Firm Participation, Learning and Innovation in Heterogenous Value Chains of IT-enabled Services

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ISBN: 978 90 8666 476 4
Publisher: Boekenplan, Maastricht

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DISSERTATION

To obtain the degree of Doctor at Maastricht University,
on the authority of the Rector Magnificus
Prof. Dr. Rianne M. Letschert
in accordance with the decision of the Board of Deans
to be defended in public
on Thursday, 4th of April 2019 at 10:00 hours

by

Charlotte Keijser

Supervisor
Prof. Dr. René Belderbos

Co-supervisor
Dr. Micheline Goedhuys
Dr. Michiko Iizuka, Tokyo

Assessment Committee
Prof. Dr. Martin Carree **(Chairman)**
Prof. Dr. Fred Gault
Dr. Rasmus Lema, Associate Professor, Aalborg University Copenhagen
Prof. Dr. Bettina Peters, Honorary Professor, University of Luxembourg
Prof. Dr. Carlo Pietrobelli

Summary

Global value chains (GVCs) are a reflection of the increasing interconnectedness of economies. Many firms delegate their non-core activities to external firms in the country (outsourcing) or to captive or external firms abroad (offshoring or offshore outsourcing respectively). The fragmentation of production processes allows developing countries to participate in GVCs without having to develop the full range of capabilities of the chain. The most recent wave of GVCs concerns the outsourcing and offshoring of information technology-enabled services (ITES), referring to services that can be delivered at distance using IT in the delivery process. Developing countries have increasingly become offshore destinations for these services, as their governments have begun to develop their ITES industry to take advantage of the opportunities presented by participation in GVCs, such as job creation, access to new markets and potential learning benefits. However, competing in value chains at the global level appears challenging for less developed countries, and recent studies suggest that participation in value chains at the national or regional market level may offer more feasible business prospects. Furthermore, firms that participate in GVCs need to continuously learn to enhance their competitiveness. This raises questions about the learning mechanisms available, in particular, the role of value chain client learning and the role of the national innovation system (NIS) (i.e. how actors, linkages and institutions within a country contribute to knowledge development). Understanding how developing countries can successfully participate in GVCs has become an important subject for policy makers and forms the fundamental question that motivates this thesis.

In this respect, the aim of this dissertation is to shed light on the case of the South African ITES sector, for which empirical evidence remains scant. In particular, it analyses the characteristics and drivers of firm participation in local, regional and global value chains of ITES, and the mechanisms of firm learning and innovation. To this end, qualitative and quantitative data were collected through interviews and a questionnaire survey, respectively. Interviews were held with 47 third-party ITES providers and with 35 industry stakeholders. A firm level survey was conducted, yielding information on 76 South African based third-party (non-captive) ITES providers. The mixed methods approach allows for the triangulation of the research findings and for the research objectives to be examined from a more holistic perspective.

The findings show that service providers in South Africa not only serve clients in offshore markets (e.g. in the UK or Australia) (engage in GVCs), but also serve clients in the domestic and regional markets (e.g. in Namibia or Kenya), connecting these

service providers to local and regional value chains respectively (engage in LVCs and RVCs). A gradual international market development pattern is observed for (mainly) South African firms that start in LVCs, and gradually expand into RVCs and or GVCs. Participation in GVCs is associated with ISO compliance, membership of an industry association, affiliation to a foreign corporate group, and skills intensity. Findings suggest that ISO standards and involvement in networks, such as affiliation to a foreign group or an industry association, may not be as common in LVCs and RVCs as in the case of GVCs. The lack of information on business opportunities and clients, and not having connections overseas to secure partnerships are the main self-perceived obstacles to GVC participation. Overall, in addition to quality standards associated with GVC participation, the importance of accessing international market knowledge and connecting to clients (e.g. through industry bodies, group affiliation or managerial experience) needs to be emphasized as well.

The analyses on the mechanisms of learning in value chains and innovation show that governance structures between the client firm and service provider, especially relations based on trust and partnership, positively influence learning in various fields and across all value chains. Relations based on forms of control and monitoring by the client firm facilitate learning only in the field of IT, and only in GVCs. Client learning (especially IT learning) is positively associated with the introduction of new to the market innovations. A positive relation also exists between new-to-market innovation and for learning through the innovation system. GVC participation is thus not the only vehicle for capability building for innovation, and VC learning fostering innovation is also evident for firms active in LVCs and RVCs.

GVC participation, in conjunction with firm resources and NIS learning, also create useful learning avenues beyond strict innovation outcomes, such as the development of a service delivery competence (i.e. knowledge of the service, industry, and client requirements). Overall, firms in RVCs and LVCs report fewer immediate learning effects, especially with regard to the transfer of human resources from clients compared to firms in GVCs and rely more heavily on (constrained) internal firm resources. Finally, multiple feedback loops exist between the NIS and GVC participation with regard to their role in capacity building at the firm level and in the wider ITES sector.

Overall, the dissertation conveys the message that rather than focusing only on the offshoring of services from firms in developed countries to firms in developing countries (considered in the literature as the current wave of GVCs), attention should be paid to heterogeneous value chains of ITES, and what these different value chains imply for developing country firms. LVCs and RVCs allow firms to enter the ITES sector and could potentially provide a space for learning for domestic firms that seek

to upgrade to GVCs. To assist these firms in the development of capabilities and potential inter-chain upgrading, a stronger NIS is required. A major conclusion of this dissertation is that learning in value chains and learning from the NIS are both important for capability building at the firm level. From a policy perspective, strengthening the NIS is key to tackle current challenges facing the South African ITES sector (e.g. shortages of skills and lack of industry interactions) and can positively influence the development of firms' internal resources, promote GVC participation, and facilitate learning in GVCs.

Acknowledgements

This thesis has been the result of an interesting journey. I would like to take the opportunity herewith to thank the people who offered their support and direction throughout this journey.

First and foremost, I would like to express my deepest gratitude to my supervisors Micheline Goedhuys and Michiko Iizuka and Rene Belderbos to whom I'm indebted for their continued academic support, constructive criticism and interesting discussions. In particular, I'm grateful for their patience, as every meeting, I walked in announcing I would only take one hour of their time, and instead walked out taking at least 2 hours of their time. This is a testimony of their commitment to providing supervision and interest in engaging in stimulating discussions.

Rene, thank you for always giving me the feeling that supervising my thesis was high on your priority list (although you only have limited time available at UNU and have multiple projects going on). Thank you for responding to my emails before I could even hit send, and for always keeping track of all of our previous discussions. This gave me a form of stability and helped me to stay focused and make progress. Thank you for allowing me to tap into your academic experience, especially regarding firm innovation and export behavior, and for challenging me to develop skills in econometric analysis. I enjoyed the critical yet constructive feedback sessions.

Micheline, thank you for allowing me to take up a big part of your day, if not, your entire day at times to discuss econometrics, even if it was just to reassure me when I felt overwhelmed, which helped me to move on to the next step. Your expertise in firms' growth, SMEs, and knowledge of conducting surveys in African countries would challenge me during meetings, raise questions that stimulated discussions among our team and help improve my work.

Michiko, thank you for your guidance throughout the dissertation, especially your support in qualitative research. I'm grateful to have had the pleasure of working together on a paper, and I'm in debt for the time you spent with me brainstorming, which helped me a great deal in understanding the bigger picture of the thesis and the research objectives. I'm grateful for the academic connections in South Africa you

provided, which was not only helpful but also showed your kindness and support, also from a distance.

I would like to extend my gratitude to the reading committee for reviewing my thesis and giving me detailed and very helpful feedback/insightful comments. I'm grateful that a selection of experienced and highly qualified academics have read my book.

Also, a special thanks to the directors of the PhD programme, Robin Cowan and Tatiana Skripka, for the guidance especially during the first year, and for the "informal door policy" that allowed me to discuss not only progress made but any issue that arose. This to me is the charm of UNU-MERIT, which functions as a formal institute, growing, yet keeping close connections to its PhD fellows.

It's been such a great pleasure to have been a programme coordinator for the dual career PhD programme, under the supervision of Mindel van der Laar. I would like to thank the GPAC participants, of whom many I spent 4 years in MERIT, for their friendship and for sharing their ambition. I'm grateful for having worked in an environment with so many different nationalities, meeting professors from all over the world. This opportunity would not have been possible without Mindel, who has allowed me to be part of the team, and taught me coordination skills, but also the importance of celebrating life events, birthdays, and other milestones over a glass of wine and fine dinner. Through the GPAC coordination and events I got the pleasure to interact more frequently with other colleagues, especially Mieke, Susan and Ingrid, whom I enjoyed chatting with. Herman, thank you for IT support, and for being so kind and patient, even when I would (multiple times) ask you look at my computer, and all that was wrong was a clearly unplugged plug. Danny, thank you for laughing at silly mistakes I made during stressful days (like the time I strongly believed that the month December would follow October) and for keeping the institute entertained with football polls. I'm also grateful for having met Saba, fellow GPAC coordinator and PhD student, but above all a warm hearted and dear friend. She left a Post-it on my desk 4 years ago, saying: "Smile my sweety", which is still on my desk and a daily reminder of her kindness.

Doing a PhD at UNU-MERIT gave the opportunity to pursue the research interest that I'm passionate about, travel and collect my own data. I'm grateful for the assistance provided by representatives of BPESA in South Africa. They were the first contacts I

established in South Africa and were always the first place I would go to when landing in South Africa. They respected the distance I kept at some point to ensure that the data collection was objective and not biased towards their representation of firms. A special thanks to Edmore Chinhamo for our great research talks about the sector, and always willing to address any question I had. I'm grateful to David Kaplan, professor at the University of Cape Town (UCT), for inviting me to seminars and introducing me to researchers at UCT. A special thanks to Francois and his lovely wife Ariana and baby boy Adriene, for welcoming me in their home in vibrant Johannesburg, when I needed to do fieldwork. Even though I had not known them for that long, they refused that I would go to a hotel and opened their home to me as long as I needed; a form of hospitality that I had not experienced before. During the various trips I traveled by myself in Gauteng, KZN and the Western Cape, and was lucky to always come across people that would make me feel safe and comfortable. I look back with great pleasure on the daily taxi trips I took to visit firms, chatting with taxi drivers about South African politics and life.

My interest in the topic of this dissertation arose during the master programme International development Studies at the University of Amsterdam (UvA). I would like to thank Niels Beerepoot for his guidance during my master thesis on the outsourcing/offshoring industry in Ghana and for further research opportunities at the UvA. Niels, thank you for introducing me to this topic, which never ceases to interest me.

Moving to Maastricht gave me the opportunity to meet an amazing international community of researchers and friends. I will never forget my first year in the programme together with my 2013 batch. We would be each other's family, have dinner together, laugh together, but also share hardship. In particular, a special thanks to Alison, Elise, Elisa, Nana and Elvis to have shared such beautiful memories and have taught me a great deal about life outside Academia and how to come together in difficult times. Elise, thank you for making me an aunty to Andrew who will always be close to my heart. Even though we all go our separate ways, I'm sure that we will always stay connected. A big thanks to Mueid and Ibrahima, my paranimphs, for always being the familiar face and the warm hug in the corridors of UNU. Im grateful to have had these intelligent and friendly colleagues by my side. Thank you Caio and Vasil for being the best office mates; I think we will never have such a big cool office suite at our next job. A big thank you to Sten for designing the cover of this book. Also,

a big thanks to Katharina, Cristina, Alex and Francisco who motivated me to come to the office, have coffee, celebrate birthdays, chat about our weekend plans, talk politics or life events, talk to each other in Polish (while none of us could actually speak Polish), and laugh about Alex's jokes. Best coffee breaks!

I would also like to thank my family, in particular, my mother Brigitte, Paul and Alexandra, for motivating me to pursue this PhD, and for teaching me the value of education and how it gives you options in life. Thank you for stimulating discussions at the dinner table, for sparking my interest in research and talking about the options of a PhD. I am indepted to Paul for connecting me to family friends in Academia or any other field that he could possible think of that would support me in fulfilling my passion and research ambition. A special thanks to David, my partner, who encouraged me to progress every day and lift me up during moments of self-doubt. David realized soon enough that the more support he would show during my frequent episodes of stress, the sooner this book would be done ☺. Thank you for putting up with me.

Finally, this book would not have been here without the help of what feels like 'my second mother', Eveline in de Braek, who already invested time in me before I was even admitted to the programme. Every day she would do everything she can to motive me and my PhD fellows, help us develop self-confidence, and teach us important life lessons. At first, I would just make sure to follow her instructions (as she is a former militant) but as time evolved, I would come to realize the value in her life lessons and visit her frequently to seek out advice or a big hug. One of my favorite Eveline phrases: "*First you are a human being, someone's daughter, a sister, a friend to someone, only then are you a PhD student*". This helped me put things into perspective, make me feel a bit "lighter" at times when feeling overwhelmed. She takes all the PhD fellows under her wing, and there is always room for more people. Eveline truly is the heart of the institute and will always have a special place in mine. Dankjewel en een dikke knuffel terug.

Maastricht, 18 December 2018

CONTENTS

LIST OF TABLES

LIST OF FIGURES

1 Introduction

Motivation of the dissertation

Global value chains (GVCs) are a defining feature of the current wave of globalization and a reflection of the increasing interconnectedness of economies (OECD, 2015). Fueled by technological advancements and cheaper transportation and communication, world economies are increasingly integrated, interdependent and specialized (Cattaneo, Gereffi, & Staritz, 2010). Many firms, predominantly from more advanced economies, seek efficiency gains and cost savings by delegating their non-core activities to external firms in the country (outsourcing) or to captive or external firms abroad (offshoring or offshore outsourcing repsectively), mostly in developing countries (Gereffi & Fernandez-Stark, 2010). The fragmentation of production processes on a global scale has given rise to GVCs, which have become "*the backbone of the world economy and central nervous system*" (Cattaneo, Gereffi, & Staritz, 2010, p. 7).

The relocation of production by transnational manufacturing firms to low-wage countries in the 1970s and 1980s has led to an increase in the number of developing country firms participating in GVCs. In the 1990s the electronic industry was leading, whereas the most recent wave of GVCs concerns the services sector, predominantly business services (Cattaneo et al., 2010). Developing countries have increasingly become offshore destinations for information technology enabled services (ITES), referring to services relying on information technology (IT) in the delivery process (Dossani & Kenney, 2007). Value chains of ITES include a broad spectrum of services, ranging from business processes, such as customer services and data processing to IT-services, such as software development to knowledge processes, including business analytics and risk management (Dossani & Kenney, 2007; Palugod & Palugod, 2011).

Participation of developing countries in GVCs is considered vital for their (economic) development as it provides opportunities to access new markets, diversify exports, add value to their local industries, and to increase employment (Gereffi & Fernandez-Stark, 2010; OECD, 2015). Moreover, the fragmentation of production processes and the associated specialization in stages of the chain, allow developing countries to participate in GVCs without having to develop the full range of capabilities of the chain. This "compresses the development experience", making non-linear catch up possible for developing country firms (Bamber, Fernandez-Stark, Gereffi, & Guinn, 2014). On the other hand, recent studies have argued that upgrading for developing country firms is often limited to the lowest value-added activities (Navas-Aleman, 2011), and may result in getting trapped in certain stages of the value chain (Andreoni,

2019; Lee et al., 2017). Furthermore, value chains at a local or regional market level may offer more feasible business prospects for domestic firms in developing country environments (Bamber et al., 2014; Bazon & Navas-Aleman, 2004; Navas-Aleman, 2011). It is still an open question whether and under what circumstances GVC participation create new opportunities or obstacles to capability building (Lema, Pietrobelli & Rabellotti, 2018a).

Understanding how firms in developing countries can successfully participate into GVCs "and enhance their competitiveness" has become an important subject for development practitioners (see Bamber et al., 2014; Gereffi & Fernandez-Stark, 2010; Kowalski, Gonzalez, Ragoussis, & Ugarte, 2015). This dissertation aims to shed light on this issue by examining the role of GVC involvement in learning, capability building, and innovation by service providers in the South African ITES sector. It puts this in a broader perspective by comparing GVCs with local and regional value chain involvement and by examining the simultaneous role of the innovation system (IS). The latter refers to how a group of actors, networks and institutions contribute to the development and diffusion of knowledge (Lundvall, 1992). The dissertation has four sets of related research objectives.

Research objectives

1.1.1 Characteristics of heterogeneous value chains of ITES

Competing in value chains at the global level appears challenging for less developed countries, particularly for domestic firms that may not have the capabilities to meet international requirements (Bamber et al., 2014). National and regional markets could offer developing country firms an alternative to the global market that is characterized by strong competition, high quality standards and that favors large-scale producers (ERA, 2009), and could provide a steppingstone into GVCs (Cattaneo et al., 2013; Banga, Kumar, & Cobbina, 2015; Draper, Freytag, & Fricke, 2015, Navas-Aleman, 2011). Bamber et al. (2014) depict GVCs as value chains capturing the flow of activities at the global market level – that is, across two or more continents, whereas regional value chains (RVCs) embody chains of activities at the regional market level (often within trading blocs), and local value chains (LVCs) capture the flow of services within a country.

Few attempts have been made to study value chains at the national and regional scale, while these have gained significance in developing countries, due to greater demand for services from emerging markets, and increased intra-regional trade (Banga et al., 2015; Cattaneo et al., 2010; Van Dijk & Trienekens, 2012). Evidence remains scant on the characteristics of RVCs of services, what opportunities these chains at the regional level provide for domestic firms in developing countries, how they differ from GVCs, and whether they can provide pathways to capability development and foster integration into GVCs (Bamber et al., 2014).

The first research objective (addressed in Chapter 3) is to identify the different types of value chains of ITES in an emerging country context. By drawing on quantitative and qualitative data collected in South Africa, this dissertation seeks to contribute to the literature by describing the characteristics of local, regional and global value chains and the characteristics of the engaged South African based ITES providers. In addition, this study seeks to identify possible (sequencing) patterns of value chain participation to contribute to the discussion on whether local and regional value chains are used as routes leading to GVC integration.

1.1.2 Firm participation in local, regional and global value chains of ITES

Despite increasing studies on determinants of GVC trade, empirical evidence remains scant regarding what drives engagement in GVCs, what the effects of such engagement may be, and what it implies for policy making (OECD and World Bank, 2015). Previous studies predominantly focus on country participation in GVCs rather than disaggregating data to the firm level, thereby leaving questions open on the type of firm level capabilities critical for GVC participation (Bamber et al., 2014). Moreover, recent research has pointed to the growing importance of value chains prevailing at the regional, rather than the global, market level. They may create opportunities for entry for small and medium-sized enterprises (SMEs) from developing countries that may have otherwise been resource-constrained to meet standards in GVCs servicing more advanced economies. This raises questions as to the determinants of participation in these different value chains. Therefore, the second research objective of this study (addressed in Chapter 4) is to identify firm-level characteristics associated with participation in local, regional and global value chains of ITES. The novelty of this analysis lies not only in identifying key correlates of participation in different value chains at the firm level, using novel data collected in South Africa, but also applying the analysis to the context of heterogeneous value chains of services.

1.1.3 Firm learning and innovation in local, regional and global value chains of ITES

Firms need to continuously engage in learning processes to develop and upgrade capabilities to be able to retain a competitive edge in a highly globalized economic landscape (Ernst, 2002). This raises questions about the mechanisms available for them to learn and develop differentiated and competitive capabilities in value chains.

Various studies incorporating a GVC approach have emphasized how the engagement of firms from developing countries in GVCs could offer them new avenues for accessing technological knowledge, and enhance learning and capability building, thereby, strengthening their competitive position (see Castellacci, 2008; Gereffi, 1994, 1999; Giuliani, Pietrobelli, & Rabellotti, 2005; Humphrey & Schmitz, 2002). However, the nature of learning mechanisms in a value chains setting, through what means knowledge is transferred, how this is facilitated and links to firms' innovation remain understudied (Morisson, Pietrobelli, & Rabellotti, 2008). For example, De Marchi, Giuliani, and Rabellotti state that "*the exact nature of GVC inter-firm relationships, and their impact on the learning and innovative processes of developing countries' firms involved in such GVCs is still controversial and rather understudied*" (2015, p. 2). The GVC literature, that has focused predominantly on GVC governance structures, has not sufficiently taken into account capability building at the firm level, e.g. firms' internal processes to innovate or to absorb and effectively use GVC knowledge (De Marchi et al., 2015; Lema, 2012), nor the local IS in which they are embedded (Pietrobelli & Rabellotti, 2011; Morrison et al., 2008). Furthermore, recent studies have challenged the notion that GVCs are the only structure facilitating learning, given the observed potential of participation in local and regional value chains for capability building (Navas-Aleman, 2011; Lee, Szapiro, & Mao, 2017).

The third research objective (addressed in Chapter 5) is to understand the role of local, regional and global value chain client learning in the development of firm capabilities, and how in turn, value chain learning is associated with the introduction of service innovation that is new to the South African market. The learning process is studied more in-depth in terms of how service providers' absorptive capacity and the governance structures prevailing in the value chain (i.e. the relation between the client firm and service provider) influence learning outcomes. The role of learning sources outside of the value chain (e.g. firms' internal R&D and the system of innovation) in fostering innovation is also explored. The main contribution to the literature is the examination of learning and innovation related to participation in local, regional and

global value chains of ITES.

1.1.4 Looking beyond GVCs for capacity development

The increased interconnectedness of firms and nations have spurred debates about firm competitiveness, in particularly, what role the increasing embeddedness of firms in transnational networks plays in the development of knowledge (Castellacci, 2008). The GVC literature has provided ample evidence on learning in GVCs, however, the IS (capturing actors, networks and institutions) is also considered key in understanding learning and knowledge development and determining competitiveness at all levels from the nation to the firm level (Cantwell, 2003; Morrison et al., 2008). Concepts such as technological, sectoral, regional and particularly national innovation systems (NISs) have been addressed extensively in the literature (Lundvall, 2007). A strong NIS is considered to be the foundation for learning and innovation in the face of strong global competition (see for a discussion Ernst, 2002; Castellacci, 2008).

GVC scholars argue that with increased integration of production processes and forces of globalization, cross-border networks rather than local networks are the enduring base for competitive advantage (Humphrey & Schmitz, 2002). It is argued that non-local networks are not reflected in the NIS literature, while they are relevant, as developing countries and most newly industrialized countries are generally dependent on foreign knowledge as the main source of learning and capability building (see for further discussion e.g. Ernst, 2002; Pietrobelli & Rabellotti, 2011).

While the international dimension, in the form of international value chains as learning mechanisms, has not sufficiently been accounted for in the IS literature, the value chain approach is criticized for overshadowing the importance of sectoral and local specificities that could influence the path, pace and direction of organizational learning (Morisson et al., 2008). A recent study stresses that neither the GVC nor the IS approach is sufficient in explaining capability development. Rather they interact in multiple ways and these interactions have implications for the speed, depth, and quality of capability building in developing country firms (Lema, Pietrobelli, & Rabellotti, 2018a). The final research objective (addressed in Chapter 6) is to have a closer look, using qualitative data, at the sources of learning in local, regional and global value chains, including the role of firms' internal efforts and the local IS. In doing so it examines how firms' involvement in local, regional and global value chains, and the NIS strengthen firms' capabilities, and how the NIS and GVCs interact to affect

firm-level capability development, and the viability of the South African ITES sector as a whole. The novelty of this analysis lies especially in the addition of the international dimension to the IS approach, which is an under researched area (Pietrobelli & Rabellotti, 2011), and applied to the business services context. It contributes to the literature by placing the analysis of the interaction between GVCs and the NIS in the South African context, using novel empirical data, and by identifying potential feedback loops between the two, which has been stressed as an important research avenue (Lema et al., 2018a, 2018b).

The case study

South Africa, a middle-income country, has made considerable strides towards improving the wellbeing of its citizens since the end of apartheid and transition to democracy in the mid-1990s, but progress is slowing (World Bank, 2018b). Growth has slowed down since 2011, driven by falling commodity prices, lower exports, and weak investments due to persistent policy uncertainty and low business confidence, amongst others. The economic slowdown has further increased the unemployment rate from 25% in 2011 to 27% in 2016, which is most felt by the youth with an unemployment rate of 53% in 2016. The continuously fallen growth rates in recent years, coupled with population growth have led to the stagnation of gross domestic product (GDP) per capita compared to other fast-growing emerging markets economies (OECD survey, 2017). This downward trend turned around in 2017, when South Africa's economy recorded growth at 1.3% in 2017, and future acceleration is forecasted by the World Bank, due to improved investor confidence (African economic outlook, 2018).

The services sector accounted for approximately 70% of GDP in 2017, whereas the industry sector and agriculture represented 29.7% and 2.8% of GDP in 2017, respectively (World Bank, 2018a). Especially, finance, real estate, and business services are South Africa's strongest non-primary sectors in the economy (contributing about 20% to GDP in 2017) (World Bank, 2018a). In 2006, the Accelerated and Shared Growth Initiative for South Africa (ASGI-SA) was launched, which identified the business process services outsourcing and offshoring sector as one of the country's top priority sectors to stimulate job creation and contribute to economic growth (Mashalaba, Wyatt, Mathe, & Singh, 2015).

The South African outsourcing and offshoring services sector (hereafter referred to as the ITES sector) makes for an interesting case. The country has only in recent years experienced (more rapid) growth as a provider of IT- enabled services like customer relations, data management, and legal services to offshore markets. Furthermore, the case of South Africa shows that it does not solely engage in GVCs through acting as a services delivery platform for clients overseas, but also as an end market for ITES, and as a gateway to the rest of Africa. Both domestic and foreign service providers are based in South Africa providing ITES (outsourcing) solutions to clients located in the country and in Sub Saharan Africa (SSA), giving rise to LVCs and RVCs of services. The resulting heterogeneity of value chains is partly driven by strategies of service providers to diversify market risks. In addition, this dissertation reveals that domestic small-scale service providers tend to struggle to compete on the offshore market and have instead turned to the domestic and regional ITES market. This shows that the case of South Africa fits well in the current discussions on whether LVCs and RVCs are important to (expand) market access and bring learning benefits. Moreover, according to the OECD survey on South Africa (2017), deepening regional integration, including exploiting its potential for trade in services, is considered key to boost job creation and growth. This further emphasizes the relevance of examining not only services value chains at the global market level, but also at the local and regional market level.

Data and methods

A mixed methods approach is followed that combines quantitative and qualitative research (Bryman, 2008). Due to lack of data on the South African ITES sector, qualitative and quantitative data have been collected through interviews and a questionnaire survey, respectively. Interviews were conducted with Chief Executive Officers (CEOs) and managers of 47 third-party ITES providers based in South Africa. In addition, interviews were held with 35 industry stakeholders (such as representatives from industry associations, governmental organizations, training providers, client firms, captive ITES providers, industry consultants, and academics). A firm level survey was conducted, yielding information on 76 South African based third-party (non-captive) ITES providers. Data from these multiple methods are triangulated in the analysis process rather than viewed separately, contributing to a more in-depth understanding of the sector at large and the specific research objectives. The focus of analysis of this dissertation is primarily on third-party providers (also referred to as independent service providers) in South Africa, that provide services to

an external client. In the case of captive providers, no outsourcing occurs, as the services are solely provided to the parent company inhouse, therefore, there may be a direct knowledge transfer from the parent firm to the captive firm, which renders the study on the drivers of market entry and the process of value chain client learning less interesting.

1.5 Structure of the dissertation

This thesis contains 6 chapters in addition to this introduction. While the chapters are interrelated and together provide a comprehensive analysis of firm participation and capability building in heterogeneous value chains of ITES, the chapters are structured such that they can also be read independently. The chapters with each their specific research objectives delineate their contribution and present the relevant literature review and specific methodologies used.

Chapter 2 discusses the overall methodological framework explaining the rationale for a mixed method research design, the choice of research sites, data collection, sample selection and descriptives, data analysis, and limitations of the research.

Chapter 3 sheds light on the South African ITES sector, and in particularly examines the characteristics of local, regional and global value chains in which South African based service providers are engaged. The survey data is used to provide insights into the characteristics of the service providers in the different value chains, and identifies the patterns of value chain involvement, shedding light on a gradual and direct route to GVC participation. The qualitative data, drawing on interviews with both service providers and industry stakeholders, is used to discuss the sector at large, and to further explain the patterns of value chain involvement.

Chapter 4 presents evidence on the characteristics of the service providers associated with participation in heterogeneous value chains. The conceptual framework integrates the literature on exports and studies on GVCs and ITES. The firm-level survey is used to statistically analyze the association between firm characteristics and the probability of participation in value chains at the global and regional market level versus participation in the South African market. In addition, a qualitative comparative analysis is conducted to triangulate findings obtained in the statistical

analysis and to shed light on the firm resources and capabilities associated with direct entry into GVC versus a gradual pathway to GVC involvement by serving LVCs first.

Chapter 5 presents evidence on how learning is facilitated in value chains of services, and in turn, how learning relates to innovation that is new to the South African market. The survey data forms the basis for this chapter and is used to conduct the statistical analyses. The first part of the chapter seeks to understand the factors that influence client learning, taking into consideration governance structures prevailing in value chains (a partnership style versus controlled forms of governance), as well as the service providers' absorptive capacity. The second analysis examines whether client learning influences the propensity of service providers to introduce new to the South African market innovation, while also considering the effects of non-GVC sources of learning (i.e. firms' internal efforts and IS-learning) on innovation. Throughout, a distinction is made between client learning and innovation in LVCs, RVCs and GVCs.

Chapter 6 examines the evidence on learning channels used by service providers to develop a service delivery competence, i.e. having the required skills and knowledge about the service to meet the requirements of their clients. Using qualitative data, this chapter explores in-depth the role of client learning in local, regional and global value chains while also exploring learning from internal firm efforts and from the NIS. In turn, it examines how the NIS and GVCs interact to affect firm-level capability development, and the viability of the South African ITES sector as a whole.

Chapter 7 concludes this dissertation. It presents the conclusions of the chapters and addresses the overall research objectives. Based on the findings of this dissertation, lessons are drawn that could be insightful for policy-making. It looks forward by discussing future research avenues.

2 Methodology

Research approach

This research follows primarily a case study approach to allow for a detailed investigation of South African based ITES providers and their context. According to Yin (2003) a case study method is used to investigate a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident (Yin, 2003, p. 13). This approach is preferable in situations when "how" or "why" questions are asked and when the researcher seeks to understand a contemporary social phenomenon while retaining the holistic and meaningful characteristics of real-life events (Yin, 2003). According to Yin (2003) multiple-case studies are generally preferred over single-case studies, but the benefit of a single case study approach is the focus on the specific context rather than on the ways in which both cases can be contrasted. Furthermore, a cross-cultural research by a single researcher can be challenging due to limitations in access, time and resources (Bryman, 2008; Yin, 2003).

Overall, there exists a large body of literature on ITES, but the majority of the studies focus on the case of India and the Philippines; two countries considered leading destinations for offshored ITES (see e.g. Dossani & Kenney, 2009; Kumar & Joseph, 2005). Much less is known about the role of and opportunities for SSA in the outsourcing/offshoring industry, while in countries such as South Africa, Ghana, Mauritius and Kenya concerted efforts have been made to develop an ITES sector to produce the much-needed white-collar jobs for the growing number of graduates. South Africa is selected as the case study, as it has the largest ITES sector in terms of number of service providers in the African continent (Everest Group, 2008), which is important for conducting a firm-level survey. Furthermore, English is one of the official languages in South Africa, which meant that interviews could be conducted in English, without the need of translators, thereby reducing any bias.

Outsourcing and offshoring is an urban phenomenon, occurring mainly in large cities with educated labor pools (Kleinbert, 2015). The vast majority of the business are located in the primary cities of South Africa: Cape Town (Western Cape), Johannesburg (Gauteng) and Durban (KwaZulu Natal (KZN)) (BPESA, 2015). Therefore, all data was collected from firms located in the areas of Cape Town, Johannesburg, and Durban.

A mixed methods approach is followed that combines methods associated with both quantitative and qualitative research (Bryman, 2008). The qualitative case study approach allows for an in-depth understanding of the workings and dynamics of the ITES industry. It is also most appropriate for generating a detailed examination of firms' value chain involvement and performance where one is to understand obstacles, actors' perceptions, firms' strategies etc. A quantitative multivariate approach is used for examining relationships among variables (Creswell, 2003), which is most suitable for understanding the relationship between firm characteristics and value chain involvement (Chapter 4), and firm level learning processes and their relationship with firm innovation (Chapter 5).

The combination of qualitative and quantitative approaches is most appropriate to address the research objectives and provides a more complete understanding of a research problem than either approach alone (Creswell, 2003). This triangulated methodology increases the accuracy of facts and interpretations, and reduces the researcher's bias, which will improve the quality of the data and validity of the research findings (Bryman, 2008).

Data collection

Secondary data, in the form of industry reports is available, however, it is not exhaustive and sufficient to address the research objectives. First, the collection of additional data is needed to explore the incidence of firms' involvement in RVCs, which is not reflected in current statistics on the South African ITES sector, which only records market presence in the domestic and the offshore market. Moreover, it does not capture multiple market involvement. Secondly, to identify the firm characteristics associated with value chain involvement (Chapter 4), firm-level learning mechanisms and firm innovation (Chapter 5), data on company profiles and several key characteristics and behavior of firms needed to be collected. Finally, additional data was needed to analyze the system of innovation underpinning sector development, and how the IS (i.e. institutions, market and non-market interactions between various agents in the sector) influence firm level learning (Chapter 6).

Qualitative and quantitative data were collected through interviews and a questionnaire (described below). Data from these multiple methods are converged in

the analysis process rather than viewed separately, contributing to a more in-depth understanding of the sector at large and the specific research questions and objectives.

Focus of analysis

The focus of analysis of this dissertation is primarily on South African based third-party service providers (also referred to as independent service providers) that deliver a service to an external client. The various firm-level analyses do not include captive service providers, as these firms provide services inhouse to their parent company (no outsourcing occurs). Therefore, there may be a direct transfer of knowledge and other resources from the parent firm to the captive unit. Third-party service providers could be still part of a larger firm network or a corporate group, but the key criteria to focus on these service providers is that they service external client firms (other than the parent firm). Although captive service providers can contribute greatly to capability building and growth of the sector via spillover effects, the direct relation with the parent firm makes the examination of the drivers of value chain involvement (as discussed in Chapter 4) and the learning processes via client-provider interactions (as discussed in Chapter 5) less interesting.

Based on the available secondary information, the South African sector is divided into captive and outsource sourcing modes. The latter thus refers to third-party service providers, which generated 34% of employment (75.855 jobs), while the former created 66% of employment (146.645 jobs) by 2016, however, employment by independent service providers is growing (13.7 percentage points increase from 2015 to 2016), whereas employment in captive arrangements has declined by 1.1 percentage points from the year 2015 to 2016[1]. Data is also available on whether firms are servicing either the domestic or international market. By the year 2016, 49.400 people were employed by third-party service providers serving clients in the domestic market, and 26.455 by third-party service providers having clients offshore (BPESA, 2017). Chapter 3 further discusses the sector and its characteristics.

[1] These numbers are presented in annual industry reports produced by the local industry association (see e.g. BPESA, 2016). In these reports employee growth is studied comparing two subsequent years. Older industry reports could have been retrieved to show growth over several years, but this would also reflect the data collection efforts of the industry association (and hence possible lack of data) rather than actual sector growth. The most recent numbers are considered most reliable and were thus used.

The Government (supported by the Rockefeller Foundation) has funded the industry body called Business Processing enabling South Africa (BPESA) to extend its representation from the Western Cape to the rest of the country to assist in their national representation strategy. This has resulted in a large-scale data collection of service providers operating in the country, including both member and non-member firms of the industry association. The business register that was created in 2016, as a result of this effort, captures service providers in the South African ITES sector across the nation. It is currently the only business register available, and was useful to create a sampling frame. It discloses whether a firm is a captive or a third-party service provider and whether it services the domestic or international market.

However, the 2016 register still proved to be quite incomplete. During this study I came across third-party service providers that operate in the ITES sector, but were not reflected in the business register. These service providers were found either via the Internet, referrals, or via visits to business campuses. I collected information about firms that either had merged, changed name, or quit operations or were wrongly classified as ITES provider. Therefore, I undertook the effort of updating the register with this new information (see Table 2.1). This resulted in a more updated list of ITES providers (see total population)[2]. Overall, the total population has similar proportions of firms operating in the domestic and international market as the original business register and the updates made. Hence, the register did not seem to be systematically over- or underrepresenting firms with an international market orientation.

[2] Due to insufficient information about the completeness and accuracy of the business register for the captive market no number of firms was reported.

Table 2.1 Description of the sample of independent service providers by market orientation

	Market orientation		
	Domestic	International	Total
Original business register	104 (63%)	61 (37%)	165 (100%)
Dropped firms	38 (65.5)	20 (34.5%)	**58** (100%)
New firms added			**99** (100%)
-Info on market*	33 (68.7%)	15 (31.3%)	48 (100%)
Total population			**206**
-Info on market**	99 (63.9%)	56 (36.1%)	155 (100%)

Source: Author's calculations. Notes: * Information on market orientation available for 48 firms out of 99 (48.5%). ** Information on market orientation available for 155 firms out of 206 (75.2%).

2.1.1 Qualitative analysis: interviews

Instead of opting for one long fieldwork period, several (shorter) periods were opted for (see Table 2.2). At the beginning of this research (2014-2015) no data was available of the names and location of firms beyond the Western Cape. Hence, this necessitated the need to first conduct an explorative fieldwork research to establish contacts and conduct open interviews to familiarize myself with the various research sites, business culture, and to learn more about the industry and its location, but also to test the relevance of the research objectives, the themes and concepts.

During this fieldwork a relationship was established with the national industry association BPESA, which was essential in accessing data of the sector, in facilitating initial introductions with stakeholders and firms, and in resolving the practical issues of conducting fieldwork in foreign environments. During the following fieldwork periods, a more distant relationship was kept with the industry association, to avoid bias of including member firms or the more successful firms only, and to maintain an independent status. This was found crucial in gaining trust of, and access to smaller firms that are not represented by the association. During these fieldwork trips, I attended several conferences on the South African ITES sector (in 2015 and in 2016), and three workshops (in 2016 and 2017), which all brought together stakeholders and service providers (see Table 2.2).

Table 2.2 Description of the fieldwork time line, location and activities

Date	*Location*	*Activities*
February-March 2015	Western Cape	Establish contacts, conducting firm interviews (8) and stakeholder interviews (11), collect secondary data, visit BPESA offshoring Summit South Africa (conference), design survey
January - April 2016	Western Cape, Gauteng and KZN	Conducting interviews with (35) firms and with (21) stakeholders, test survey, attend workshop on industry statistics hosted by BPESA
March - April 2017	Western Cape and Gauteng	Distribution survey and interviews with (4) firms, attend two workshops for service providers in ITES hosted by CCMG
October 2017	Western Cape	Attend offshore South Africa conference, and interviews with (3) stakeholders

Source: Author.

During these fieldwork periods, semi-structured interviews were conducted with CEOs and managers of 47 third-party ITES providers in Cape Town (Western Cape region, 26), Johannesburg (Gauteng, 13), and Durban (KZN, 9). It should be noted that various firms have multiple offices across South Africa.

The Manager Director or CEO in each firm was interviewed to get an overview of the firm in terms of their strategies and perception towards types of activities and market orientation, the firm's networks with other actors, especially their client(s) and their role in learning, and the overall evolution of their business and the sector in general. In several instances, I interviewed more than one representative from the same firm– such as managers from operations and human resources – to gain a more detailed overview of the firm by incorporating different perspectives. Each interview had a duration of approximately 1.5 hours.

Semi-structured interviews reflect the themes of interest while also capturing the interviewee's point of view and what the interviewee sees as relevant and important (Bryman, 2008). During each interview, I covered a list of specific topics (see interview guide in appendix), while keeping a degree of flexibility to pursue issues of interest that emerged during interviews. Although the interviews conducted in the first two fieldwork periods covered the same topics, during the first fieldwork the duration of interviews at firms was generally longer or multiple interviews were held at the same

firm to test the relevance of the research objectives, and also capture other information (not all used in the analysis) to help me understand the context (e.g. differences between captives and third-party providers and other characteristics of the ITES sector). The list of interview topics was not changed after the first fieldwork, but only more targeted to focus on the main research objectives.

Gaining trust was important for eliciting information, which did not allow for the use of audio recording during interviews. The offices of service providers were often highly secured, controlling and registering all employees and visitors every time they enter or leave the building. In most cases, I was not allowed to bring in a mobile phone, USB sticks or laptop and I had to register serial numbers of my devices. Due to these security issues and sensitivity of information disclosed during interviews about firms' strategies, perceptions and their clients, notes were taken instead. To ensure confidentiality, names of individuals and firms have been omitted.

In addition, semi-structured interviews with 35 industry stakeholders (such as representatives from industry bodies, governmental organizations, training providers, client firms, captive ITES providers, industry consultants, and academics) were conducted. These interviews aimed at understanding the ITES industry in terms of expectations, challenges and perceptions towards the local, regional and global market, and to gain an understanding of the NIS underpinning the ITES sector. Although the focus throughout the dissertation is on third-party/independent service providers, several interviews with captive service providers and client firms are included in the 35 stakeholder interviews, to understand the ITES sector at large, and to provide the relevant context of the sector in which the service providers operate.

Stakeholder interviews were both of an open nature, particularly in the initial fieldwork phase to explore important issues, whereas I also conducted semi-structured interviews to explore the specific research topics. As in the case of firm interviews, notes were taken and to ensure confidentiality, individuals and organizations interviewed have been kept anonymous[3].

[3]The name of BPESA is revealed (with consent), to provide transparency regarding the data collection

Sampling qualitative interviews

Given the absence of a publicly available formal firm register of this sector during the first fieldwork in 2015, firms were selected using snowball sampling. The business register capturing all service providers in the South African ITES sector across the nation only became available in 2016. During the second fieldwork phase, during which the majority of the firm interviews took place, the updated sampling frame of 206 firms was used to select firms randomly. It should be noted that due to the mix of both snowballing techniques in the beginning of the data collection, and random sampling during the second half of the data collection phase, the overall sampling method should not be viewed as purely randomized.

From the group of firms interviewed (47) to generate qualitative data, 40.5% is engaged in the domestic market, whereas 59.5% is engaged in the international market, hence for the qualitative analysis there is an oversampling of internationally oriented firms. This could reflect the information available during the first fieldwork phase, which was biased towards the Western Cape where internationally oriented firms are mostly located. The higher fraction of internationally oriented firms interviewed compared to the firms in the survey and the total population need to be considered when interpreting the results; nevertheless, the qualitative data is especially used to comment on particularities of the different value chains, rather than drawing general conclusions for the whole sample.

The key stakeholders were selected through snowballing sampling where initial contact with stakeholders whom are relevant to the research topic were used to establish contacts with other stakeholders. This form of non-probability sampling was conducted because there was no accessible sampling frame for "stakeholders" from which the sample was to be taken.

2.1.2 Quantitative analysis: firm-level survey

For the quantitative analysis a survey was developed that incorporates concepts from the literature on value chain participation, internationalization strategies of firms, learning and firm innovation (as will be discussed in the theoretical framework in each chapter). In the first place the various concepts and relevant dimensions were derived from the literature study and their relevance was tested during the first field visit. Subsequently the concepts were operationalized into survey questions that were

particularly relevant for the ITES industry in South Africa. Questions were inspired by existing surveys, mainly the Community Innovation Survey (CIS) for innovation questions, and the World Bank Enterprise Surveys[4] for general firm characteristics, and studies on organizational learning and outsourcing. These were adapted to the context of the South Africa ITES sector and complemented with questions that arose from own insights from earlier field research. For example, the explorative research phase was key in adding relevant concepts that were not reflected in the literature and to avoid omitting critical factors. Prior to developing and distributing the questionnaire, the survey was tested among six firms during the beginning of the second fieldwork phase. In addition, open interviews were held to obtain a better understanding of the industry, which further served as a "qualitative check" to understand whether the survey questions were relevant and interpreted correctly by the respondents (see survey in the appendix).

Sampling design survey

Due to the small scale of the industry, the entire population of third-party service providers (the final population of 206 firms as presented in Table 2.1) was targeted. Given the focus of this study, the key informant contacted in each firm was the managing director or the CEO, as they would have the appropriate knowledge on the research issues and especially since information regarding the decision makers in the firm (e.g. MD/CEO) had to be collected. The business register does not disclose any contact details, which resulted in a strenuous process of identifying the managers or CEOs in question and collecting contact details. Firms were contacted via email during approximately five months from March until July in 2017. Approximately one month after the initial mail reminders were sent via email. Another round of reminders to non-respondents was done via the phone. Overall, 81 responses were received of which five were not used (e.g. incomplete), leaving 76 valid responses for evaluation[5]. The response rate of the survey is 39.3% (81 businesses out of 206). Table 2.3 presents the proportion of survey responses and non-responses as well as the market

[4] The CIS 2014 questionnaire can be found at
https://ec.europa.eu/eurostat/web/microdata/community-innovation-survey
World Bank Enterprise surveys available at: http://www.enterprisesurveys.org/methodology.

[5] The sum of the total employees (by 2016) of the 76 ITES firms surveyed is 47.340, which equals 62% of the employees employed in the outsourcing market by 2016, as measured by the industry association (BPESA, 2017). This is similar to the number of firms surveyed that equals 49% of the population based on the original business register.

orientation of these firms. The proportion of firms engaged in the domestic market ranges between 60% and 65% for the responses, non-responses and for the total population (for which such information is available). The number of firms servicing international markets are also similar for the response, non-response and total population (ranging from 35% to 38%), hence suggesting that non-response bias should not be a major source of concern. The business register includes information on the type of provider (captive versus third-party), market involvement, but does not include other information (e.g. firm ownership, firm size), which would allow for a more detailed non-response analysis. Finally, of the 47 firms interviewed, 20 are also included in the survey, showing an overlap of 26% between firms included in the qualitative and quantitative data.

Table 2.3 Description of the survey responses and non-responses by market orientation

	Market orientation			
	Domestic	International	Total	
Response	51 (63%)	30 (37%)	81 (100%)	
Responses used	47 (61.8%)	29 (38.2%)	76 (100%)	5 responses dropped (incomplete)
Non-response	48 (64.9%)	26 (35.1%)	74 (100%)	Information available for 74 firms out of 125 firms (59.2%)
Total population	99 (63.9%)	56 (36.1%)	155 (100%)	Information available for 155 firms out of 206 firms (total population) (75.2%)

Source: Author's calculations.

Descriptive statistics of firms surveyed

Adopting the definition used by Bamber et al. (2014) value chain involvement is here defined by the geographical market location of the client firm to which the South African based service provider exports its services to (i.e. the market location of the client that has outsourced its service to a service provider in South Africa). Table 2.4 reflects the current client market(s) of the sample of South African based ITES providers. It shows that 34 firms service the domestic (South African) market only, 13 firms have clients in both the domestic and regional market, 5 firms have clients only in overseas markets, 13 firms have clients in both the domestic market and in overseas

markets, only one firm services both the regional and global market, whereas 10 firms have clients in the domestic, African market and in overseas markets.

Table 2.4 Classification value chain involvement according to client market(s)

Client market(s)	*Number of firms*	*Value chain*	*Total number of firms*
Domestic	34	LVC	34
Domestic/regional	13	RVC	13
Overseas	5	GVC	29
Domestic/overseas	13		
Regional/overseas	1		
Domestic/regional/overseas	10		
Total	76		76

Source: Author's calculations.

Following from this, firms from this sample that are active in the domestic market are considered to participate in LVCs, demand from clients in the African region (excluding South Africa) connect firms to RVCs, whereas the firms servicing clients located overseas (e.g. the UK, Australia or North America and possible emerging markets overseas[6]) are connected to GVCs.

As reflected in Table 2.4, firms can be engaged in multiple markets simultaneously, and hence participate in multiple value chains. In this study, firms are grouped according to their "market reach", which means that firms in both LVCs and RVCs are grouped under RVCs, whereas firms in both domestic and global markets, and firms in all markets, are grouped under GVCs. This results in the classification of local, regional and global value chain involvement.

Among the firms in GVCs, 26 firms (89.7%) service clients in Europe, 19 firms (86.2%) service clients in North American markets and 17 firms (58.6%) service clients in other geographical regions, such as Australia. Although survey data is not available on the degree of involvement in each value chain (e.g. for instance in terms of sales), the data

[6] In the questionnaire, a question on the location of the most important client in GVCs was included, which showed that the UK, the US and Australia were the most common client locations. Due to missing data it cannot be established with certainty whether any emerging market could have been included.

does show that out of the 24 firms in GVCs that participate in multiple value chains 16 (66.7%) are engaged in at least two regions, for example in both Europe and North America. This may be an indicator of significant involvement in GVCs. Moreover, firms could also be involved in multiple country markets within a certain region.

Firms participating in LVCs service clients in the South African market, both in the public and private sector. Of the 76 service providers, 24 firms have some regional activities (most cited countries in qualitative data are Botswana, Kenya and Namibia). Noticeable is that there are no firms in this sample that solely provide services to the regional market, instead firms active in the regional market have operations in other geographical areas simultaneously.

Table 2.5 provides an overview of the segment of the value chain in which the service providers operate, as well as a description of the firms' main line of service within each segment.

Table 2.5 The main services provided by the surveyed firms

	Value Chain Segment									
	BPO	N	**ITO**	N	**KPO**	N	**BPO/ITO**	N	**BPO/KPO**	N
Service line	ERM	4	Infra-structure	2	Business analytics /consulting	7	ERM/Software; IT Consulting	1	HRM/KPO	1
	HRM	8	Software	4			HRM/ Infrastructure; Software	1	ERM/KPO	4
	CRM	31	IT Consulting	1			CRM/Software	1	ERM;CRM/ KPO	1
	Multiple	5	Multiple	4			CRM/IT Consulting	1		
Total		**48**		**11**		**7**		**4**		**6**

Source: Author's calculations.

Notes: Business Process Outsourcing (BPO) includes activities in the field of Enterprise Resource Management (ERM); Human Resource Management (HRM); Customer Relationship Management (CRM). Information Technology Outsourcing (ITO) includes: infrastructure management; software development and management (Software); IT consulting. Knowledge process outsourcing (KPO) includes business analytics and consulting.

The clear majority of firms operate in the BPO segment, providing mostly customer relationship management (CRM) solutions, such as contact/call centers handling customer queries, (e.g. for telecommunication companies), debt collection services; sales and marketing (e.g. in the insurance sector). The other firms provide solutions in the field of either (or both) enterprise resource management (ERM) or human resource management (HRM). The type of services reported in ERM include document management (data entry, data processing), administrative activities, finance and accounting, and in HRM the main services include recruitment, payroll services and training. In the ITO segment (11) or in both BPO and ITO (4) most firms provide software services solutions (mainly application development), followed by more basic infrastructure support, IT consulting, or a combination of infrastructure- and software management. Finally, 13 firms provide services in the KPO segment, which include more knowledge-intensive services such as business consulting and analytics, including in legal services. The different value chain segments are more elaborately discussed in Chapter 3 and discusses how these descriptive statistics, especially the majority of firms active in the BPO segment, corresponds with secondary data.

Data analysis

The interview notes and fieldwork observations were digitized and together with secondary data stored and analyzed using text analysis software Nvivo (QSR software, 2017). The qualitative analysis follows primarily a deductive approach where the research objectives have been used to group the data. The data has been structured through coding, which is a process of attaching labels to lines of text to classify all data (Bryman, 2008). This was done to allow for grouping and systematic comparison with other parts of the data set so that similarities and differences in the data can be recognized. For example, in Chapter 6, a code matrix was generated, which involves summarizing the data by value chain involvement, to explore similarities or differences across service providers engaged in local, regional or global value chains.

The survey data was collected through email invitations via SurveyMonkey, and was analyzed using statistical methods, in the software program STATA (Statacorp, 2017). In Chapter 4, the qualitative comparative analysis (QCA) method, using the fsQCA software (Ragin, 2006), was used in addition to conventional statistical methods. QCA is an analytic approach and set of research tools to explain how a certain outcome is produced, i.e. what combinations of conditions produce a given phenomenon or event (Legewie, 2013). This was done to triangulate the research findings using different analysis techniques, as well as to examine subsamples of the data that cannot be analyzed using econometric methods, due to a low number of observations. The methods and techniques used for the analyses are further described in each chapter.
Table 2.6 provides an overview of the research questions and the data used in the empirical chapters. The survey data provide background statistics for Chapter 3 that characterizes firms in heterogeneous value chains. It particularly forms the base for Chapter 4 to examine the association between various firm characteristics and firms' engagement in value chains of services, and for Chapter 5, which analyses the nature of client learning in value chains and its relationship with firm innovation. The qualitative data is used in all chapters to complement insights from quantitative analysis (Chapter 3-5), whereas it is used in Chapter 6 to further zoom in on the mechanisms of learning in value chains.

Table 2.6 The research questions and data used in empirical chapters

Empirical Chapters	Research questions	Data
3	*What are the characteristics of South African based service providers engaged in local, regional and global value chains and what are the motivations for and drivers of this engagement?*	**Quantitative**: -76 survey responses **Qualitative**: -47 service provider interviews -35 stakeholder interviews **Secondary:** -industry reports
4	*What are the firm characteristics associated with firms' involvement in domestic, regional and global value chains of IT-enabled services?*	**Quantitative**: -76 survey responses **Qualitative**: -47 service provider interviews
5	*What is the role of value chain client learning in the development of firm capabilities? How do providers' absorptive capacity and the governance structures prevailing in the value chain influence the learning outcome? And in turn, how does client induced learning affect service innovation at the firm level?*	**Quantitative**: -76 survey responses **Qualitative**: -47 service provider interviews used to design survey and findings summarized in tables in appendix
6	*What is the contribution of firms' involvement in local, regional and global value chains, and the National Innovation System in developing firm capabilities? How do the National Innovation System and GVC networks interact to affect firm-level capability development, and the viability of the South African ITES sector at large?*	**Qualitative**: -47 service provider interviews -35 stakeholder interviews **Secondary:** -industry reports

Limitations

This research is based on a single-case study, which means that the research findings are context-specific and cannot be generalized beyond the case. South Africa is arguably not a typical case, rather a unique one in comparison to many countries in SSA that have less advanced economies. However, one can argue that it can represent a more typical case of other hub destinations in SSA, such as Kenya. According to a recent OECD/World Bank report (2015), Kenya, Nigeria, Ghana and Mauritius show the highest potential to catch up with South Africa in terms of value chain involvement. Furthermore, South Africa may resemble the situation of other emerging countries like the Philippines, which has been commonly used as a benchmark for South Africa with regard to the development of the ITES sector and attracting offshore ITES contracts. [7]

Case studies are often criticized for involving data that can be too rich, broad and complex to be analyzed (Yin, 2003). Multiple fieldwork periods helped overcome this challenge as the first fieldwork allowed me to explore key issues and test theoretical concepts to subsequently develop a clear and relevant conceptual framework that guided the data collection phase. Moreover, the multiple visits allowed me to further reflect on the data collection process at home and discuss this data with my supervisors and peers before entering the next fieldwork period. In terms of the quantitative data analysis, limitations could arise due to the small sample of firms. Any possible limitation resulting from this is tried to overcome by employing mixed methods, and multiple data analysis techniques, as seen in Chapter 4. Finally, the evolving ITES sector and with that the emergence of new service providers and developments in the sector is an ongoing process, which makes for a contemporary and relevant topic, but there are also limitations to analyzing a dynamic and evolving sector. Further limitations specific to the research objectives are discussed in each chapter.

[7] For example, comparisons with the Philippines were made during interviews with stakeholders, and during a conference on the South African sector in 2016, for which an ambassador of the ITES sector in the Philippines was invited to discuss their industry and to share lessons.

3 Characteristics of heterogeneous value chains of ITES[8]

[8] This chapter is based on Keijser, C. (2016). Changing geographies of service delivery in South Africa. Globalisation and Services-driven Economic Growth: Perspectives from the Global North and South, in Beerepoot, N., Lambregts, B., & Kleibert, J. (Eds.). (2016). Globalisation and Services-driven Economic Growth: Perspectives from the Global North and South. Routledge.

Introduction

Various researchers refer to the relocation of service activities to developing countries as a 'next wave in globalization' or even a 'second industrial revolution' (Blinder, 2006; Dossani & Kenney, 2007). The ITES industry has created opportunities for developing countries to participate in GVCs of services without having to develop the full range of capabilities of the value chain. Previous GVC studies predominantly focus on the relocation of (service) activities from large global operators and less internationalized companies from developed to less developed countries, and the potential benefits for developing countries, for example, in terms of job creation and upgrading along the value chain (see also Gereffi, 2005; Gereffi et al., 2010; Oshri, Kotlarsky, & Willcocks, 2015).

The extensive focus on GVCs, however, overlooks the fact that many domestic firms in developing countries, especially SMEs, do not integrate into GVCs, as they often face challenges that limit their GVC participation. Scholars suggest that domestic firms in developing countries may be more likely to integrate into LVCs and RVCs, which could provide a stepping-stone into GVCs (Cattaneo et al., 2010; Bamber et al., 2014; Banga et al., 2015; Navas-Aleman, 2011; Staritz, Gereffi, & Cattaneo, 2011). Local and regional value chains have become increasingly important for developing countries, especially due to the emergence of "Southern" end markets and the rise of South-to-South trade (Kaplinsky & Farooki, 2010).

While RVCs have captured increasing interest by researchers and policymakers, empirical evidence remains scant and limited mostly to manufacturing sectors. Questions remain, including what constitutes RVCs, what are the key drivers and actors of RVCs, and the opportunities for developing countries (Bamber et al., 2014). This chapter seeks to contribute to the scant literature on value chains of services by examining the following research question: *What are the characteristics of South African based service providers engaged in local, regional and global value chains and what are the motivations for and drivers of this engagement?* In order to provide context to this question, the chapter will first describe the key characteristics of the South African ITES industry.

The South African ITES industry fits well into recent academic debates on the need to look at the potential of LVCs and RVCs of services, as the country does not solely engage in GVCs through acting as a delivery platform for services that are outsourced

from overseas firms, but also as an end market for ITES, and as a gateway to the rest of Africa. This has led both domestic and foreign service providers in South Africa to seek ITES contracts in the domestic market and in SSA, thereby integrating into LVCs and RVCs of services. These service providers in the South African ITES sector concern both captive providers (service firms that provide services exclusively to the parent firm) as well as third-party/independent service providers that provide services to an external company (involving outsourcing). Drawing on primary and secondary data this chapter provides an overview of the South African ITES sector. The qualitative data (47 interviews with service providers and 35 interviews with industry stakeholders) sheds light on firms' perceptions towards the different markets, whereas the firm-level survey, that has gathered information on 76 independent service providers in South Africa, is used to describe the characteristics of the firms engaged in these different value chains.

This chapter will first provide a conceptual background (section 3.2), followed by the data and methods (section 3.3), and by an overview of South Africa's ITES industry (section 3.4). Section 3.5 discusses the characteristics of the service providers in heterogeneous value chains of ITES, whereas section 3.6 presents quantitative and qualitative data on patterns of value chain integration, and section 3.7 concludes with a discussion and final remarks.

Prior research and conceptual background

3.1.1 Outsourcing and offshoring

The globalization of production and trade are important features of the contemporary economy. World markets are rapidly integrating while at the same time production is becoming more fragmented through lower transportation costs and technological advances. The offshore services industry has grown exponentially in the past two decades, with developing countries offering attractive incentive packages to companies to promote their territory as a services export platform (Bamber et al., 2014). The term outsourcing is used to refer to a firm's decision to not undertake all its business functions internally, but to outsource to an external service provider. Offshoring involves a transfer of business activities that had been previously performed in the home country to another country; independent of whether simultaneous outsourcing (transfer of ownership of the activity) is occurring. In doing so, business functions can be performed offshore within the same firm (captive or subsidiary offshoring) or by an independent/third-party service provider (offshore

outsourcing) (see Table 3.1) (Massini & Miozzo, 2012). The contracting of services to a firm in a nearby country is referred to as nearshoring.

Table 3.1 Sourcing modes of services selected by client firms

		Location of client	
		Home country (Domestic market)	Offshore (Global market)
Type of provider	External (third-party/independent service provider)	**Domestic outsourcing** Service is outsourced to an independent provider in the firm's home country	**Offshore outsourcing** Service is outsourced to an independent provider offshore
	Internal (captive unit)	**Domestic captive** Service is performed at home by the firm itself	**Offshore captive** Service is performed in-house in an affiliated office offshore

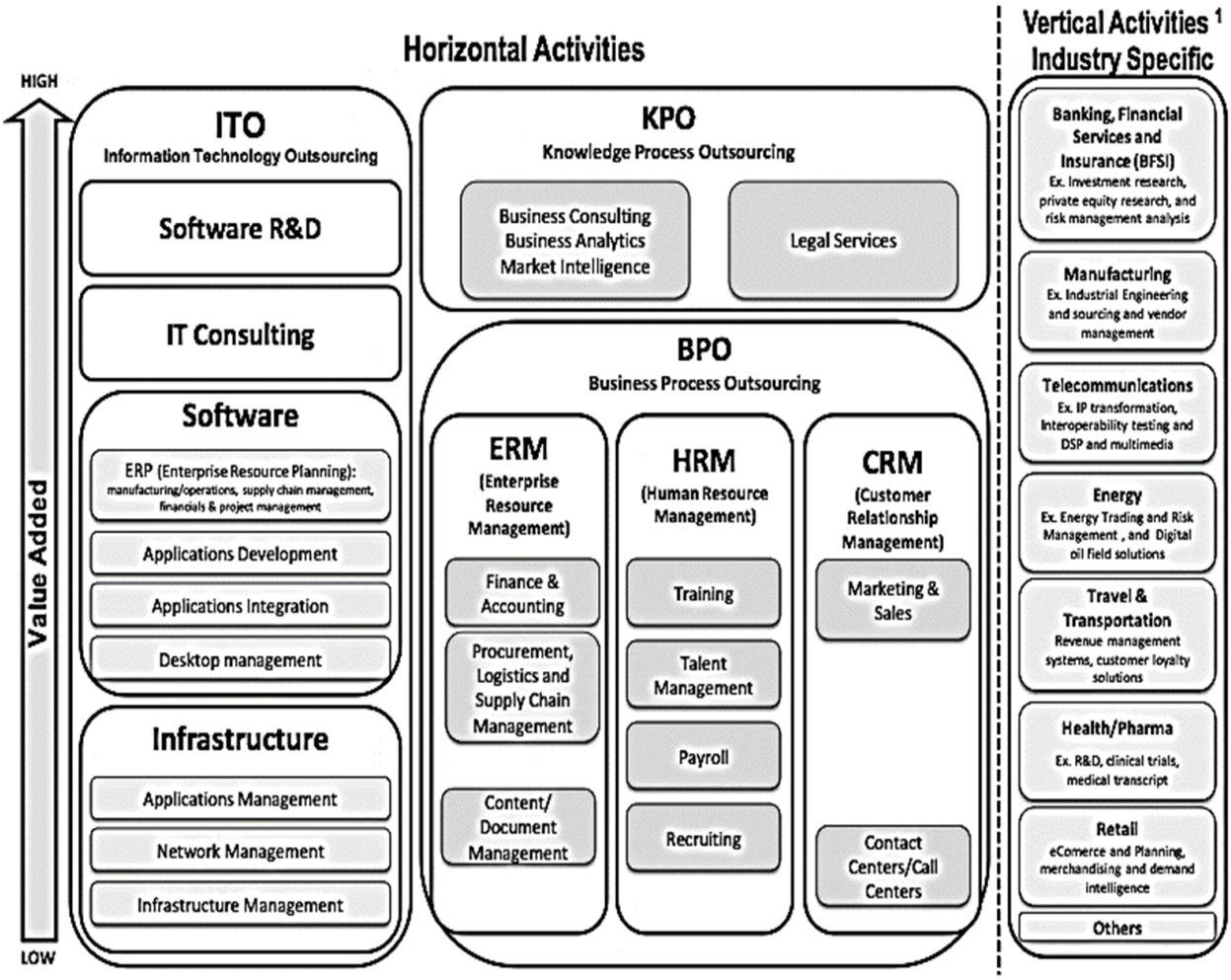
Source: Adapted from Massini and Miozzo, 2012.

According to Massini and Miozzo (2012), the current wave of outsourcing and offshoring concerns the relocation of service activities from large global operators and less internationalized companies from developed to less developed countries (see also Gereffi, 2005; Gereffi et al., 2010; Oshri et al., 2015). Firms set up captive units offshore, typically in lower cost countries, to provide services for the parent country (offshoring) or outsource their services to an external service provider offshore (offshore outsourcing). As such, a range of activities that were once considered the domain of the industrialized world are now also performed in developing countries (Gereffi et al., 2011).

Developing countries have increasingly become offshore destinations for ITES, referring to business services using IT in the delivery process (Dossani & Kenney, 2007). They have been engaged in the provision of low-value and standardized services, such as data entry tasks; however, more knowledge-intensive business services (KIBS) (e.g. accounting, legal services, and marketing) are increasingly offshored (Massini & Miozzo, 2012). Gereffi and Fernandez-Stark (2010) analyse

offshoring through a GVC lens that connects ITES suppliers (hereafter "service providers") in developing countries to global buyers (hereafter "clients") offshore. They identify three different segments of activities: ITO, including IT infrastructure management, software development, IT consulting and software R&D; BPO, including data processing, human resource management, and customer relationship management; and KPO, including business consulting, marketing research, and legal processes (see Figure 3.1). These segments range from low to high value-adding activities, encompassing standardized to more knowledge-intensive activities. The relative wages paid to employees for different activities, reflects the required employee education and work experience, and is used as proxy for value added. The low value-added activities, requiring less education and experience, appear lower on the value chain map, whereas higher-value added activities, requiring employees with more formal education and experience, appear in the upper part of the value chain (Gereffi & Fernandez-Stark, 2010). This measure is adopted by Fernandez-Stark, Bamber, and Gereffi (2011) in their analysis on economic upgrading and workforce development in offshore services GVCs, in which they argue that the classification provides the best indication of "low" and "high" value-added activities.

Figure 3.1 The offshore service value chain



Source: Gereffi & Fernandez-Stark, 2010.

Notes: The column on the right ("vertical activities industry specific") reflects the industries with the highest demand for offshore services, but the depiction does not imply value levels as in the case of the activities within each segment. Each industry may include activities in BPO, ITO, and KPO (Gereffi & Fernandez-Stark, 2010).

3.1.2 Regional value chains

Although the value chain from production to consumption of services is commonly short, the GVC approach has proven useful to understand shifting patterns of global production, capabilities key for competitiveness, and the role played by different actors in developed and less developed countries (Gereffi & Fernandez-Stark, 2010). Yet, few studies have paid attention to local and regional value chains (of services) resulting from increasing demand for goods and services, a growing middle class, and increasing intra-regional trade in some emerging countries (Banga et al., 2015; Cattaneo et al., 2010; Van Dijk & Trienekens, 2012). LVCs capture the chain of services within a country, RVCs embody chains of activities at the regional market level, while

GVCs encompass chains at the global market level – that is, across two or more continents. RVCs differ from GVCs in that a service in a RVC is provided by a country within the region, often within trading blocs, rather than across continents (Bamber et al., 2014).

Recent research has pointed to the growing importance of value chains prevailing at the regional, rather than global, market level (Bamber et al., 2014; Cattaneo et al., 2010; Staritz et al., 2011). The proliferation of regionally oriented (bilateral) trade agreements have resulted in RVCs based on regional production for the regional market as well as interconnected regional operations, typically to leverage complementary comparative advantages, that ultimately supply global markets. Both trends apply to value chains in Southern markets that concern the trade in final products for end markets in the South as well as trade in intermediates, feeding into a final product that may still be designated for traditional end markets in Northern economies (Bamber et al., 2014).

The role of Southern markets has grown creating both new opportunities for entry and upgrading in value chains, especially for least developing countries (Bamber et al., 2014). Cattaneo et al. (2010) signal a trend where south to south trade has increased, and emerging markets have become more attractive to domestic and foreign producers from both the so-called "Southern" as well as "Northern" economies. This is to some extent attributed to the realization, exacerbated by the financial crisis in 2008, that heavy dependence on exports to advanced economies may be problematic for developing countries, and that product and market diversification should be part of their development strategy. As a result, companies are increasingly focusing on emerging markets, which has translated into a greater focus on domestic markets in the case of large emerging economies and a focus on exporting regionally for smaller economies. The increased interest in emerging markets is also sparked among exporters in the Northern economies, partly due to a decline in demand in their home economies, demonstrated by a decline in the share of North to North trade (Kaplinsky & Farooki, 2010).

The so-called shift in markets to the South has implications for participation in GVCs, as the nature of the demand typically guides the direction of the development of suppliers' capabilities, for instance through the role of standards in products and processes. Standards have been an integral component in most GVCs, and have become more complex and demanding in most advanced economies, whereas examples of lower levels of standards in emerging economies are observed. The latter

is largely ascribed to demand preferences that tend to differ for lower income countries. Kaplinsky and Farooki (2010) document cases of value chains in Southern markets (e.g. Thailand and Gabon), characterized by the demand for low cost, undifferentiated goods where standards are less of a concern than cost considerations, reducing the role of standards in products and production processes. On the other hand, this may also create opportunities for entry and upgrading in value chains for SMEs that may have otherwise been resource-constrained to meet standards in GVCs serving Northern markets (Kaplinsky & Farooki, 2010). In addition, understanding consumer preferences in less advanced markets may be easier for firms from these markets or region, due to cultural, geographic and regulatory proximity (Kaplinsky & Farooki, 2010; Fernandez-Stark, Bamber & Gereffi, 2011). Value chains in emerging markets are commonly discussed in connection to the value chains at the local and regional market level (see e.g. studies on RVCs in Latin-America (Navas-Aleman, 2011), production systems in East Asia (Bamber et al., 2014), and RVCs in the African continent (ERA, 2009; Ramdoo, 2014; UNCTAD, 2016).

Bamber et al. (2014) discuss the binding constraints that domestic firms in developing countries, especially SMEs, often face when seeking engagement in GVCs. For example, limited economies of scale, information asymmetries resulting in limited access to finance and labor, and poor marketing skills amongst others form obstacles for many firms in meeting GVC demands. The authors suggest that, based on case-based evidence from apparel and footwear chains, serving local and regional markets first is a viable strategy to learn how to compete better in the global market (see also Bazon & Navas-Aleman, 2004; Gibbon, Bair, & Ponte, 2008; Navas-Aleman, 2011). Engagement in GVCs may not necessarily provide gains when countries are linked into global production at the lower end, based on the supply of primary inputs, rather than value-added exports. In fact, such terms of engagement may be counterproductive for structural transformation of economies. Instead, the regional market may be used to boost firm's competitiveness and upgrade in the value chain to produce high value-added goods and services, to subsequently link to GVCs and increase their bargaining power with lead firms (Banga et al., 2015).

Although RVCs have captured increased interest of policy makers, empirical evidence remains scant and limited to a few documented examples, impeding the drawing of meaningful lessons for policy development. Bamber et al. (2014) identify various questions that remain unanswered, including the exact definition of what constitutes RVCs, the key drivers and actors prevailing in value chains at the regional market

level, the opportunities for developing countries, and how they differ from GVCs. Limited empirical evidence is available on the types of industries that are developing RVCs, and their peculiarities, for instance in the context of services (Bamber et al., 2014).

3.1.3 Regional value chains: the African market

For many countries in SSA competing in the global market is challenging, and their participation in GVCs is hampered by structural factors (OECD and World Bank, 2015). It is argued that firms in these countries could gain experience and build the capabilities needed to compete globally by first reaping the benefits of intra-regional trade. The African regional market would function as a playing field where firms could 'learn by doing' and develop the capabilities and gain the experience needed to compete in global markets (Banga et al., 2015; Draper et al., 2015; OECD and World Bank, 2015).

In the African agriculture policy measures have been directed at developing and promoting RVCs through harmonizing national policies, laws and regulation, and standards across regional economic communities in SSA (Ramdoo, 2014). The key argument is that RVCs have the potential of expanding market opportunities, especially for African countries with small populations and fragmented national markets. National and regional markets in developing countries offer an alternative to the global market that is characterized by strong competition, high-quality standards and that favors large-scale producers (ERA, 2009).

A recent OECD/World Bank report (2015) also states the challenges many African countries face in terms of scale and productively critical for successful integration in GVCs. Policy recommendations for African economies include that GVCs integration should remain priority, but in parallel, deeper regional integration should be pursued to take greater advantage of intra-regional trade (OECD and World Bank, 2015). Regional integrational integration is considered key for South Africa to boost its job creation and economic growth (OECD Economic Surveys: South Africa, 2017). In the Southern African Development Community (SADC)[9], South Africa is the most

[9] SADC is a Regional Economic Community comprising 16 member states: Angola, Botswana, Comoros, Democractic Republic of Congo, eSwatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Tanzania, Zambia and Zimbabwe (SADC website, 2018).

diversified economy in terms of intermediates (i.e. the number of exported products as well as the number of destinations), which also points to the potential to explore trade in services (OECD and World Bank, 2015). Despite potential, intra-regional trade for SADC has increased only modestly since the establishment of the free trade area in 2008. For example, it sources 10% of their intermediate inputs from within the region, which contrasts with the Association of Southeast Asian Nations, i.e. ASEAN countries[10] where deeper regional integration is observed (approximately 25% of total trade) (OECD Economic Surveys: South Africa, 2017).

In the context of outsourcing and offshoring of services, empirical literature on the opportunities of the regional market remains scant, especially with regard to studies on SSA. Only in recent years have studies been conducted on African countries as new players in the ITES landscape, particularly on hub destinations Ghana, Kenya and South Africa (see Adelakun & Iyamu, 2013; Beerepoot & Keijser, 2015; Dihel, 2011; Mann & Graham, 2015; Wausi, Mgendi, & Ngwenyi, 2013). There is much common ground in these studies, as they all predominantly use a GVC perspective for analyzing the 'offshore readiness' of these countries with regard to obtaining services contracts overseas, leaving little focus on the opportunities of the local or regional market[11].

Data and methods

The objective in this chapter is to provide an overview of the ITES sector in South Africa by focusing not only on firms that serve client firms overseas, but also on service providers that respond to demand for ITES solutions in the domestic and regional market. It analyses the characteristics of the service providers that are thus participating in value chain at different geographical levels and their perception towards these different markets.

[10] Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam (ASEAN website, 2018).

[11] An exception includes the recent study by Mann and Graham (2016) on the re-orientation of Kenyan businesses and policy makers from international markets to the domestic and regional market.

This chapter draws on two main sources of data collection. First, the qualitative data including interviews with CEOs and managers of 47 (foreign and domestic) third-party service providers, and 35 industry stakeholders (such as representatives from industry bodies, governmental organizations, training providers, client firms, captive service providers, industry consultants, academics). Secondly, the firm-level survey is used yielding information on 76 foreign and domestic third-party service providers.

The qualitative interview materials as well as papers, company data, industry reports, and other secondary sources are used to provide an overview of the South African ITES industry, explore different value chains of ITES, and to understand what sourcing modes give to these chains. The interviews with both foreign and domestic service providers are used to understand firms' perceptions towards participation in the different markets. On the institutional side, interviews with representatives from government agencies, business associations and international organizations are used to understand the ITES industry in terms of how it has developed, its opportunities and bottlenecks as well as the expectations and perceptions towards the opportunities in the local, regional and global market.

The quantitative data collected via the firm-level survey also captures both domestic and foreign service providers. The data is used to describe their characteristics (e.g. market orientation, ownership, activities), and captures information on market orientation and sequence, i.e. the market(s) firms first serviced, whether they expanded into new markets and whether they have concrete plans for market expansions. This data, together with the qualitative analysis, is used to discuss the potential of involvement in LVCs and RVCs as stepping stones into GVCs. The descriptive statistics were generated using the software program STATA (Statacorp, 2017). The interviews with the industry stakeholders include interviews with captive firms, as they are part of the ITES industry, but captive firms do not form the focus on the firm-level analysis of ITES providers. This is addressed in Chapter 2 on methodologies, which also elaborates on the sampling strategy and representativeness of the survey.

Overview of the South African ITES sector

In the mid 1970's the first contact center was established in Cape Town, focusing on customer service solutions in the financial services sector, and the local market has since been developing, mainly with captive operations. The beginning of South

Africa's presence in the offshore market dates to 1998 when Lufthansa was the first company to offshore to Cape Town. The arrival of international brands, that set up a delivery base in South Africa have put the country on the map as player in the global ITES industry (BPESA, 2015). However, it was not until the year 2012 that South Africa experienced strong demand for ITES service delivery, especially in the offshore market reaching growth rates above 12% per annum (Willcocks, Lacity & Craig, 2015). Although domestic demand for outsourcing and especially captive operations continues to account for the largest number of employees (see Table 3.2), the offshore segment has shown growth in recent years expanding from approximately 10,000 jobs in 2012 to over 25,000 jobs in 2015 (BPESA, 2015), and to over 30.000 jobs in 2016 (BPESA, 2017).

Table 3.2 Total number of jobs in the South African ITES sector in 2015 and in 2016

Number of jobs created		*Type of sourcing*					
		Outsource		**Captive**		Total	
		2015	2016	2015	2016	2015	2016
Market serviced	**Domestic**	45.569	49.400	142.731	140.600	188.300	190.000
	Offshore	21.146	26.455	5.554	6.045	26.700	32.500
	Total	**66.715**	**75.855**	**148.285**	**146.645**	**214.134**	**222.500**

Source: BPESA key indicator report, 2017.

Notes: Domestic captives refer to 100 per cent subsidiaries (wholly owned) of firms in South Africa, which provide services exclusively to the parent company. Offshore captives refer to 100 per cent subsidiaries of companies based outside South Africa, which provide services exclusively to the parent company outside South Africa.

Even though the ITES sector in South Africa is relatively small[12] it has expanded in recent years, particularly in response to increased demand from both the domestic and offshore markets. Growth in the domestic market is attributed to increased awareness of cost savings and improved efficiencies associated with outsourcing. Underpinning increased growth of service providers in South Africa serving offshore market is the weakening of South Africa's currency (Rand), improved IT infrastructure, and various

[12] In the South African ITES around 200,000 jobs are created by 2015, compared to approximately a million-people working in the ITES industry in the Philippines (BPAP, 2015) and approximately 3.5 million in India (NASSCOM, 2015).

government incentives introduced to mitigate growth-inhibiting factors, such as the high cost of doing business, lack of required talent, investor support, marketing, and experience (Mashalaba et al., 2015). Since 2006, the South African government has prioritized the ITES sector for its potential to generate employment. Incentives include an operational grant to providers, conditioned on actual jobs created via offshore clients, and the minimum required score for the Broad-Based Black Economic Empowerment (B-BBEE) regulations (e.g. requiring at least 80% of employees to be youth). Investments in talent development programs have also been made to supplement the needed human resources.

Services are performed mainly in three cities with surrounding areas: Johannesburg and the Gauteng region, Durban and the KZN region, and Cape Town and the Western Cape region. These three main areas comprise what Willcocks et al. (2015) refer to as the 'service triad'. Cape Town counts the largest number of jobs coming from the offshore market, mainly due to the quality of its infrastructure and attractive expat lifestyle (Willcocks et al., 2015). Service providers in Johannesburg and the wider Gauteng region predominantly focus on the domestic ITES market. This is because the region is home to most of the headquarters of multinational companies (MNCs) operating in Southern and Eastern Africa, and the center of South Africa's main industries and financial centers. In the last decade firms in Durban and the wider KZN region have started to provide services to client firms in both the domestic and offshore market. The overall cost of doing business in KZN is lower than in the Gauteng and Western Cape region, and is generally home to providers opening a second office in South Africa (Willcocks et al., 2015).

3.1.4 Types of service activities

In South Africa, BPO is the largest segment, with around 70% of the firms delivering front office services– mainly customer relations services in call centers – and 30% of the firms providing back-office services, such as data processing and payroll processing. BPO usually involves low value-added standardized services, however, South Africa demonstrates an advantage in mid-to-high complexity (voice-focused) customer services and expertise in niches (e.g. financial services). This is due to the availability of professional knowledge and tangible and intangible skills, such as adaptability, leadership, English language competence with a neutral accent, and a customer-oriented service culture with cultural affinity to Western markets (IQ Business, 2014; Willcocks et al., 2015).

The ITO segment constitutes activities, such as coding, testing and maintenance of software and higher value-added services including software development and system integration. No accurate numbers are available, but it is argued that the ITO market is significantly smaller than the BPO market, due to fewer IT skills available (BPESA, 2015). This was also observed in the descriptive statistics of the surveyed firms (see Table 2.5).

KPO entails high-end knowledge work, such as consulting practices and marketing research, and makes up the high-end of the value chain. Particularly, Legal process outsourcing (LPO), a type of KPO, has recently been identified as a fast-growing niche with potential and where South Africa can compete globally (BPESA, 2016; Willcocks et al., 2015). The LPO sector in South Africa is rather new, but is fast growing and employs approximately 1,350 employees (Zille, 2015). South Africa has a large group of law graduates that have not made it to practice yet, while possessing the appropriate skills for LPO (for example paralegal skills). The LPO market in South Africa consists of standardized jobs such as document review and higher value-added services such as legal research.

Capabilities are particularly built in both front and back-office services across several industries such as insurance, banking, and asset management (Everest Group, 2008). The financial industry is responsible for the highest demand for services, coming mainly from the domestic market, whereas the demand for services from offshore markets is mainly driven by the telecommunication industry (BPESA, 2015).

According to respondents, the sector could be growing more rapidly given the capabilities in the ITES sector, but rapid expansion of the sector has been hampered by various factors. One of the main obstacles is the supply of human resources. Despite the competitive advantages, demand for skills has outgrown the supply of relevant labor in South Africa. This has resulted in a shortage of personnel, mainly at the managerial and supervisory levels, as well as a lack of specialists, such as quality assurers, trainers, information analysts, work force managers, and those with foreign language competence (Knowledge Executive, 2014; IQ Business, 2014). This puts a strain on firms and requires continuous investment in the recruitment and training of students from the education system as well as training and retaining existing employees to meet the growing demand for more complex skills (Knowledge Executive, 2014, Firm and industry stakeholder interviews, 2016). This will be further discussed in Chapter 6.

3.1.5 Sourcing modes giving rise to GVCs

South Africa has been selected by client firms (both captive and external), predominantly from Europe and Australia, as a delivery platform for their services. Particularly firms in the UK offshore services to South Africa, due to historical links, family ties, and similarities in business environment, laws and regulations (BPESA, 2015). While not having the scale of India and the Philippines in terms of firms' size, South Africa is one of the few destinations offering English speaking skills at relatively low cost, and having close cultural affinity to Western markets. Furthermore, the education system as well as products and regulation in South Africa's domestic services sector are very much in line with those of its client markets, particularly the UK (Everest Group, 2008). For instance, legal services are provided from South Africa, as the country is argued to be strong in auditing and reporting standards, and has data protection laws and certifications, similar to the UK (Willcocks et al., 2015).

Not only domestic service providers in South Africa seek offshore contracts, above factors have also attracted foreign service providers to South Africa, from where they service clients in the UK or in other offshore markets. These foreign service providers can in turn be affiliated to a parent company, however, they differ from captive providers in that they do not (strictly) provide services to the parent company, but act as third party providers servicing external clients. A respondent from a foreign service provider affiliated to a corporate group explains the following:

"*Despite being part of a global group, "company name" is still very much a stand-alone enterprise. We share best practices within the group, but (company name) remains and is a local entity and led by local people*" (Interview with a foreign service provider engaged in GVC).

The cost of doing business in South Africa has dropped significantly in recent years to approximately 54% cost savings for firms in the UK and Western Europe, mainly due to the incentive scheme provided by the Department of Trade and Industry (the dti) (Willcocks et al., 2015). However, South Africa is not trying to compete as a low-cost location for large volume contracts, rather the country aims for a position as a destination for 'high-quality, medium-cost contact centers and back-office services' (Willcocks et al., 2015). The respondents in this study confirmed that global investors turn to South Africa for the quality of customer services, which is argued to anchor in high quality of English language skills, neutral accent and cultural affinity to

suppliers' markets. As one respondent from a UK based client firm explained:

"We have work delivered by Indian agents and South Africans. Some of the bulk goes to India, but when it comes to customer interaction we like to have South African agents doing the work. (...) We offshore large volume back- office work to India, but for the customer experience we choose South Africa" (Interview with a UK based client firm).

For instance, the CEO of a captive service provider argues that the competences in the delivery of customer services, involving judgement calls distinguishes South Africa from more traditional offshore destinations such as India.

"When the tasks are well scripted, and frameworks are in place then India is a good option, but if it deviates Indian employees are off. We have experience in both countries, but for our company we see more value in South Africa, because the employees are more capable to work off the script" (Interview with a foreign captive provider of customer solution services).

Indian service providers have also opened offices in South Africa, because it offers a pool of multi-lingual skills at proximity to the Middle East and European market (KPMG, 2011). Also, its domain skills in service delivery in financial services, particularly in actuarial science (risk management) act as a pull factor. For instance, South Africa's number of qualified actuaries is argued to be three times higher than India and the Philippines combined (BPESA, 2015). In addition to the skills base, the growing demand for ITES in the South African and regional market itself also acts as a pull factor for foreign service providers, which will be further discussed in the next section.

3.1.6 Sourcing modes giving rise to LVCs and RVCs

South Africa serves not only as a platform for service delivery to firms overseas (connecting service providers to GVCs), but both South African and foreign service providers have also started operations in South Africa to access the market potential in the country (resulting in LVCs) and the SSA region (connecting these service providers to RVCs).

Despite the absence of government support schemes to promote and drive the formation of local markets as is available for promoting export activities (i.e. GVC

integration)[13], a domestic market for outsourcing, in addition to a large captive market, has formed nevertheless. Labor sensitivity, the strong role of labour unions combined with fear among firms to relinquish control has kept (and continues to keep) organizations in the local market from outsourcing their services to external parties. However, respondents argue that a growing services sector in the domestic market increasingly motivates firms to seek cost savings and quality improvements through outsourcing, including in the public sector.

"There is still a lot of opportunity to service the local outsourcing market. Firms now go to the outsourcing model because of efficiency reasons" (Interview with a local industry stakeholder).

Respondents emphasize the arrival of foreign service providers in South Africa servicing the South African and regional market, as a result of saturated markets in Western countries and a rising middle class and growing consumerism in African markets. For example, Indian service providers have explored new emerging markets to open an office and service new clients in the Middle East and in Africa to reduce their overreliance on clients in the United States. Consequently, Indian service providers have established a presence in the South African market to service the domestic market for outsourcing (KPMG, 2011; The Economic Times, 2010).

A study by Everest Group (2008) claims that businesses providing outsourcing solutions in the financial services sector in South Africa have expanded their operations more rapidly into SSA, servicing firms in the neighboring countries. This is also notable in the IT industry, where South Africa has for a long time been the major supplier of IT products and services to neighboring countries. As such, market seeking behavior of firms is not restricted to South Africa as a potential market, but extends to other African countries. This has taken the form of nearshoring in SSA, referring to the outsourcing of services from firms in the region to service providers in South Africa, which give rise to RVCs. The growing services industry and trade in the African region is expected to create more opportunities for the South African ITES industry. Particularly more potential is identified in the ITO segment, as industries such as banking and telecoms need more advanced IT infrastructure management. The

[13] From a policy making perspective, the offshore market is argued to be key as it creates new jobs, whereas outsourcing in the domestic market is perceived to be moving jobs from one firm to another creating no additional jobs.

growing services industry in the region is also coupled with increased demand for customer relationship management and back-office services (Everest Group, 2008). Within the African continent South Africa is considered to have the competitive edge, as it is having the largest BPO sector on the continent, the most reliable infrastructure, largest talent pool, and a more stable political and financial climate compared to other African nations (Everest Group, 2008). While significant potential has been identified outsourcing solutions provided by firms in South Africa to clients in the African region have not been captured in the current statistics. A resopondent argued the following:

"*The awareness is missing. Clarification is needed. Africa is not completely on the map yet as to what is happening*" (Interview with a foreign service provider engaged in GVCs).

Even though the cases are not well documented, many respondents do highlight that the potential for nearshoring is present. This is also confirmed by the survey data showing that of the total group of firms (76) in this study, 24 firms currently have clients in the regional market. Opportunities and trends have also been signaled in the field of LPO.

"Law firms have global relations, and with South Africa as a gateway to Africa the stage is set to utilize those relations" (Interview with a consultant specialized in legal services).

In addition to nearshoring in SSA, which connects firms in South Africa to RVCs, value chains at the regional scale also consist of large companies in SSA having multiple offices across the region, which choose not to deliver their services in a dispersed matter, but bundle and perform these out of South Africa. This type of service delivery, referred to as shared services, is a form of service delivery, whereby various business functions and processes (for example in Finance and Accounting, IT, and Human Resources) from several departments, often across countries, are grouped together and provided from one location. This is typically done to achieve cost savings and business efficiencies (BPESA, 2015). There are approximately 40 shared services centres operating in South Africa, of which 87.5% are run as captive operations, and the rest are run by third-party providers (Zille, 2015).

Shared services are different from nearshoring in that a center could also perform bundled services from within a country, and that services are generally not outsourced to a third-party provider. The market for shared services in South Africa is gaining momentum and appraised for demonstrating similar opportunities and capabilities as

the outsourcing/offshoring industry. In some cases, a third-party provider first runs the operation before it is turned into a shared services center. Furthermore, the networks between different branches and actors across the continent that underpin these centers are emphasized by respondents as increasing the likelihood of knowledge sharing, learning and hence capacity building in South Africa. As such, shared services are seen as integral and essential to the ITES industry.

Table 3.3 provides an overview of the heterogeneity of value chains, when taking into account the different sourcing modes as discussed in secondary data and by respondents interviewed in this research. In each mode, the type of provider, viewed from the perspective of South African based service providers, could be an independent/third-party service provider (domestic or foreign) or a captive unit (domestic or foreign). The location of the client depicts the (end) market that is serviced from South Africa, hence, giving rise to different value chains (local, regional and global value chains). It shows that service providers in South Africa may not solely provide service solutions to clients in overseas markets, but also to clients in the domestic and regional market, demonstrating the potential of the South African and SSA market for ITES. There is thus a need for a more elaborate overview of outsourcing/offshoring modes in which different markets (domestic, regional and global) come to the fore and in some cases, overlap. The next section discusses the characteristics of the independent service providers (non-captive) in these different value chains.

Table 3.3 Service providers in South Africa involved in heterogeneous value chains

		Market serviced (Location of client)		
		Domestic market	Regional African market	Global market
Type of provider	External: local or foreign third-party provider	**Domestic outsourcing** South African based firm provides services to client firm in South Africa	**Regional outsourcing** (nearshoring) South African based Firm provides services to client firm located in SSA or shared services for multiple units of the client firm	**Offshore outsourcing** South African based firm provides services to overseas client firm (outside of SSA)
	Internal: local or foreign captive provider	**Domestic captive services** Captive unit in South Africa provides services to the parent firm in South Africa, or onshore shared services centres	**Regional shared services** Captive unit of a firm in South Africa provides bundled services to other affiliates of the firm across SSA countries	**Offshore captive services** Captive unit in South Africa provides services to the parent firm overseas

Source: Author.

Characteristics of ITES providers in heterogeneous value chains

Table 3.4 presents the means and number of observations for various characteristics (ownership, group affiliation, performance, size, age, and service segments and skills intensity) for firms in LVCs, RVCs and GVCs. The last three columns indicate whether a statistically significant relation exists between each firm trait and participation in value chains by comparing two value chains at a time (LVCs vs. RVCs; LVCs vs. GVCs; and RVCs vs. GVCs). For the categorical variables (all variables except firm size and firm age) a Pearson Chi-square test of independence is used to examine how likely it

is that the distribution of two variables is due to chance. For instance, the relation between affiliation to a South African corporate group (yes vs. no) and value chain participation (LVCs vs. RVCs) is significant (p-value=<0.05, indicated by **), which means that the null hypothesis that the two variables are independent of each other is rejected, and that a statistical association thus exists. The means of the firm traits reveal that around 30% of firms in LVCs and GVCs are affiliated to a South African corporate group compared to 69% in RVCs. In contrast, 41% of the firms in GVCs are part of a foreign group whereas only 3% of firms in LVCs show such linkage and not any firm in RVCs. A significant association indeed exists between foreign group affiliation in GVCs versus LVCs, and in GVCs versus RVCs. In terms of performance a significant association is observed for LVCs versus GVCs and for RVCs versus GVCs. Among the firms in GVCs 96% consider their organization to be profitable, compared to 77% in RVCs and 70% in LVCs.

For firm size and firm age, two continuous variables, a t-test is performed to determine whether there is a significant difference between the means of two groups. Firms in RVCs, are on average, larger than firms active in LVCs only (431 and 200 employees respectively), but are, on average, smaller compared to firms in GVCs (1200). The average firm size of firms in RVCs is not statistically different from the average firm size in LVCs or in GVCs. The only significant difference for firm size is observed for firms in LVCs versus GVCs. Finally, the average number of years firms have been in operation varies between 15 and 19 years and is not found statistically different across the different value chains.

Table 3.4 Descriptive statistics by firms in local, regional and global value chains

	Firms engaged in value chains						*Comparison groups*		
	LVC		RVC		GVC		LVC vs. RVC	LVC vs. GVC	RVC vs. GVC
	Mean	N	Mean	N	Mean	N	X^2	X^2	X^2
Firm characteristics									
% of firms part of a SA group	26%	34	69%	13	31%	29	7.2**	.15	5.3**
% of firms part of a foreign group	3%	34	0%	13	41%	29	.39	14.1***	7.5***
% of firms perceived profitable	70%	34	77%	13	96%	29	.2	6.7**	3.4*
Mean size in terms of employment	200.4	34	431.5	13	1200.6	29	-1.6	-2.3**	-1.1
Mean age in terms of years in operation	15.4	34	18.8	13	15.6	29	-0.7	-0.07	.7
Service segment according to firms' main service activities									
% in BPO	74%	34	54%	13	55%	29	1.6	2.3	.0
% within BPO performing mid-high skilled activities	32%	25	57%	7	63%	16	1.4	3.6*	.0
% in ITO	15%	34	31%	13	21%	29	1.5	.38	.5
% within ITO performing mid-high skilled activities	60%	5	100%	4	100%	6	2.0	2.9*	-
% in KPO	12%	34	15%	13	24%	29	.1	1.6	.4

Source: Author's calculations.

Notes: Significant at ***–1%, **–5% and *–10% levels. The Chi-Square (X2) is performed for the categorical variables, whereas for firm size and firm age a t-test (based on equal variance) is performed. The Fisher's Exact Test is also performed on the categorical variables, as its most suitable for small samples, and shows no differences from the Pearson Chi-Square test except for the difference between firms in GVCs and LVCs with regard to performing mid-high skilled activities in the ITO segment (p-value= .18). In the ITO segment 4/15 firms are simultaneously engaged in BPO. In the KPO segment 6/13 firms are simultaneously engaged in BPO.

In short, firms in LVCs differ from firms in GVCs regarding affiliation to a foreign corporate group and firm size. Firms in RVCs show more resemblances to firms in LVCs compared to GVCs regarding general firm traits (affiliation to a foreign group, size, and performance). However, in terms of service activities, and knowledge complexity the RVC group shows more similarities to firms in GVCs compared to firms in LVCs.

The services as reported by the respondents in this survey reflect the classification of the services value chain by Gereffi and Fernandez-Stark (2010) as illustrated in Figure 3.1. More than half of the firms active in the regional market operate in the BPO segment (54% in RVCs and 55% in GVCs), and on average 31% and 21% of the firms perform activities in the ITO segment, whereas in LVCs the clear majority are engaged in BPO (74%) and 15% of the firms perform ITO activities. The shares of firms performing services in the KPO segment are highest in GVCs (24%), followed by RVCs (15%), and LVCs (12%).

Gereffi and Fernandez-Stark (2010) show that within each services segment, activities can differ in value added, which is measured by skills requirement. Services in KPO are considered high value-added services activities, whereas activities in the BPO and ITO segment can range from low, mid to high value (see Figure 3.1). Based on their measurement of value add (education level and work experience), in this study the service activities are grouped as either low in skills intensity (including only low-value added activities) or skills intensive (including mid-to high value-added activities)[14].

As reflected in Table 3.4, of the regional and global active firms in the BPO and ITO segment the majority perform skill-intensive activities. Examples in BPO include finance and accounting, sales and marketing activities within contact centers, whereas examples in ITO include software development and IT consulting. Of the LVC firms performing service activities in the BPO segment around one third perform such activities, whereas the large majority (68%) perform activities that are considered low in skill intensity, including more standardized work, such as data processing, back

[14] For the purpose of analysis, the activities grouped under IT infrastructure in the ITO segment, and the activities in the BPO segment described at the bottom in Figure 3.1 (content/document management, payroll, recruiting, contact centres) are categorized as low-value added, whereas the remaining activities are considered mid-to-high value added and hence considered skills intensive.

office operations, customer services in contact centers. The latter is what sets firms in LVCs (statistically) apart from firms in GVCs.

It can be observed that the fraction of firms that perform mid to high value-added activities in the ITO and or BPO segment, and the fraction of firms in the KPO segment, are higher in GVCs compared to LVCs. This is in line with findings from secondary data reporting that in the global offshore industry South Africa is aiming to compete in the medium cost/high value-added segments, rather than the low standardized jobs only, which is also emphasized by foreign service providers setting up offices in South Africa.

However, survey data lacks to verify whether the higher value-added service activities observed for firms in RVCs, are demanded from clients in the regional market or in the domestic market (the RVC group consists of firms engaged in the domestic and regional market simultaneously). It is possible that firms have upgraded to higher value-added activities in the domestic market first before they expanded to the regional market where the service activities may be similar or lower in value added.

In fact, from the 47 firms interviewed (the qualitative data used in this study), 11 firms service clients in the regional market, of which five firms perform lower value-added service activities (e.g. debt collection, customer services), and the six other firms also provide such "standardized services", while simultaneously providing mid value-added services (e.g. marketing and sales services, finance and accounting, IT software development) or higher value-added activities, such as IT consulting and business consulting. A firm provides the following explanation for the provision of higher value-added services:

"*South Africa is much more advanced and playing the role that they transfer and introduce new technologies. South Africa is much more ahead*" (Interview with a South African provider engaged in RVCs).

Noticeable is that, although half of the firms perform more skills-intensive services, nearly all firms (simultaneously) perform services in the lower segments of the value chain. The following statements were made regarding service provision in the regional market:

"*It's just about horizontal solutions, not much in niche or specialized services. (..) deployable everywhere cheap and quick*" (Interview with a South African service provider engaged

in local, regional and global value chains).

"*There is low hanging fruit all over*" (Interview with a foreign service provider engaged in local, regional and global value chains).

"*Still pretty standard to roll out operations into SSA. Incentive schemes in African countries are there. South Africa has a lot of red tape for investors*" (Interview with a South African service provider engaged in local and regional value chains).

Respondents argue that while opportunities exist in the regional market, some also emphasize the lower margins gained in the regional market compared to the South African or global market. For instance, two firms from the interview sample quit the provision of BPO activities to the regional market, due to low revenues.

According to a South African BPO provider that serviced clients in Namibia and Botswana:

"*The regional market is difficult without economies of scale*" (Interview with a South African service provider engaged in LVCs and RVCs).

Another respondent state:

"*The regional market, like Namibia, Botswana and Swaziland, are big markets for BPO, through big banks that are sitting there. We've done some projects, but the margins are not big enough. The volumes are too low. Now we focus on South Africa and the UK*" (Interview with a foreign service provider engaged in GVCs).

Survey data on the type of industries in which the various services are performed is not available for all firms. The available data shows that for firms in RVCs, six out of the 13 firms state to perform their services in the financial sector only, whereas the other firms state to be active in various sectors. The majority of firms in LVCs and GVCs also state to deliver their services in a variety of industries (e.g. health, automotive, retail, financial services (including banking and insurance), and telecommunications). Around a quarter of the firms in LVCs provide services in the financial sector only, whereas among firm in GVCs the telecommunication sector is frequently reported.

Nearly half of the firms in LVCs are based in the Gauteng region, whereas the other half are equally distributed across the Western cape region, KZN or across multiple regions in South Africa. Firms in RVCs show a similar distribution to to firms in LVCs, whereas firms in GVCs are mostly based in the Western Cape or in multiple regions (e.g. WC and Gauteng). This is also in line with secondary data depicting Gauteng as home to the domestic market, and the Western Cape attracting providers that service offshore markets (Willcocks et al., 2015; BPESA, 2015).

3.1.7 Patterns of value chain involvement – quantitative data

Table 3.5 presents an overview of the market(s) that the firms first serviced and whether they expanded into different markets. The results show that the majority of firms (77.6%) started in the domestic market only, from where 34 firms stayed (57.6%), and 25 firms (42.4%) further expanded into different markets. In addition, 12 firms (15.8%) started in the global market, one firm (1.3%) started in the regional market, two firms (2.6%) started in the domestic and regional market, and two firms (2.6%) started in the domestic and global market simultaneously.

Table 3.5 Market entry and future market expansion by current status of value chain involvement

Current value chain involvement	*Market entry*						*Future market expansion*				
	D	R	G	D/R	D/G	**Total**	No	LVC	RVC	GVC	**Total**
LVC	34 100%	0 0%	0 0%	0 0%	0 0%	34 100%	12 35.29%	6 17.7 %	8 23.5 %	8 23.5%	34 100%
RVC	10 76.9%	1 7.7%	0 0%	2 15.4%	0 0%	13 100%	1 7.7 %	0 0%	6 46.15%	6 46.15%	13 100%
GVC	15 51.7%	0 0%	12 41.4%	0 0%	2 6.9%	29 100%	8 27.6%	1 3.4%	3 10.3%	17 58.6%	29 100%
GVC* including LVC & RVC	9	0	0	0	1	10 100%	2	0	3	5	10 100%
Total	59 77.6%	1 1.3%	12 15.8%	2 2.6%	2 2.6%	76 100%	21 27.6%	7 9.2%	17 22.4%	31 40.8%	76 100%

Source: Author's calculations.

Notes: involvement. D= domestic, R= regional and G= global. GVC* shows only firms in GVCs that are also in LVCs and RVCs, hence a subgroup of firms in GVCs.

The vast majority (76.9%) of the firms currently in RVCs started in the domestic market, and from there expanded into the African market over time. Only one firm started in the regional market at inception before expanding into the domestic market, and two firms in the domestic and regional market simultaneously. Among the group of firms in the regional market that are also active in local and overseas markets (constituting part of the GVC group (see GVC*)), 9 out of 10 started in the domestic market, and the other firm started in the domestic and global market. This shows that the regional market is typically not considered the first entry mode, rather, the domestic market appears to be antecedent to RVC.

The survey lacks information on the sequence of value chain participation to establish whether firms starting in LVCs and currently participating in all value chains (grouped under GVCs) have first expanded into regional markets or into global markets. However, the market orientation of the firms surveyed suggests that regional participation precedes GVC participation. From the firms participating in LVCs 23.5% states to have the ambition and concrete plans to start servicing overseas markets, whereas the intention to expand into overseas markets (i.e. entering GVCs) is significantly stronger for firms currently participating in LVCs and RVCs (46.15%). This confirms the likelihood of firms first starting in the domestic market, expanding into the regional market before competing in overseas markets.

Different trajectories into GVC participation can be observed: firms that entered GVCs from the start of operation ("direct GVC entry" firms (14)), and firms that did not immediately enter overseas markets, but operated in the local market first before expanding into GVCs ("gradual GVC entry" firms (15)). The latter group has started in the domestic market first. Gradual GVC entry firms are well integrated in RVCs (60% of the firms are also active in RVCs), whereas only 14.3% of the direct GVC entry firms have operations simultaneously in RVCs. Table 3.6 shows the current market involvement, market entry and future market plans for firms classified in GVCs. Gradual and direct entry firms are equally planning on expanding further into the global market (around 60%), whereas for direct GVC entry firms no firm claimed to expand into the regional market in the near future versus 20% of the gradual GVC entry firms.

Table 3.6 Market entry and future market expansion by firms participating in GVCs

Routes into GVC involvement	*Market entry*						*Future market expansion*				
	D	R	G	D/R	D/G	**Total**	No	LVC	RVC	GVC	**Total**
Gradual GVC entry	15 100%	0 0%	0 0%	0 0%	0 0%	15 100%	3 20%	0 0%	3 20%	9 60%	15 100%
Direct GVC entry	0 0%	0 0%	12 85.7%	0 0%	2 14.3%	14 100%	5 35.71	1 7.15	0 0%	8 57.14%	14 100%
Total	15 51.7%	0 0%	12 41.4%	0 0%	2 6.9%	29 100%	8 27.6%	1 3.5%	3 10.3%	17 58.6%	29 100%

Source: Author's calculations.
Note: D= domestic, R= regional and G= global.

3.1.8 Patterns of value chain involvement – qualitative data

Table 3.6 has demonstrated that the domestic market is used by firms to enter the ITES sector to exploit market opportunities locally or further expand into other value chains. A service provider engaged in the domestic and regional market states the following:

"*Having domestic clients is the entry into the rest of Africa*" (South African provider engaged in RVCs).

Various examples have been documented in firm interviews where not only the domestic, but also the regional market have served as an entry into the global offshore industry. For instance, the CEO of a South African owned firm, delivering IT outsourcing solutions, explained that the local and regional industry provided its management team the toolset needed to enter the global market. The provider also faced fewer difficulties obtaining a contract in the regional market compared to the global market, because its contract with the client firm in the region was the result of prior established relationships in the domestic market. The CEO of the firm explains the following:

"It wasn't intentional. Our client in South Africa expanded its business to neighboring

countries, and because of that we are now also servicing our client and new clients in the African region.(...) BPO rides on the back of it" (Interview with a domestic service provider engaged in GVCs).

Another firm explains:

"*We are servicing clients in Namibia, Swaziland, Botswana and Kenya. (..) (company name) looked at Africa and picked Kenya first where it already had relations*" (Interview with a foreign service provider engaged in GVCs).

The struggles that various firms face in terms of entering overseas (global) markets, may explain why most respondents emphasize the need to consider the African market more carefully to diversify risks, reduce overreliance on the overseas market, and secure future growth.

"The African market could be the new offshore market, which we need because globally there is a lot of competition, prices are going up in South Africa [...] and it is a way to expand our talent pool" (Interview with a representative of an organization targeting skills development in the South African ITES sector).

Despite the existence of opportunities in the regional market, and for some firms existing networks facilitating market access, respondents do stress that differences regarding cultural and regulatory alignment exists and emphasize the importance of partnering with local service providers in the region. Examples were given during interviews where service providers in South Africa service clients in the SSA market through joint ventures with local partners in the region. For instance, a domestic provider of call and contact center outsourcing solutions to banking, insurance, telecoms and retail customers partnered with local service providers in Kenya, Tanzania and Uganda to deliver its services in these countries, as well as in Nigeria through a joint venture with a Nigerian based service provider. Another domestic service provider argues the following:

"*The only countries close to South Africa where you don't need partnering is Lesotho and Swaziland. the rest is so different. Although services can be standardized still there is no one size fits all for Africa. Differences still exist and needs to be overcome by partnering*" (Interview with a South African service provider engaged in RVCs).

Finally, a company that provides credit collection services states the following:

"We cannot go into the UK or US, because the data behind the collection services is so localized, and we need access to that. We are however going into Kenya now. Same problem. Data collection is a localized thing, but at least we can partner with a local firm there to get access to the data and overcome barriers. So we partnered with a local credit provider who has existing clients so we tap into existing capabilities. We will have a branch in SSA with local people employed, but the company and the processes are managed from South Africa" (Interview with a South African service provider engaged in RVCs).

Respondents from foreign owned service providers located in South Africa explain that for them the South African or wider African market is not used as a stepping stone into the global market. They perceive these markets more as risk diversification and an opportunity to expand their global services delivery capacity. Respondents did point out challenges in doing so in line with the arguments made above. For example, some highlighted the need for local expertise to expand into Africa. A respondent from a foreign firm in South Africa, servicing the offshore and local market, explained how they were looking to expand operations into the rest of Africa servicing neighboring countries, but needed resources and local expertise to do so.

"*Knowledge is needed, in particular local expertise to roll out to the rest of Africa. (...) Partnership is important, learning from other operations, what they know"* (Interview with a foreign service provider engaged in GVCs).

Another respondent argued:

"The ease of doing business is different. You need partnering, sharing best practices" (Interview with a foreign service provider engaged in GVCs).

Foreign firms also stressed the importance of gaining expertise on the South African market, and the role of partnering. During interviews examples were given of foreign service providers setting up operations in South Africa with the help of local third-party providers via (temporary) partnerships or via mergers and acquisitions, showing that South African actors may be instrumental to gaining a better understanding of the domestic and regional market.

"*Some foreign firms fail to grasp local dynamics and it is through mergers or acquisitions with South African firms that local capabilities are bought, not built*" (Interview with a local service providers).

Conclusions, discussion and limitations

South Africa's share in the global offshore market has grown in recent years, but, the total number of people employed by firms engaged in LVCs of ITES is currently more significant than the number of people employed by firms engaged in GVCs. Furthermore, RVCs of ITES are emerging and gaining attention. Firms consider participation in RVCs an opportunity to expand their global delivery capacity or as an alternative to GVC participation. Secondary data identify the potential market opportunities for African based service providers to serve the African region, however, current statistics on the South African ITES sector do not reflect or specify the demand coming from clients in African countries outside South Africa. The qualitative and quantitative data collected for this dissertation have documented cases demonstrating the heterogeneous nature of value chain involvement for service providers in South Africa.

This chapter shows that service providers in South Africa do not solely service firms in overseas/global markets, but also demonstrates the importance of the South African and the wider African market (i.e. emerging markets) for ITES. Domestic and foreign (captive and non-captive) service providers from advanced and emerging economies increasingly use South Africa as a base to service the overseas market, integrating these service providers into GVCs, but also service the South African market, giving rise to local value chains of ITES. These LVCs, in turn, have demonstrated the potential to be extended to RVCs as service providers in South Africa provide outsourcing solutions to firms located in the African region. Both the following of the internationalization strategy of domestic clients and the identification of new clients in the African region (via existing business networks) are observed patterns. There is thus a need for a more elaborate view of outsourcing/offshoring modes in which different markets (domestic, regional and global) come to the fore and in some cases, overlap, as well as the type of actors involved (e.g. both South African and foreign providers). This is different from the mainstream understanding of the current wave of outsourcing/offshoring focusing mainly on GVCs of services, which involve the relocation of services from firms in advanced countries to less developed countries (see Massini & Miozzo, 2012; Gereffi et al., 2010; Oshri et al., 2015; Lambregts,

Beerepoot, & Kloosterman, 2015).

Service providers in South Africa are integrated in RVCs as they serve external clients in the African region. Value chains at the regional scale also consist of (often large) companies that have multiple offices across the African continent, which choose not to deliver their services in a dispersed matter, but bundle and perform these out of South Africa. This type of service delivery in South Africa, referred to as shared services, are predominantly run as captive operations (Zille, 2015), and are thus not targeted in the survey. The examples discussed are based on nearshoring in the Sub-Saharan African markets.

Firms in RVCs, just like in other value chains, show activities in the three services segments (BPO, ITO and KPO). The survey data and qualitative data show that in terms of skills intensity, both low and high value-added activities are performed. Although most firms in RVCs are active in the BPO segment, and differences across value chains are small, a larger fraction of firms in RVCs are active in the ITO segment compared to firms in LVCs and in GVCs. This is in line with opportunities identified in IT services for the regional market (Everest Group, 2008).

In terms of general characteristics of these different value chains, survey data on third-party service providers show that firms in LVCs perform mostly standardized services in the BPO segment, whereas RVC and especially GVC firms provide more skills intensive outsourcing solutions in the BPO segment, and more services in the KPO segment. Firms in LVCs are, on average, smallest in size followed by firms in RVCs and GVCs. The fraction of firms affiliated to a corporate group is lowest in LVCs and increases in RVCs and is highest in GVCs. The same pattern is found for self-perceived performance (lowest in LVC, closely followed by RVC and highest in GVC). In short, these characteristics, may suggest that firms in RVCs, and especially firms in GVCs have a larger resource and capability base available compared to firms in LVCs. This may support the self-selection hypothesis that "better performing firms" manage to enter international markets. However, not only the quantitative data, but also the qualitative data demonstrate a gradual market sequence of many firms starting in LVCs before expanding into RVCs and or GVCs. Respondents state that participation in the domestic and regional markets allowed them to gradually build and deepen capabilities needed to expand into new markets, including overseas markets. Hence, this study provides evidence for the assertion that LVCs and RVCs can facilitate entry into the ITES sector and potentially function as a playing field where learning can take

place and capabilities can be built (this is further discussed in Chapter 6). This is in line with advocates who argue that RVCs can serve as a stepping stone into GVCs (Bamber et al., 2014; Cattaneo et al., 2010; ERA, 2009; Kaplinsky & Farooki, 2010).

The closer look at different value chains does however point out other important research gaps that exist and relate to the different entry requirements for LVCs and RVCs compared to GVCs. In other words, what determines firm participation in these different value chains. Questions also arise concerning the sources of knowledge and innovation underpinning firm competitiveness. For instance, different learning opportunities may exist in value chains resulting from different networks, e.g. between provider and client firm. The latter is still understudied while it is crucial for understanding firm competitiveness in the current economic landscape where learning and innovation are key (Ernst 2002; Morrison et al., 2008; Pietrobelli & Rabelloti, 2011). The next chapter delves into questions on determinants of firm level participation in these different value chains, whereas Chapter 5 and 6 seeks to contribute to the under researched area of learning and capability building in heterogeneous value chains.

Limitations

As with any study, limitations exist that need to be considered when interpreting the results. First, the grouping of firms surveyed in local, regional and global value chains, may hide heterogeneity across firms, especially due to involvement in multiple value chains for some firms. The use of the qualitative data has allowed for the singling out firm characteristics and their motivations for participating in each specific value chain, confirming or further elaborating the survey results. Secondly, the group of surveyed firms that are categorized as participating in RVCs is smaller (17.1%), compared to the firms in LVCs (44.7%) and in GVCs (38.2%), which needs to be considered when interpreting and comparing the firm characteristics across these groups.

This chapter is embargoed at request

4 Firm participation in local, regional and global value chains of ITES

This chapter is embargoed at request

5 Firm level learning and innovation in domestic and international value chains of ITES

6 Looking beyond GVCs for capacity development[37]

[37] This chapter is based on Keijser, C., & Iizuka, M. (2017) Looking Beyond Global Value Chains in Capacity Development: The Case of the IT-Enabled Service (ITES) Sector in South Africa, *The European Journal of Development Research.* doi:10.1057/s41287-017-0110-7

Introduction

The increased interconnectedness of firms through GVCs has spurred debates about the role such transnational networks play in capability building. Integration in GVCs is perceived as a critical avenue for firms in developing countries to access knowledge and to learn and innovate. This contrasts with the mainstream position in the IS literature that knowledge is spatially sticky and national linkages provide the foundation for learning (Ernst, 2002). Despite recent studies combining the literature of GVCs and the IS (Morrison et al., 2008; Pietrobelli & Rabellotti, 2011; De Marchi et al., 2015; Lee et al., 2017), empirical evidence remains limited on how the GVCs and IS affect capability development and how they may interact. Only recently has such a framework on the co-evolution of the two approaches and its impact on capability building been introduced in the literature (Lema et al., 2018s, 2018b). Moreover, the literature has almost exclusively focused on the manufacturing sector, whereas learning trajectories in the service sector in developing countries – such as the ITES sector – remain understudied.

As argued in the previous chapters, the extensive focus on GVCs overlooks the fact that many domestic firms in developing countries, especially SMEs, do not integrate into GVCs. Chapter 3 and 4 demonstrated the prevalence and significance of RVCs and especially LVCs as alternative markets and used as stepping stones into GVC participation. Moreover, Chapter 5 has shown the mechanisms of learning in value chains, suggesting that non-GVC learning avenues play a role in innovation. Using the qualitative data, this chapter seeks to address the following research questions: *What is the contribution of firms' involvement in local, regional and global value chains, and the National Innovation System in developing firm capabilities? How do the National Innovation System and GVC networks interact to affect firm-level capability development, and the viability of the South African ITES sector at large*?

In undertaking this, potential interlinkages are considered between learning opportunities arising from participation in GVCs, RVCs, and LVCs, as well as firm resources and the NIS. The contribution of this chapter is the joint consideration of NIS and value chain learning, and the attention given not only to GVCs, but also to LVCs and RVCs, for a more comprehensive approach to learning. Thereby, it sheds light on the understudied relationship between value chain learning and the NIS in capability building, by drawing on novel qualitative data collected in South Africa. Novelty also lies in applying the above analyses to a service context.

The next section reviews the literature on learning avenues as well as capabilities specific to ITES, section 6.3 outlines the methods, while section 6.4 provides an overview of the NIS and its main challenges affecting the ITES sector in South Africa. Section 6.5 describes the sample of firms within heterogeneous value chains, followed by results on learning patterns used for capability building in 6.6. Finally, section 6.7 concludes with final remarks and the limitations.

Prior research and conceptual background

Nowadays, firms need to continuously learn and upgrade their capabilities to remain competitive in a highly globalized economic landscape. The previous chapter provided an elaborate literature review on organizational learning at the firm level, learning in value chains and the various capabilities critical to firm performance in the ITES sector. This section, therefore, provides only a brief summary of the literature regarding the distinctive sources of learning and the type of capability in focus. The NIS is central to this chapter and is discussed more elaborately.

Studies have shown that internationalization strategies of firms (e.g. learning by exporting) provide learning opportunities (Navaretti et al., 2004). The GVC literature, illustrating buyer and supplier interactions along the value chain, has been particularly useful in understanding learning- and capability-upgrading processes of suppliers in developing countries (Gereffi, 1999). Common learning channels in GVCs include knowledge transfer from the GVC lead firm through face-to-face interactions, specific trainings, and enforcement of standards (De Marchi et al., 2015).

While the GVC approach generally assumes a positive effect of GVC participation for domestic firms in developing countries, studies also point out that less-capable firms, especially SMEs, fail to integrate into GVCs, and that LVCs are used by late comer country firms to build capabilities first before entering global markets (Navas-Aleman, 2011). Bamber et al. (2014) stress the need for further data on the policy implications of GVCs for developing countries to ensure inclusive growth, and argue that value chains at a local or regional level may offer more likely prospects for firms in building capability. Questions persist on how capabilities are developed within local and regional value chains, how these may differ from learning trajectories in GVCs, and how they may facilitate participation in GVCs in future (Bamber et al., 2014).

Aside from value chain learning, firm resources play a role in capability development. According to the resource-based view, competitiveness derives from the creation of differentiated and firm-specific capabilities, which are determined by the bundling of resources and ability to make productive use of resources (Penrose, 1959). The knowledge base of a firm, composed of the background and experience of employees, is considered one of the most strategically important resources (Grant, 1996). As already mentioned, the notion of absorptive capacity has been applied to the GVC and related literature. For instance, Ernst and Kim (2002) argue that suppliers need their own capabilities to internalise externally acquired knowledge in global production networks. This requires firms to take strategic decisions on individual and organisational learning, such as investing in the recruitment of talented workers and development of training programmes to upgrade the existing (tacit) knowledge base. Furthermore, Lema (2012) sheds light on supplier learning in outsourcing relationships by integrating GVC learning and firm capabilities. Based on the case of Indian software firms, findings show that although learning from customers in outsourcing relations are an important source of learning for innovation, it is combined with firms' internal investments and learning.

6.1.1 The National Innovation System

The system of innovation literature highlights the formation of capabilities through inter-organizational linkages and the institutions that shape learning processes. Firms do not learn and innovate in isolation; rather, knowledge is produced and disseminated through interactions between actors (firms, consumers, universities, and public organizations) in the system. Previous IS literature has predominantly been bound to the nation state (Freeman, 1995; Lundvall, 1992), and is currently referred to as the NIS, but a focus on regional and sectoral systems has also emerged (Malerba, 2002). Literature on the NIS stresses the importance of national linkages due to the interactive nature of learning, necessitating close interaction between co-located users and producers. A well-established NIS with local collaborations is a prerequisite for firms to access global networks and exploit knowledge flows (Ernst, 2002). Strong emphasis on learning within spatially bounded networks has also been criticised for over-territorialising the learning process and neglecting international networks. Simultaneously, GVC studies have been criticised for not paying sufficient attention to the IS in which suppliers are embedded. Ernst (2002) considers the neglect of the international dimension in the NIS problematic because most developing countries lack a broad local knowledge base and depend on foreign sources of knowledge. He

suggests that international linkages need to prepare the way for the development of a strong NIS (Ernst, 2002, p. 500).

Prior studies, however, did not empirically demonstrate the ways that GVCs and NISs interact in capability building, or how GVC learning could strengthen the NIS. Recently, efforts have been made to reconcile both schools of literature. Pietrobelli and Rabellotti (2011) find that the nature of the IS affects the modes of governance of GVCs and, through this, the opportunity for firms to learn and innovate. Furthermore, De Marchi et al. (2015) conducted a systemic review of the literature and identified learning channels within and outside of GVCs (e.g. collective learning at the local level, imitation, learning from other non- GVC actors, etc.). They found that, due to heterogeneity in firms' resources and embeddedness in the local IS, firms may differ in their capacity to identify, absorb and adapt knowledge transferred from actors in GVCs. Lee et al. (2017) stress that the creation of local knowledge and LVCs require a strong local IS. Lema et al (2018a, 2018b) stress that the GVCs and IS, through forward feeding flows (as channels of learning) contribute to capability building, but also emphasize the feedback flows between the two (e.g. enhanced capabilities can influence the local IS characteristics and value chain governance patterns). Based on stages of the coevolution process, they describe various possible trajectories of learning and innovation in developing countries. Additional empirical research on the relation between the NIS and GVCs is needed to draw lessons on the design of the NIS in developing countries conducive to learning in GVCs. This is important especially since the concept of the IS was initially developed and is mainly applied to understanding developments in industrialised and advanced nations (Kreamer-Mbula & Wamae, 2010).

6.1.2 Capabilities critical for ITES

To compete in ITES, firms in developing countries need to satisfy the service requirements of clients (Feeny et al., 2005; Bharadwaj & Saxena, 2010; Lahiri et al., 2012). The ability of providers to respond to the client's day-to-day service requirements is referred to as 'service-delivery competence' (Feeny et al., 2005). Integral to this is 'domain expertise', or the capability to apply and retain sufficient professional knowledge of the target service domain, such as understanding of its core function, industry, as well specifics and idiosyncrasies of the clients (adopted from Feeny et al., 2005). Such expertise demands skilled and trained manpower, and human resource management competence (HRMC), defined as the provider's ability to

identify, acquire, and deploy human resources (HR) (Bharadwaj & Saxena, 2010). This includes the ability to respond to the demand for skills, scale-up operations, recruiting and training, and career development. The above studies recognize that while other factors (e.g. IT infrastructure as discussed in Chapter 5) are important in the performance of ITES providers, management of HR[38] to develop professional knowledge of the business process are fundamental for enhancing competitiveness. This is especially relevant in the context of South Africa where scarcity of human capital is considered the main constraint to growth of the ITES sector (interviews 2016, BPESA, 2016).

The literature on KIBS (e.g. intangible nature of services, process orientation, and customer integration), also stresses the importance of non-technological elements, such as skills, training activities, and new patterns of client interaction, as critical assets for innovation (Den Hertog, 2000; Hipp & Grupp, 2005). According to Miles (2005), innovation in KIBS requires generic and sector-specific skills, including sector-specific knowledge about the industries and organisations of clients, as well as their processes. In fact, innovation in KIBS is typically linked to satisfying client-specific demands.

Data and methods

For this chapter the qualitative data, as described in Chapter 2, is used that was collected from 47 service providers and 35 industry stakeholders. The firm interviews focused on identifying capabilities critical to meet requirements of value chains, as well as sources of learning used to build or deepen such capabilities. In contrast to the firm-level survey where respondents are asked to rate the importance of various sources of innovation, during the semi-structured interviews questions were asked about the most important sources of learning (to develop knowledge and acquire skills) to sustain their day-to-day operations. Probing questions were included to consistently explore the role of client learning, learning efforts internal to the firm and at the industry level through interactions with other actors. Firm characteristics were also obtained (ownership, size and service activities) and whether they provide services to clients in the domestic market (LVCs), to clients in the African continent (RVCs), or to clients outside the continent, in offshore markets (GVCs). Interview notes were coded using qualitative data analysis software Nvivo (QSR International, 2015)

[38] This reflects the development of skills relevant to the ITES industry, which may include IT skills.

to identify the variety of learning channels. These were subsequently grouped under the learning mechanisms identified in the literature review: value chain (VC) learning (GVC, RVC, LVC), the NIS, and firm resources. The aim was to map the sources of learning inductively.

The semi-structured interviews with 35 industry stakeholders (such as representatives from industry bodies, governmental organizations, training providers, client firms, captive ITES providers, industry consultants, academics) also form the basis of this chapter. They provide an understanding of the innovation system (e.g. the identification of key actors, interactions between actors, and the main challenges to the growth of the sector, relevant policies etc.) underpinning the development of the industry.

The ITES sector from a NIS perspective: the main challenges

The providers of IT-enabled services differ in terms of general firm characteristics, type of activities, market orientation, and their behaviour and learning processes (as also seen for the survey results discussed in Chapter 4 and 5). It is particularly through offshore focused firms and foreign owned firms that the local industry is exposed to foreign markets, actors, knowledge and institutions, hence adding the international dimension to the system. Client firms are also heterogeneous in nature, located in different geographical markets and operating in different vertical industries, having different demands in terms of services and standards. Not only formal institutions (e.g. regulation and quality standards), but informal institutions (e.g. socio-cultural dynamics, norms and values) of South Africans as well as external actors also play a key role in influencing behaviour and strategies of firms. Despite close cultural alignment with client locations (e.g. the UK and Australia), sensitivity to cultural issues and perception remain that have been found challenging to foreign service providers that are based in South Africa, especially when dealing with human resources management.

"An international service providers looked at ways to improve the capacity of the transportation busses it offered to its employees by putting the people from one neighborhood on the same work shift. This caused separation of ethnic groups and caused a lot of chaos. Not understanding the nuances and cultural issues in South Africa and how they affect employees" (Interview with a representative of a training institute).

Key non-firm actors include governmental agencies, business associations, non-profit organizations and other stakeholders and industry bodies supporting and promoting the ITES sector. Particularly business associations are found to be key drivers of ITES sectors globally, which is showcased by efforts from countries to replicate the success of the Indian National Association of Software and Services Companies (NASSCOM) (GASSCOM in Ghana and BRASSCOM in Brazil) (Kleibert, 2015a). In the past decades, South Africa has struggled with creating one business association representing the entire nation. Several business associations have emerged, disappeared and re-emerged. Currently, several business associations represent firms in the call centre industry and the wider ITES industry. As of 2016, BPESA is referred to as the national association for companies operating in the ITES sector, and operates as a trade association and a specialist investment promotion agency. Its mandate is to create an enabling environment for its members to network, share knowledge and collectively contribute to the development of the sector. The association is the key spill in various linkages between the private sector and the public sector, which will be discussed further in the next section.

The Government identified the business process services industry as a key avenue for job creation and through the dti (department trade and industy) puts in place a sector-specific business process services incentive scheme. A grant is offered for a period of five years, and is awarded on actual jobs created in South Africa to serve offshore markets as per the definition of full-time equivalents[39] and based on operating cost per job. Such government support is provided only to firms with offshore clients, as the mandate is to bring in foreign investments and create new jobs. Eligibility for the incentive requires a level 4 Broad-Based Black Economic Empowerment (B-BBEE) status, which is a score based on several elements: ownership, management control, skills development, enterprise and supplier development, and socio-economic development. The incentive scheme has reduced the cost of doing business in South Africa, thereby contributing to the growth of offshore market (Mashalaba et al., 2015). Various other incentives, not specifically designed for the ITES sector, are available in the form of direct subsidies and are granted to organizations that in general promote foreign investments, exports, black economic empowerment and employment. An example includes employment tax incentives where employers are given two-year tax

[39] FTE: Full time equivalent, a measure of work effort equal to an average workload of 37.5 hours per person per week.

incentives when hiring young and less experienced work seekers (Mashalaba et al., 2015).

Although actors and institutions in the NIS (e.g. industry associations, training organizations, incentive schemes) have been critical in supporting the growth of the sector and promoting GVC participation, respondents also highlight obstacles to growth, associated with the NIS and especially policies. Various respondents criticized the overall institutional support for the ITES sector for being targeted predominantly towards firms serving offshore markets with only limited support for those in the domestic market (Firm and industry stakeholder interviews, 2016). This was also observed in Chapter 4 where government support has been more frequently indicated to be an important antecedent to participation in GVCs compared to participation in LVCs and RVCs. Small sized firms argued that information lacks about the existence and eligibility of incentive schemes for micro or small business operations that service the domestic market. A respondent from a domestic owned small size argued the following:

"The local industry does not get much recognition and to acquire local help there is a lot of red tape. Applications for government facilities are challenging for SMEs. There are no grants given to firms in the domestic market like to those in export markets. You need to be innovative rather than look for help. You don't have to time to wait and try" (Interview with a South African provider engaged in LVCs).

Furthermore, weak or missing interactions with industry stakeholders is not only observed for small scale domestic service providers, but applies to the wider sector. The following statements were given by respondents:

"It would help to understand who all the players in the market are and what their value proposition is" (Interview with a South African service provider engaged in RVCs).

"A networking platform is missing for service providers who can partner to fulfil larger overseas tenders" (Interview with a foreign service provider engaged in GVCs).

"Not sure whether it makes sense to link up to an industry association. I don't have enough information on this" (Interview with a South African service provider engaged in LVCs).

According to respondents, there is a lack of alignment amongst the governmental bodies, which results in grants, support and policies being "piecemeal" and subject to decision-making from different national, provincial and municipal entities. Different government layers have initiated policy measures to attract ITES activity into their own provincial region or municipality, showing differences in success. This scattered approach inhibits the delivery of one national strategy, which is considered critical for the promotion and development of the South African ITES sector, and mostly for addressing challenges in the mobilization of human resources. This is problematic given the lack of human resources that currently forms one of the biggest obstacles to sustainable growth of the ITES sector in South Africa (IQ Business, 2014; Firm and industry stakeholder interviews, 2016).

Coordination and alignment also lack across industries, which evidences in scattered initiatives related to workforce development. For instance, respondents stress the need for cooperation between the education sector and the private sector to cater to the needs of the services industry by increasing the employability of people and hence increasing the scalability of projects.

"The quality of education is very poor in South Africa. At the moment, there is a huge responsibility for the private sector to bridge it. The market is not providing staff; we need to grow our own" (Interview with a foreign service provider engaged in GVCs).

"There really should be something like private sector/public partnerships. At the moment, there is a lack of such partnerships. There is a need to tailor incubator centres to the needs of SMEs, and to deliver training and mentorships like we also do at our firm" (Interview with a foreign service provider engaged in GVCs).

In terms of the labour market, every year approximately 41,000 English speaking secondary and tertiary graduates enter the workforce (Everest Group, 2008; BPESA, 2015). High unemployment rates and growing number of high school graduates and University graduates have contributed to a growing pool of labour that meet the minimum recruitment levels for the ITES industry, which is in most cases a matric level (secondary school). Despite the large and growing pool of workers with generic skills, there is a shortage of specialized skills, particularly managerial and leadership skills. The labour market is not sufficiently supplying these skills through educational institutions to keep up with the current and forecasted demand of the industry. In addition, firms encounter problems when it comes to retaining staff as the growing

demand for employees enables them to easily switch between employers. As a result, firms are facing high investment costs regarding human capital and have to resort to the development of in-house training programs and academies as well as engage more frequently with external training providers and recruitment agencies.

Furthermore, improvement is still needed in sector-specific institutions for ITES, especially related to standardisation in skills training and certification. Existing accredited training programmes are insufficient to meet current HR needs in providing lower-management staff and specialists (IQ Business, 2014; Firm and industry stakeholder interviews, 2016). Respondents argued that efforts from the private sector and to some extent the government are not coordinated and there remains the need for more rigorous standardization across the industry not only an at entry level, but also for more specialized skills. The following statements were given by respondents:

"*Standardization across the industry is needed and at all levels of skills, also for issues like leadership to have some sort of a benchmark and to have proof for local firms trying to get a tender. Now there is not much to show"* (Interview with a South African service provider engaged in RVCs).

"There is no consistent detailed and accepted accredited training for the staff, like for trained senior management" (….) *Graduates don't want to be a call center agent or teamleader unless there is a specialization qualification* (Interview with a consultant active in the South African ITES sector).

"*In the local market, we are not looking for best practices, because 10 years ago there were not even call center qualifications. You need to look for best practices by yourself. Local benchmarking and standards are only coming through recently"* (Interview with a foreign service provider engaged in GVCs).

"We now have two of our executives accredited with call centre qualifications, which is an authority shipped in from the UK" (Interview with a consultant and member of an industry association active in the South African ITES sector).

Industry stakeholders, especially industry associations, have been important to pick up the needs from the sector and put pressure on institutions to develop standards. In

recent years, concerted efforts have been made to mitigate the skills constraints. Several HR development programmes have been implemented recently[40], all aimed at increasing the coordination between public and private stakeholders across the industry (Firm and industry stakeholder interviews, 2016, 2017).

The next section discusses how firms source critical domain knowledge and manage HR needed to meet clients' requirements and to sustain their business activities.

Description of the interviewed ITES providers

Close examination of the 47 interviewed independent service providers[41] demonstrates their heterogeneous nature in terms of characteristics (ownership, size and service segments) and value chain participation. The location of the client signifies the end market of the service – hence giving rise to different value chains (local, regional, and global value chains). Service providers based in South Africa cater to domestic and offshore markets (mostly the UK and Australia), integrating them into LVCs and GVCs, respectively, and to markets in SSA (e.g. Kenya, Botswana, Mozambique), connecting them to RVCs. As can be seen in Table 6.1, various firms are engaged in multiple value chains.

Firms in LVCs (13) are predominantly small (9) South African firms (10), involved mainly in BPO activities (customer services and back office) (8), with some diversifying into ITO (3) (software development and IT infrastructure management). Those operating only in GVCs (12) are mostly large (8), foreign-owned firms (9), operating in BPO (9) (mainly customer services), but with activities also extending to other segments (e.g. business analytics and legal services). Firms operating in RVCs are also involved in the local market (6) or in all markets (5), and are typically providing BPO services. The following sequence of value chain participation can be observed: all foreign firms operating simultaneously in LVCs and GVCs (8) and in all VCs (1) started from GVCs and expanded into LVCs and RVCs, whereas, out of 15 South African firms operating outside the domestic market, 12 firms started from LVCs and expanded to RVCs (5) or to GVCs (3) or to RVCs and GVCs (4). Only three

[40] Frequent cited examples by respondents include skill development strategies from the Rockefeller Foundation Impact Sourcing Academy, Business Process Enabling South Africa (BPESA), and Harambee.

[41] The sample procedure of the interviewed service providers is more elaborately described in Chapter 2.

South African firms entered GVCs directly. This is in line with the survey data discussed in Chapter 3 and 4, capturing direct and gradual routes into GVCs, with direct GVC entrants being predominantly foreign owned and indirect GVC entrants predominantly South Africa.

Table 6.1 Descriptitives of the service providers by value chain involvement

		Value chain involvement					**total**
		LVC (N=13)	LVC, RVC (N=6)	LVC, GVC (N=11)	GVC (N=12)	LVC, RVC, GVC (N=5)	N=47
Owner-ship	South African	10	5	3	3	4	25
	Foreign	3	1	8	9	1	22
Size (employees)	Small (< 200)	9	1	4	3	1	18
	Medium (200-500)	2	1	4	1	2	10
	Large (>500)	2	4	3	8	2	19
Service segment	BPO	8	5	5	9	1	28
	BPO/ ITO	3	0	0	1	3	7
	BPO/ KPO	0	1	4	1		6
	ITO	2	0	0	0	1	3
	KPO	0	0	2	1	0	3

Source: Author's calculations.

Notes: N= number of observations. BPO= business processing outsourcing, ITO= information technology outsourcing, KPO= knowledge processing outsourcing, LVC= local value chain, RVC=regional value chain, GVC= global value chain.

Learning via value chains, firm resources and the NIS

Table 6.2 summarizes the results of the various learning channels used in heterogeneous value chains of ITES. The rows represent the sources of learning that resulted from the firm interviews, grouped under VC learning, the NIS, and firm resources, thus showing the number of firms in different value chains using such sources. Firms in GVCs, even though they also participate in LVCs (11), and in both LVCs and RVCs (5), are grouped under GVCs, and firms who operate in RVCs and LVCs (6) are categorised under RVCs.

Nearly all firms claim to learn from their clients through various forms of communication (e.g. face-to-face meetings). Firms participating in GVCs indicate additional learning opportunities through enforcement of standards and training of employees undertaken by the client firm, compared to firms that participate in LVCs and RVCs (see rows in VC learning in Table 6.2). Furthermore, firms in GVCs have more interactions in the NIS that assist in capacity building, especially from government and business associations, reflecting policies towards assisting firms serving offshore markets as discussed in the previous section (see rows in NIS). Finally, firms in GVCs make use of various firm resources, whereas firms in RVCs and especially LVCs indicate the use of resources in- house to assist in building capacity less frequently (see rows in firm resources).

Table 6.2 needs to be interpreted with caution, due to the grouping of data, which may hide the heterogeneity that exists within groups of firms (as shown in Table 6.1), and due to the varying number of observations across the three groups. Moreover, only those sources of learning that are identified as most important by the respondents are reported, which does not render other learning sources entirely obsolete. The following sections describe the learning patterns in each value chain based on firm interview results while highlighting similarities and exceptions across South African and foreign-owned firms.

Table 6.2 Learning sources used to develop service delivery competence by value chain involvement

		Value chain involvement		
	Description sources of learning	**LVC (N=13)**	**RVC (N=6)**	**GVC (N=28)**
VC learning	Communication *-Exchange of information (face to face meetings, conference calls, reports) between service provider and client*	11 **(85%)**	5 **(83%)**	**22** (79%)
	Training *-Client firm places employees (temporarily) at providers site, training of staff by client firm, provider sends staff to client*	2 (15%)	2 (33%)	**16** (57%)
	Standards *-Incentives to upgrade capabilities to adhere to client standards*	0	2 (33%)	**15** (54%)
NIS	University *-Linkages with universities for internships, upskilling courses, training facilitates*	0	1(17%)	5 (18%)
	Government *-Linkages with representatives at national, provincial and municipal level for financial and HR-related incentives and industry-specific knowledge*	1 (8%)	0	13 (46%)
	Business association *-Membership, access to knowledge-sharing platforms and operational support, skills development programs*	5 (38%)	1 (17%)	**16** (57%)
	Local actors *-e.g. consultants, data analytics, public and private training and recruitment organisations*	**8** (62%)	**4** (67%)	**14** (50%)
	Mergers and Acquisitions *-Typically, foreign-owned company mergers or acquisition of South African-established company. Access to local resources and capabilities*	2 (15%)	1 (17%)	6 (21%)
	Collaboration with (ITES) service providers *-Typically, between foreign and local providers, driven by B-BBEE*	4 (31%)	2 (33%)	7 (25%)
	Mobility of employees *-Tacit skills and (international) work experience through employees with prior work experience at competition*	4 (31%)	2 (33%)	7 (25%)
	Competitors benchmarking	5 (39%)	**3** (50%)	6 (21%)

Firm resources	Corporate group *-Parent and subsidiary linkage for human resources, knowledge and standards*	3 (23%)	**5** (83%)	**19** (68%)
	Formal in-house training academy *-Skills development through formal and accredited training programmes*	3 (23%)	0	10 (36%)
	In-house knowledge sharing *-Internal transfer of ideas, knowledge and experience, employee engagement*	**7** (53%)	**5** (83%)	**14** (50%)
	Knowledge build up *-Internal accumulation of knowledge, experience, learning by doing*	**8** (62%)	**3** (50%)	11 (39%)
	Management: prior work experience	**8** (62%)	1 (17%)	**14** (50%)
	Management: international experience and networks	3 (23%)	2 (33%)	**18** (64%)
	Management: risk taking	3 (23%)	1 (17%)	5 (18%)
	Career development	2 (15%)	0	8 (29%)
	Foreign managers	3 (23%)	2 (33%)	**14** (50%)
	South African managers	4 (31%)	2 (33%)	**18** (72%)
	Standards *-Incentives to upgrade capabilities to adhere to service standards*	4 (31%)	**3** (50%)	9 (32%)
	Self-study *-e.g. white papers, Internet*	4 (31%)	1 (17%)	8 (29%)
Other	International actors *-e.g. ITES providers (in SSA), consultants, business associations)*	3 (23%)	**5** (50%)	10 (26%)

Source: Author.

Note: Bold digits are learning mechanisms reported by at least 50% of firms in a value chain.

6.1.3 Learning patterns in GVCs

GVC client learning

Client firms play a key role in knowledge diffusion, through standards that pressure providers in GVCs to learn and upgrade services, through close communication, and by exchanging and training personnel. These interactions provide knowledge in areas such as process requirements, client- and industry-specific requirements, as well as avenues to develop human resources. Active information sharing takes place between clients and providers in the form of business meetings, manuals, reports, training, and face-to-face visits. The latter are considered particularly effective for the transfer of tacit knowledge (e.g. on business culture, work ethics) and embodied skills. The majority of firms received a team of expats from overseas clients to transfer skills and process-related knowledge that helped them kick start operations and upgrade services in line with standards of the client firm. This is motivated by pressure on providers to represent the client's company brand, compelling firms to follow the same technology, international standards and qualifications, and employ staff with international experience. Moreover, services provision to clients overseas tend to be large in scale, prone to risk of reputational damage (due to geographical and cultural distance), which could motivate the client to invest in the transfer of knowledge and skills. Such interactions with GVC clients contribute to developing HR and domain expertise, especially considering the shortage of skilled and experienced personnel (e.g. in specialist and senior management roles) in South Africa.

The national innovation system

Close interactions exist between firms in GVCs and other actors in the South African NIS (e.g. South African governmental agencies, industry bodies, consultants, recruitment and training organisations). This facilitates firms' entry into GVCs and helps to build service-delivery competence. Particularly, industry bodies provide support, for example by facilitating access to government incentives, and obtaining permits to source foreign skills. They also function as intermediaries between firms and offshore clients and other industry stakeholders, ultimately forming a platform for sector-specific learning. For example, through workshops organized by industry bodies information can be shared regarding market trends, operational requirements, labour market issues (e.g. best HR management practices in South Africa). Furthermore, local actors, including recruitment and training providers, also provide

skills and information regarding industry trends and management of employees. Foreign firms, especially, claim to rely on local actors – i.e. collaboration with South African ITES providers, mergers and acquisitions, consultants, etc. – to acquire tacit knowledge about the local environment. They emphasise the importance of cultural understanding and nuances of the South African market for adapting foreign knowledge to the local context, critical for better service delivery.

Firm resources

The majority of foreign-owned firms that participate in GVCs have in-house training programmes and so-called academies to offer accredited skill development and learning trajectories to their employees. Similarly, nearly all foreign firms in GVCs are connected to a global corporate network (i.e. a parent company), which facilitates mobilisation of HR internally. Such networks also help to transfer skills and tap into prior experience as well as 'tried and tested' strategies. Through in-house training academies and interactions among employees, firms seek to further distribute and adapt (foreign) skills, experience, and information obtained from corporate or client firms to the rest of the firm. Furthermore, most foreign-owned firms in GVCs employ both foreign managers to secure skills and experience in international operations while also employing South African managers to obtain an understanding of the absorptive capacity of local employees. While internal firm resources can provide similar learning effects as GVCs in terms of accessing skills and knowledge on processes in ITES, respondents stress that client interactions are still critical in obtaining skills and information to cater to client-specific requirements.

Most South African firms participating in GVCs stress the use of resources such as managers' previous (international) work experience and learning by doing for entering GVCs and building capacity. Among ten South African firms participating in GVCs, three managed to immediately obtain offshore contracts, mainly due to existing networks with offshore clients and managers' prior international work experience. The other firms started in LVCs, which according to these firms, allowed them to upgrade HRMC and develop domain expertise, mainly via internal firm efforts, expanding their client base and strengthening their networks and reputation among others, thus enabling them to enter GVCs (as also discussed in Chapter 3).

6.1.4 Learning patterns in LVCs

LVC client learning

Nearly all firms in LVCs state that they learn about client needs and operational aspects of the processes through communication with clients. Such interactions, however, are not extensively used for the transfer and development of skills, except for two large-scale providers from this sample operating in the local market who state to have an onsite manager from the client firm collaborating with their local managers. Furthermore, no specific cases of learning that resulted from the pressure of meeting standards were reported, as was the case in GVCs. Explanations provided by respondents include lower standards for services and skills qualifications demanded in the domestic market. Governance structures (see Humphrey and Schmitz, 2002) that prevail in value chains may differ across chains, which could further explain differences in learning opportunities for supplier firms.

The national innovation system

Respondents argue that as current government incentives prioritize the need to attract FDI and job creation linked to offshore markets, various organizations and policy measures are not oriented towards the local market, and especially not to small South African operations. This is also expressed by local firms operating in LVCs. For instance, platforms for knowledge sharing and access to financial incentives are critical for firms in LVCs, yet not perceived available as in the case of GVCs. Firms in LVCs, especially South African-owned SMEs, are often not members of industry bodies that are central to such knowledge platforms (this is also found in the quantitative data, as discussed in Chapter 4). The B-BBEE regulation has special relevance for firms operating in the domestic market, pressuring ITES providers to comply with B-BBEE regulations, for instance, through enhancing cooperation with South African firms. This could explain the interactions between foreign and South African ITES service providers. Interviewees state that although the regulations have the potential to promote knowledge transfers and develop local enterprises, in some cases, this had limited effects on knowledge transfers for local firms, due to conflicts of interest and lack of implementation. In fact, other more indirect knowledge flows are reported between these firms (e.g. competition, mobility of personnel), which allow local firms to capture internationally experienced and skilled workers and learn about international service requirements and market trends.

Firm resources

Many local firms that currently operate only in the domestic market expressed a desire to operate in global market, but argue that this is not possible due to lack of an established brand, scale, networks, or sufficient financial resources to explore business opportunities in offshore markets. A manager from a UK-based client firm confirmed the importance of firms' resources, emphasizing a preference for large and well-known global service providers due to the higher perceived risk intrinsic to contracting of smaller domestic firms that lack scale or a strong reputation (Interview with a UK based client firm visiting South Africa).

Several south African small firms explained how they seek to offset their lack of scale and reputation by adopting standards (e.g. BBEEE, sector specific standards), which may explain why, as seen in Chapter 3, firms indicate standards to be important to enter local markets. Furthermore, in interviews, the CEOs and managers disclosed that they rely on personal networks to recruit people, as well as to access information about business processes, opportunities, and market trends. Internal learning occurs through experimentation with new business processes, technologies, and promoting knowledge sharing within the firm. Managers seek to dynamically interact with employees to gain trust and understand how to motivate them to produce an environment conducive for learning and to retain staff. Despite such efforts, many firms, especially SMEs, stated that their resources were constrained, particularly regarding financial resources needed to mobilize and develop HR. The majority of local firms consider LVCs an opportunity to accumulate knowledge and experience gradually, and build capabilities and scale eventually needed to enter GVCs. This mirrors the experiences of South African firms from this sample that started in LVCs and are currently operating in GVCs.

6.1.5 Learning patterns in RVCs

RVC client learning

Interactions with clients in the African region are not as frequently reported as in the case of GVCs, and appear not to convey much operational knowledge about the targeted business process (or transfer of HR), compared to those with clients in offshore markets. Respondents explain that services in the regional market also include non-client facing services of BPOs, such as administrative tasks, data capture, and payroll activities, where the intangible skill sets required for more complex

customer-focused service delivery in the case of GVCs become less paramount. Instead, literacy, computer skills, and foreign languages are critical in RVCs. On the other hand, regional operations do assist in the building of experience and knowledge about conducting business in foreign markets and different cultures. Respondents argue that despite perceived cultural proximity to South Africa, differences exist in languages, cultural norms and habits, and business operations in RVCs. They argue that interactions with client firms are crucial for conveying information about such specificities, which are paramount in ensuring quality of service and establishing a relationship with the client conducive to knowledge sharing. This is in line with the findings from Chapter 4 revealing that cultural affinity to regional markets, is in fact not considered an important factor facilitating RVC participation, and with findings in Chapter 3 stressing the importance of partnering with local firms to overcome challenges related to geographical remoteness (e.g. cultural differences).

The national innovation system

Firms in RVCs act similar to firms in LVCs with regard to sourcing knowledge in the NIS. They highlight the lack of support from the NIS in South Africa. For instance, they stress that information on business processes and potential clients in the region is often obtained through personal networks rather than through organizations and platforms that are more pronounced in the case of firms in GVCs. Furthermore, firms in RVCs put more emphasis on knowledge sharing through partnering with African-based ITES providers in the region (see other in Table 6.2). In fact, four out of 11 service providers delivering services from South Africa to clients in the African region did so in partnership with local ITES providers to acquire local resources and capabilities (language skills and an understanding of the institutional and cultural business environment and needs of clients). This could further explain why client learning is less stressed in RVC firms compared to firms in GVCs.

Firm resources

Firms in RVCs emphasize the importance of internal learning efforts, gradual accumulation of knowledge and experience through learning by doing, similar to firms in LVCs. They appear to be less resource constrained compared to firms in LVCs. Respondents explain that by operating in the domestic and regional market they have opportunities to build and demonstrate their capabilities, and develop networks and sufficient reputation to further expand into other African and overseas markets. For

instance, some firms have, over time, become part of a corporate group that assists with the development of capabilities. Three out of four South African firms that are simultaneously operating in LVCs, RVCs, and GVCs argue that they started in the domestic market, expanded into the region where they built the necessary resources, before they moved into GVCs.

Conclusions, discussion and limitations

The previous sections illustrated how ITES providers in South Africa manage human resources and source knowledge to build and deepen their capabilities critical to meet client requirements. Findings show that GVC participation can provide an important mechanism to develop such a service-delivery competence. GVC learning is important in sourcing specific skills and knowledge to cater to client demands. This determines the quality of the service, based increasingly on value-added through client customization rather than cost considerations alone. Furthermore, GVC learning is especially important in the face of a weak local knowledge base (shortage of skills, missing industry linkages, and lacking policy support) – even more so for resource-constrained firms that struggle to overcome such weaknesses in the NIS. This is largely in line with earlier claims in the literature on the importance of foreign knowledge for developing countries that typically lack a strong knowledge base (see Ernst, 2002; Morrison et al., 2008). However, the findings show that GVC learning is coupled with learning from firm resources and the NIS. This is line with the claim that GVCs and the NIS can act as complements, as made by Lema (2018). In addition, an interaction is found between GVC learning and the NIS that can jointly support the growth of the ITES industry.

This study reveals various examples showing that industry interactions (e.g. mainly industry bodies) assist service providers in accessing foreign skills and knowledge from GVC clients. Furthermore, due to local characteristics of the South African formal and informal institutional environment (e.g. socio-cultural dynamics, local business ethics, B-BBEE regulations), interactions between actors within the country (e.g. collaborations with local ITES providers, training organizations, and consultants) are key to developing the local capabilities (especially for foreign firms) necessary to adapt foreign-sourced knowledge accordingly. Simultaneously, firm participation in GVCs can strengthen the NIS, potentially benefitting other ITES providers that do not have access to GVCs. This study documents various examples of such potential spillover effects, including the transfer of information and skills resulting from GVC learning

to other ITES providers in South Africa, due to collaboration between local and foreign ITES providers (typically driven by B-BBEE regulation), mobility of personnel and observing competitors. Furthermore, GVC participation may trigger institutional developments from which benefits may also accrue to the rest of the industry. For instance, demand for international skills and quality standards in ITES have stimulated the development and use of skills-related standardization and accreditation across the ITES industry in South Africa. This has recently led to the introduction of skills certifications specific to ITES in line with both local qualifications as well as international standards (industry stakeholder interviews, 2017). Furthermore, growth in GVC participation has put further pressure on the private and public sector to coordinate and align efforts to address the human resources shortages and other obstacles, and to sustain the growth of South Africa's share in the offshore market. In short, a combined effect exists between the NIS and GVC participation with regard to their role in capacity building. This study thus confirms that feedback loops exist between the GVC and NIS, and within the NIS, as illustrated in the framework on GVC-IS co-evolution and firms' innovative processes by Lema et al., (2018a). Adopting the lens provided in their framework, and based on the examples observed in this study it can be concluded that the interaction between GVC learning and the NIS are both direct and indirect. For example, GVC participation and learning can strengthen the NIS directly (via institutional developments) or indirectly, via firms (e.g. labour mobility resulting in spillover effects that ultimately affect the NIS). GVC learning and, as a result capability formation at the firm level, is also influenced by the NIS (e.g. the role of local actors in accessing and adapting foreign knowledge in GVCs).

GVC participation is not the only avenue for learning. Internal firm resources also influence capacity building, and are critical for GVC entry. Firms with strong internal resources (mostly foreign firms) manage to insert directly into GVCs, whereas the majority of South African firms, mainly due to resource constraints, participate in LVCs. Various South African firms in this study that are currently in GVCs have, through participation in LVCs, built the capabilities needed to move into GVCs, several also via participation in RVCs. This finding, which is more elaborately discussed in Chapter 3 and 4, is in line with the assertion in earlier studies that RVCs, and especially LVCs, can serve as playing fields for capability development and as springboards into GVCs (Bamber et al., 2014).

Firms in RVCs and especially in LVCs show differences in sourcing knowledge for capability building from firms in GVCs. The latter have more learning opportunities arising through all three channels (VC participation, the NIS, and firm resources), compared to firms in RVCs and especially in LVCs. Overall, firms in RVCs and LVCs report fewer immediate learning effects in terms of the transfer of skills from client firms. This could be related to the previous finding that lead firms from so-called Southern markets place less emphasis on skills transfer to local suppliers compared to traditional lead firms (Bamber et al., 2014).

Particularly, the lack of industry support (e.g. missing interactions and policy incentives) contrasts with (foreign) firms in GVCs, and forms an obstacle to sourcing the resources needed to expand their capacity. Rather, through internal resources they seek to strengthen their position in the local and or regional market and, in various cases, seek to upgrade into GVCs. Respondents of firms that have upgraded to GVCs confirm their initial reliance on in-house resources. Such inter-chain upgrading is, however, not guaranteed for most firms currently in LVCs and RVCs, with resource constraints posing immediate challenges to expanding operations. Respondents emphasise the severe competition from large and well- established global service providers over contracts not only in offshore markets but also in the domestic market (e.g. pointing to possible crowding-out effects).

The NIS has an important role to play in mobilising resources to assist these local firms in gaining competitiveness in domestic and regional markets, and potentially upgrading into offshore markets. Current government policies in the ITES sector prioritise incentives to firms who are in GVCs, which are usually foreign and large in scale. This can be understood considering the strategy of the Government to generate employment and economic impact. However, to develop local capabilities in the long run, a stronger IS catering also to the needs of firms in LVCs and RVCs is key, as these two chains can provide an opportunity for participation in the ITES sector and a potential space for capacity building for South African firms, especially for SMEs.

Limitations

The selected sample and methodology allowed for an in-depth exploration of possible learning avenues and their interlinkages for capability development. However, the conclusions drawn for the sample of firms should be viewed in light of the smaller sample size of firms compared to the survey sample, especially for RVCs.

Furthermore, the results on the different learning avenues need to be interpreted with caution, due to the grouping of data, which may hide the heterogeneity that exists within groups of firms (e.g. multiple market involvement), and due to the varying number of observations across the three groups. This encourages future researchers to further collect data, analyze and compare the performance effects of participation in LVCs, RVCs, and GVCs of services.

7 Concluding remarks

Main findings

Global value chains (GVCs) are a defining feature of the current wave of globalization and a reflection of the increasing interconnectedness of economies (OECD and World Bank, 2015). Many firms seek efficiency gains and cost savings by delegating their non-core activities to external firms in the country (outsourcing) or to captive or external firms abroad (offshoring or offshore outsourcing respectively) (Gereffi & Fernandez-Stark, 2010). Developing countries have increasingly become offshore destinations for information technology enabled services (ITES), referring to business services using information technology (IT) in the delivery process (Dossani & Kenney, 2007). Understanding how developing countries can successfully participate into GVCs has become an important subject for development practitioners (Bamber et al., 2014; Gereffi & Fernandez-Stark, 2010, Kowalski et al., 2015), and forms the fundamental question that motivates this thesis. Examining the case of South Africa, this thesis provided a comprehensive analysis of the characteristics of firm participation in local, regional and global value chains of ITES and how, in turn, firms' involvement in these value chains leads to capability building and innovation. The data used for this dissertation are both qualitative (47 interviews with third-party service providers (non-captive firms) and 35 industry stakeholders) and quantitative (76 survey responses from third-party service providers) collected in South Africa. The main conclusions of each chapter are presented below; section 7.2 discusses policy implications, while section 7.3 discusses limitations and avenues for future research.

Chapter 3: Characteristics of heterogeneous value chains of ITES

Chapter 3 has contributed to the scant literature by providing evidence on what regional value chains (RVCs) look like, in terms of firm characteristics and firms' perceptions towards RVCs, and how these compare to local value chains (LVCs) and global value chains (GVCs). It also contributes to the debate on the importance of LVCs and RVCs as stepping stones into GVC participation

Using both the qualitative and quantitative data, this chapter shows that service providers in South Africa not only serve offshore markets (e.g. in the UK or Australia) (engage in GVCs), but also serve clients in the domestic and regional markets (e.g. Namibia, Kenya), connecting these service providers to local and regional value chains respectively. Value chains at the regional scale also arise as companies that have multiple offices across the African continent choose not to deliver their services in a

dispersed matter, but bundle and perform these out of South Africa. This type of service delivery in South Africa, referred to as shared services, are predominantly run as captive operations (Zille, 2015), and are thus not targeted in this research. The growing services industry and trade in the region is expected to create more opportunities for the South African ITES industry

Although most firms in RVCs are active in the Business Process Outsourcing (BPO) segment (e.g. data processing, human resource management, and customer relationship management), and differences across value chains are small, a larger fraction of firms in RVCs operate in the Information Technology Outsourcing (ITO) segment (e.g. IT infrastructure management, software development, and IT consulting) compared to firms in LVCs and GVCs. This is in line with opportunities identified in IT services for the regional market (Everest Group, 2008).

The qualitative and quantitative data show that RVCs are typically not firms' first starting point. Rather, the vast majority of firms that are participate in RVCs have started in LVCs. Observed patterns for RVC entry include both the following of the internationalization strategy of domestic clients and the identification of new clients in the African region (some via existing business networks) (in line with the export literature, see e.g. Majkgard and Sharma, 1998; Ibeh, 2003). The involvement in local and regional value chains is motivated by strategies of service providers to expand their geographical delivery capacity and diversify markets. The regional market is also considered an alternative to global markets, especially by small domestic firms that face barriers to participation in GVCs.

Qualitative findings suggest that the regional market, but also the local market could form a playing field where firms could gradually build and deepen capabilities needed for expansion into global markets. A gradual international market development pattern is observed for (mainly) South African firms starting in LVCs, from which various firms have gradually expanded into RVCs and or GVCs. The survey data confirms this and shows evidence of a heterogeneous path of GVC engagement: firms that entered GVCs directly and those that took a more gradual approach, i.e. that entered GVCs via participation in LVCs first. These findings are in line with advocates of RVCs who argue that RVCs serve as a spring board into GVCs (see Bamber et al., 2014; Cattaneo et al., 2010; ERA, 2009; Kaplinsky & Farooki, 2010).

Furthermore, not only South African, but also foreign owned service providers are based in South Africa to serve clients in these different markets. The findings demonstrate the role developing and emerging country markets can play as end markets in the outsourcing/offshoring industry. Hence, this chapter emphasized the need for a more elaborate overview of sourcing modes in which different markets (domestic, regional and global) come to the fore and in some cases overlap (e.g. firms' engagement in multiple markets). This change in geographies of services is not well reflected in the literature on outsourcing and offshoring, which has focused predominantly on the relocation of services from client firms in advanced economies to service providers in less advanced economies, with insufficient attention given to RVCs.

Chapter 4: The association between firm characteristics and participation in heterogeneous value chains

Previous studies on GVCs reveal that in recent years, empirical research has begun to address the determinants of firm-level GVC participation, but has yet to yield a clear picture (OECD and World Bank, 2015; Pathikonda & Farole, 2016). Following the identification of heterogeneous value chains of services in Chapter 3, questions also arise regarding the determinants of firm participation in LVCs and RVCs compared to GVCs. Therefore, the aim of chapter 4 was to contribute to an increased understanding of the factors associated with firm participation in local, regional and global value chains of ITES. The statistical analysis shows that participation in GVCs is associated with ISO compliance, membership of an industry association, affiliation to a foreign corporate group, and skills intensity. It also shows a significant association with the manager's international work experience and orientation, but this effect is not robust if controlled for foreign group affiliation and ISO compliance.

Even though above-mentioned factors set GVC firms clearly apart from firms in LVCs (and to some extent from RVCs), Chapter 4 finds heterogeneous characteristics of firms in GVCs depending on the path they took to get there (gradual versus direct GVC entry). Using qualitative comparative analysis (QCA) tools, affiliation to a foreign corporate group, and the manager's international experience and orientation are found to be part of the main pathways sufficient for direct GVC entry. Such elements of foreign exposure may be accompanied with experience, and (access to) other resources, as claimed in the internationalization literature (e.g. Douma et al., 2006; Wignaraja, 2013), and explain (direct) GVC participation. For the gradual GVC

entrants, the absence of a foreign group affiliation, but presence of affiliation to a South African group, and membership of an industry association together form the main pathway sufficient for gradual GVC entry.

Although the firms in RVCs could not be treated as a separate category in the statistical analysis, due to low number of observations, by joining this group to first GVCs and second to LVCs in two separate analyses, and excluding the group in a third analysis some insights were drawn. The statistical analyses suggest that ISO standards in RVCs may not be as common or demanded as in the case of GVCs. The results from the QCA confirm that ISO compliance is not part of the pathways leading into RVCs. The association of standards with participation in GVCs, but not with RVCs and LVCs, is in line with the suggestion of Kaplinsky and Farooki (2010) that value chains in advanced economies (here GVCs) may be more demanding than value chains at the developing or emerging market level. The statistical analysis and QCA also highlight the association of affiliation to a South African corporate group with RVC participation. This could imply that establishing networks with actors and potential clients in the region is less challenging than in global markets, which was found in the qualitative data (as discussed in Chapter 3).

While the GVC literature has a strong focus on high quality standards in GVCs as barriers for participation, this chapter highlights the lack of information on business opportunities and clients, and not having connections overseas to secure partnerships as the main self-perceived obstacles to GVC participation. Prior studies suggest that international experience of the management team is key to acquiring knowledge on foreign markets (Love et al., 2016; Ibeh, 2003), which may explain the association found in this dissertation between internationally experienced management and GVC participation. This is in line with the findings from the qualitative data that for some domestic firms, the lack of such international experience acts as a barrier for GVC entry (as discussed in Chapter 3).

The perceived obstacles to GVC participation may also confirm the importance of networks (e.g. associations), that can assist in connecting actors, and in providing foreign market knowledge critical for internationalization (as found by Welch et al., 1998). This is in line with findings discussed in Chapter 3 and in Chapter 6 on the important role of industry associations in providing knowledge and connecting firms with international clients, and how such a platform lacks for firms in the domestic

market. In Chapter 4, it was indeed found that only GVC participation is associated with membership of an industry association and a foreign corporate group. This dissertation finds that, in addition to quality standards associated with GVC participation, the importance of accessing international market knowledge and connecting to clients (e.g. through industry body or managerial experience etc.) needs to be emphasized as well, as is done in prior studies on export (Love et al., 2016; Ibeh 2003), but less so in the GVC literature. In the literature specific on ITES, studies identifying capabilities critical for firm performance, adopted the perspective of the service provider only more recently.

Chapter 5: Firm learning and innovation in local, regional and global value chains of ITES

Participation in a value chain may create learning opportunities to build and deepen capabilities critical for innovation, however, the nature and the workings of the learning mechanisms in a value chain setting remain controversial and understudied (Morrison et al., 2008). Chapter 5 contributes to the scant literature on learning in local, regional and global value chains of services. It assessed whether participation in value chains of services provide learning opportunities by focusing on client and provider interactions, and how this learning is influenced by the type of client-provider relation governing their interactions and the providers' absorptive capacity (AC). In turn, it assessed the relation between value chain learning and service innovation. A distinction is made between client learning in local, regional and global value chains.

Client learning in different fields (developing knowledge on the business domain, the client's cultural business environment, IT skills and infrastructure, and the gaining of other critical information) is observed across all value chains. Based on the quantitative data, findings suggest that governance structure of the value chain, especially relations based on characteristics, such as trust and partnership, positively influence learning in all fields and across all value chains. This is in line with previous assertions made in supply chain studies (e.g. Lee, 2001) that such relational norms produce governance mechanisms that favor knowledge exchange. Furthermore, relations based on forms of control and monitoring by the client firm facilitate learning only in the field of IT skills and infrastructure. The significant association between such governance structures and IT capability building is observed only for firms in GVCs when compared to firms in RVCs and especially to firms in LVCs. Such client

learning may be the result of pressures from the client to adhere to international standards, which is found one of the GVC learning channels by Pietrobelli and Rabellotti (2011). This is in line with findings in Chapter 4, revealing that ISO compliance (including IT related ISO 27001) is positively related with the probability of GVC participation. In addition, AC positively affects IT capability building for firms in RVCs and especially in GVCs, which suggests that an existing level of skills may be required to exploit learning. More knowledge intensive activities are observed in these two chains compared to LVCs.

The GVC literature has acknowledged the relationship between learning in value chains and innovation (or at least in relation to upgrading) (Altenburg, 2006; Gereffi, 1994, 1999; Giuliani et al., 2005; Humphrey & Schmitz, 2002). In Chapter 5, the model estimates new-to-market innovation as a function of client learning, R&D, and networks from the (national) innovation system, including mergers & acquisitions; university/education institutes; consultants/intermediaries; conferences, seminars, trade fairs; Government; and industry associations. These non-GVC learning channels are often overlooked in the analysis on GVCs and innovation, as argued by (Lema, 2012; Morisson et al., 2008; De Marchi et al., 2015; Pietrobelli & Startiz, 2017).

The analysis concludes that overall client learning is positively associated with the introduction of new to the market innovation. Findings also show that especially capability building in the field of IT (i.e. IT skills and infrastructure) is significantly associated with new to the market innovation. The relation between client learning and innovation is not significantly different when comparing value chains, suggesting that GVC participation is not the only vehicle to learning and capability building for innovation, as client learning resulting in innovation new to the South African market is also evident for firms in LVCs and RVCs. The set of alternatively phrased survey questions that directly ask respondents to rate the importance of client interactions for innovation confirm that client learning contributes to innovation not only in GVCs, but also in LVCs. However, a larger fraction of firms in GVCs state that client interactions have resulted in innovation, compared to firms in RVCs and LVCs. Moreover, the data show that a higher proportion of firms in GVCs experience learning in the different domains (except for similar levels of IT learning across value chains). These findings suggest that more opportunities for learning (and client learning induced innovation) may occur in GVCs. Even though not all fields of client

learning are significantly related to the introduction of innovation, they could be still critical to learning and capability building (as found in Chapter 6).

In terms of non-GVC learning, the analysis showed a significant relation between learning via the (national) innovation system and new-to-market innovation. The self-reported learning sources important to firms' innovation, also suggest that capability building internal to the firm and via the IS matter. For instance, the qualitative data indicates that for firms in GVCs, capability building via mergers and acquisitions are important, which is captured in the measure for IS-learning. This chapter contributes to the more recent discussion in the literature on learning in various value chains that challenge the dominant notion that the GVC is the only structure facilitating innovation for firms in emerging countries (see e.g. Navas-Aleman, 2011; Lee et al., 2017).

Chapter 6: Learning via client firms, internal efforts, and the NIS in local, regional and global value chains

The objective of Chapter 6 was to examine in-depth the learning channels used by service providers to build service-delivery competence – defined as the capacity to manage human resources and to obtain domain expertise (i.e. knowledge of process, industry, and client requirements). Using the qualitative data, this chapter explored the role of client learning in local, regional and global value chains, learning from internal firm efforts and from embeddedness in the NIS[42]. In turn, it examined how the NIS and GVCs interact to affect firm-level capability development, and the viability of the South African ITES sector as a whole.

The findings showed that strategies to build service-delivery competence differ between firms depending on their internal resources, embeddedness in the NIS, and participation in value chains. GVCs create useful learning avenues, i.e. client-provider learning for service providers, however, this is simultaneously coupled with learning from firm resources and from actors in the NIS, confirming previous studies (Ernst, 2002; Lema, 2012; Pietrobelli & Rabellotti, 2011). Participation in GVCs is important as

[42] The national innovation system refers to interactions among firms and organizations in the country and the related national institutions (e.g. research and training agencies, quality and standard institutions) and the informal institutional context that shape firm learning (Lundvall, 1992).

client firms can play a key role in knowledge diffusion, through standards that pressure providers in GVCs to learn and upgrade services, through close collaboration, and by exchanging and training personnel. These interactions provide knowledge in areas such as process requirements, client- and industry-specific requirements, as well as avenues to develop human resources. For example, the majority of service providers in South Africa have received (a temporary) team of expats from overseas clients to transfer skills and process-related knowledge that helped them kick start operations and upgrade services in line with standards of their client. Overall, firms in RVCs and LVCs report fewer immediate learning effects in terms of the transfer of human resources from clients compared to firms in GVCs. This is in line with survey results presented in Chapter 5, showing higher levels of client learning in GVCs in the field of business domain knowledge, clients' business culture, and other information.

GVC learning is especially important in the face of shortage of skills, missing industry linkages, and the lack of policy support – even more so for resource-constrained firms that struggle to overcome such weaknesses in the NIS. This is largely in line with earlier claims in the literature on the importance of foreign knowledge for developing countries that typically lack a strong knowledge base (see for a discussion Ernst, 2002, and Morrison et al. 2008). However, GVC participation is not the only avenue for learning. Internal firm resources also influence capacity building. For instance, sourcing skills and experience from corporate groups, and the training of employees via on-site accredited training academies to overcome skills shortages are common examples. Furthermore, interactions with actors in the NIS (e.g. industry associations, training organizations, consultants) and institutions aid GVC involvement and assist firms in obtaining (foreign) skills and knowledge from clients in GVCs, both indirectly via promoting GVC participation that exposes firms to learning, but also directly. The latter includes examples of the local industry association that assists firms in GVCs in administrative procedures regarding working visas for foreign employees or by organizing workshops and seminars that bring together clients and service providers to encourage knowledge exchange.

Moreover, service providers, especially foreign owned providers that operate in South Africa interact with actors in the industry to develop a better understanding of how to successfully operate in South Africa. For example, they source information from local consultants or hire South African experienced managers that assist with the

management of human resources or other operational aspects. This is important considering the embeddedness of service providers in the South African formal and informal institutional environment (e.g. exposure to socio-cultural dynamics, local business ethics, Broad-Based Black Economic Empowerment (B-BBEE) regulations[43])). Such local capacity is needed to perform successfully, but also to adapt foreign-sourced knowledge accordingly.

Simultaneously, firm participation in GVCs can strengthen the NIS, potentially benefitting other firms that do not have access to GVCs. This study documents various examples, including the transfer of information and skills resulting from GVC learning to other ITES providers in South Africa, due to collaboration between (local) providers in LVCs and (mostly foreign) providers in GVCs. Such interactions are typically driven by the B-BBEE regulations that seek to promote knowledge transfers from foreign to local employees, and enhance cooperation between (foreign) firms in GVCs and local firms, but also via mobility of personnel and observing competitors. Furthermore, GVC participation may trigger institutional changes from which benefits may also accrue to the rest of the industry. For instance, the demand for international skills and quality standards in ITES has stimulated the development and use of skills-related standardization and accreditation across the ITES industry in South Africa. In short, an interaction effect exists between the NIS and GVC participation with regard to their role in capacity building in the ITES sector. This is in line with the recognition that the local IS and GVC not only act as complements, but that their co-evolution also provides a better understanding of the dynamics of learning and innovation in value chains, as demonstrated by Lema et al. (2018a). Especially knowledge intensive business services (KIBS) (e.g. consultants, industry associations) have proven to be important elements of the NIS. This is in line with the argument that KIBS are central to the innovation process in developing and emerging countries, and contribute to a new knowledge infrastructure that complements the first infrastructure, largely constituted by Universities and (public) research institutes (Andersen, Howells, Hull, Miles, & Roberts, 2000; Hipp & Grupp, 2005).

[43]"In 2003, B-BBEE strategy was published as a precursor to the B-BBEE Act of 2003. "The fundamental objective of the Act is to advance economic transformation and enhance the economic participation of black people in the South African economy" (dti South Africa website:http://www.dti.gov.za/economic_empowerment/bee.jsp).

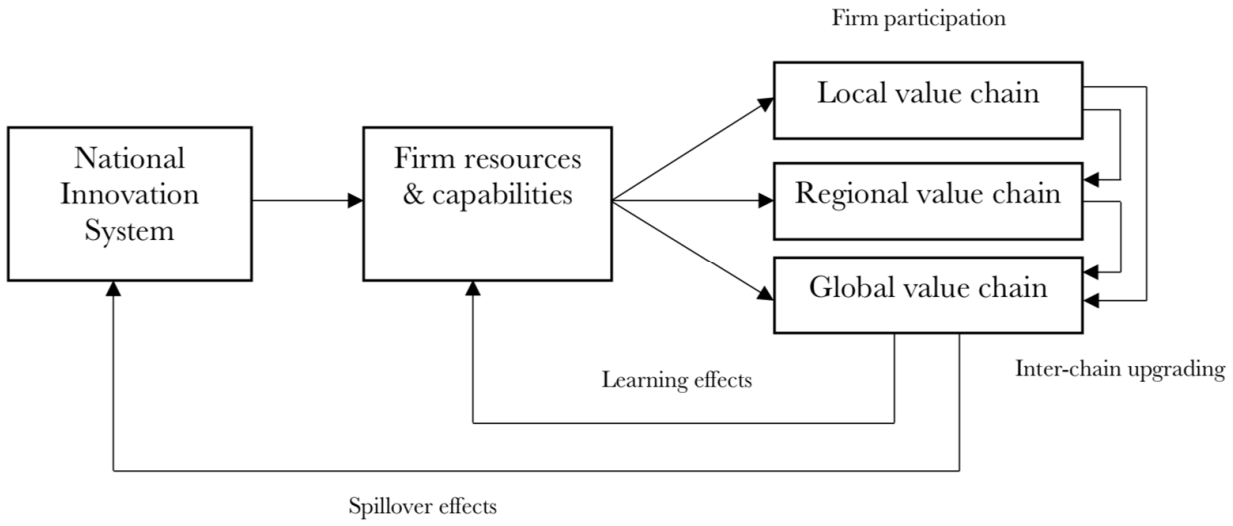
Main conclusions: firm participation, learning and innovation in local, regional and global value chains of ITES

To conclude, evidence of participation in heterogeneous (local, regional and global) value chains by South African based service providers is found, and the characteristics of the firms involved in these value chains differ. Participation in GVCs appears to be more demanding in terms of resources and capabilities compared to participation in RVCs and in LVCs. Through value chain participation, client learning occurs, which is important for the development of capabilities and for service innovation. Although learning opportunities appear to be somewhat larger for firms in GVCs they are also present for firms in LVCs and RVCs.

Value chain learning, especially in GVCs, has often been portrayed in the literature as the way for developing and emerging countries to develop a local knowledge base and induce innovations, or even as the "golden standard for industrial upgrading". This deserves some nuances and should not disregard the importance of firm learning and the local innovation system. This dissertation shows the interconnectedness between value chain participation, the NIS and firm resources (as illustrated in Figure 7.1). The NIS (i.e. capturing firms' embeddedness in industry networks and the influence of institutions) is key to tackle current challenges facing the South African ITES sector, but also influences firms' internal resources, and hence initial value chain participation, and firms' ability to learn in GVCs. The NIS can be strengthened via knowledge transfers and spill overs from firms in GVCs.

The interaction between the GVC and NIS has often been overlooked in actual policies and programs, as argued by Pietrobelli and Staritz (2017). This dissertation shows that policy measures can be taken so that learning and capability building via GVCs may affect the viability of the ITES sector, indirectly also benefitting domestic firms that are not in GVCs. For example, local institutions, particularly the B-BBEE regulations, if properly implemented and enforced, can further encourage knowledge transfers and spill overs. The NIS is thus important for developing firm resources and capabilities that could facilitate participation in GVCs, which may in turn affect the development of the NIS, thereby creating a circular effect. The next section discusses the implications for policy making.

Figure 7.1 The interconnectedness between value chain participation, the NIS and firm resources in capacity building in the South African ITES sector



Policy implications for the NIS in promoting capacity development and GVC participation

The ITES industry in South Africa is relatively small, but it has expanded rapidly in recent years especially due to increased offshoring to South Africa by firms overseas. Reasons for this include an improved telecommunication infrastructure, the prioritization of ITES as an avenue for job creation, incentive schemes reducing the cost of doing business for foreign investors, and the creation of a national association representing and promoting the ITES sector, i.e., developments related to the NIS. South Africa has the potential to attract more (international) investments in the ITES industry. Yet, integral to this is human capital development. Increased demand for services coupled with weaknesses in the education system has resulted in a shortage of human resources. This has put constraints on growth in the sector and on firms' upgrading trajectories to higher value-added activities, which are important especially in light of trends in automation. Continuous investment is required from firms in training employees to meet the growing demand for more complex skills.

Although South Africa has its unique challenges related to the education sector and labour market, the importance of human resources and the (often accompanied issue of skills scarcity) applies to the global ITES sectors. Leading offshore destinations such as India and the Philippines also prioritize skills formation to sustain future growth. For example, the ITES sector in the Philippines has shown rapid growth in the BPO segment as well as in IT services, however, growth prospects are constrained by

multiple factors, of which the quantity and quality of entrepreneurial, managerial and technical skills is one of the most important constraining factors. Therefore, policy recommendations include that industry, government, and academia in the Philippines must make concerted efforts to expand the scale and scope of educational and training programs and supply the professional skills needed to attract investments and move up the value chain. Especially the latter is key to long-term growth prospects of the ITES sector, which is already challenged by rising competition from other developing countries, efforts of re-shoring services to home countries, and automation processes (Kleibert, 2015b). The prioritization of technical education in India has enabled firms to not only deliver the more standardized BPO services, but also information technology and knowledge-intensive services (Kleibert, 2015b).

The case of South Africa shows that participation in GVCs is important as client firms can play a key role in knowledge diffusion, through standards that pressure providers in GVCs to learn and upgrade services, through close collaboration and by exchanging and training personnel. Such interactions with GVC clients can contribute to developing human resources and domain expertise, especially important considering the shortage of skilled and experienced personnel (e.g. in specialist and senior management roles) in South Africa. Although client learning also occurs in LVCs and RVCs, this dissertation finds that they are less emphasized as avenues to access and develop these critical skills.

Despite evidence of learning in GVCs and its positive relation to innovation, this dissertation suggest that policy makers need to look critically at the type of firms engaged in GVCs, and to whom these learning benefits accrue and under what conditions. Service providers are different in their capacity to integrate and learn in GVCs and in their embeddedness in the NIS. In this study, at least half of the firms participating in GVCs are foreign service providers, whereas the majority of the South African firms participate in LVCs and or RVCs. Nearly all of the domestic firms that are currently involved in GVCs started in LVCs. Moreover, various domestic firms operating solely in LVCs, especially SMEs, state to be too resource constrained to even overcome challenges related to the NIS, such as shortcomings in skills supply, and they are struggling to enter GVCs. Therefore, promoting GVC participation requires the triggering of knowledge transfers with right policy measures to ultimately also benefit these local firms and foster their ability to engage in and benefit from GVC involvement. Firms' ability to enter GVCs is determined by firm resources and

industry support in the first place. Moreover, GVC client learning is also coupled with learning from internal resources and from actors and institutions in the industry.

The NIS has also implications for capability building in LVCs and RVCs, which deserves attention from policy makers, considering that most South African firms in this sample operate in LVCs and in RVCs. These two chains provide access to the ITES sector and could potentially provide a space for learning for domestic firms that seek to upgrade to GVCs. To assist these firms in the development of capabilities and potential inter-chain upgrading, a stronger NIS is required that caters to their needs. In studies on determinants of GVC participation the main focus is on the enabling environment and not on specific firm capabilities per se. However, studying firm resources and capabilities helps to understand the needs of firms and better informs policy making regarding the enabling environment. For example, this dissertation stresses the importance of networks (e.g. via foreign corporate groups or industry associations) that may assist firms in accessing knowledge on foreign markets and connecting with clients, and thus overcome barriers to GVC entry. This suggests that a stronger NIS, that promotes industry interactions for domestic firms, may assist in obtaining critical knowledge including on foreign markets, and generate other resources to accelerate their internationalization process. For example, the main industry association was until a few years ago mainly focused on attracting foreign service providers to South Africa and on service providers serving clients offshore, but has recently extended its focus to cover more fully the domestic ITES market. The efforts to establish a more complete registry of service providers in South Africa was exemplary for this expanded focus. The more complete representation of the domestic industry provides scope for an improvement in the functioning of the NIS, if this results also in increased industry interactions among local firms and provides access to knowledge and international networks. Currently, reasons given for a lack of membership include unawareness and a lack of perceived benefits. If industry associations expand representation covering the entire domestic market, association membership and further industry interactions could be promoted for domestic firms.

The domestic and wider African market also demonstrate potential. This is apparent from the arrival of foreign service providers in South Africa that respond to market opportunities in South Africa and in the African region, and from local firms using these markets to upgrade to GVCs. Therefore, sectoral policies should not solely have an offshore market focus but also consider a focus on the African market and its

opportunities. This can be fostered by branding South Africa as having a local ITES market and as a hub to the regional ITES market, which may in turn further attract demand from offshore clients and international service providers.

This is currently actively pursued by the Kenyan government who has re-oriented the ITES sector from overseas markets towards contracts sourced from clients in the domestic market and other East African clients (Mann & Graham, 2016). This so-called domestic turn both signals the increasing use of outsourcing within the country and in the region, as well as the difficult of gaining access to overseas markets. The latter is ascribed to local firms lacking managerial experience and overseas connections, and a damaged country reputation. Local firms have in response turned to clients in the domestic market and regional markets, and the Government has re-oriented the sector towards promoting higher value ITES, stimulating local demand for outsourcing and attracting multinational service providers to the country to enhance competitiveness and improve global recognition. Domestic outsourcing is viewed as a strategy to build capacity before orienting towards overseas markets again. This strategy is viewed as offering opportunities, such as potentially creating linkages with Kenyan firms in other sectors, as well as making the country less vulnerable to external shocks. Attracting large international service providers, however, may also result in the acquisition of domestic owned firms, and may result in loss of control (Mann & Graham, 2016).

In addition to an international orientation, policy makers in South Africa could also consider exploring and marketing local and regional market opportunities to brand South Africa as a strategic African hub. The arrival of large international competitors that seek local and regional ITES contracts can contribute to global recognition of South Africa as an outsource and offshore destination. On the other hand, potential crowding out effects may occur, that need to be addressed. For instance, various domestic firms raised their concerns about local client contracts going to foreign service providers, which are typically larger in size, have a well-established reputation, and, importantly, receive industry support from industry associations and via incentive schemes in South Africa. This stresses the importance of creating capacity among local firms and avoiding that they operate in a disadvantaged position compared to their foreign competitors. For example, this requires policy incentive schemes or industry associations that are currently targeted to firms that have an

offshore footprint to be inclusive to local market players that may not (yet) serve offshore markets.

The experiences of the Philippines demonstrate the importance of stimulating domestic entrepreneurship and supporting locally owned small and medium enterprises for sustainable growth. According to Kleibert (2015b), the BPO sector in the Philippines is largely based on exporting services through foreign-owned firms' subsidiaries. The absence of (powerful) domestic entrepreneurs and Philippine-owned BPO firms decreases opportunities for value capture in the Philippines and makes the sector more vulnerable to foreign decision making and external shocks. This is in contrast to the ITES sector in India, where large Indian-owned firms, who benefitted from diaspora networks, have been a driving force of the sector (Kleibert, 2015b).

In short, policies to build capacities at the firm level and for the wider ITES sector should focus on addressing the skills supply and facilitating the development and adoption of internationally recognized standards. This requires better alignment between stakeholders in public, private and non-profit sectors (e.g. government agencies across the country, industry associations, and educational organizations) to close the skills gap and to cater to the need of the private sector, as is more recently pursued by various stakeholders. Furthermore, industry linkages and knowledge platforms need to be created that also cater to the needs of firms oriented towards the domestic and regional market. These are needed to provide information on potential clients and (operational) requirements, and to provide (financial) support to source and develop critical skills and acquire information from industry actors. Respondents expressed that more needs to be done to better implement and enforce the B-BBEE regulation to ensure the transfer of skills from foreign employees to local employees, and to foster cooperation between local and foreign service providers. This is an avenue where through GVC participation spill over effects can occur for the wider NIS. Creating the conditions for learning and innovation to build long-term capacities should be the focal point of government policy. Finally, better marketing of the country not only in terms of firms serving offshore markets, but also in terms of the opportunities locally and regionally should be considered.

Limitations and avenues for future research

This dissertation has contributed to the literature on outsourcing and offshoring by shedding light on South Africa and opportunities in the African market, which have received little attention by scholars and for which limited data exist. As a result, novel data has been collected via both quantitative and qualitative methods, bringing together important streams of literature: firm learning and innovation, value chains of services, and innovation systems.

The limitations specific to each chapter were noted, including the cross-sectional nature of the data used in this dissertation and the limits this places on the ability to identify causal relationships. The nature of the data does not allow for the tracking of individual firms at the time of their initial market entry decision, which would be desirable to capture the relative importance of firm resources and capabilities for participation into value chains, as well as the capabilities built as a result of value chain participation.

Furthermore, the ITES sector in South Africa is relatively small in number of firms. Although this research targeted the population of firms and the survey had a relatively high response rate, the sample size was still small for statistical inference. In particular, the examination of whether differences in the associations of interest exist across value chains was challenging due to particular low number of observations when taking subsamples of value chain categories. These results thus need to be interpreted with caution.

These challenges were anticipated, and therefore, both qualitative and quantitative data were collected and triangulated. Furthermore, the survey was designed to measure any associations between concepts of interest directly and indirectly. For example, the association between the concepts were tested in a statistical analysis, whereas a set of alternatively phrased questions was also included asking respondents in each value chain directly about the relationships under study (e.g. the antecedents and barriers of value chain involvement and the importance of client learning for the introduction of innovation).

This research has contributed to the discussion on participation, learning and innovation considering value chains at different market levels, and in the specific

context of South Africa. A key point for future research includes the examination of learning via local, regional and global value chains, considering the intensity and impacts of innovations introduced by service providers, and using different countries as a case study. It is also of interest to further examine whether learning in GVCs strictly results from GVC client interactions or from multi-chain participation, as firms in GVCs can operate simultaneously in local and or regional value chains (see also Navas-Aleman, 2011).

In terms of deriving policy recommendations regarding the dynamic process of firm level capability building, future research on the interaction between the GVC and IS approaches to learning needs to also take into account factors, such as the macroeconomic context, market segments, socio-economic development, as pointed out by Lema et al. (2018a).

Finally, this dissertation encourages future researchers to further examine the role of developing and emerging country markets in the outsourcing/offshoring industry. Captive service providers, although not the focus in this research, deserve attention in future studies, as they may bring in capital, technological and managerial skills that may be superior to those available domestically (UNIDO, 2018), and hence contribute to capability development and growth of the sector. In general, it would be of interest to study both demand and supply sides to shed more light on the type of clients involved and their demands in different value chains (e.g. captive versus external clients, foreign versus domestic owned etc.) and the implications for value chain integration and capacity building. The case of firms in South Africa servicing clients in developing and emerging markets in the African continent coincides with RVC participation that can be identified as so-called "South-to-South trade". However, applicability of this definition of RVCs (beyond this case) may be limited, especially with the advancements in technologies and reducing trade costs that could make the distinction between RVCs and GVCs of services, based on a geographical definition, become blurred over time. Studying both the demand and supply side in value chains will allow for a more detailed and appropriate categorization of different value chains encompassing developing, emerging and advanced economies.

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APPENDIX

A. Interview guide for qualitative interviews at service providers

Introduction

- Research information, consent from respondent, time-line

General information manager direct/CEO

- Position in the firm
- Duration of employment in firm
- Prior work experience

General information firm

- Type of service activities
- Year in operation
- Size of the firm
- Location(s) firm
- Status firm (ownership, part of a corporate network?)

Market orientation

- Which markets firm services? Probing: Why?
- If foreign service provider, why based in South Africa?
- Describe market sequence in case of multiple markets
- Perception towards markets
- If not in domestic, regional or overseas markets, why not?
- Future plans to expand into different markets?

Competitiveness

- Critical competences in this industry
- Critical capabilities for your firm/required by client
- How develop these? Probing questions to explore: role of client in this; internal firm efforts, and via actors in the industry?
- Describe process of communication with client – how is knowledge exchanged?
- Obstacles/opportunities for growth of the firm

ITES sector

- Obstacles/opportunities for growth of the sector
- Support available? Probing: member of industry association/firm network?

African market

- Awareness from the larger industry?
- Opportunities for ITES?

Other issues respondent wants to raise?

SURVEY

General information

1. In what region(s) is your firm located?

- [ ] No multiple offices
- [ ] Gauteng
- [ ] Global presence
- [ ] Western Cape
- [ ] KwaZulu Natal
- [ ] Other, please describe

2. What is your position within this firm?

3. What is the current ownership status of your firm?

- ( ) Private domestic business (South African ownership)
- ( ) Private foreign business
- ( ) Other, please describe (for example joint venture)

4. What type of operation is your firm?

- ( ) Captive (owned by client firm)
- ( ) Outsourcer (Independent service provider)
- ( ) Other, please describe

5. Is your firm part of an enterprise group?
(a group consists of two or more legally defined enterprises under common ownership. Each firm in the group can serve different markets or serve different product markets. The head office is also part of an enterprise group)

- ( ) No
- ( ) Yes, in which country is the head office of your group located?

6. Please describe the main service that your firm offers that represents the largest proportion of annual sales
(for example, inbound customer services in financial services or telecommunications)

7. In what year did your firm begin operations?

8. How many full time employees did your firm employ when it started operations, in 2013, and how many employees does it have today?

At start

End of year 2013

End of year 2016

9. Please tick the correct answer regarding your firm's profits in the year 2016

- Loss-making
- Break even
- Profitable
- Profitable and profits are growing

10. In which geographical market(s) is/are your current client firm(s) located?

- Domestic (South Africa)
- Europe (incl. UK)
- Other (incl. Australia)
- Regional (Rest of Africa)
- North America

11. Please answer the following questions

	Domestic (South Africa)	Regional (Rest of Africa)	Europe (incl. UK)	North America	Other (incl. Australia)
a). In which market did your firm first deliver services?					
b). Thinking of your firm's major product line, in which market(s) are your firm's main competitors located					
c). Does your firm have concrete plans to operate in a different/additional market? If so, please indicate in which market(s)					

12. Please identify the main reason(s) that helped your firm get the contract from your client firm(s) in the market(s) you are currently operating

	Domestic	Regional/Africa	Overseas
Price of services	☐	☐	☐
Product/domain knowledge	☐	☐	☐
Experience in this industry	☐	☐	☐
Compliance with certification	☐	☐	☐
Cultural affinity with client firm	☐	☐	☐
Prior social network with client firm	☐	☐	☐
An employee of this firm previously worked for the client firm	☐	☐	☐
Access to financial resources	☐	☐	☐
International experience management team	☐	☐	☐
Reputation/brand of your firm	☐	☐	☐
Risk taking	☐	☐	☐
Support from the Government	☐	☐	☐

Other, please describe

If your firm delivers services overseas please skip question 13 and click 'next'

13. Please identify the main reason(s) why your firm does not deliver services to firms overseas?

- ☐ Lack of financial resources
- ☐ Lack of information on business opportunities, potential clients etc.
- ☐ Excessive economic risk
- ☐ Lack of government support
- ☐ Other, please describe
- ☐ No connections overseas to secure strategic partnership(s)
- ☐ Not part of strategy/vision
- ☐ Competition in overseas markets
- ☐ Lack of cultural affinity
- ☐ Lack of regulatory alignment
- ☐ Lack of reputation/brand
- ☐ High quality standards

Relation with your client firm

Please answer the following questions having your most important client in mind (in terms of sales)

1. In which country is your (most important) client located?

2. What is the ownership status of your client firm?

South African owned Foreign owned

3. How many years has your firm been providing services to this client?

4. In the past 3 years, has the duration of the contract with your client been renewed/extended?

Yes No

5. In the past 3 years, has the scope of services your firm offers to this client extended?

Yes No

6. What type of interaction is used between your firm and your client?

- Face to face contact
- Receiving staff from client firm
- Reports, mails, written documents
- Sending staff to client firm
- Conference calls
- Other, please describe

7. To what extent do you agree with the following statements about the relationship with your main client firm?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Our client is involved in improvement initiatives within our firm	◯	◯	◯	◯	◯
Our firm follows a strict transcript set by the client in delivering the service and does not have much input in designing the service offering	◯	◯	◯	◯	◯
The relationship with our client is characterised by a high degree of monitoring and control by our client	◯	◯	◯	◯	◯
The relationship is characterized by goodwill and trust	◯	◯	◯	◯	◯
Our client is willing to continue the relationship long-term	◯	◯	◯	◯	◯
With this client we often have to respond to changing needs, such as providing additional or different services than stipulated in the contract	◯	◯	◯	◯	◯
We have a partnership model in place with our client and not a supplier/vendor type of relation	◯	◯	◯	◯	◯

8. This client shares information with your firm that is important to the growth of your firm

◯ Strongly disagree ◯ Disagree ◯ Neutral ◯ Agree ◯ Strongly agree

9. The interaction with our client has helped our firm to

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	N/A
... understand our client's business culture	◯	◯	◯	◯	◯	◯
... expand our overall professional knowledge of the process domain	◯	◯	◯	◯	◯	◯
... improve management of our Human Resources	◯	◯	◯	◯	◯	◯
... introduce new services that we did not supply before	◯	◯	◯	◯	◯	◯
... enhance the quality of the services that we offer	◯	◯	◯	◯	◯	◯
... increase the efficiency in the delivery of our day-to-day operations	◯	◯	◯	◯	◯	◯
... move away from standardised service offerings to more client specific service offerings that are more complex and value added services (for example off the script customer services)	◯	◯	◯	◯	◯	◯
... adopt improved IT infrastructure systems (specific software, applications etc.) and improved IT skills in our firm	◯	◯	◯	◯	◯	◯

Innovation

Service innovation
The market introduction of a new service or a significantly improved service with respect to its characteristics and capabilities. The innovation (new or improved) must be new to your enterprise, but it does not need to be new to your sector or market. It does not matter if the innovation was originally developed by your firm or by other firms.

1. During the three years 2012 to 2015, did your firm offer new or significantly improved services?

- ◯ Yes
- ◯ No *(please go to question 4)*

2. What percentage of sales of your firm's total turnover in 2016 has been due to new or significantly improved services that your firm introduced during the three years 2013 to 2016?

- ◯ 0-5
- ◯ 5-10
- ◯ 10-15
- ◯ 15-20
- ◯ 20-25
- ◯ 25-30
- ◯ 30-35
- ◯ 35-40
- ◯ 40-50
- ◯ More than 50
- ◯ No estimation possible

3. Was this service innovation new to any of the following markets? (Your firm introduced a new or significantly improved service onto that market <u>before</u> your competitors)

- ◯ No, not new to any market, just new to the firm
- ◯ New to the South African market
- ◯ New to the African (regional) market
- ◯ New to your export market overseas (outside of Africa)

Process Innovation.
The implementation of a new or significantly improved production process, which includes new or improved methods, equipment or skills used to perform the service. The process innovation must be new to your firm, but it does not need to be new to your sector or market. It does not matter if the innovation was originally developed by your firm or by other firms.

4. During the three years 2013-2016 did your firm implement<u>a new or significantly improved process?</u>

- ◯ Yes
- ◯ No *(please go to question 6)*

5. Please estimate the percentage by which the new or significantly improved process(es) introduced during the past 3 years reduced the average cost for your firm in 2016

- ◯ 0-5
- ◯ 5-10
- ◯ 10-15
- ◯ 15-20
- ◯ 20-25
- ◯ 25-30
- ◯ 30-35
- ◯ 35-40
- ◯ 40-50
- ◯ More than 50
- ◯ No estimation possible

6. Over the last 3 years, the service delivery to our client(s) has improved, providing them some combination of cost/quality/functionality benefits.

◯ Strongly agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Strongly disagree

7. Could you give an example of how your firm transformed a service or added value to the service over the last 3 years?

8. During the three years 2013 to 2016, how important to your firm's innovation activities (introduction of a new or significantly improved service or process) were each of the following information sources?

	Not used	Low importance	Medium	High importance
Internal Research and Development	○	○	○	○
Learning from parent company	○	○	○	○
Training of employees	○	○	○	○
Hiring professionals with previous experience and or skills in the industry/clients firm	○	○	○	○
Best practices/information from client(s) or other firms overseas	○	○	○	○
Best practices/information from client(s) or other firms in the African market	○	○	○	○
Best practices/information from client(s) or other firms South African market	○	○	○	○
Competitors in your sector	○	○	○	○
From another company in the same corporate group	○	○	○	○
Learning through acquisition or merger with another company	○	○	○	○
University/Education institutes	○	○	○	○
Government or public research institutes	○	○	○	○
Consultants/intermediaries	○	○	○	○
Conferences, seminars, trade fairs	○	○	○	○
Scientific journals, white papers, trade/technical publications	○	○	○	○
Industry associations	○	○	○	○
The Internet	○	○	○	○

Other, please describe

9. Is there a source of information or business linkage/network with other actors in the industry missing that would be key to the growth of your firm?

○ No

○ If yes, please describe what is missing

10. Is your firm a member of an association/network?

	Yes	No
Trade or industry association	○	○
Formal business network with other firms	○	○

Other, please describe

Skills and managerial characteristics

Last set of questions

1. Has your product or service been certified to meet domestic or international standards?

- ◯ No
- ◯ Yes, please indicate since what year and the name of the certification

2. How many years of experience in this line of business did the decision maker of this firm (CEO/Manager Director) have before joining this firm?

- ◯ No previous experience
- ◯ 1-2 years
- ◯ 3-4 years
- ◯ 4-6 years
- ◯ More than 6 years

3. Please tick the correct answer regarding the decision maker of this firm (CEO/Manager Director)

	Yes	No
Manager has a University/graduate degree (BA, Master)	◯	◯
Manager is South African	◯	◯
Manager lives in South Africa	◯	◯
Manager has studied overseas	◯	◯
Manager has friends/family living overseas	◯	◯
Manager had business connections overseas **before** joining this firm	◯	◯
Manager lived overseas **before** joining this firm	◯	◯
Manager has worked overseas **before** joining this firm	◯	◯
Manager has had business travels overseas	◯	◯
Manager regularly searches for information on the international market	◯	◯

4. What percentage of your firm's staff (supervisors, management team etc.) (excluding agents) have the following education levels?

No formal qualifications

Matric

Vocational training/TVET

Graduate degree (BA, BS)

Post graduate degree (Masters, PhD)

5. What are the entry requirements that this firm sets for itsagents (excluding management level) to join your firm? Please tick the correct answer(s)

- ☐ No qualifications
- ☐ Matric
- ☐ University degree
- ☐ On the job training
- ☐ 1-2 years experience in this line of business
- ☐ 2-4 years experience in this line of business
- ☐ Experience in firms servicing foreign markets

Other, please describe

6. Does your firm provide any training courses, either in-house (on the job) or formal training from an external provider?

	Inhouse/on the job	External training
Management	☐	☐
Supervisor/team leader	☐	☐
Agents	☐	☐

7. If external training is provided, where did your staff members receive such training?

- [ ] University
- [ ] Client firm
- [ ] Government led training programs
- [ ] Private training programs
- [ ] Vocational schools
- [ ] Other, please describe

8. To what extent are the following statements relevant to your organization?

	Not at all	Little relevance	Neutral	Relevant	Extremely relevant
Employees are encouraged to collect, bring back, and report information about what is going on outside the company	○	○	○	○	○
New ideas and approaches on work performance are experimented continuously	○	○	○	○	○
The firm has instruments (manuals, databases, files, organizational routines etc.) that allow what has been learnt in past situations to remain valid, although the employees are no longer the same	○	○	○	○	○
We have mechanisms for sharing lessons learned in organizational activities from department to department (unit to unit, team to team)	○	○	○	○	○

9. Is there any critical factor for the success of your business that has not been asked or received sufficient attention in the survey? Please explain what it is

END OF THIS SURVEY

Thank you very much for your participation!

10. Please fill out your details in case there are any questions

Name

Email adress

Valorisation Addendum

In accordance with Article 23 of the regulation governing the attainment of doctoral degrees at Maastricht University, this chapter discusses the valorization opportunities of this PhD dissertation. Following the corresponding guidelines, the socio-economic relevance of the dissertation and its novelty are discussed, followed by a discussion regarding the potential target groups that can benefit from the knowledge and insights from this research, and the channels used for dissemination of these insights.

Socio-economic relevance

The findings from this dissertation have direct social and economic relevance. South Africa is facing high unemployment rates, especially among its youth. The South African government has identified the development of the IT-enabled services (ITES) sector, and especially attracting ITES contracts from offshore countries, as a strategy for economic and social growth. This is in line with policies in other developing and emerging nations, illustrated by the success stories of software firms and business process outsourcing providers in India and the Philippines in attracting international contracts and creating jobs. This dissertation has studied the opportunities and obstacles facing South African based service providers to participate in value chains of ITES at the domestic, regional and global market level (Chapters 3 and 4). The policy recommendations derived from these findings can assist policy makers in determining how to promote firm participation in global value chains (attract offshore contracts), which is an important issue given the potential to earn foreign exchange and to create new jobs.

The potential of the ITES sector to create jobs has incentivized service providers, government and other actors to contribute to skills development initiatives. One important initiative is so-called 'impact sourcing": recruiting talent from the unemployed labor pool (including previously disadvantaged youth) and training them to provide the necessary skills for the sector. These initiatives are not only relevant in terms of job creation but can also have significant social impact. The findings stress that the scarcity of skills in South Africa forms an important bottleneck to growth of the sector and emphasizes that skills development programs should be the focal point of government policies.

This dissertation has examined learning and capability mechanisms at the firm-level in value chains of ITES, and how this in turn affects innovation. The findings provide insights and policy recommendations regarding the overall growth of the South African ITES sector, and more specifically regarding the stimulation of innovation, entrepreneurship and SME growth, i.e. key sources of economic and social development.

Target groups

Various institutions and agencies working to promote the development of the ITES sector may benefit from this dissertation. For example, despite the growing domestic services sector in South Africa, and the opportunity to export services to global markets, the country's share of exports of services remains small (McKinsey Global Institute, 2015). The findings in Chapter 4, on the key drivers of firm participation in local, regional and global value chains of ITES can assist policy makers in South Africa in determining how to facilitate GVC integration and hence stimulate the exports of services. The findings related to the national innovation system underpinning the ITES sector (examined in Chapter 6) can help policy makers to promote the development of the sector, while ensuring that the sector (especially the offshore oriented service segment) does not develop as an enclave, but instead deepens linkages with the local economy. Finally, the implications derived from the mechanisms of learning and innovation can be used by firm managers and other stakeholders to create an environment conducive for firm learning and upgrading to higher-value added activities in value chains of ITES. The latter is especially important in the face of technological advancements that make low-value added services prone to automation.

Dissemination

This dissertation does not only provide policy implications, it is also relevant to further academic discussion. The dissertation is intended to feed into the debate on firm participation, learning and innovation in value chains of services, particularly those in developing and emerging countries. Presentations at seminars and workshops and publishing these results are important channels for this purpose. Thus far, different versions of the various chapters have been presented at a UNU-MERIT in-house seminar of Research Theme 3, on May 10th 2016, the internal conference on June 23rd 2017 and June 26th 2018. The results of Chapter 3 were published in a book

("*Globalisation and Services-driven Economic Growth: Perspectives from the Global North and South*" in Beerepoot et al. (2016)). The results on which Chapter 6 is based were published first as a working paper (UNU-MERIT) and eventually in the European Journal of Development Research (2018). This chapter was presented at a workshop (23-25 April, 2017) at the Aalborg University in Denmark.

During the various fieldwork trips, findings were discussed with representatives of the national industry association and managers of ITES providers. The dissertation will be made available to all participants in South Africa that were involved in this research as survey respondents or interviewees.

About the author

Charlotte Keijser obtained her Bachelor degree in Human Geography (B.A) and her master's degree in International Development Studies from the University of Amsterdam (UvA), the Netherlands in 2012. Upon completion of her master's degree, she worked at the University of Amsterdam as a research assistant in the field of "flexibility in the labor market in developing countries" (published). Throughout her years at the University of Amsterdam, Charlotte has carried out research in India, Cuba, Togo, Senegal and Ghana. In Ghana she examined the outsourcing services sector (published). In 2013, she joined the PhD programme at Maastricht Graduate School of Governance (MGSoG) and The United Nations University – Maastricht Economic and social Research institute on Innovation and Technology (UNU-MERIT). Alongside her PhD research she worked as a programme coordinator for the dual PhD career programme GPAC (from 2014 until 2018), and was involved in teaching Research Design in the GPAC programme. Charlotte is currently working as a consultant for the World Bank in Madagascar, for which she conducts a study on the digital economy in Madagascar, as part of the Country Economic Memorandum.

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