivity which can make the hotel more competitive in developing its activities”. The findings are also in agreement with the study by Smith, (2012) who also examined contracting out and supply chain performance in telecom operators in Kenya. This study established “the relationship between outsourcing and supply chain performance among mobile phone service providers”. The performance of Supply chain was measured from operation system reaction, logistic process reaction, supplier network reaction and competitive edge. “Results of the study indicated that supplier network responsiveness has the greatest impact on outsourcing while operating system responsiveness has the greatest negative effect on outsourcing”. The Supply chain system “react speedily to changes in product volume required by clients and to changes in product mix required by customers.

However, some studies tend to differ with the assertion of a positive relationship between BPO and productivity, the studies indicated that there is no significant impact on the firm with reference to productivity after outsourcing.

Supporting the assertion is the study by Arvanitis and Loukis, (2012) examined firm performance in the Swiss and Greek countries where outsourcing was done. The study explored the factors that determine organizational propensity to outsourcing various processes while analyzing its impact on firms’ innovative performance. Outsourcing in this study involved activities of R&D information and communication technologies. The study was a comparison of Swiss and Greek firms’ performance. This study on firms in Greece and Switzerland in the manufacturing and services revealed that “outsourcing enhances innovation performance, particularly process

innovation, but has a weak positive effect on labor productivity". The results are supported by the study conducted by Jiang et al., (2006) who empirically examined the effects of contracting out services on the performance of a firm and suggested that "there is insufficient evidence to conclude that outsourcing firms obtain significant productivity growth". On the contrary, it was established that the productivity of firms that outsource is worse when compared to those that do not outsource. They say "here a positive sign indicates productivity improvement". This study depicts that there is no correlation between the contracting out of services and productivity.

Although some of the above empirical studies may not directly be linked to telecommunications industry, lessons can be drawn from the studies that are of benefit to the current study. The above studies provide benchmarks with which the current study can utilize. Findings indicated by above studies complement previous studies and are useful in the present study.

#### **5.11.5 Objective 4: To establish whether business processing outsourcing increases profitability**

In this section, some of the findings on the linkage between BPO and increase in profitability (or whether BPO increase profitability) are briefly reviewed to understand BPO from the mobile telecom operators/ organizational perspective. The current study suggests that, based on the respondents' views in the sample overall the key findings of BPO implementation by the mobile telecom operators with reference to increase in profitability include an improvement on return on assets(ROA) after outsourcing, increased sales price after outsourcing, there is an improvement/Increased return that the organisation's owners obtain from their investments after contracting out (ROI, there is a specialization & economies of scale after outsourcing, there is an improvement in the growth of revenue after outsourcing, there is an improvement in return on equity(ROE) and Overall business process outsourcing increases profitability.

The results of the descriptive statistics, of the present study reflect that most of the participants alluded that there is an increase in profitability after BPO thereby

improving the operational performance of the mobile telecom operators. This justifies the need for BPO implementation.

These results are similar to the chi square tests, which confirm that there is a relationship or statistically significant correlation between implementation of BPO and increase in profitability thereby improving the operational performance of the telecom operators. Statistically, [ p-value (.002) < (0.05a)]. Below are the empirical studies supporting the finding.

The above results are consistent with the work by Prajapati et al., (2020) on an integrated framework for preferring the results of performance of contracting out services. The findings indicated an improved control in core activity, capacity to improve or reduce capacity, financial performance improvement, optimized resource usage and increased market share are the top five performance outcomes because of the adoption of outsourcing. The result compliment the study conducted by Claussen et al., (2012 on the performance consequences of business process outsourcing (BPO) in the mobile telecom operators in UK, results “revealed that as expected, mobile operators who showed preference for external outsourcing, their operations improved profitability and that outside contracting of network operation services showed a positive effect on revenue primary driven by reduction in operations expenditures, reduced costs and increasing revenues in the long-term. The findings are also in line with the results of another study by Movahedi et al., (2016), Operational excellence through business process orientation. An intra- and inter-organizational analysis” were grouped into three main constructs: financial, operational and customer Satisfaction, with reference to issues of finance the study found a positive impact, in that the financial outcomes increased the organizational value, market reaction, market share and attractiveness, profitability, cost minimization, lower (inventory) costs, improved earnings/sales/profits, equity ratio, net profit margin and operating profit, new employments ( Kohlbacher, 2010; Tarhan et al., 2015).

Supporting the above results is the study by Christiansson and Rentzhog, (2019) on the Lessons from the “BPO journey” in a public housing company: toward a strategy for BPO. The findings specified that the impact in BPO are established in terms of higher customer satisfaction, improved innovative capacity, enhanced operational

performance, higher employee satisfaction and, as a result of these profitability improved. The findings are also in line with the study conducted by Sandhu et al., (2017) on does outsourcings always work? A critical evaluation for project business success. The findings of the study suggested that the 'management of outsourcing enhanced resource functions such as financial savings, an increased ability to focus on strategic issues, attaining access to technology and specialized expertise, an ability to demand measurable and enhanced service levels.

The results are supported by the study by Khaki and Rashidi, (2012) on the outsourcing and its impact on operational objectives and performance in Iranian telecommunication industries, the survey indicated out that "outsourcing could lead to better financial and non-financial and service". These results also agree with the study conducted by Rodríguez et al., (2017) on whether outsourcing moderates the effects of asset specificity on performance. These authors stated that "an application in Taiwanese hotels, however, indicated a positive relationship between financial performance and the increase in outsourcing, in contrast to the predicted relationship". This collaboration is triggered in the sense that hotels with high performance satisfaction would consider outsourcing as a way to improve financial performance. Hotels that have improved financial performance are those that outsource frequently, being influenced more by their competitive strategy. The results are also in line with the findings of another study by Emmanuel, (2013) on the effects of outsourcing practice on performance of mobile telephone providers in Nigeria. The purpose of the study was to determine the key performance indicators for assessing their performance of the mobile telephone providers. The results indicated that, majority of mobile telephone providers in Nigeria have performed well in revenue, usage and network quality after BPO.

However, some of the studies tend to disagree with the above findings which states that BPO can improve profitability. Some studies however, suggested that there is lack of sufficient evidence to make such conclusions that BPO has significant impact on the firm profitability. A study by Cho et al., (2008) found that logistics outsourcing negatively affected profitability, customer satisfaction, and overall firm performance. Similarly, Hsiao et al., (2010a) discovered that "logistics outsourcing decisions, such

as transportation, packaging, transportation management and distribution network management, have no direct effect on service performance” (Zhu et al.,2017). Supporting the negative assertion is a research conducted by Jiang, Frazier and Pratel,(2006) on the impact of outsource on the operational performance of the firm. Research found “insufficient evidence to conclude that outsourcing has a significant impact on firms’ profitability.

Although some the above empirical studies may not directly be linked to mobile telecommunications industry, lessons can be drawn from the studies that are of benefit to the current study. The above studies provide benchmarks with which the current study can utilize. Findings indicated by above studies complement previous studies and are useful in the present study.

**5.11.6 Objective 5: To suggest a framework that can evaluate the impact of BPO on mobile telecommunications industry (organisation’s operational performance) using productivity, profitability and cost efficiency as the performance measurements**

In this section, some of the findings on the linkage between BPO and cost efficiency, improvement productivity and increase in profitability are briefly reviewed to understand BPO from the mobile telecom operators/ organizational perspective. The current study suggests that, based on the respondents’ views in the sample overall the key findings of BPO implementation by the mobile telecom operators with reference to linkage between BPO and cost, productivity and profitability as the performance metrics underpinning the study is illustrated by the (proposed) developed CCP Framework. The overall results are that implementation of BPO improves productivity, cost efficiency and profitability thereby improving the operational performance of the mobile telecom operators.

The developed cost, productivity and profitability (CPP) business process outsourcing performance measurement conceptual framework(conceptual model) is depicted below which bridges the gaps of the authors’ frameworks by addressing the issues of BPO measurements in the south African telecommunications companies and the resulting effect( operational performance).Below is the (proposed) developed CCP

framework that assisted the mobile telecom operators to assess the effects of the operational performance of BPO quantitatively.

The descriptive statistical results of the present study reflect that most of the participants alluded that there is an improvement in cost efficiency, increase in productivity and increase in profitability after the implementation of BPO thereby improving the operational performance of the mobile telecom operators. These results are similar to the chi square tests, which confirm that there is a correlation or significant statistically correlation between implementation of BPO and improve in cost efficiency, increase in productivity and in increase in profitability thereby improving the operational performance of the telecom operators. The inferential statistical results from the chi square are shown below and signifies a statistically significant relationship (correlation) of BPO and cot efficiency, productivity and profitability pavingthe way for the (proposed) developed CPP framework. This justifies why telecom operators implement BPO.

These results suggest that there is significant statistically correlation between implementation of BPO (independent variable) and cost efficiency, productivity and profitability (dependent variable). As depicted from the descriptive and chi square statistical tests above, there is a positive relationship between adoption of BPO and increase in cost efficiency, productivity and profitability thereby improving the operational performance of the mobile telecom operators or companies. These results are reflected in the (proposed) developed CPP framework as part of the business performance outcome (see figure 5.6 below for the CPP framework).

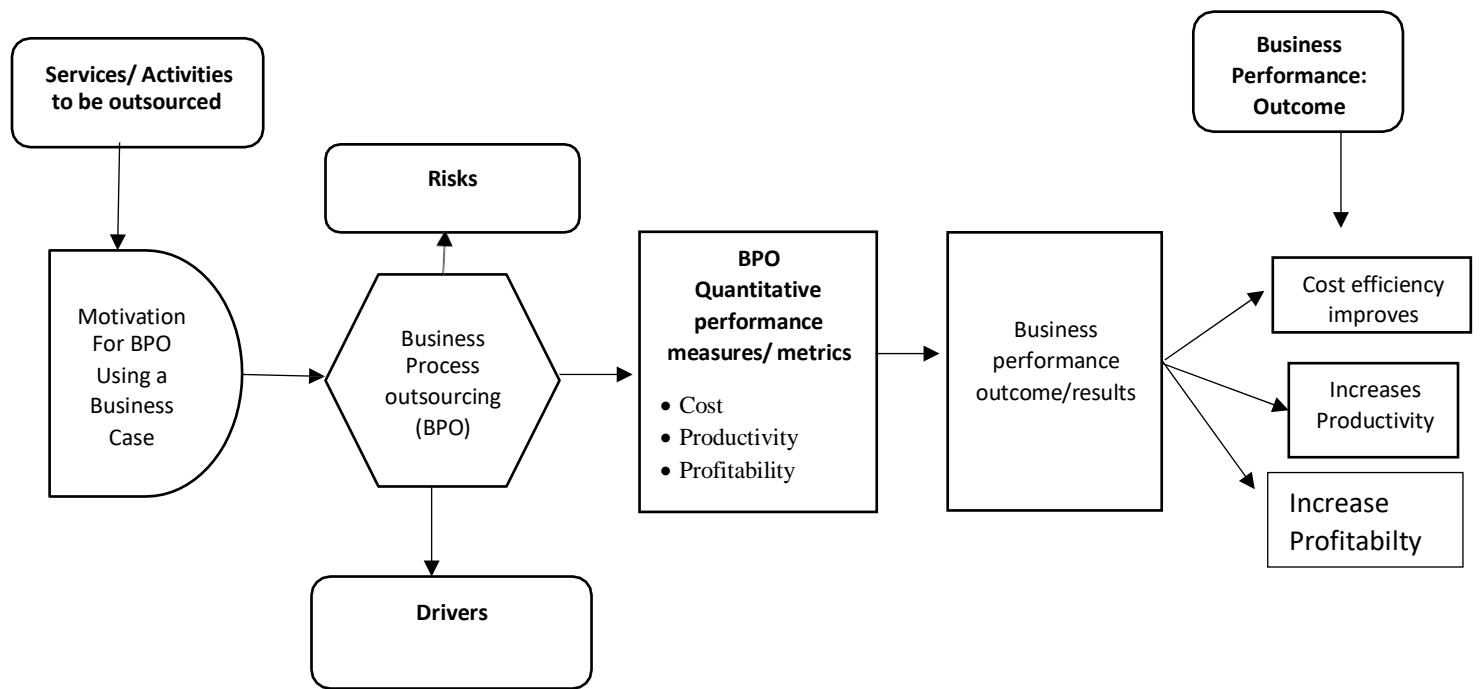


Figure 5.6 Cost, productivity and profitability (CPP) business process outsourcing performance measurement framework

On the business perspective, this research added new knowledge by suggesting a framework that assisted companies in the mobile telecommunications industry to be able to assess the effect of BPO on the organization operational performance using quantitative metrics. The importance of the framework lies from a business perspective, in that management will be able to comprehend the significance of the linkage between BPO and cost, productivity and profitability.

The CCP Framework also reflects the drivers and different risks that the mobile telecom operators are exposed to. A direct intervention mechanism by managers to mitigate the path of risk transmission on performance for controlling mechanism and avoidance of BPO risk is needed. Supply chain practitioners can also reduce the impact of risk by managing the risk of contracting out services and the probability reducing the possibility of loss. The proposed CCP framework is important and useful to corporate management, policy makers as this avoided relying on managers' estimates in place of quantifiable metrics in deciding on whether to outsource or in source and can also assist management in developing BPO policies.

The proposed (developed) conceptual framework provided supply chain practitioners with information before deciding for the outsourcing decision. Supply chain practitioners must assess the cost-benefit analysis, which is considered as the crucial management matter within the company. This process of assessment is considered to be among the key decision linked to positives and negatives of BPO.

#### **5.12 RELATIONSHIP BETWEEN BUSINESS PROCESS OUTSOURCING (BPO) AND ORGANISATION OPERATIONAL PERFORMANCE**

This section addresses the linkage between the BPO and the operational performance of the firm. The results of both the inferential statistics using chi square and descriptive statistics of the current study above on BPO impact on productivity, cost efficiency and profitability suggest that there is a significant statistically correlation between BPO and cost, productivity and profitability as reflected in the CPP framework as part of the business performance outcome (See framework Figure: 5.6). The implementation of BPO improves the operational performance of the company.

In this section, various empirical studies from different authors are briefly reviewed to understand the relationship between BPO and organization's operational performance from organizational perspective. These studies can also be used as reference point or benchmarks. The results above are complemented by the below studies

Complementing the above conclusions is the study conducted by Lahiri, (2016) in USA on how outsourcing impact performance of the firm? Empirical studies and Research Agenda on the correlation between BPO and organization's operational performance has mixed findings. The "findings indicated that outsourcing can produce positive, negative, mixed, moderated or no significant impact on the firm".

Supporting the above assertion is the results of a study by Christiansson and Rentzhog, (2019) on the Lessons from the "BPO journey" in a public housing company: toward a strategy for BPO. The results indicated that the influence of BPO is reflected by improved satisfaction of customer, improved R & D, enhanced operational performance, high satisfaction of employee and as a result of these, profitability improved.



Although the above empirical studies may not directly be linked to telecommunications industry, lessons can be drawn from the studies that are of benefit to the current study. The above studies provide benchmarks with which the current study can utilize. Findings indicated by above studies complement previous studies and are useful in the present study.

### **5.13 SUMMARY**

The chapter discussed the results and discussion of the study. The data was appropriately coded in STATA program. Analysis, using descriptive statistics commands, was also carried out in the same program. The study mainly employs univariate analysis. A range of results presentation techniques were used such as normal bar graphs, stacked bar graphs, pie charts, flow charts and tables. The chapter has eleven sections. The inferential statistics through the chi square and Phi & Cramer's test for strength of association were conducted to establish the correlation between BPO (independent variable) and cost efficiency, productivity and profitability (dependent variable). The first section provides a sample summary in form of participants' socio-demographic characteristics. Here, a table summarizing participants' age, gender, period within the organization, education level and departments they belong to is provided. Two hundred and ten (210) participants who comprise of middle and senior managers from two mobile telecommunication companies were drawn from ten departments constitute the sample of the study

The current study aim is to propose a framework to evaluate the impact of Business Processing Outsourcing (BPO) on the operational performance of the South African mobile telecommunication companies, the study objectives focused on identifying activities outsourced, drivers of BPO, risks associated with BPO and three performance metrics (productivity, cost efficiency and profitability). The final section gives a thorough discussion of the findings obtaining in the study. The final result was that there is a significant statistically correlation between implementation of BPO (independent variable) and cost efficiency improvement, increase in productivity and profitability (dependent variable). This discussion is organized by the objectives of the study in order to clearly show how much these objectives were addressed by the exercise. Together, these sections provide a clear picture on the sample

characteristics, services outsourced, participants' perceptions with regards to performance metrics, the proposed BPO performance measurement framework, and the extent to which the study objectives were addressed. The new proposed cost, productivity, and profitability (CPP) business process outsourcing performance measurement conceptual framework (conceptual model) bridges the gaps of the authors' frameworks by addressing the issues of BPO measurements in the south African telecommunications companies, and the resulting effect (operational performance). The chapter analyzed the new proposed CCP framework that will assist the mobile telecom operators to assess the effect of the operational performance of BPO quantitatively. The next chapter focused on summary of findings, conclusions drawn from the results aligned to the study objectives/research questions and lastly the recommendations giving rise to future research.

## **CHAPTER 6: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

### **6.1 INTRODUCTION**

The findings from the quantitative study conducted with the use of the questionnaire as the research instrument and focusing on the summary of findings from the respondents to form a foundation for a conclusion and recommendations are discussed in this section. The aim of this study is to close the existing knowledge gap and the limited body of literature by proposing (developing) a framework to evaluate the impact of BPO quantitatively in the South African mobile telecommunication industry using cost, profitability and productivity as the performance measurements underpinning the study. In this section, the major findings on the drivers (reasons), risks/challenges are briefly reviewed to understand their effects on BPO. The summary of findings from both the descriptive statistics and chi square tests, on the impact of BPO on productivity, cost efficiency and profitability are also briefly reviewed paving the way for the (development) suggestion of the cost, productivity, profitability (CPP) framework to be used by the mobile telecom operators in evaluating the effects of BPO on the company operational performance. Below are the summary of results, key conclusions and recommendations as they relate to the research objectives or research questions.

### **6.2 SUMMARY OF FINDINGS**

This section discussed the current study results, which were derived from the data gathering procedure and are based on the study objectives or research questions. The study main findings centered on the drivers of BPO implementation, the risks or challenges or disadvantages associated with BPO implementation and finally the impact of BPO on mobile telecom operators using productivity, cost efficiency and profitability as performance metrics. The results of the current research produced a positive result that demonstrates a knowledge of the influence of BPO on the South African mobile telecommunications market.

With reference to the results of the current study, outsourcing mobile network operating services can lower costs, increase revenues, improve profitability, and

increase productivity in the long run for mobile telecom operators. This indicates that BPO and the aforementioned variables have a statistically significant association. This explains why telecom companies use BPO. These results paved the suggested new CPP Framework for evaluating the influence of BPO on the operational performance of the mobile telecom operator operators. Below are the summary of the results/findings according to the research objectives/questions of the current study.

### **6.2.1 Objective 1.1: The primary reasons or drivers of BPO**

In this section, the major findings on the drivers(reasons) of BPO are briefly reviewed to understand their effects on BPO.A summary of the results drawn from the participants' views on the sample suggests that overall the key drivers are that there is a reduction in capital investment thereby freeing up limited capital funds more available for core areas (agree= 85.24%), company can gain access to newer or latest technology or access to world class capabilities (strongly agree= 99.52%) ,company can have access to unique resources skills and talents,(strongly agree= 99.52%), there is cost saving/reduction(Cost driver) ,(agree= 58.57%), company can benefit from increase competitiveness, (strongly agree= 85.24%) company can focus on core competencies or business (Organisational driver,(strongly agree= 85.24%) and lastly company can develop relationship with the outsourced service provider (Relationship driver)( agree= 80.95%).

The majority of the participants in this study alluded that, they are different drivers that triggers the mobile telecom operators to embark on BPO. Managers should take into consideration the drivers and whether there are in line with the company goals and objectives.

### **6.2.2 Objective 1.2: Challenges/risks/disadvantages of BPO**

In this section, the major findings on the risks/challenges of BPO are briefly reviewed to understand their effects on BPO. The summary of the findings based on the current study's respondents' views in the sample suggests that overall the key challenges/risk/disadvantages of BPO implementation faced by the mobile telecom operators include, potential loss of control over key/critical functions such as reputation, if ethical issues emerges ,(100%), company may experience risk of" lock

in” to under-performing suppliers of service (32%), struggle of ensuring service quality and consistency from the suppliers of service (100%), there is potential loss of in-house expertise knowledge in the service area which may be required in future (100%), risk of loss of control over confidential data and intellectual property(89%), added distance from the customer or end-user by having an intermediary service provide may reduce the communication between external or internal customer and relationships with the company(loss of supply chain visibility)(95%), potentially higher cost of services from the service provider due to contractor high profit margins(100%), resistance from employee unions due to fear of job loss and change may lead to low morale(97%) and performance of the remaining employees and company may be unable to realize expected deliverables/benefits due to poor choice or selection of service providers (99%).

The majority of the respondents in the current study alluded that mobile telecom providers are vulnerable to various risks. Supply Chain practitioners can use a direct intervention mechanism to mitigate the risk-on-performance transmission path, allowing them to control and avoid BPO risk. Supply Chain practitioners can also lessen the impact of risk by lowering the risk of outsourcing and decreasing risk loss.

### **6.2.3 Objective 2: Impact of BPO on productivity**

In this section, the major findings on the effect of BPO on the operational performance of the mobile telecom industry using productivity as a performance measurement are briefly reviewed. The summary of the findings based on the current study’s respondents’ views in the sample suggests that overall the key findings on BPO implementation by the mobile telecom operators with reference to evaluating the impact of BPO on productivity, results suggest that BPO improves productivity. Majority of the subjects supported the five possible sub constructs/variables that agreeon there is an improvement of asset turnover after outsourcing (100%), there is an improvement in investing more in new technology after outsourcing (99.52%), there is an improvement in inventory turnover after outsourcing (100%), there is an increase in market share after outsourcing (91.90%), there is an improvement in process and employee productivity (73.33%) Overall business process outsourcing increases productivity (agree= 77.14%).

The other subjects supported two variable/sub constructs (performance metrics) that strongly agree on the assertion that mobile telecommunication companies' productivity is affected by implementation of BPO. Two of the possible variables/ sub constructs are that BPO leads to an improvement in total revenue/ Sales (output) after outsourcing (strongly agree=99.52%) There is an improvement in economies of skill after outsourcing (strongly agree= 99.52%).

In the remaining case of these eight identified possible variable/sub-constructs, subjects who said that they are not being sure whether there is a reduction in customer response cycle time after outsourcing (don't know=44.21%). The descriptive statistics results suggested that implementation of BPO results to an increase in productivity.

The chi square tests result indicates that there is a statistically significant relationship or correlation between the implementation of BPO and increase in productivity. The positive association indicates that the implementation of BPO by the mobile telecom operators or companies results in them benefiting from increase in productivity hence improve the operational performance of the mobile telecom operators. This justifies why mobile telecom operators implement BPO. Statistically, [p-value (.005) < (0.05a)].

The findings of this current study from both the descriptive statistics and chi square tests reflect that majority of the participants alluded that there is an improvement in productivity after BPO thereby improving the operational performance of the mobile telecom operators and this justifies the need for BPO implementation. This infers that there is a statistically significant relationship or correlation between implementation of BPO and increase in productivity.

#### **6.2.4 Objective 3: Impact of BPO on cost efficiency**

In this section, the major findings on the effects of BPO on the operational performance of mobile telecom operators using cost efficiency as a performance measurement are briefly reviewed. The summary of the findings of the current study and based on the respondents' views in the sample suggest that overall the key findings on evaluating the impact of BPO implementation by the mobile telecom operators with reference to cost efficiency, results suggests an improvement in cost efficiency. Majority of the subjects supported the five possible sub constructs/variables by strongly agree that

there is reduction in labour cost after outsourcing (81.43%), there is reduction in operational expenses/ cost after outsourcing (81.43%) there is reduction in investment in research & development(R & D), (99.52%), there is an elimination of the uncontrollable (fixed) cost of internal staff by moving the function to a supplier (92.86%) and lastly there is an improvement in selling, general and administrative expenses (54.76%) after the implementation of BPO. The other subjects supported the two variables/sub constructs that agree on the assertion that mobile telecommunication companies' cost efficiency is affected by implementation of BPO. Two of the possible variables/ sub constructs are BPO leads to reduction in capital investment after outsourcing (agree= 98. 57%) and reduction in developmental cost after outsourcing (agree=94.76%).

In the remaining one case of these eight identified possible variable/sub-constructs, there is some variation for BPO as a cost efficiency improvement. Other subjects indicated to have no knowledge that there is lower total cost of ownership after outsourcing (don't know =73.81%). Overall the subjects indicated that they are not being sure whether overall business process outsourcing improves cost efficiency (dont know= 51. 53). The results of the descriptive statistics indicate that implementation of BPO results in improving cost efficiency.

Results from the chi square test indicates that there is a positive relationship between the implementation of BPO and improvement in cost efficiency. This implies that the implementation of BPO by the mobile telecom companies results in them benefiting from improvement in cost efficiency hence improve the operational performance the mobile telecom operators. Statistically, [p-value (.001) < (0.05a)]. This justifies why mobile telecom operators implement BPO.

The findings of this current study from both the descriptive statistics and chi square tests reflect that majority of the participants alluded that there is an improvement in cost efficiency after implementation of BPO thereby improving the operational performance of the mobile telecom operators. This justifies the need for BPO implementation. This suggests that there is a statistically significant relationship or correlation between implementation of BPO and improvement in cost efficiency.

#### 6.2.5 Objective 4: Impact of BPO on profitability

In this section, the major findings on the effects of BPO on the operational performance of the mobile telecom operators using profitability as a performance measurement are briefly reviewed. The summary of the findings based on the current study's respondents' views in the sample suggest that overall the key findings of BPO implementation by the mobile telecom operators with reference to evaluating the impact of BPO on profitability, results suggests an improvement in profitability. Majority of the subjects supported the five possible sub constructs/variables on strongly agree that there is a specialization & economies of scale after outsourcing (strongly agree=100%), there is an improvement in the growth of revenue after outsourcing (strongly agree=100%), there is cash generation by transferring assets to the service provider (strongly agree=50.48%), there is an improvement in return on equity (ROE) (strongly agree=55.24%). Overall business process outsourcing increases profitability (strongly agree=99.52%).

The other subjects supported the three variable/sub construct that agree on the assertion that mobile telecommunication companies' profitability is affected by implementation of BPO. Three of the possible variables/ sub constructs are that there is an improvement on ROA (return on assets) after outsourcing (100%), there is an improved sales price after contracting out services (100%), and that there is an improvement/Increased return that the firm's owners receive from their investments after outsourcing (ROI) (100%). In the remaining case of these eight identified possible variable/sub-constructs, subjects who indicated that they are not being sure whether there is an improvement on net profit margin after outsourcing (don't know=82.86%). The results of the descriptive statistics indicate that implementation of BPO results to an increase in profitability.

The chi square test results indicate that there is statistically significant correlation between the implementation of BPO and increase in profitability. This positive association indicates that the implementation of BPO by the mobile telecom operators or companies results in them benefiting from increase in profitability hence improve the operational performance of the mobile telecom operators. Statistically, [ p-value (.002) < (0.05a)]. This justifies why mobile telecom operators implement BPO.



The findings of this current study from both the descriptive statistics and chi square tests reflect that majority of the participants alluded that there is an increase in profitability after BPO thereby improving the operational performance of the mobile telecom operators and this justifies the need for BPO implementation. This suggests that there is a statistically significant relationship or correlation between implementation of BPO and increase in profitability.

#### **6.2.6 Objective 5: To suggest a framework that can evaluate the impact of BPO on mobile telecommunications industry (organisation 's operational performance) using productivity, profitability and cost efficiency as the performance measurements**

In this section, the major findings on the drivers (reasons), risks/challenges, the summary of findings on the effects of BPO on productivity, cost efficiency and profitability above were briefly reviewed paying the way for the development of the cost, productivity, profitability (CPP) framework to be used by the mobile telecom operators in evaluating the effects of BPO on the operational performance of the company. The key contribution of this study is that a comprehensive framework for the evaluation of the effects of BPO on the South African mobile telecommunication industry using cost, profitability and productivity as the performance measurement is proposed. The findings or results are part of new proposed CPP conceptual framework. The new framework included the drivers and risks of BPO.

Below is the suggested new (developed) conceptual framework to be used to evaluate the effects of BPO on the performance operation of the mobile telecommunications industry using cost, productivity and profitability as the underpinning performance measurements. The conceptual framework afforded the mobile telecommunications companies the opportunity to integrate performance measurement considerations into BPO processes and was able to establish the relationship between implementation of business process outsourcing and the operational performance of the organizations. Overall the results suggest that there is a statistically significant relationship or correlation between BPO and productivity, cost efficiency and profitability and this is illustrated in the new CPP framework below.

The new (developed) proposed cost, productivity, and profitability (CPP) business process outsourcing performance measurement conceptual framework (conceptual

model) is depicted (Figure 6.1) below bridges the gaps of the other authors' frameworks by addressing the issues of BPO measurements in the south African mobile telecommunications companies and the resulting effect (operational performance).

Overall the findings of this current study from both the descriptive statistics and chi square tests reflect that majority of the participants alluded that there is an improvement in productivity, an increase in cost efficiency and increase in profitability after BPO thereby improving the operational performance of the mobile telecom operators. This justifies the need for BPO implementation. This result led to the development of the CPP framework. This result of the relationship between BPO and the three said variable is illustrated on the CPP framework depicted below.

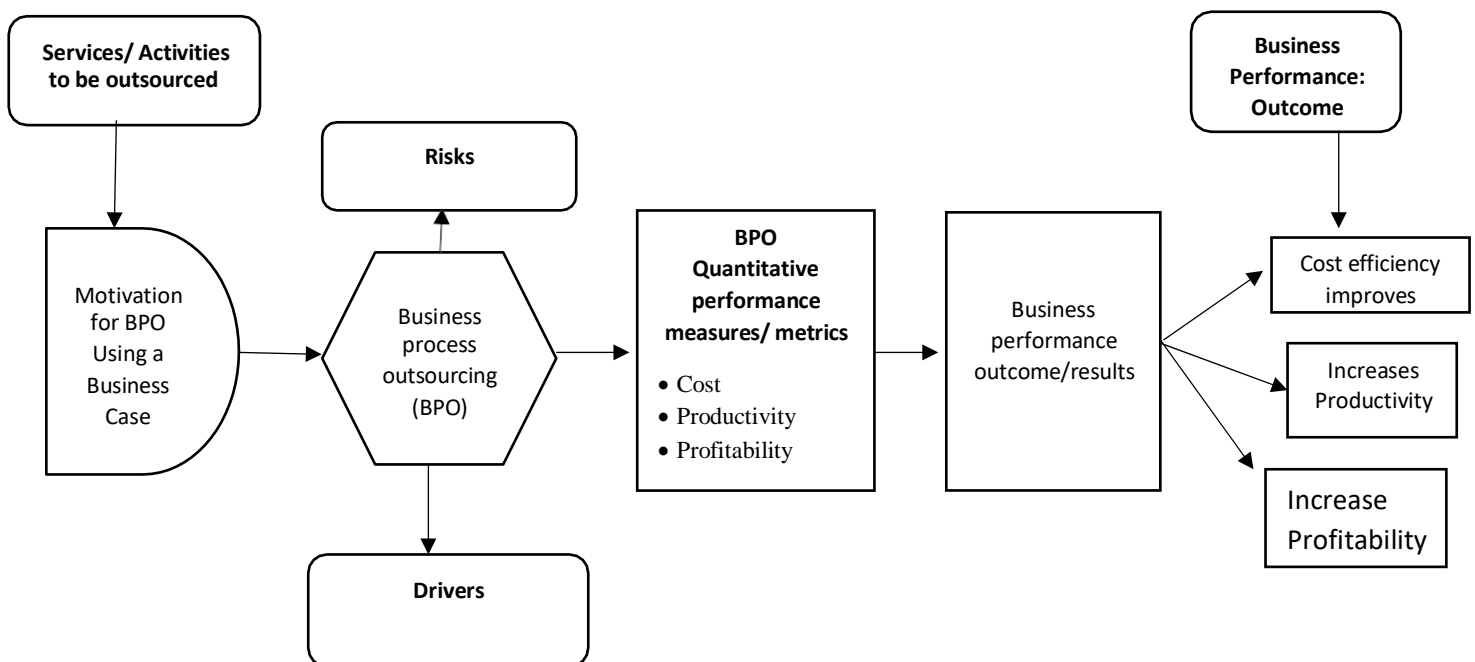


Figure 6.1: Proposed cost, productivity and profitability (CPP) business process outsourcing performance measurement framework.

### 6.3 CONCLUSIONS

The quantitative study provided conclusions premised on the objectives set and the conclusions are guided by the actual findings or results from the data analysis process. In this section, below are the major conclusions drawn from the findings on the drivers (reasons), risks/challenges are briefly reviewed to understand their effects on BPO.

The conclusions on the impact of BPO on productivity, cost efficiency and profitability drawn from the findings are also briefly reviewed. The conclusions drawn are based on the objectives/research questions of the current study. The conclusions formed the basis of the suggested new CPP conceptual framework to be used to evaluate the impacts of BPO on the operational performance of the mobile telecommunications industry using cost, productivity and profitability as the underpinning performance measurements.

Below are the conclusions of the current study drawn from the findings

The conclusions based on the current study findings suggests that, based on the respondents' views in the sample overall the results concluded that some of the key drivers of implementing BPO by the telecom operators are reduction in capital investment thereby freeing up limited capital funds more available for core areas, company can gain access to newer or latest technology or gain international capabilities ,company can have access to unique resources skills and talents.The overall conclusion of this current study reflects that majority of the participants alluded that there are different drivers that triggers the mobile telecom operators to embark on BPO. Managers should take into consideration the drivers and whether there are in line with the company goals.

Overall the conclusions from the study indicated that some of the key challenges,risks and disadvantages of BPO implementation exposed to mobile telecom operators include, potential loss of control over key/critical functions e g to reputation,if ethical difficulties rise, Company may experience risk of" lock in" to under- performing service provider, difficulty of ensuring service quality and consistency from the service provider, potential loss of internal skills and expertise in the service area which may be mandatory in future.The overall conclusion of the current study reflects that majority of the participants alluded that there are different risks that the mobile telecom operators are exposed to. Supply Chain practitioners can use a direct interference strategy to mitigate the risk-on-performance transmission path, allowing them to control and avoid BPO risk.

The conclusions based on the current study findings suggests that, based on the respondents' views in the sample overall the conclusions on BPO implementation by the mobile telecom operators with reference to impact of BPO on productivity, results concluded that there is an increase in productivity. The overall conclusion of the current study from the descriptive statistics and chi square test reflects that majority of the participants alluded that there is an improvement in productivity after BPO thereby improving the operational performance of the mobile telecom operators. This justifies the need for BPO implementation. The research concluded that there is statistically significant relationship (correlation) between implementation of BPO and improvement in productivity.

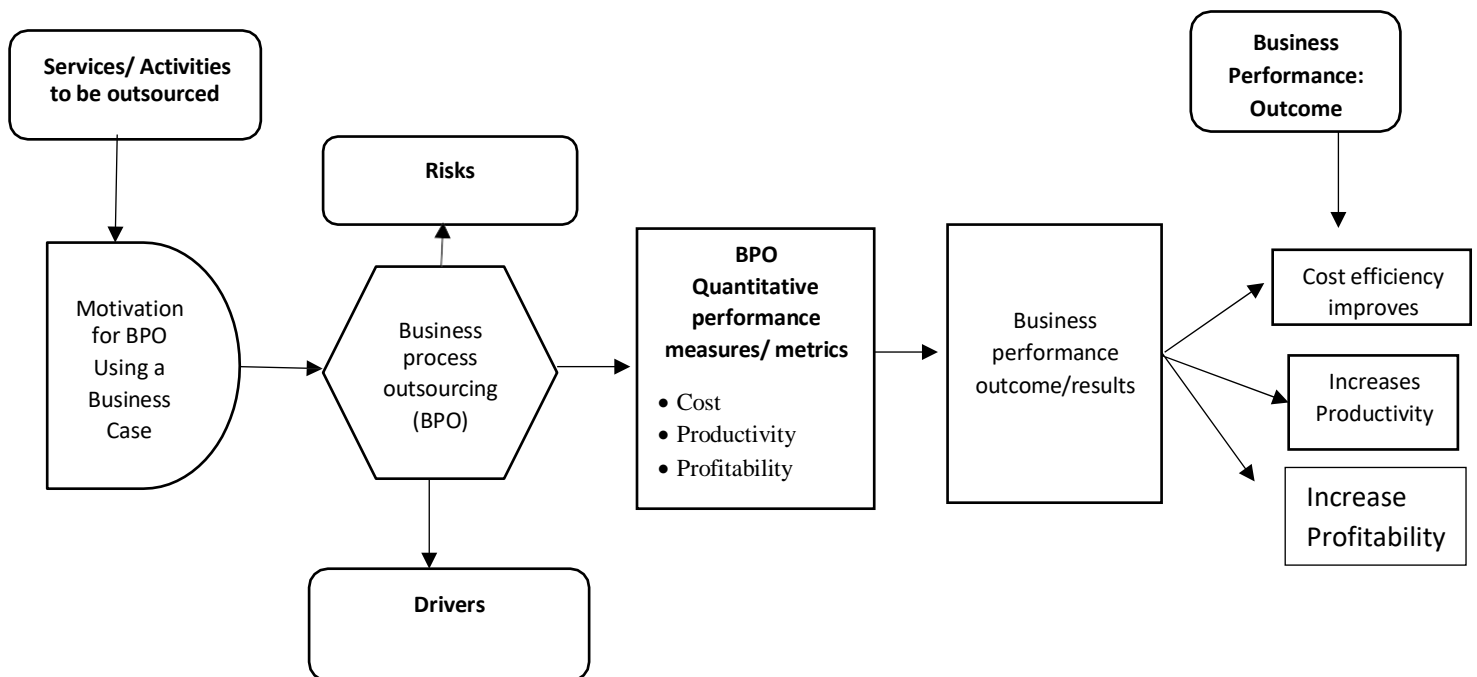
Again, conclusions based on the current study findings suggests that, based on the respondents' views in the sample overall the conclusions on BPO implementation by the mobile telecom operators with reference to cost efficiency results concluded that there is an improvement in cost efficiency. The overall conclusions of this current study from both the descriptive statistics and chi square test reflect that majority of the participants alluded that there is an improvement in cost efficiency after implementation of BPO thereby improving the operational performance of the mobile telecom operators. This justifies the need for BPO implementation. The study concluded that there is a statistically significant relationship (correlation) between implementation of BPO and improvement in cost efficiency.

Conclusions based on the current study findings suggests that, based on the respondents' views in the sample overall the conclusions on BPO implementation by the mobile telecom operators with reference to impact of BPO on profitability results concluded that there is an improvement in profitability. The overall conclusions of this current study from both the descriptive statistics and chi square test reflect that majority of the participants alluded that there is an increase in profitability after BPO thereby improving the operational performance of the mobile telecom operators. This justifies the need for BPO implementation. The study concluded that there is a statistically significant relationship (correlation) between implementation of BPO and increase in profitability.

The final conclusion of the study was the development of a CPP framework that evaluated the effects of BPO on the operational performance of the mobile telecommunications industry using productivity, profitability and cost efficiency as the performance measurements. The conclusions on BPO impact on productivity, cost efficiency and profitability suggest that there is a statistically significant relationship (correlation) between implementation of BPO (independent variable) and cost, productivity and profitability (dependent). This is reflected in the developed(proposed) CPP framework as part of the business performance outcome.

As previously mentioned above, the input of the current research is that it provides a solid framework for evaluating the impact of BPO on mobile telecom industry in South Africa using cost, profitability and productivity as the performance measurements. The conclusions led to the development of (proposed) a new CPP conceptual framework.

Overall the conclusion is that implementation of BPO improves productivity, improves cost efficiency and improves profitability of the mobile telecom operators. Overall the results concluded that there is a statistically significant relationship (correlation) between implementation of BPO (independent variable) and productivity, cost efficiency and profitability (dependent variable) hence improve the operational performance of the mobile telecom operators. This justifies the need for BPO implementation. Below is the (developed) suggested new CPP conceptual framework).



*Figure 6.2 Proposed cost, productivity and profitability (CPP) business process outsourcing performance measurement framework*

## 6.4 RECOMMENDATIONS

The major recommendations drawn from the conclusions and results on the drivers (reasons), risks and challenges, the impact of BPO on productivity, cost efficiency and profitability were discussed in this section. The conclusions were drawn in relation to the research objectives / questions of the current research. Chapter 5 involved the process of data analysis and the findings and discussions that directed the researcher to provide answers aligned to research objectives and questions. Chapter six (6) addresses issues relating to the summary of findings, the main conclusions established from the study findings, paving the way for recommendations to mobile telecom operators in South Africa for adoption and implementing BPO so that can improve productivity, cost efficiency and profitability.

Below are the key recommendations as they relate to the research study

It is recommended that BPO service providers achieve all of the requirements of mobile telecommunications operators within the service level agreement (SLA), with the completion of a given work being tested against pre-determined standards, considering accuracy of cost, completeness and speed. A service provider who uses a BPO-based cost, productivity and profitability framework may be adequate to

address the SLA's obligation(s) more effectively and efficiently. The service level agreement (SLA) specifies the performance standard, the mechanism for determining performance, specific customer needs, and the method of delivering of service. The mobile telecom operators may benefit from reduced uncertainty, as well as the definition of all expectations, including the satisfactory level of processed quality of service and method of service delivery through the use of SLA.

Overall the results concluded an improvement in cost efficiency, increase in productivity and profitability after BPO implementation. In line with this overall conclusion it is recommended that the mobile telecom operators (managers) develop entry qualifiers or key performance indicators for supplier selection and evaluation and continuously monitoring the performance of the service providers (suppliers). Therefore, before awarding a BPO contract in the future, the technique of selecting suppliers, the effects of supply chain concerns and the supplier's perspective should all be considered.

Mobile telecom operators should invest in supplier development programs to their service providers(suppliers) of outsourced services on cost reduction strategies such as supply chain compression, kaizen concepts, joint braining storming for cost improvement and value engineering. Other notably areas of development focus on cycle time reduction and customer relationship management.

The entire BPO implementation process should be controlled by strong management leadership from both mobile telecommunications operators and service providers, whose performance is measured by certain performance criteria. To effectively conduct the contracting out of service and obtain the anticipated resource, project managers must create a comprehensive document. The gap should be identified by project managers and transfer of knowledge should emerge from both sides rather than from supplier to customer.

In order to achieve long-term success, decisions to contract out services should be taken from a strategic viewpoint and thoroughly incorporated into the process of planning business also known as business process planning (BPP).

Professionals, researchers and management of the mobile telecom operators should also understand which drivers triggers the type of BPO to be implemented, which is aligned to its vision & goals of the organization e.g Information Technology Outsourcing (ITO), Knowledge Process Outsourcing (KPO), Business Process Outsourcing (BPO) and Technology Process Outsourcing (TPO). The mobile telecom operators need to identify which of the activities can add value to the business which they can outsource.

Overall, mobile telecom operators can limit the risks of outsourcing by selecting service providers with the necessary competencies. Providers, also have to incorporate Information Technology (IT) into their operations to achieve the standard of competency required to be accepted by potential customers.

Due to the growing importance of outsourcing BPO procedures, a broader knowledge of the strategy is necessary and can help with management understanding the benefits and drawbacks of this form of outsourcing. Supply Chain practitioners should be aware that employing knowledge management capabilities is the most effective strategy to mitigate risks. Supply chain practitioners can use a direct interference strategy to eliminate the risk-on-performance transmission path, allowing them to control and avoid BPO risk. Supply Chain practitioners can also mitigate the effects of risk by lowering the risk of outsourcing and decreasing the chances of risk.

Supply chain managers are recommended to be flexibility when implementing BPO. Flexibility is a "add-on" component. Flexibility is, "defined as an organization's ability to make changes in process components such as activities, technology and information in a timely manner in response to changes in the business environment, requirements, and stakeholder needs, is recommended for both telecom operators and service providers.

Various roles play a part in the transformation to BPO, some with coordinating, strategic and operational responsibilities. As a result, it is recommended that organizations' structures must be transformed with process-based structures in order



to become adaptable and responsive to a process-oriented BPO company, as well as to eliminate bureaucratic approval stages and clarify responsibility for everyone, not just the management layer. The objective for organizational structure change is to adapt to new opportunities to service customer requirements, to collaborate amongst teams, and to align management and operations with the new environment.

Before deciding on outsourcing, management should consider using the developed CPP conceptual framework, which will guide supply chain practitioners in deciding on whether to insource or contract out. Supply Chain Practitioners must evaluate the cost-benefit analysis, profitability and productivity issues, all of which are regarded key managerial issues in evaluating the impact of BPO firms. This review procedure continues the fundamental choice about outsourcing's benefits and drawbacks. Outsourcing is a managerial decision based on both gains and risks.

## **6.5 LIMITATION AND SUGGESTIONS FOR FURTHER RESEARCH**

The impact of BPO on other countries was not examined using quantitative factors in this study. A comparative study between South Africa and other African countries on analyzing the impact of BPO on telecom operators quantitatively and applying the CPP framework should be one subject of future research. South Africa will be able to examine where it stands when compared to other countries in the region on aspects such as the link between BPO and productivity, cost efficiency and profitability.

The study confined itself to the mobile telecommunication companies. More research can be conducted in other South African industries most notably banks, hospitals, car assembling, learning institutions, are also important BPO hubs and worthy of further examination. These industries are the subject of a future study by other authors. This research should be replicated in other sectors to evaluate the effects of BPO on the performance of an organization's operational activities and also to establish the linkage between BPO and cost efficiency, productivity and profitability.

Another area of inquiry is investigating specific telecommunications sector companies in South Africa, because no country's industries or companies are at the same level of skill maturation or offer the same cost advantage. As a result, several South African mobile telecom providers might be investigated to determine how they can be

promoted as a BPO industry. A research article like this is critical for BPO literature since it will fill a gap in the present knowledge base.

Further research on extensive BPO journeys is needed, according to Brocke and Mendling (2017), in order to do comparison studies confirming lessons gained across industries on the impact of BPO on cost, productivity and profitability, as well as international studies.

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## APPENDIXES

### Appendix 1: Research instrument (questionnaire)



### Information Sheet to Participate in Research

Date: \_\_\_\_\_

Dear Participant,

My name is Samson Mbanje and I am a Doctor of Business Administration student at the University of KWAZULU-NATAL. My email address is 217081009@stu.ukzn.ac.za or [psmbanje@gmail.com](mailto:psmbanje@gmail.com) and phone number is +27712063832.

You are being invited to consider participating in a study that involves research on “

**Evaluating the impact of business process outsourcing on the operational performance of the mobile telecommunications Industry, South Africa**”. The study is being supervised by Dr Orthodox Tefera who may be contacted at [teferao@ukzn.ac.za](mailto:teferao@ukzn.ac.za)

The research results are useful to corporate management in the mobile telecommunications industry in making decisions regarding whether to in-source or outsource (or whether outsourcing is an appropriate option in their situation) and can also be used as a benchmark or reference point by other companies in the same industry especially in developing countries in southern Africa. The duration of your participation, if you choose to enroll and remain in the study, is expected to be not more than 25 minutes. The study is funded by the researcher.

The study may involve no risk or discomfort except for taking 25 minutes of your valuable time. We hope that the study will develop a framework for the telecommunication industry on the impact of business process outsourcing on their operational performance.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (HSSREC/00002387/2021).

In the event of any problems or concerns/questions you may contact the researcher using the abovementioned details or the UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

#### **HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION**

Research Office, Westville Campus  
Govan Mbeki Building  
Private Bag X 54001  
Durban  
4000  
KwaZulu-Natal, SOUTH AFRICA  
Tel: 27 31 2604557- Fax: 27 31 2604609

Email: [HSSREC@ukzn.ac.za](mailto:HSSREC@ukzn.ac.za)

The participation in this research is voluntary and you may withdraw participation at any point. In the event of refusal to participate or withdrawal of participation, you will not incur penalty or withdrawal of any benefits to which you are

normally entitled. Your confidentiality is assured as your personal information will not be traced or divulged to anyone as you will not be required to submit this information on the questionnaire. The questionnaire will be collected in a sealed envelope and if there is any evidence of tampering, the questionnaire will be destroyed. Once the questionnaire is coded for analysis it will be kept in a box in a reputable document warehouse for the period required by the university.

Please mark with a Tick✓ in the box (1-5) with the appropriate response/option. Mark one box only.

**SECTION A: DEMOGRAPHIC INFORMATION**

**1. What is your age category in years?**

20 > 30	
30 > 40	
40 > 50	
50 > 60	
< 60	

**2. What is your gender (choose)?**

Male	
Female	
Not willing to Answer	

**3. How long have you been working for this organisation?**

> 5 years	
5 > 10 years	
10 > 15 years	
15 > 20 years	
20 > 25 years	
< 25 years	

**4. What is your highest Qualification?**

Matric	
Certificate	
Diploma	
Degree	
Masters	
PhD	

**5. What department are you working in this organisation?**



Accounts/Finance	
Human resources	
Engineering	
Production	
IT	
Sales &Marketing	
Procurement	
Research &Development(R&D)	
Logistics	
Others please specify	

## 6. Activities and Services outsourced

Which activities and services are outsourced by the company?		Please tick all the applicable
<b>M1</b>	Spare parts management/Inventory management &operation	
<b>M2</b>	Assembly operations and maintenance of the base stations of mobile network	
<b>M3</b>	Building and managing network infrastructure(maintenance)	
<b>M4</b>	Property/Facility management	
<b>M5</b>	Monitoring the mobile network on capacity overload and breakdowns	
<b>M6</b>	Manufacturing of mobile network equipment, handsets	
<b>M7</b>	Manufacturing of hard software components and resolving software problems	
<b>M8</b>	Network roll-out and management	
<b>M9</b>	Fleet management	
<b>M10</b>	Sales/Marketing	
<b>M11</b>	Others please specify	

## SECTION B: OPINIONS RELATED QUESTIONS

Please indicate the extent to which you agree or disagree with each of the following statements. Please put a tick  $\checkmark$  in the applicable box to rate your level of agreement or disagreement (selected response). Mark one box only. Use the scale: (5) = Strongly Agree; (4) = Agree; (3) = Don't know; (2) = Disagree; (1) = Strongly Disagree

### 7. Primary reasons/ drivers of business process outsourcing (BPO)

Please indicate the following are the reasons/drivers of outsourcing. Please tick all the applicable.		Strongly Agree (5)	Agree (4)	Don't know (3)	Disagree (2)	Strongly Disagree (1)
<b>F1</b>	There is a reduction in capital investment thereby freeing up limited capital funds more available for core areas (Financial driver)					
<b>F2</b>	Company can gain access to newer or latest technology or access to world class capabilities					
<b>F3</b>	Company can have access to unique resources, skills and talents					
<b>F4</b>	There is cost saving/reduction (Cost driver)					
<b>F5</b>	Company can benefit from increase competitiveness					
<b>F6</b>	Company can focus on core competencies or business (Organisational driver)					
<b>F7</b>	Company can develop a relationship with the outsourced service provider (Relationship driver)					
<b>F8</b>	Company will improve on return on assets					
<b>F9</b>	Company can improve operating efficiency through handling varying demand due to economies of scale					
<b>F10</b>	Company can provide an alternative to building the capability inside					
<b>F11</b>	To improve profitability (Revenue driver)					
<b>F12</b>	Company can improve productivity through operational efficiency					
<b>F13</b>	Focus on enablers of business growth (Revenue driver)					
<b>F14</b>	Achieve competitive advantage by quality improvement (Improvement driver)					
<b>F15</b>	Company outsource due to politically-driven agenda					
<b>F16</b>	Others please specify					

### 8. Risks/Challenges/Disadvantages of business process outsourcing (BPO)

<b>Please indicate the following are the risk / challenges / disadvantages of outsourcing.</b>		<b>Please tick all the applicable</b>
<b>T1</b>	There is potential loss of control over key/critical functions e.g to reputation, if ethical issues arise	
<b>T2</b>	Company may experience risk of "lock in" to under-performing service provider	
<b>T3</b>	Difficulty of ensuring service quality and consistency from the service provider	
<b>T4</b>	There is potential loss of in-house expertise, knowledge in the service area which may be required in future.	
<b>T5</b>	Risk of loss of control over confidential data and intellectual property	
<b>T6</b>	Added distance from the customer or end-user by having an intermediary service provider, may weaken external or internal customer communication and relationships with the company (loss of supply chain visibility)	
<b>T7</b>	Potentially higher cost of services from the service provider due to contractor high profit margins	
<b>T8</b>	Resistance from employee unions due to fear of job loss and change may lead to low morale and performance of the remaining employees	
<b>T9</b>	Company may be unable to realize expected deliverables/benefits due to poor choice or selection of service providers	
<b>T10</b>	Company may experience the risk of over dependence on a supplier	
<b>T11</b>	Others please specify	

### **9. Performance dimension/metrics: Linkage between business process outsourcing (BPO) and Cost efficiency**

<b>Linkage between Outsourcing and Cost reduction. Please tick all the applicable</b>		<b>Strongly Agree (5)</b>	<b>Agree (4)</b>	<b>Don't know (3)</b>	<b>Disagree (2)</b>	<b>Strongly Disagree (1)</b>
<b>A1</b>	There is reduction in labour cost after outsourcing					
<b>A2</b>	There is reduction in operational expenses/ cost after outsourcing					
<b>A3</b>	There is lower total cost of ownership after outsourcing					
<b>A4</b>	There is reduction in capital investment after outsourcing					
<b>A5</b>	There is reduction in developmental cost after outsourcing					

<b>A6</b>	There is reduction in investment in research & development (R & D)					
<b>A7</b>	There is an elimination of the fixed cost of internal staff by moving the function to a supplier					
<b>A8</b>	There is an improvement in selling, general and administrative expenses					
<b>A9</b>	Overall business process outsourcing improves cost efficiency					
<b>A10</b>	Others please specify					

10.

<b>The following is the range of cost savings the company realised from the outsourcing efforts.</b>		<b>Please tick the applicable</b>
<b>B1</b>	> 1%	
<b>B2</b>	1 > 5%	
<b>B3</b>	6 > 10%	
<b>B4</b>	11 > 15%	
<b>B5</b>	16 > 20%	
<b>B6</b>	21 > 25%	
<b>B7</b>	< 25	

11.

<b>The company begin realizing these cost savings (Timing).</b>		<b>Please tick the applicable</b>
<b>C1</b>	1 > 6months	
<b>C2</b>	7 > 12 months	
<b>C3</b>	1 > 2years	
<b>C4</b>	< 2 years	
<b>C5</b>	Not applicable	

**12. Performance dimension/metrics: Linkage between business process outsourcing (BPO) and Productivity**

<b>Linkage between Outsourcing and Productivity. Please tick all the applicable</b>		<b>Strongly Agree (5)</b>	<b>Agree (4)</b>	<b>Don't know (3)</b>	<b>Disagree (2)</b>	<b>Strongly Disagree (1)</b>
<b>D1</b>	There is an improvement in total revenue/ Sales(output) after outsourcing					
<b>D2</b>	There is an improvement of asset turnover after outsourcing					
<b>D3</b>	There is an improvement in inventory turnover after outsourcing					
<b>D4</b>	There is an improvement in investing more in new technology after outsourcing					
<b>D5</b>	There is an improvement in economies of skill after outsourcing					
<b>D6</b>	There is a reduction in customer response cycle time after outsourcing					
<b>D7</b>	There is an increase in market share after outsourcing					
<b>D8</b>	There is an improvement in process and employee productivity					
<b>D9</b>	Overall business process outsourcing increases productivity					
<b>D 10</b>	Others please specify					

**13.**

<b>The following is the range of output/turnover the company realised from the outsourcing efforts.</b>		<b>Please tick the applicable</b>
<b>E1</b>	> 1%	
<b>E2</b>	1 > 5%	
<b>E3</b>	6 > 10%	
<b>E4</b>	11 > 15%	
<b>E5</b>	16 > 20%	
<b>E6</b>	21 > 25%	
<b>E7</b>	< 25%	

14.

The company begin realizing an improvement on the output/turnover (timing).		Please tick the applicable
H1	1 > 6 Months	
H2	7 > 12 Months	
H3	1 > 12 years	
H4	< 2 years	
H5	Not Applicable	

**15. Performance dimension/metrics: Linkage between business process outsourcing (BPO) and Profitability**

Linkage between Outsourcing and Profitability. Please tick all the applicable		Strongly Agree (5)	Agree (4)	Don't know (3)	Disagree (2)	Strongly Disagree (1)
G1	There is an improvement on return on assets (ROA) after outsourcing					
G2	There is an improvement on net profit margin after outsourcing					
G3	There is an increased sales price after outsourcing					
G4	There is an improvement/Increased return that the firm's owners receive from their investments after outsourcing (ROI)					
G5	There is a specialization & economies of scale after outsourcing					
G6	There is an improvement in the growth of revenue after outsourcing					
G7	There is cash generation by transferring assets to the service provider					
G8	There is an improvement in return on equity (ROE)					
G9	Overall business process outsourcing increases profitability					
G10	Others please specify					

16.

The following is the range of profits the company realised from the outsourcing efforts.		Please tick the applicable
K1	> 1%	
K2	1 > 5%	

<b>K3</b>	6 > 10%	
<b>K4</b>	11 > 15%	
<b>K5</b>	16 > 20%	
<b>K6</b>	21 > 25%	
<b>K7</b>	< 25	

17.

<b>The company begin realizing these profits (timing)</b>		<b>Please tick the applicable</b>
<b>P1</b>	1 > 6months	
<b>P2</b>	7 > 12 Months	
<b>P3</b>	1 > 2 years	
<b>P4</b>	< 2 years	
<b>P5</b>	Not applicable	

**Thank you for your time and co-operation**



**CONSENT FORM**

I..... (full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT

DATE

\_\_\_\_\_

\_\_\_\_\_

**This page is to be retained by researcher**

## Appendix 2: Gatekeeper letters



2019 August 23

Dear Samson Mbanje

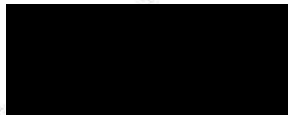
Thank you for your request to conduct a study with our organization.

The Management has deliberated upon your request to interview some amongst our personnel as part of your doctoral research project.

You are, therefore, granted the permission to interview and interact with our personnel.

Wishing you all the best in your studies.

Yours faithfully



Iyaniso Khologadi, VII.

**OPERATIONS DIRECTOR**

Metro Global Telecom Services (Pty) Limited  
Regus Business Centre, Ground Floor, Lakeview Building  
1277 Mike Crawford Avenue, Centurion, Gauteng, South Africa  
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🐦 vodacom  
🌐 vodacom

September 02, 2019

Dear Mr. Samson Mbanje

**RE: REQUEST TO CONDUCT RESEARCH STUDY WITHIN OUR ORGANISATION**

I hope I find you well.

Thank you for your request and consideration to conduct your doctoral studies with our organization.

As part of our corporate social responsibility, we welcome such an initiative to assist you in conducting your research as part of your studies. It is our belief that such studies will also assist us in the continuous improvement of our services to the communities we serve.

The Management has therefore, granted you the permission to do such with our employees.

We wish you the best in your studies and look forward to work with you to achieve your desired goals.

Yours faithfully,

Nombuso Nelly Madonsela, Ms.

**HEAD: Corporate Affairs**

## Appendix 3: Ethical clearance approval letter



11 May 2021

Mr Samson Mbanje (217081009)  
Grad School of Bus & Leadership  
Westville Campus

Dear Mr Mbanje,

Protocol reference number: HSSREC/00002387/2021

Project title: A framework for evaluating the impact of Business Process Outsourcing (BPO) on the operational performance of the mobile telecommunication industry, South Africa

Degree: PhD

### Approval Notification – Expedited Application

This letter serves to notify you that your application received on 02 February 2021 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted FULL APPROVAL.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

This approval is valid until 11 May 2022.

To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

All research conducted during the COVID-19 period must adhere to the national and UKZN guidelines.

HSSREC is registered with the South African National Research Ethics Council (REC-040414-040).

Yours sincerely,



Professor Dipane Hlalele (Chair)

/dd

### Humanities and Social Sciences Research Ethics Committee

Postal Address: Private Bag X54001, Durban, 4000, South Africa

Telephone: +27 (0)31 260 8350/4557/3587 Email: [hssrec@ukzn.ac.za](mailto:hssrec@ukzn.ac.za) Website: <http://research.ukzn.ac.za/Research-Ethics>

Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville

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