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Opportunities and challenges for Chinese multinational companies in South African telecommunications industry .

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***Opportunities and challenges for Chinese
multinational companies in South African
telecommunications industry***

A research report submitted by

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ABSTRACT

This report examines the role of Chinese multinationals in South African telecommunications industry and identifies opportunities and challenges for the Chinese multinationals in South African telecommunications industry.

Although there is very limited literature on the role of Chinese multinationals in South African telecommunications industry, there is some literature on the role of Chinese multinationals globally and the opportunities and challenges for them. Apart from reviewing the published literature and in order to gain better understanding of the role of Chinese multinationals in South African telecommunications and the related opportunities and challenges for the Chinese multinationals, the qualitative research study focusses on two separate samples, one expert South Africans sample (fourteen interviewees) and one expert Chinese sample (four interviewees).

The key findings of the report, the role of the Chinese multinationals, show that there are positive and negative aspects. Some of the aspects such as competitive pricing, lack of knowledge transfer are similar to trends identified in the published literature. There are also new findings such as high quality technology and total customer orientation. Furthermore, key findings of the report show that there are opportunities for Chinese multinationals such as good financial terms offered to customers, similar to trends identified in the published literature. There are also number of opportunities such as highly qualified Chinese personnel, which are new findings. In the case of challenges, key findings of the report show that there are number of them such as cultural differences between Chinese personnel and local personnel, similar to trends identified in the published literature. There are also number of challenges such as the perception of stranglehold and vendor locking on local telecommunications which are new findings.

Despite the presence of negative aspects in the role of Chinese multinationals in the South African telecommunications industry, the overall conclusion of the study is that the role of Chinese multinationals in South African telecommunications industry is positive and there are numerous opportunities and challenges for them.

DECLARATION

I, Pius Anton Christopher, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

PIUS ANTON CHRISTOPHER

Signed at -----

On the ----- day of ----- 2016

DEDICATION

I wish to dedicate this research report to my two children, Thabiso and Lerato, who have continually supported me through to the completion of this report.

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CHAPTER 1. INTRODUCTION

1.1 Purpose of the study

The purpose of this study is to analyse the role and identify the opportunities and challenges for the Chinese multinational companies in the South African telecommunications industry.

1.2 Context of the study

In global context, Quer, Claver, and Rienda (2012) observes that over the last ten years the centre stage of the world economy has shifted from West to China. In 2009 China overtook Japan and emerged as the second largest economy in the world (Quer et al., 2012) . By 2009 China became the first largest exporter and second largest importer in the world (Quer et al., 2012). China had inflows amounting to \$124 billion in 2013 and narrowed the gap with largest host country, the United States (UNCTAD, 2014). At the same time China's outflows strengthened by 15 percent in 2013 to \$101 billion, the third highest in the world. China's outflows are expected to surpass its inflows in two years' time (UNCTAD, 2014).

OECD (2011) describes that, multinationals usually comprise of companies or other entities established in more than one country and connected in such a way that they may coordinate their operations in numerous ways. Ning (2009) believes that when China opened up its economy to outside investment it had two components. They were called "attracting in" and "walking out". "Attracting in", means attracting foreign investment. "Walking out" meant Chinese firms investing in other countries. Ning (2009) also believe that by managing "Attracting in" in ICT industry, China laid grounds for "walking out". Chinese government too provided easily obtainable loans for "walking out" (Ning, 2009). On the other hand according to Liu and Dalum (2009) State assistance to Chinese firms to "catch-up" with their Western counter parts is not unique to China. State intervened in Japan, South Korea and other Asian tigers to catch-up with their western counterparts.

According to Low (2005) China has become the largest telecommunications market in the world in 2003. Low (2005) also quotes ITU's recognition of China as telecommunications super power. Before 1980s China was heavily dependent on foreign companies for telecommunications equipment (Low, 2005). In early 1980s ZTE was formed as a state enterprise (Low, 2005). In 1987 Huawei was founded by Ren Zhengfei, a technician in the Chinese People's Liberation Army (De Cremer & Zhang, 2014). China considered telecommunication equipment supply as a strategic asset and ensured that China's mobile operators bought equipment from ZTE and Huawei (Low, 2005). In addition Chinese government applied constant pressure on foreign equipment suppliers to transfer knowledge to local vendors (Low, 2005). China's largest mobile operator China Mobile has given majority of its contracts to Huawei and ZTE (Lee & Lee 2014). Lee and Lee (2014) state that China Mobile gave 34 percent of new 100000 base stations in China to ZTE and 31 percent to Huawei. China Mobile is the world's largest mobile operator says Lee and Lee (2014) with 784 million mobile subscribers and 4.8 million 4G subscribers in April 2014. One of the significant Chinese telecommunications investments abroad in 2013 is, China Mobile winning the bid for 3G& 4G mobile operations in Pakistan (UNCTAD, 2014). Liu and Dalum (2009) contend that the inability of the foreign products to meet domestic market needs is the key incentive for Chinese companies to catch-up by leapfrogging.

In telecommunications equipment vendor environment, Ericsson was the leading player globally (Jiang, 2005). Ericsson has been operating for more than 100 years. According to Jiang (2005), in 2005 Huawei stated in an interview, that it will take 10-20 years to catch up with leading players such as Ericsson, Nokia Siemens and Cisco. But as per De Cremer and Zhang (2014), they have achieved that in less than 10 years. In 2012 Huawei achieved sales revenue of \$35.5 billion as opposed to Ericsson's sales revenue of \$2.47bn (De Cremer & Zhang, 2014).

Porter (1990) say that both country specific advantages (CSA) and firm specific advantages (FSA) could contribute to the success of a company. He also believed that companies achieve competitive advantage through acts of innovation. Rugman and Li (2007) believed that Chinese multinationals have only country specific advantage due to cheap labour and natural resources. On the other hand FSA requires building knowledge based capability (Rugman & Li, 2007). Rugman and Li (2007) believed that Chinese multinationals are knowledge seekers than knowledge takers and will only be able expand

regionally. But on the contrary, current situation in global, African and South African telecommunications industry prove that Chinese MNCs in telecommunication industry are global players in innovation and knowledge. For example fonearena (2015) reported the opening of Huawei R&D facility in Bangalore, India . This facility will employ about 5000 Indian engineers.

Telecommunications sector has been undergoing global downturn and growing competition. As such the telecommunication sector has been looking for affordable equipment and capital financing. Huawei and ZTE have been able to provide affordable equipment and capital financing (International, 2014b). Both of them have very efficient manufacturing and logistics to provide efficient supply chain (De Cremer & Zhang, 2014). Due to comparatively low manufacturing and logistics costs Chinese multinationals can provide affordable equipment. In addition, they have developed very efficient supply chain. More importantly both Huawei and ZTE have been able to arrange financing for their equipment via China development bank and Exim bank (International, 2015). However the negative impact of financing on the quality of products is also discussed (International, 2015).

Within the African context, according to Corkin (2007) Vodafone , French Telecom, Vodacom and MTN dominated telecommunications industry in Africa in 90s. Huawei and ZTE are comparatively recent arrivals. According to Corkin (2011),in Angola, ZTE is heavily involved in building telecommunications network. ZTE's equipment is also used in fifteen other African countries. Huawei and ZTE are essentially telecom equipment vendors. However Corkin (2007) contends that in Africa, they are also bidding and involved in telecom operations. On the other hand, Brautigam (2009) has highlighted serious questions about the business practices and corporate social responsibility of the Chinese multinationals.

Within the South African context, recent visit to Huawei's head offices in Shenzhen by the secretary general of ruling African National Congress and subsequent statement by Huawei to expand its investment in South Africa gives a glimpse of Huawei's involvement in South African telecommunications (Huawei.com, 2015). At the same time, both Vodacom and MTN are embarking on major acquisition exercises. According to (Biznews.com, 2015), Vodacom wants to acquire fixed line operator Neotel. Similarly,

MTN wants to acquire large share of Telkom. According to International (2014b) and International (2014a) , Chinese Multinationals have significant presence in MTN, Vodacom, Telkom, Neotel and Cell C .

At present there is very little research material on the role of Chinese Multinationals in South African telecommunications industry There is also very little research material on the opportunities and challenges for Chinese multinationals in South African telecommunications industry.

1.3 Problem statement

1.3.1 *Main problem*

The main problem consists of analysing the role, identifying the opportunities and challenges for Chinese multinationals (MNCs) in the South African telecommunications industry.

1.3.2 *Sub-problem 1*

The first sub-problem is to analyse the role of Chinese MNCs in South African telecommunications industry.

1.3.3 *Sub-problem 2*

The second sub-problem is to identify the opportunities for Chinese Multinationals in the South African telecommunications industry.

1.3.4 *Sub-problem 3*

The third sub-problem is to identify the challenges for Chinese Multinationals in the South African telecommunications industry.

1.4 Significance of the study

This research could contribute to the contemporary body of literature with reference to a comprehensive understanding of the Chinese multinational companies in South African telecommunications industry. Chinese multinationals involvement in South African telecommunications industry has changed in latitude and involvement over the years. Therefore, there is a need to have a good understanding of their business strategies, business practices, competitive advantages, strengths and weaknesses. In addition, South African industry needs to understand the opportunities available to Chinese multinational companies and the challenges posed to them.

This study could also provide strategic business planning guidance to South African industry and government policy makers in engaging with Chinese multinationals. In addition, it could also provide guidance to South African project managers to manage Chinese vendors. Although the study is primarily focussed on South African telecommunications industry, it could also help other industries who are either engaged with Chinese multinationals or in the process of engaging with Chinese multinationals. This is even more critical in view of the recent memorandums of understanding on wide range of cooperation agreements between South Africa and China which covers all sectors of industry (Southafrica.info, 2015). In addition to South African industry, this study could also help other African telecommunications industries in managing Chinese multinationals.

1.5 Delimitations of the study

Three delimitations exist. Firstly, the study is conducted in South Africa and secondly, it examines only South African subsidiaries of Huawei and ZTE. Finally, the study is limited to telecommunications in South Africa.

1.6 Definition of terms

Following is a list of acronyms and terminology used in this study.

- AIIB: Asian Infrastructure and Investment Bank

- BRICS: Brazil, Russia, India, China and South Africa
- CSR: Corporate Social Responsibility;
- CSA: Country Specific Advantages;
- CNOCC: China National Offshore Oil Corporation;
- FAN: Fixed Access Network;
- FSA: Firm Specific Advantages;
- ICASA: Independent Communications Authority of South Africa;
- ICT: Information and Communications Technology;
- IMF: International Monetary Fund.
- IP: Intellectual Property;
- JV: Joint Ventures;
- MNC: Multi National Corporation;
- OFDI: Outward Direct Foreign Investment;
- PRC: Peoples Republic of China;
- RAN: Radio Access Network;
- R&D: Research and Development;
- SOE: State Owned Enterprise;
- SWOT: Strengths, Weaknesses, Opportunities and Threats;
- VAS: Value Added Services.

1.7 Assumptions

- As the data was collected from the strategic decision makers of South African subsidiaries of Chinese multinationals, it was assumed that they are sufficiently knowledgeable and are willing to provide answers in an objective, honest and accurate manner.
- Similar assumption was made of the strategic decision makers of South African telecommunications operators.
- Finally, an assumption was made that the respondents have the necessary internal corporate approvals to answer the interview questions.

CHAPTER 2. LITERATURE REVIEW

2.1 Introduction

There is little empirical research done on the role of Chinese MNCs in South African telecommunications industry. Furthermore, there are gaps in the literature on opportunities and challenges for Chinese MNCs in general.

The literature review consists of two sections. The first section is a discussion regarding the background to the main problem statement, which was to analyse the role of Chinese multinationals in South African telecommunications industry. Role of Chinese MNCs looks first at Chinese multinationals in global context, subsequently in African context and finally in South African context. The second section is the literature review of various aspects of Chinese multinationals.

2.2 Role of Chinese MNCs

2.2.1 *Global Perspective*

Sachs (2005) believes that the Chinese economic development is a success to be emulated by the developing countries, as China has succeeded in reducing poverty and developing a massive infrastructure. The author found that in 1980s and 1990s, foreign investments poured in and Chinese students went abroad to study. Growth of Free Trade Zones (FTZs) along with the return of the overseas educated Chinese students led to the transfer of knowledge. This growth along with the return of overseas educated Chinese students helped the growth of the export industry which has now evolved into Chinese MNCs. However according to Yan and Yudong (2003), sources for China's growth has been highly debatable. The debate centred on the question whether the growth was driven by productivity growth or factor accumulation. Yan and Yudong (2003) believe that initially productivity growth played a major role and subsequently factor accumulation has become the primary role in China's economic growth.

Sachs and Woo (1997) believe that China will ultimately become part of the world's economic framework similar to Japan and South Korea. This would also lead to changes in China's political system from current one party state to a Western democratic state (Sachs & Woo, 1997). Raine (2013) also believes that the West is keen to see that China evolve into a stakeholder in the international economic framework. In 60s, Japan's multinationals were initially viewed as a serious threat to Western multinationals. But Japan is now an integral stakeholder in the world economic order. West sees the advent of Chinese multinationals in global context as a step in that direction. On the 30th of November 2015, China's currency Renminbi (Yuan) was included in the basket of master currencies by International Monetary fund (Bradsher, 2015). Along with U.S Dollar, Euro, Yen and U.K pound, Renminbi can be used for international trade and finance. However China's government has its own objectives in building relationships with developing countries says Raine (2013), be it in Latin America or Africa or Asia. China's government sees itself as a champion of developing countries as China has both developed and developing constituents (Raine, 2013). Parmentola (2011) highlights the fact that Chinese investments have been targeting both developing countries and advanced economies. They also target both low end industries and high value activities.

Similarly, KPMG stated that (KPMG, 2013) during the past 30 years China has undergone major economic transformation. Many of the local state owned enterprises (SOEs) developed in an environment where there is a strong domestic demand, low prices and ability to set prices, cheap labour and low variable costs (KPMG, 2013). These conditions have helped these companies to grow in the corporate world and become highly successful corporate players (KPMG, 2013).

Sachs (2012) in China, the game changer, quoting IMF figures stated that China will overtake U.S as the largest contributor to world GDP by 2017. He attributed this to slow growth in U.S compared to China. Sachs attributed this to the fact that China is more competitive and has a better manufacturing capacity (Sachs, 2012). However Silk (2015), points out that China's manufacturing sector did not meet its targets in 2014. According to Silk (2015), this is due to scaling down of China's domestic demand. Furthermore according to Institute (2014), which tracks all the Chinese investments globally Chinese investments abroad slowed down in 2014.

Alden and Davies (2006) trace the growth of the Chinese economy in the past 7 decades and believe that China is now entering a new phase in its economic history i.e. the growth of Chinese multinationals. Alden and Davies (2006) highlight the support provided by the state to around 180 companies to go global and building on the advantage of well-established home market. On the other hand, Luo, Xue, and Han (2010) believe that Chinese government utilise ODFI (Outward foreign direct investment) as a new opportunity to access markets, technology, capital and knowledge from advanced countries and use this opportunity to enhance their own competitiveness. In 1970, China's ODFI was almost nil. In 2002 it was 2.2 billion dollars. In 2012 it has grown to 87.8 billion ((KPMG, 2013). Focus of Chinese OFDI has been on the acquisition of strategic assets internationally (Deng, 2009). As a later comer Chinese MNCs have been trying to catch up with other MNCs (Deng, 2009). Deng (2009) believes that in a highly competitive environment, Chinese MNCs need strategic assets to compete successfully in global market place.

Luo and Tung (2007) by introducing springboard perspective further reinforced this approach to explain the motivation of the Chinese MNCs in going global .The authors state that Chinese MNCs methodically and continuously use global expansion as a spring board to compensate for their competitive weakness, to overcome their latecomer disadvantage, counter their international competitors, bypass trade barriers into advanced markets, exploit competitive advantages in other emerging and developing countries. The same authors assert that Chinese MNCs motivation for OFDI is both asset seeking and opportunity seeking and face unique challenges such as poor corporate governance, post spring integration and organisational difficulties, lack of global experience, managerial competence and professional expertise, weak product/process innovation. Furthermore according to Deng (2009) purchasing strategic assets is not sufficient on its own. These assets have to be successfully integrated to improve the performance.

China has been allowing it's currency Renminbi (RMB) to marginally appreciate (KPMG, 2013). Economists believe that RMB is undervalued. Adams, Gangnes, and Shachmurove (2006) believe that the competitiveness of Chinese export products is due to both improved production abilities as well as the undervalued currency. Adams et al. (2006) also believe that an undervalued currency cannot be sustained in the long run. However Adams et al. (2006) believe that even if Chinese currency is appreciated significantly it will not impact China's competitive edge.

Child and Rodrigues (2005) believe that the expansion of Chinese MNCs are taking place at different number of levels. At first level it is purely exporting equipment. At second level it is subcontracting production in the form of original equipment manufacturer (OEM) for foreign companies and at the third level it is the physical and organizational expansion of Chinese MNCs to other countries which is characterized as organic expansion. Chinese MNCs in telecommunication sector are now in the organic expansion stage. However Guillén and García-Canal (2009) believes that Chinese MNCs differ from traditional MNCs in their approach to organic expansion by using horizontal expansion to expand into other markets whereas traditional MNCs used vertical expansion to expand into other markets. The same authors assert that Chinese MNCs expansion is an accelerated expansion where as traditional MNCs were gradual. Furthermore, Chinese MNCs were used to a political environment in their host country. The same political environment is replicated in the developing countries. Chinese MNCs also have a higher organisational adaptability than traditional MNCs as they have less rigid structure and culture (Guillén & García-Canal, 2009).

Both Guillén and García-Canal (2009) and (Child & Rodrigues, 2005) believe that Chinese MNCs have advantages such as technology adaptation, early adoption of technology, efficient production and project execution, incremental product innovation and specialised products for market niches, institutional entrepreneurial ability, expertise in mergers and acquisitions from home country, networking skills and political knowhow.

Monitor (2014) identifies following weaknesses for Chinese MNCs global expansion. They are long term political instability in China, employment and working conditions of employees both Chinese and local, environmental issues in the home country, end of double digit growth. In 2015 China's growth is a single digit growth at 6.9% (Guardian.com, 2015).

2.2.2 African perspectives

China had relationship with Africa for more than two thousand years (JINYUAN, 1984). Chinese emissaries have been visiting Africa for centuries. Chinese products were sent to Africa and African products such as elephant tusks found their way to China. These relations reached a climax with the visit of Zheng He's navy to Africa between 1405-1433

(JINYUAN, 1984). Menzies (2003) describes Zheng He's trip around the world in his book "1421 China discovers the world". According to Menzies, Zheng He visited East African countries with gifts from Chinese emperor Zhu Di and then proceeded travel around Cape of Good Hope to reach West Africa.

China has excellent relationships with African governments (Tull, 2006). At the state level China is seen as a benefactor as opposed to western countries which are tainted by colonialism and neo colonialism (Raine, 2013). During the 60s China was pursuing an ideological objective in Africa. It supported national liberation movements and provided infrastructure to newly independent countries (Raine, 2013). An example of the infrastructure effort is the Tanzam railway linking landlocked Zambia to Indian ocean (Manning, 2006). The relationships cultivated by the ideological effort later helped to promote Chinese business interests in Africa (Manning, 2006).

Tull (2006) believes that China changed its foreign policy after 1989 Tiananmen incident. Strong western reaction convinced Chinese leadership to build a counter balance to west by cultivating economic ties with developing nations and especially Africa (Tull, 2006). According to Tull (2006), many of the African leaders themselves were under pressure from West at that time to carry out political reforms. In the eyes of African leaders China was seen as a developing nation and a friend (Tull, 2006). However, Brautigam (2009) view the role of Chinese MNCs as negative, destructive and as such are major challenges or threats to African industry. Brautigam (2009) trace China's involvement in Africa over four decades and find Chinese business strategies and practices in Africa are similar to Western MNCs in Africa. Brautigam (2009) sees Chinese MNCs are only interested in raw materials. Brautigam (2009) has looked at the business practices of Chinese MNCs and has concluded in many instances they are predatory in nature. However Gill and Reilly (2007) believes China's involvement in Africa goes beyond interest in raw materials. It sees Africa undergoing economic transformation and wants to be part of the change.

Main destinations for Chinese investments are shown in Appendix B. China has also invested heavily in various sectors in other African countries including Mozambique, Tanzania, Uganda, DRC, Namibia, Djibouti, Ivory Coast, Gabon, Mali and Sierra Leone (Baah & Jauch, 2009). Chinese military released a white paper in 1998 highlighting the relationship between energy security, raw materials and national security (Giralt, 2007).

According to (Giralt, 2007) in 2005 China was importing 25 percent of oil from West Africa. This dependency has grown over the years. China is the largest trading partner for Angola (Sandrey, 2009). 99 percent of Angolan exports to China is oil (Sandrey, 2009). However contrary to popular belief Chinese investments in Africa are secondary to Chinese investments in Europe and North America. China's largest investment in the world is in Canada, an investment by CNOCC (Institute, 2014). Largest investment in Africa is in Guinea by China Power Investment (Institute, 2014).

The facilitation role played by Chinese business networks in China's business ventures in Africa is highlighted by (Bräutigam, 2003). Bräutigam (2003) calls facilitation role as "flying geese". Chinese business networks which consist of localised Chinese behave like a flock of geese changing leaders as they move forward. Chinese business networks have very strong transnational links. Chinese business networks promote Chinese investments via joint ventures. In addition Chinese business networks also help to establish subsidiaries of Chinese MNCs (Bräutigam, 2003). Examples of these networks can be seen in South Africa. However many of these networks are more loyal to Taiwan than People's Republic of China (PRC) for historical reasons (Bräutigam, 2003).

2.2.3 South African perspectives

In 1999 late President Mandela visited China. In the following year President Jiang Zemin visited South Africa. Since then ties between both countries has been growing. Grimm, Yejo, and Ross (2014) considers South Africa to be of strategic importance to China. South Africa is considered the spokesman for African continent. According to (Grimm et al., 2014) China is South Africa's largest trading partner. By August 2010, China was South Africa's largest trading partner, largest export destination and largest import source (MOFCOM, 2015). In December 2015, South Africa and China signed various memorandums of understanding (Southafrica.info, 2015). These memorandums cover industries such as Eskom and Transnet. They also cover strategic infrastructure and industry development projects.

Gelb (2010) has provided a table shown in Appendix C, on Chinese investments in South Africa. According to the table in 2006 there was not a single Chinese firm in ICT (IT & Telecommunications sector). Within the last 9 years two Chinese firms Huawei and ZTE

dominate the telecommunications sector in South Africa. Furthermore, Huawei in public pronouncements has stated that it wants to become the top ICT provider in the world. There is a need for research on current status of Chinese firms in South African telecommunications industry.

2.2.4 *Chinese MNCs in South African Telecommunications Industry*

Technological advancements are rapid and considered as one of the global drivers for change (Oberholzer, Cullen, & Adendorff, 2014). According to Oberholzer et al. (2014), in South African telecommunications sector technological advancements is an important variable in providing competitive advantage. Huawei and ZTE are the two Chinese MNCs providing technological advancements to South African Telecommunications Industry. In 2010, then foreign minister Nkosazana Dlamini-Zuma welcomed Huawei's investment in South Africa (SAPA, 2010). According to SAPA (2010) Ms Zuma encouraged Huawei to use South Africa as the platform to expand into rest of South Africa. This is an opportunity for Chinese MNCs and to South Africa. Empirical research is needed to confirm whether this is happening in practice.

According to Huawei Africa factsheet Huawei (2009) Huawei fixed assets in Africa exceeded \$1.5 billion. As of January 2009, Huawei (2009) employs more than 4000 employees in Africa of which 60 percent is locally employed. These figures show there is a significant (nearly 40 percent) percent of the employees is Chinese. Other question is the level of the position held by the local employees. There are no statistics available for Huawei & ZTE assets and employment in South Africa. China Global investment tracker 2014 has no record of Huawei or ZTE investments in South Africa or Africa. Cut off point for tracker is \$100 million. It has record of Huawei and ZTE investments in rest of the world (Institute, 2014). However Huawei's Africa fact sheet says its investment in Africa exceeds \$1.5 billion (Huawei, 2009).

Huawei is the largest telecommunication equipment manufacturer in China (Low, 2005). Low (2005) believe that both Huawei and ZTE have very good market targeting skills and experience in fast tracking research and development. Chinese mobile operators do not have any presence in South Africa. However after the China Mobile successes in Pakistan

UNCTAD (2014), acquisitions are possible and should be considered as a challenge to South African industry.

2.2.5 Proposition 1

Role of the Chinese multinationals in South African telecommunications has both positive and negative aspects. Empirical research of the role of multinationals is required to fully understand these aspects.

2.3 Aspects of Chinese Multinationals

This section is the literature review of various aspects of Chinese multinationals.

2.3.1 Business practices of Chinese Multinationals

OECD (2011) established clear guidelines for multinationals. These policies are detailed and can be summarised into following business practice requirements. Firstly, business practices should contribute to economic, environmental and social progress and should be sustainable. Secondly they should respect international human rights, build capacity and help with human capital formation. Then they should adhere to good corporate governance, risk based due diligence, self-regulatory practices and have management systems. Finally they should develop awareness of company policies among employees; refrain from discriminatory practices and local political activities(OECD, 2011)

Raine (2013) has identified common charges levelled against Chinese multinationals business practices in Africa. They are unreasonable preference for Chinese labour and materials, poor employment practices, bribery and lack of transparency, poor workmanship and dumping of poor quality products and fakes, lack of respect for environment, unfair competition enabled by excessive state support, exploitive relationships and trade imbalances (Raine, 2013). Some researchers consider Chinese management practices to be very different from western practices. Hout and Michael (2014) attribute the uniqueness of the Chinese management practice to its environment.

According to them the harsh political conditions both historical and current, has led the Chinese management to develop unique practices. Chinese companies value high asset turnover and correct timing over perfection. In addition, its organizational structure is very flat with many reporting to the top. This lean management is widespread within the Chinese MNCs. On the other hand according to Hout and Michael (2014) organization is highly decentralized. Furthermore, Chinese companies invest in the companies they source.

African authors such as Kuada (2005) believes that African management can learn a lot from Chinese management practices. Kuada (2005) identified following characteristics of the Chinese management to be emulated. They are mutual dependency, disciplined flexibility, planned work, holistic and long term orientation. Mutual dependency is a characteristic of Chinese and African family. Chinese MNCs extend this to their enterprises to sacrifice personal interests to the benefit of the organisation. Many authors have observed that human resource practices of Chinese subsidiaries differ from their parent company in China (Cooke, 2011).

Chinese Multinationals such as Huawei believe very much on self- criticism as a business practice. According to Tao and Chunbo (2015) , when Huawei's Charter was finalized in 1998, Huawei's Chairman Ren Zhengfei placed a stone at the front gate of its new campus with the inscription stating " A company's long-term success depends on the continuity of its core values and its tradition of self-criticism".

Due to the economic downturn all the telecommunications operators in South Africa are having financial difficulties. This can be seen in the recent retrenchments (mybroadband, 2014). Although Chinese MNCs have been able to finance projects in the developing countries, negative interest rates according to Atkins (2014) in the Euro Zone offer alternate financing for Western MNCs.

Both Huawei and ZTE are providing managed services for CellC. There is a current proposal to outsource the entire network to Huawei and ZTE. In 2008, as part of the managed services agreement CellC staff was transferred to Huawei and ZTE. Subsequently they left both organizations. Now majority of the managed service staff deployed at CellC are Chinese. This can be considered as a challenge for the Chinese MNCs. Another negative aspect is the question of knowledge transfer. In September 2014,

MTN group signed managed services contract with Huawei for six countries on Africa (Africa, 2014).

Very little empirical research has been done on Chinese multinationals business practices in the South African telecommunications.

2.3.2 *Business strategies of Chinese Multinationals.*

China's "Go-out Strategy" can be best explained by the policy statement issued by China's Industrial Planning Department in 2001(Nolan & Zhang, 2002). This policy statement calls on state to encourage big state-owned businesses to become internationally competitive corporations by listing in domestic and overseas stock market, increase their R&D expenditure and acquire other businesses.

Every MNC faces liabilities of foreignness (LOF) when they invest in a foreign country (Cooke, 2011). These include unfamiliarity with host country's culture, language , policies, regulations and other institutional arrangements such as trade unions (Cooke, 2011). Other challenges are geographic distance; managing risks associated politics and economy in host country. Chinese MNCs also have their inherent disadvantages such as insufficient technical and managerial competence , image problems associated with low cost and low quality products (Cooke, 2011). Cooke (2011) believes that in order to mitigate these disadvantages Chinese MNCs such as Huawei and ZTE collaborate with local network operators to establish roots in the host country. This collaboration can be in the form of financing, training or arranged visits to China by important stakeholders in the local network operator. Involvement of Chinese government in promoting Chinese MNCs too is another mitigation measure.

Huawei's organizational structure is led by its strategy and marketing department (Cooke, 2011). Key components of its business strategy are innovation, high quality, low cost and outstanding customer service. Furthermore, customer focus strategy is realised through active engagement with customers, in this case network operators. These include setting up training centres to train customers and inviting potential customers and customers to Shenzhen. ZTE adopts a product differentiation strategy tailored to different markets (Cooke, 2011) . For example ZTE provides Malawi with cheap K1500 handsets while

producing modern and expensive handsets for China and developed countries (Cooke, 2011). Compared to Ericsson, Nokia Siemens and Motorola, Huawei and ZTE pursue global business strategy with high quality, reliability, lower prices and faster customer's services. ZTE specialises in manufacturing and focussed on developing countries whereas Huawei focusses on system integration and have made more inroads into developed countries.

Both Huawei and ZTE focus on following strategic actions. Foremost among them is cost leadership. Cost leadership enables them to win the contracts (Cooke, 2011). Developing countries are sensitive to price. They break into developing countries markets using the price advantage. Once they have developed the brand and reputation they move to developed countries using joint ventures with other MNCs (Cooke, 2011). Low cost success of both Huawei and ZTE is also achieved by the use of extreme over time of its Chinese employees and performance measures. Second most important strategic action is developing and deploying political capital (Cooke, 2011). Both ZTE and Huawei extensively utilise their contacts with Chinese government to leverage contracts in foreign countries. When Chinese leaders visit these countries they are accompanied by ZTE and Huawei business leaders (Cooke, 2011). Alden and Davies (2006) too believe that comparative political advantage is being used by Chinese MNCs to offset their competitive disadvantage. According to Alden and Davies (2006) this is in addition to comparative economic advantage and symbolic and diplomatic diplomacy. However, these actions also have their negative consequences in both developing and developed countries. It has been met with opposition from local politicians and entities (Cooke, 2011). Other strategic actions are partnerships with local firms and universities, improving management process and deployment of human and social capital (Cooke, 2011).

Alden and Davies (2006) believe that partnerships and JVs, parent-satellite investments are the business strategies of Chinese MNCs in investing in developing and developed countries. Alden and Davies (2006) think that Chinese MNCs adopt partnerships and JVs strategies to developed countries and parent-satellite strategy for the developing countries. When Huawei first came to South Africa supplied products to CellC via Business Connexion in 2005. But within a year it established its own subsidiary.

2.3.3 Technology and Research Development

Telecommunications industry is a knowledge intensive industry and high level of global competition depends on swift technological innovation (Cooke, 2011).

Jiang (2005) has done research on globalization strategy of Chinese Multinationals. This research has sections devoted to Huawei's and ZTE's "Internationalization of R&D". Jiang (2005) states that both Huawei and ZTE have taken advantage of low cost development and combined it with advanced research and expertise in developed countries.

Huawei is investing \$4 billion in fixed broadband technology in the next three years.(Huawei, 2014).There is very little independent research done on Technology and R&D of ZTE and Huawei. However, their technology strategy documents show the extent of their technology and R&D.

Abrami, Kirby, and McFarlan (2014) give various reasons why Chinese cannot innovate in technical field. Abrami et al. (2014) believe that top to down approach by the Chinese government as the main reason why Chinese cannot innovate. On the other hand, Fan (2006) believes that innovation capability and self-developed technologies are the main reasons for Chinese MNCs catching up with their counterparts elsewhere. Fan (2006) attributes this to higher R&D budget of Chinese MNCs. Ren Zhengfei laid high emphasis on innovation from the onset of the company (Fan, 2006). De Cremer and Zhang (2014) believe that Huawei's innovation is the result of Huawei's values, vision and procedures. Ren Zhengfei's leadership style itself set the platform for innovation (De Cremer & Zhang, 2014). Chinese multinationals are also becoming more innovative (De Cremer & Zhang, 2014). As growth in China slows innovation becomes more and more necessary. Huawei strongly believes in value-driven leadership (De Cremer & Zhang, 2014)

Jiang (2005) has done research on internationalization of R&D activities of the Chinese MNCs. Jiang (2005) included 11 technology based Chinese firms in the research. They operated 77 R&D units and 37 were situated outside China. 22 of them were situated in Europe and U.S. Researcher subscribed this to the need for advanced technology and to keep abreast of main competitors. According to De Cremer and Zhang (2014) Chinese MNCs R&D in 2012 is now 14 percent of the world R&D expenditure .

Huawei's R & D commitment has been extensively discussed by (Low, 2007). According to Low (2007), Huawei's R&D expenditure as a percentage of revenue in 2005, is much less than Nokia or Ericsson. These percentages may be different now. However, at that time 48 percent of Huawei's staff was engaged in R&D with many of them holding doctoral qualifications. Furthermore Huawei was also recruiting engineers from other telecommunications giants when they restructure or layoff them (Low, 2007). In addition, Huawei also established R&D centres abroad. Its first R&D centre was in Bangalore which is known as the silicon valley of India (Low, 2007). In South Africa, Huawei reported in 2009 that it has established an R& D centre. But it is unclear whether it is functional.

2.3.4 Competition

In 2006, Huawei implemented its network solution to CellC network. This was the first instance of Chinese (Huawei) telecommunication equipment being deployed in South Africa. According to (Taka, 2001) in 2001 the dominant players in South Africa at that time were Ericsson, Siemens, Nokia and Motorola. Today Nokia Siemens and Motorola are almost non-existent in South African telecommunications. Although Ericsson was limited to MTN, It is making a comeback via providing managed services to Vodacom (Asha, 2015). Furthermore, there is consolidation taking place within Western MNCs. Nokia Siemens is buying Alcatel-Lucent. Ericsson has a strategic partnership with the leading IP vendor Cisco (rethink-wireless, 2015). Western Multinationals are making all these efforts to counter the rise of Huawei.

There is competition in South Africa between Chinese MNCs. Huawei and ZTE are highly competitive towards each other. This offers opportunities and challenges to South African telecommunications industry. There is little research done on the competition between Chinese MNCs. Internationally European competition commission has initiated investigation into Huawei and ZTE for unfair competition (Shu, 2013).

2.3.5 Corporate Social Responsibility

Corporate social responsibility is another area where there is critique of Chinese multinationals in existing literature.

Huawei and ZTE play an active role in CSR to demonstrate their commitment to host country (Cooke, 2011). They donate to local charity causes , relief to victims of natural disasters, sponsor education and employ local people (Cooke, 2011). However, this view is not universal. One research report, Corporate Social Responsibility in Chinese State-Owned Enterprises in South Africa Zhang (2013) is critical of CSR responsibilities of Chinese SOEs in South Africa.

Shared value as espoused by (Porter & Kramer, 2011) provides another opportunity to South African industry to leverage the Chinese MNCs involvement in SA telecommunications industry. During tender evaluation it is possible to introduce shared value as a requirement and thus benefit the country.

2.3.6 Asian Infrastructure Investment Bank

Asian infrastructure investment bank is expected to play a major role in Chinese investments in South Africa. In 2015, China is launching Asian Infrastructure Investment Bank (AIIB). According to Economist.com (2015), U.S considers AIIB to be a serious challenge to World bank and IMF. But many of U.S allies such as U.K, Germany and France have already signed up to be founder members of AIIB. Although AIIB is to be initially focussed on Asia, it could become a global bank along with anew development bank being launched by BRICS countries. 32 countries have agreed to be founder members. 11 of them are from Europe.

2.3.7 Proposition 2

The literature review shows that there are opportunities for the Chinese Multinationals in South African Telecommunications industry. Further empirical research is required to expand on these opportunities and crystallise the opportunities.

2.3.8 Proposition 3

The literature review shows that there are challenges for the Chinese Multinationals in South African Telecommunications industry. Further empirical research is required to expand on these challenges and crystallise the challenges

2.4 Conclusion of Literature Review

2.4.1 Gap Analysis

The literature review has identified following gaps. Firstly, there is limited understanding on the role of Chinese multinationals in South African telecommunications industry. Secondly, there is little research available on the business practices, business strategy, technology and R&D, corporate social responsibility, competition of the Chinese MNCs in South African telecommunications industry

2.4.2 Proposition 1:

Role of the Chinese multinationals in South African telecommunications has both positive and negative aspects. Empirical research of the role of multinationals is required to fully understand these aspects.

2.4.3 Proposition 2:

Literature review indicates that there are opportunities for the Chinese Multinationals in South African Telecommunications. Further empirical research is required to expand on these opportunities and crystallise the opportunities.

2.4.4 Proposition 3:

Literature review indicates that there are challenges for the Chinese Multinationals in South African Telecommunications. Further empirical research is required to expand on these challenges and crystallise the challenges.

CHAPTER 3. RESEARCH METHODOLOGY

The study required a comprehensive understanding of the topic and the problems. As such the research was conducted with the participation of strategic decision makers in South African telecommunications industry, representatives of Chinese multinationals and other stakeholders. Qualitative research was the research paradigm used in this study as the aim was to understand the experiences, perspectives, ideas and attitudes of the participants.

Existing literature on the research topic was studied in the literature review. Literature review looked at the role of Chinese MNCs globally, in African continent, in South Africa and finally at Chinese MNCs in South Africa telecommunications. It also looked at the opportunities and challenges. The research was undertaken using in-depth interviews with strategic decision makers in various organizations, firms, people in South Africa, representing both state and private sectors.

Method followed was a series of semi-structured in-depth interviews, using open ended questions. Initial set of questions was prepared in the interview protocol for the interviews. Further probing questions evolved during the interview or during the follow-up interviews. These questions tested the propositions outlined in the literature review.

3.1 Research methodology / paradigm

Creswell (2013) explains that there are three approaches for a research. They are qualitative, quantitative and mixed methods. The author defines qualitative approach as an approach based on constructivist claims of knowledge, employs strategies such as narratives, phenomenology, ethno graphics, grounded theory and case study and collects data utilising methods such as open-ended questions, interview data, observation data, document data, audio-visual data, text and image analysis.

Bryman (2012) describes qualitative research as a strategy that places more emphasis on words and content rather than quantification, in the data collection and analysis. It also advances an inductive approach to the relationship between theory and research. In

addition, it places importance on the generation of theories rather than verification of theories as in quantitative research.

Greenhalgh and Taylor (1997) , believes that researchers who use qualitative method seek deeper truth. Questions such as “what stops smokers from giving up smoking?” cannot be answered by measurements. Instead it requires listening to what the respondent is saying and exploring the ideas and concerns raised by the respondent. The authors also believe that the strength of the qualitative research lies in its validity as opposed to quantitative research where the strength lies on reliability. On contrary, Mays and Pope (1995) believes that there is an opinion within the research field that qualitative method is unscientific. Most commonly held criticism is that qualitative research is simply a collection of narratives and personal impressions of the researcher. However, Mays and Pope (1995) also provide various strategies to ensure rigour in the qualitative research. These strategies address the issues of validity, reliability and generalizability.

Research study was limited to South African telecommunications industry. In addition, research population was limited to executive and senior management of South African telecommunication industry and executive and senior management of Chinese multinationals.

3.2 Research Design

The research design was cross-sectional as it was based on in-depth interviews on the role of Chinese multinationals, their business practices, business strategies, technology and research development, competition and corporate social responsibility at a single point in time. Interviews were held with executives and senior managers in the following organisations

- Huawei
- ZTE
- Cell C
- Vodacom
- MTN
- Telkom
- Eco net wireless
- Mitsubishi Hitachi

- CSG international
- ICASA

The interview focussed on collecting information on the interviewee's view of South Africa, South African telecommunications industry, Chinese multinationals involvement in South African telecommunications industry including capital investment projects.

The 'interviewee' organisations came from China and South Africa and have various levels of Chinese, South African state participation and ownership. These companies covered the entire South African telecommunications spectrum.

The reason for adopting the qualitative approach was that the discussion and consequent easing of the interview environment will result in greater sharing of information which could only have been done in a face-to-face interview. According to Kalof, Dan, and Dietz (2008), the reason for open ended questions is that there is great deal of new information that could come out of the interview, if the interviewer allow respondents more freedom to answer open ended questions. Interview environment was further relaxed by the fact the interviewer personally knew majority of the interviewees.

3.3 Population and sample

3.3.1 *Population*

The research population encompasses strategic decision makers of Chinese and South African private sector and parastatal organisations.

3.3.2 *Sample and sampling method*

The number of interviewees were 18. Two expert samples were included. One expert South African sample and one expert Chinese sample. South African sample set comprised 14 participants from South African telecommunications industry. Selection of the South African sampling set was based on their experience in South African telecommunications industry and their experience in managing Chinese multinationals. In addition, they are decision makers within telecommunications industry. Chinese sample

set consisted of 4 representatives from Huawei and ZTE which are the two Chinese multinationals in South African telecommunications industry. There was one representative from Huawei and three from ZTE. Main criteria for choosing the interviewees is that they possess critical information for the research (Mays & Pope, 1995).

A questionnaire, with questions that were to be asked in the interviews, were sent to the respondents along with a presentation of the research. Presentation explained the interview process to the respondents. Interviewees were also briefed on the interviews well in advance either in person or telephonically. As the interviewees are holding executive or senior positions appointments were booked well in advance and only one-time slot was available for each of the interview in many cases. Interview process included the recording of interview. Recording was done in a digital recorder and as a backup, recorded on the mobile phone voice recorder.

Table 1: Profile of respondents

South African sample set is as follows:

Name	Position
Pakamile Pongwana	Chief Executive Officer – ICASA
Sherhaad Kajee	Chief Procurement Officer – Cell C
Maria Pienaar	Chief Information Officer – Cell C
Clive Cheetham	Executive Head Enterprise Network Services -Vodacom
Themba Zotwane	Regional Manager –Operations- MTN
Schalk Visser	Executive Head- Central PMO – Cell C

Steven Boiles	Group Head of Network planning and Strategy –Econet Wireless.
Wellington Sibande	Executive Head – Group IT – Vodacom
Mohammed Adamjee	Executive Head – Business infrastructure – Cell C
Mxolisi Msutwana	Technical Advisor to CTO – Mitsubishi Hitachi Power systems and Telecommunications. Formerly Senior Manager at MTN.
Pieter Welgemoed	Executive Director- CSG international Service Management at MTN. Formerly Huawei.
Satish Ajodha	Formerly Executive – Software Development and Deployment at Blue Label Telecommunications
Ubendra Naidoo	Senior Manager – Network Engineering-Telkom
Kuben Ramsamy	Manager –Pricing & Propositions- Vodacom

South African sample set covers all the network operators and regulatory authority.

Chinese sample set is as follows:

Jacky Zhang	Director- Government and Public Affairs Department - Huawei
Fu Zhen assisted by Ravi Sowki and Jessica Jiang.	Chief Technical Officer -ZTE

ZTE requested a team of respondents headed by Chief Technical Officer (CTO) as the CTO was new to the position.

3.4 The research instrument

Research instrument was the interview questions. Interview questions were designed to focus on collecting respondent's view of South African telecommunications industry, role of Chinese multinationals in South African telecommunications industry, their business practices, their investments, business strategies, technology and research development, competition and corporate social responsibility. A sample of the instrument is attached as Appendix A.

The interview schedule was dependent on the availability of the respondent. Interviews took between 30 and 60 minutes. On average the interview time was 45 minutes.

3.5 Procedure for data collection

The procedure for data collection from interviews was as follows:

Firstly, the interview was recorded using audio records by the interviewer. Secondly, interview feedback was logged as a transcript in a separate document, which was used as source material for the research's analysis and conclusions. All the respondents were interviewed face to face except one telephonic interview.

3.6 Data analysis and interpretation

The interview data was analysed using content analysis and thematic analysis. There are three approaches to content analysis ((Hsieh & Shannon, 2005). Direct content analysis approach was used.

All results from the interview were interpreted in an unbiased and impartial manner. The information obtained from the interview was analysed in order to link it to the propositions and sub problems.

3.7 Limitations of the study

Following are potential limitations and weaknesses of the selected research method:

- Respondents may not disclose openly, their companies' plans and activities in South Africa;
- The figures and trends described or referenced by the respondents might not be accurate and hard to source/confirm independently;
- Due to time constraints and other important engagements, respondents might have taken short cuts on various answers or explanations;
- Respondents may not be able to express their own views and instead follow corporate or government disclosure guidelines.

3.8 Validity and reliability

Validity is concerned with congruence i.e. whether a measurement or set of measurements that is devised to measure a concept actually measures the concept (Bryman, 2012). On the other hand reliability refers to the consistency of a concept (Bryman, 2012). According to Greenhalgh and Taylor (1997) the strength of the qualitative research lies in validity. This is due to the fact that in good qualitative research using a selection of data collection methods, researcher will be able to get to the core of the problem rather than having a superficial view of the problem.

3.8.1 External validity

External validity refers to the ability to generalize from the study to a larger population (Bryman, 2012).

Since the interviews conducted represent a number of respondents which were not randomly selected, a generalization will not be appropriate. On the other hand, the findings and insights gained in this research may be of value to South African policy makers and

business entities who are already engaged with Chinese multinationals or in the process of engaging with Chinese multinationals.

3.8.2 *Internal validity*

Internal validity is defined as drawing suitable or fitting deductions from the information generated from the interview (Kalof et al., 2008). Internal validity in this study is maximised as the interview questions were very specific. There was very little uncertainty regarding the information required from the respondents and therefore there was no misinterpretation.

3.8.3 *Reliability*

Raw data was collected during the qualitative process in an unstructured form, such as transcripts of interviews and audio recordings. Since the research method is qualitative, the primary way to ensure reliability is to keep accurate records of interviews and observations, as well as complete documentation of the analysis process (Mays & Pope, 1995). One of the primary reasons for taping the interviews is that data can be analysed independently at a later stage.

The wide range of respondents interviewed guaranteed that a representative sample of the population was examined. All interviewees were interviewed using a standardised questionnaire to ensure reliability.

CHAPTER 4. PRESENTATION OF RESULTS

4.1 Introduction

The objective of this section is to present the results of the research. In this chapter, positive and negative aspects of the role of the Chinese multinationals are identified from the interviews using content analysis. In addition, opportunities and challenges for the Chinese multinationals too are identified. The views of the participants are presented under different themes. In the following chapter, the results will be analysed in detail as they relate to the testing of the propositions.

4.2 Interviews

Interviews were carried out as per grounded theory approach. As per approach the interviews were conversational and an iterative process was used to develop theory (Strauss & Corbin, 1994).

The results are presented under the 14 themes stated below:

- a) Positive aspects of Chinese MNCs role in SA Telecommunications
- b) Negative aspects of Chinese MNCs role in SA Telecommunications
- c) Opportunities in the business practices of Chinese MNCs
- d) Opportunities in the business strategies of Chinese MNCs
- e) Opportunities in the Financing and Investments of Chinese MNCs
- f) Opportunities in the Corporate Social Responsibility of Chinese MNCs
- g) Opportunities in the R&D and Technology of Chinese MNCs
- h) Opportunities in the Competition of Chinese MNCs
- i) Challenges in the business practices of Chinese MNCs
- j) Challenges in the business strategies of Chinese MNCs
- k) Challenges in the Financing and Investments of Chinese MNCs
- l) Challenges in the Corporate Social Responsibility of Chinese MNCs
- m) Challenges in the R&D and Technology of Chinese MNCs
- n) Challenges in the Competition of Chinese MNCs.

Table 2 : Response rate

Anticipated number of candidates to be interviewed	Actual Number of candidates interviewed	Response percentage
18	18	100%

4.3 Results pertaining to the proposition 1:

Question was posed to the South African and Chinese sample sets with a view to obtain information whether the role is positive or negative or both. In addition, the question was posed as a way to set the tone for the discussion and enable the interviewees to freely share their thoughts and understanding of the matter.

All the respondents answered that the role is overall positive. South African sample set answered that there are both positive and negative aspects in the role. Pakamile Pongwana of ICASA stated “Overall positive”. Sherhaad Kajee of Cell C said “I think it is both positive and negative. But more positive”. Themba Zotwane of MTN said “As a whole it is positive”. Other South African respondents and Chinese respondents too expressed similar views. Jack Zhang of Huawei states “I think it is positive. Of course it is positive”.

Chinese sample set provided positive aspects. This set did not provide any negative aspects.

4.3.1 Positive aspects of the role of Chinese MNCs

The South African respondent interviews unearthed three main positive aspects of the role. They are

- a) Chinese multinationals are providing competitive pricing
- b) Chinese multinationals are providing high quality technology

c) Chinese multinationals are customer oriented and meet delivery timelines

Financing is also identified as a positive element. It is later discussed under opportunities. These aspects have positive effect on South African telecommunications. The positive aspects are analysed in detail in the following chapter.

All the respondents stated that the competitive pricing is a positive aspect of the role. Pakamile Pongwana of ICASA states “When they gained traction over Alcatel, NSN they have made it cheaper to build a network. Purely because they are cheaper. On the other hand, because of their scale, where they come from, it is easier for our operators to utilize their services to have a cost effective network”. Sherhaad Kajee of Cell C says “They have brought price competitiveness into the party into the country. Before that SA was mainly Ericsson, NSN and Alcatel. They won the business with competitive pricing and giving very good financing”. Also according to Schalk Visser of Cell C “It is positive because before we had to pay high prices for equipment and services. They have come down with Chinese vendors. From competition point of view prices have come down”. Steven Boiles of Econet Wireless states “Chinese firms are extremely adaptable”.

High quality technology provided by Chinese vendors specifically by Huawei was constantly mentioned by the South African respondents. Kuben Ramsamy of Vodacom states “Their technology is leaps and bounds ahead of our technology”.

Customer service in terms of issue resolution and speedy delivery was also highlighted by South African respondents. Themba Zotwane states “The way they react to problems compared to Ericsson. Chinese sends truckloads of people to provide speedy resolution”.

Chinese respondents highlighted positive aspects. Jacky Zhang of Huawei states “Huawei is number 1 in the world. We overtook Ericsson which is a 100 years’ company. Huawei was established in 1987. In just 28 years we have become No 1 in the world. We have latest technology”. Fu Zhen of ZTE states “I think it is positive role. As you have interviewed all the others you know that they are all using Chinese technology, Chinese equipment and Chinese solutions sometimes Chinese labour”.

4.3.2 *Negative aspects of the role of Chinese MNCs*

The South African respondent interviews identified two main negative aspects regarding the role. They are

- a) Large Chinese contingent within Chinese MNCs.
- b) Lack of knowledge transfer from Chinese MNCs to the operator.

Cultural differences are also identified as a negative element. It is also discussed later as a challenge under business practices. These negative aspects have negative effects on South African telecommunications.

South African respondents are of the view that one of the negative aspects is the disproportionately high number of Chinese personnel with Chinese multinationals. There is also a dominant view among the South African respondents that inadequate skills transfer is taking place between Chinese MNCs to operators and this is a negative element. On the other hand, some of the South African respondents felt that skills transfer depends on how well the operators manage the vendors to ensure that skills transfer take place.

Sherhaad Kajeer of Cell C states “They bring everyone from China. No real skill transfer happening. I don’t know whether this is on purpose or due to culture. It is not a good cultural fit. This stops skill transfers at all levels”. Similar comment by Wellington Sibande of Vodacom who states “They bring their own nationals. Disproportionately high Chinese nationals. They don’t invest a lot on skills transfer. They trust their own people. They are very protective about their IPs”.

Aspects identified in some cases are similar to trends described in literature review. There are also aspects which are not in literature review. These aspects are analysed in detail in Chapter 5.

4.4 Results pertaining to the proposition 2:

Questions were posed to the South African and Chinese sample sets with a view to obtain information on opportunities for Chinese multinationals. In addition, questions were posed

as a way to set the tone for the discussion and enable the interviewees to freely share their thoughts and understanding of the matter. Respondents identified opportunities in the business practices, business strategies, financing and investment, Corporate social responsibilities, R&D and technology and competition of the Chinese multinationals in South African Telecommunications industry.

4.4.1 Opportunities in the business practices

South African respondents answered that there are opportunities for Chinese MNCs in business practices. These opportunities give Chinese MNCs competitive advantage over their rivals. South African telecommunication industry places strong emphasis on productivity and prompt delivery. Operator margins are becoming narrow and productivity and speed of delivery have become top premiums.

Kuben Ramsamy from Vodacom states that “Their work ethics from productivity perspective second to none. Their work ethics is definitely an opportunity for them”. Mxolisi Msutwana from Mitsubishi Hitachi states that “Chinese engineers are highly skilled, highly qualified. They have Masters in Engineering compared to SA engineers. Work ethics is high. They are prepared to work 20 hrs a day”. Maria Pienaar from Cell C states that “From management style they are extremely dedicated and when they put their minds to something, I have never seen a company deliver like the way Huawei can”. Clive Cheetham from Vodacom states that “Their hierarchical way of doing business. They engage from governmental down to the bottom”.

South African respondents also saw that there is an opportunity for Chinese MNCs to improve their business practices as South African telecommunications had business practices which were superior. Schalk Visser of Cell C states “When they started in South Africa they followed business practices as they saw fit. But once they started dealing with major operators like Vodacom they improved a lot as Vodacom has high level of standards”.

Chinese respondents answered that there are opportunities in the business practices.

Jacky Zhang states that “Regarding staff dedication Chinese people are very dedicated people. This is influenced by the culture in China”. Ravi Sowki from ZTE states that “It is

true that the Chinese staff have higher productivity. They work long hours. Chinese have highly qualified staff. What I notice here is that only 5% here go into postgraduate after degree. But lots of Chinese staff go for post graduate qualification after undergraduate and come to work. As such they are highly qualified and understand the business”.

The respondent interviews identified two main opportunities in the business practices of Chinese MNCs. They are

- a) High productivity of the Chinese personnel including high work ethics
- b) Highly qualified Chinese personnel.
- c) Learning from South African business practices

Hierarchical management style of Chinese MNCs which is facilitating delivery was also identified as an opportunity for Chinese MNCs. These opportunities provide the Chinese MNCs competitive advantage over Western MNCs.

These opportunities are analysed in detail in Chapter 5.

The general conclusion is that there are opportunities in the business practices for Chinese multinationals.

4.4.2 Opportunities in the business strategies

South African respondents in general do not believe that Chinese MNCs are using South Africa as a gateway to rest of Africa. There is a general view that decision making for South African operations is still done from Shenzhen in China for all their operations in Africa. Many believe that using South Africa as a gateway for operations in Africa is an opportunity for Chinese MNCs. This will be in line with South African government views expressed in literature review.

Themba Zotwane from MTN states that “They are not using SA as a gateway. They can go anywhere. They are everywhere. They don’t need SA. Initially it might have been a strategy but not anymore”. Steven Boiles from Econet Wireless states that “I don’t think Chinese MNCs see SA as a hub to expand into rest of Africa. NSN and Ericsson had SA as a gateway and had entrenched organizations a long term presence here”. Wellington Sibande from Vodacom states that “Chinese MNCs are not using SA as a gateway to rest

of Africa”. On the other hand, Clive Cheetham from Vodacom states that “They have used SA as a Launchpad to rest of Africa”.

South African respondents also stated that local partnerships are opportunities in the business strategies for Chinese MNCs. Wellington Sibande from Vodacom states that “Chinese companies can help local companies with scale to get globalized quickly and grow due to availability of capital. It is an opportunity for our local companies to work with Chinese MNCs to grow”. Mohamed Adamjee from Cell C states that “They need to have right partnership with local partners to do the things like testing here. They should have implementing partners here while keeping sales and presales. HP has gold and silver local partners. Huawei should adapt these models”.

Chinese responses are mixed. Jacky Zhang from Huawei states that “We think SA is a very important strategic market in global market. We think SA is in the top 10 countries. Our strategy is to be here for a long period”. On the other hand, Ravi Sowki from ZTE states that “We have businesses outside telecommunications in Africa which are not here. So we cannot say that SA is a gateway to rest of Africa. Head Office for Africa in ZTE is in Dubai. For SADC countries it is here”.

The respondent interviews extracted two main opportunities in business strategies. They are

- a) SA as a gateway for operations in Africa.
- b) Local partnerships

These opportunities are analysed in detail in Chapter 5.

The general conclusion is that there are opportunities in the business strategies for both Chinese MNCs and South African industry.

4.4.3 Opportunities in the financing & investment

South African respondents highlighted the opportunities specifically in financing. As stated earlier operators have narrow margins and are unable to finance all the major upgrades and new deployments. Chinese MNCs with the support of Chinese banks are able to provide relatively low interest loans. Chinese Sherhaad Kajee of Cell C states that “The

opportunities are lots of Chinese money available. There are two aspects, how much is the loan and what is the cost of the loan. How you negotiate finance agreement. They are prepared to give big loans. In the last agreement they were prepared to allow 30% of loan to buy non-Chinese products very different from western financing. There is cheap loan, long term loans very flexible. They work very closely with China development bank in providing good long term loans". Maria Pienaar of Cell C states that "Cause of their strength is the support given by the government and banks in China:" Steven Boiles of Econet wireless states that "They have huge support from Chinese banks especially Chinese development bank. It is not free of charge. It is available with good terms." Satish Ajodha states that "One opportunity is making capital available. It allows the operator to grow."

Chinese respondents provided information on their investments in the country. Fu Zhen of ZTE states that "We have invested 0.5 Billion U.S dollars in South Africa since 2009. Have good relationship with banks and give very good terms." Jacky Zhang of Huawei states that "It is a difficult to calculate the investment in South Africa. For this year alone, procurement is 10 million U.S dollars which is part of investment."

The respondent interviews unearthed two main opportunities in financing and investment. They are

- a) Good terms offered to Operators
- b) Strong bank/vendor relationship between Chinese banks and Chinese vendors.

These opportunities provide Chinese MNCs competitive advantage over Western MNCs.

These opportunities for both Chinese MNCs and South African operators are analysed in detail in Chapter 5.

The general conclusion is that there are opportunities in financing and investment for the Chinese multinationals in South African telecommunications industry.

4.4.4 Opportunities in the CSR

Many of the South African respondents felt that there are opportunities for Chinese multinationals in carrying out genuine corporate social responsibility efforts which will

contribute towards the development of the country. They were of the opinion very few genuine corporate social responsibility efforts are happening in the country. Another opinion was that the current CSR efforts by Chinese MNCs are purely marketing efforts.

Pakamile Pongwana from ICASA states “We have an opportunity which we don’t use. In the universal service agents, they are identifying schools to develop. But they are only going to operators. They are not going to Huawei and ZTE and asking them to develop networks to schools. When Vodacom builds an infrastructure to schools they use Huawei equipment. Why don’t we ask Huawei to do that?”. Mohamed Adamjee of Cell C states that “I think government should be talking to these companies and make sure CSR is addressed. They can help with school’s text books, hospitals with fibre connectivity. Government should set stringent criteria to ensure CSR responsibilities.”

On the other hand, Chinese MNCs believe that they are carrying out genuine CSR efforts. According to Jacky Zhang of Huawei “Every year we do a lot for CSR. We have done enterprise developments called incubator programs. We have helped black owned SMEs. This year we have helped 2 more SMEs to bring the number to 27”. According to Jessica Jiang from ZTE “We are participating in the vice president’s program for schools. We are going to donate learning systems to 5 schools. This is driven by our chairman”.

The respondent interviews extracted one main opportunity in corporate social responsibility. It is

- a) Authentic CSR efforts to benefit the host country

This opportunity is analysed in detail in Chapter 5.

The general conclusion is that there are opportunities in the corporate social responsibility area for the Chinese multinationals in South African telecommunications industry.

4.4.5 Opportunities in the R&D and Technology

South African respondents identified opportunities for Chinese multinationals and South African industry. Pakamile Pongwana of ICASA stated that “We need to literally talk to them and leverage that opportunity for our graduates. Only 5 of our universities are producing more than 10000 research papers per year whereas Chinese Universities are

producing more than million research papers per year. It boils down to the question I was talking about that we are not talking to Chinese vendors. We should be sending graduates to them for development". Themba Zotwane from MTN states that "I think from R&D there are lots of opportunities for them. Before they were follower and now they are the market leader". Steven Boiles of Econet wireless states that "R&D wise they have a huge talent pool. They open R%D centres abroad for two reasons. One is to show that they are employing local people and contributing to local economy". Mxolisi Msutwana from Mitsubishi Hitachi states that "Huawei knows which products are profitable in the country as a whole. They can use R&D to map out for the entire country. Every effort in this country goes to R&D in China. That makes business sense. They have best equipment in their R&D".

Both Huawei and ZTE acknowledge that R&D and Technology played a major role in their evolution as market leaders. They also provided figures in terms of R&D commitment. Jacky Zhang of Huawei states that "20% of revenue is spent on R&D. 50% of staff are R&D staff." Fu Zhen of ZTE states that "ZTE spends 10-15% of the revenue on R&D. Nowadays ZTE has 60-70000 staff. 30% of them are R&D staff."

The respondent interviews extracted two main opportunities in Technology and R&D for Chinese multinationals. They are

- a) State of art network technology
- b) Speedy solutions

Innovations was also identified as an opportunity. These opportunities provide Chinese MNCs competitive advantage over Western MNCs.

These opportunities are analysed in detail in Chapter 5.

The general conclusion is that there are opportunities in the R&D and technology for the Chinese multinationals in South African telecommunications industry. Furthermore, the same R&D and technology could be leveraged to assist South African industry.

4.4.6 Opportunities in the competition

South African respondents are of the view that the competition between the Chinese multinationals provided opportunities to South African industry.

Schalk Visser from Cell C states that “There is real competition between Huawei and ZTE”. Wellington Sibande of Vodacom states that “Opportunity is that they compete among themselves. They lower the costs. Quality improves. They can match them on funding and match them on resources”.

Both Huawei and ZTE acknowledge the competition between them. They believe that the competition is healthy. Jack Zhang of Huawei states that “Competition is good for the customer to know whose technology is good. We are not afraid of competition. We are confident about our technology our solution.” Fu Zhen of ZTE believes that there is still competition with Western Multinationals. He states that “ZTE is only doing infrastructure, Ericsson is doing more. Competition helps with cost and managing risk.”

The respondent interviews unearthed one main opportunity in competitions. Opportunity is

- a) Competitive pricing to operators

This opportunity is analysed in detail in Chapter 5. This opportunity provides Chinese MNCs competitive advantage over Western MNCs.

The general conclusion is that there are opportunities in the competition of the Chinese multinationals in South African telecommunications industry.

4.4.7 Question: Are there are any other areas of opportunities?

All the respondents answered that they could not think about any other areas.

4.5 Results pertaining to the proposition 3:

Questions were posed to the South African and Chinese sample sets with a view to obtain information on challenges to Chinese multinationals. In addition, questions were posed as a way to set the tone for the discussion and enable the interviewees to freely share their thoughts and understanding of the matter. Respondents were explained that questions were looking at challenges and not at the threats.

4.5.1 Challenges in the business practices.

South African respondents are of the view that there are challenges in business practices for Chinese Multinationals. Pakamile Pongwana of ICASA states that “I think there is also cultural issues. Culturally Chinese have set minds, loyalty etc. our younger generation doesn’t believe much in loyalty, and they want to just move on”. Sherhaad Kajee of Cell C states that “Over the last two years’ biggest challenge for them is conforming to rules and regulations to be listed on foreign stock exchange. If you now want to be a subcontractor to one of the supplier, there is enormous paper work. It is a big challenge for them. It is a new way of doing business and over the top for us. But our point of reference is western world according to King Commission etc. They have difficulties in conforming to Western regulations especially related to security in IT sector”. Maria Pienaar of Cell C states that “For South African businesses to effectively utilize Chinese vendors or any other vendors you have to understand cultural nuances”. Clive Cheetham of Vodacom states that “Strong corporate governance is there in large organizations. This a challenge for them.”

The South African respondent interviews identified two main challenges regarding the challenges in business practice. They are

- a) Cultural differences between Chinese personnel and local personnel
- b) Lack of local knowledge and conforming to local regulations

However, Chinese MNCs do not believe they are any major challenges. Ravi Sowki of ZTE states that “Definitely there are cultural differences. But the Chinese are very willing to adapt to other cultures. It is a small challenge with attitude and willingness to work. Definitely there is a better understanding of local environment etc. ZTE have been here for

a long time. They understand the regulations. ZTE is not any different from Ericsson or NSN.”

These challenges are analysed in detail in Chapter 5. These challenges have negative impact on operator’s perception of Chinese MNCs.

The general conclusion is that there are challenges in the business practices of the Chinese multinationals in South African telecommunications industry.

4.5.2 Challenges in the business strategies

South African respondents are of the view that there are challenges in business strategies of Chinese Multinationals. Sherhaad Kajee of Cell C states that “They have not invested in fixed presence in the country. There is continuous change of management. People come for short period i.e two years and move to another destination. Their strategy is grab market and sell products.” Themba Zotwane of MTN states that “They are using SA as a training ground. They have offices. But not branded. They keep low profile when it comes to branding. They don’t show their presence. But they are there. They have very big office, but you don’t see signage”. Clive Cheetham of Vodacom states that “Other challenge we have seen is that they come in with any cost to win business. Come with initial low capex costs, but opex costs in year 3&4 are setup in such a way, that it is at high cost”. Satish Ajodha states that “Biggest challenge the industry faces is that the Chinese vendors as market entrant comes with the lowest prices and once they have the market share will increase the prices”.

The South African respondent interviews identified two main challenges regarding the challenges in business strategies. They are

- a) Lack of long term plans in the country.
- b) Initial low capex costs to get market share and higher operational costs

These challenges are analysed in detail in Chapter 5. These challenges impact on customer perception of Chinese MNCs.

Chinese respondents did not identify any challenges in the business strategies,

The general conclusion is that there are challenges in the business strategies of the Chinese multinationals in South African telecommunications industry.

4.5.3 Challenges in the financing & investment

South African respondents are of the view that there are challenges in financing and investment of Chinese Multinationals. Pakamile Pongwana of ICASA states that “Operators may become captive to financing”. Mxolisi Msutwana of Mitsubishi Hitachi states that “Taking strategic hold is their corporate strategy”. Kuben Ramsamy of Vodacom states that “Stranglehold is very valid point. Because their technology architecture is superior. They have already got a blue print”.

South African respondent interviews identified one main challenge regarding the challenges in financing and investment. It is

- a) Perception of stranglehold and vendor locking on local telecommunications.

However, Chinese respondents strongly disputed this view and expressed following views. Jack Zhang of Huawei states that “I think it is normal for a managed service. It is not risky. We are only technology provider. We are not holding any data”. Fu Zhen of ZTE states that “We are only viewed as pipe for Telecoms. So operators should be more concerned about the IT vendors. Especially Cisco”.

This challenge is analysed in detail in Chapter 5. This challenge impact on customer perception of Chinese MNCs.

The general conclusion is that there are challenges in the financing and investment of the Chinese multinationals in South African telecommunications industry.

4.5.4 Challenges in the CSR

South African respondents have already identified the absence of tangible CSR programs in section 4.4.4. Themba Zotwane of MTN states that “They are completely absent in CSR.”

However, Chinese respondents believe that communications about their CSR efforts is their biggest challenge. Jacky Zhang of Huawei states that “Biggest challenge is also communications”. Jessica Jiang of ZTE states that “Communications is the main issue”.

The respondent interviews identified one main challenge regarding the challenges in Corporate Social responsibility. It is

- a) Communication about CSR programs initiated by Chinese MNCs.

This challenge is analysed in detail in Chapter 5. This challenge impact on customer perception of Chinese MNCs.

The general conclusion is that there are challenges in the corporate social responsibility of the Chinese multinationals in South African telecommunications industry.

4.5.5 Challenges in the R&D and Technology

South African respondents have identified challenges in the R&D of Chinese MNCs. Maria Pienaar of Cell C states that “Biggest reason why lots of MNCs fail is the inability to commercialize the R&D and come up with new business models.” Wellington Sibande from Vodacom states that “They can solve lots of problems in the continent. Use technology to solve problems such as Ebola and terrorism etc.”. Mohamed Adamjee of Cell C states that “They need to have R&D centres in the places where operators are to understand the local needs.” Ruben Ramsamy of Vodacom states that “Doing smart cities in China is not of value to us. We need to resolve water and electricity problems in our cities and townships. Focus of the R&D should be geared towards what does the South African market place require and will be able to provide”.

On the other hand, ZTE believes that they are meeting local requirements in technology by leveraging R&D. Ravi Sowki of ZTE states that “There are lots of research done for local requirements. Many of the products have been redesigned or modified for local requirements”.

The South African respondent interviews identified one main challenge regarding the challenges in R&D and Technology. It is

- a) Commercialize the R&D for local requirements and new Telco models

This challenge is analysed in detail in Chapter 5. This challenge impact customer perception of Chinese MNCs.

The general conclusion is that there are challenges in the R&D and technology of the Chinese multinationals in South African telecommunications industry.

4.5.6 Challenges in the competition

South African respondents identified one challenge in the competition between Huawei and ZTE. Ubendra Naidoo of Telkom states that “It will be a challenge to manage both vendors as they don’t necessarily want to work together. Huawei may not even agree to swap out any equipment to ZTE”. Satish Ajodha states that “Both vendors are highly competitive. Once at Cell C personnel from both of them were sitting in same service centre not talking to each other to solve problem. This is not between both companies. It is more human and sociological problem. We cannot have two vendors providing services and not talking to each other. It will impact systems”.

The respondent interviews identified one challenge regarding the challenges in competition of the Chinese multinationals. It is

- a) Chinese competitors working together

This challenge is further discussed in Chapter 5.

The general conclusion is that there are challenges in the competition of the Chinese multinationals in South African telecommunications industry.

4.5.7 Question: Are there are any other areas of challenges

All the respondents answered that they could not think about any other areas.

4.6 Conclusion of the presentation of the results

According to South African respondents the role of the Chinese MNCs in SA telecommunication industry has both positive and negative aspects. Chinese respondents while highlighting positive aspects, did not provide any negative aspects. On the whole all the respondents see the role of Chinese MNCs as positive.

On the question of opportunities, both South African and Chinese respondents believe that there are opportunities for Chinese MNCs based on their strengths. In the case of some of the opportunities such as competitive pricing, there is an overwhelming consensus among the respondents.

On the question of challenges, South African respondents identified significant number of challenges. However, Chinese MNCs only identified one challenge which is communications about their CSR efforts.

The interview feedback and opinions from both South African and Chinese sample sets have presented several conclusions pertaining to the main problem of this study and the three propositions.

It is important to underscore the fact that all the interviewees were current or former representatives of South African telecommunications or Chinese multinationals. Although there were confidentiality limitations on the respondents due the corporate affiliation, interview discussions were open and provided valuable insights.

The results gathered from respondents has in the case of proposition 1 easily identifiable dominant aspects. However, in the case of proposition 2 and 3 dominant opportunities and challenges were not easily identifiable.

CHAPTER 5. ANALYSIS OF THE RESULTS

5.1 Introduction

The results of the research are based on the findings made in the interviews. These results including the positive and negative aspects of the role of the Chinese multinationals and opportunities and challenges for the Chinese multinationals are analysed in detail. The interpretation of results is compared to and contrasted with the various points presented in the literature review. The results of the tests of the propositions are discussed and commented upon.

5.2 Demographic profile of the respondents

A total of 16 interviews, with 18 interviewees, were conducted over a period of five weeks in Johannesburg and Pretoria, South Africa. The selection criteria of the persons interviewed for South African sample set was mainly to identify individuals with a good understanding of the South African Telecommunications industry and who have interacted with Chinese multinationals at various levels. The selection criteria of the persons interviewed for Chinese sample set was to identify individuals who represented the Chinese multinationals.

5.3 Main problem discussion

The feedback from the interviews related to the main problem of the study, analysing the role of the Chinese multinationals in the South African Telecommunications industry and the opportunities and challenges for the Chinese Multinationals were presented in the Chapter 4. The conclusion from the received feedback, apart from setting clear examples of positive and negative role of Chinese multinationals is that, overall, the role of the Chinese Multinationals has positive effects on the South African Telecommunications industry.

The interview process, similar to literature review, identified positive aspects and negative aspects in the role.

The South African sample set and Chinese sample set has given several opportunities and challenges for Chinese Multinationals in the South African Telecommunications industry,

5.4 Analysis pertaining to Proposition 1:

The information gathered in the literature review, along with the feedback from interviews generally accept that the role of the Chinese multinationals is overall positive. The feedback from the interviews also show that there are positive aspects and negative aspects.

Before concluding and presenting the relevant recommendations, it is important to point out that the conclusions relate only to Chinese multinationals in South African Telecommunications industry.

5.4.1 Positive aspects

Positive aspects in the role of Chinese multinationals in South African telecommunications industry are as follows

- a) Chinese multinationals are providing competitive pricing
- b) Chinese MNCs are providing high quality network technology to operators.
- c) Total customer orientation including meeting delivery timelines.

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a) Chinese multinationals are providing competitive pricing

South African sample set is of the view that the traditional Western vendors such as Nokia Siemens, Ericsson, Alcatel and Motorola were very rigid in their pricing. Furthermore, their pricing was complex and the western vendors became complacent in their approach to operators. Traditional vendors thought that they had strangle hold on SA telecommunications. Steven Boiles from Econet wireless states “Contrast to traditional vendors. They were extremely rigid. Cannot change pricing structure. European centric”. Satish Ajodha states “Let us look into the history of Telecommunications vendors in this

country. Primary suppliers were Ericsson and Nokia and a lesser extent Motorola. They very much cornered the market and were making good margins. There was no leverage to the operators”.

On the other hand, Chinese MNCs have brought affordable pricing to SA telecommunications. Chinese MNCs are providing flexible and adaptable pricing models. In addition, Chinese MNCs have given the leverage on pricing back to SA operators. Themba Zotwane of MTN states “10 years ago we had only Ericsson. They (Chinese MNCs) came and diluted the influence of Ericsson”. Chinese MNCs were able to provide competitive pricing due to their low manufacturing costs and logistics costs.

b) Chinese MNCs are providing high quality network technology to operators

Chinese MNCs are providing better quality network technology to operators than the traditional MNCs. During the period of traditional MNCs, the service levels were deteriorating. One example was at Cell C in 2005 and 2006, core network data base system supplied by Nokia Siemens was constantly failing. It was replaced by Huawei and the system has been stable for nearly 7 years. Ubendra Naidoo of Telkom states “building a robust network which can be monetised quickly”.

The view expressed by South African sample set is only applicable to telecommunications sector and to business products and services and not applicable to consumer products such as cell phones.

This element is partially in contradiction with the views expressed in literature review. Literature review indicated in some cases, Chinese MNCs dump low quality products in Africa. However, it must be noted that the study was only limited to Chinese MNCs in SA telecommunications.

c) Total customer orientation

South African sample set believe that Chinese MNCs are very much customer oriented. This view was strongly stressed by Huawei and comes strongly in Tao and Chunbo (2015) as the guiding philosophy of Ren Zheng Fei the founder of Huawei who ingrained customer centricity deeply in the minds of its employees.

South African sample set believe that Chinese MNCs utilise their immense resources and R&D to resolve issues and deliver products and services in time. Pieter Welgemoed of CSG international says “They always have the answer of yes we can. When we (Respondent used to work for Huawei) go to the meeting with Alan (Former Cell C CEO), Alan wants this or that to be done and the Chinese President will say yes to the customer and then we go back and figure it out”. Themba Zotwane says “The way they react to problems compared to Ericsson. Chinese send truckloads of people to provide speedy resolution. They prioritise”. Total customer orientation gives Chinese MNCs competitive advantage over other rivals.

d) Financing

South African sample set who get finance from Chinese MNCs believe that financing is a positive element. Financing is further discussed in proposition 2 and 3.

In summary positive aspects illustrate that Chinese MNCs competitive advantage is not just limited to competitive pricing. Chinese MNCs also provide high quality technology and total customer orientation. This may be limited to Chinese MNCs in telecommunications. However, as Huawei has shown, in matter of time Chinese MNCs may also achieve the same positive aspects in their role in other industries.

5.4.2 Negative aspects

Negative aspects in the role of Chinese Multinationals in South African telecommunications industry.

- a) Large Chinese contingent within Chinese MNCs.
- b) Lack of Knowledge transfer/IP from Chinese MNC to operator.

a) Large Chinese contingent within Chinese MNCs

South African sample set believe that Chinese MNCs have disproportionately large number of Chinese personnel. Sherhaad Kajee of Cell C called it “Too many Chinese”. Wellington Sibande says “Disproportionately high Chinese nationals”.

Huawei's response to this challenge is that they have localised the positions and there are Chinese who are on short term contracts in projects and go back when the projects are complete. Huawei stated that they have close to 1000 staff and 60% of them are blacks including in the management. It is possible that as SA operators only have the day to day experience with Chinese project teams and thus see a large Chinese contingent.

b) *Lack of Knowledge transfer/IP from Chinese MNC to operator*

SA sample set believe that there is a lack of knowledge transfer from Chinese MNC to the operator. Wellington Sibande states that "They don't invest a lot on skills transfer".

However, this element must be qualified as some of the respondents believe that this has improved over the years. Again both Huawei and ZTE asserted that this is not the case. Jacky Zhang of Huawei states that "Huawei is very clear about our responsibility to local staff and society. Every year we send local staff to China to Huawei universities get training and get Huawei certificate which is like Cisco certificate".

From the discussions with South African management and Chinese management it is also apparent that there is a difference of opinion on what constitutes knowledge transfer. South African management sees the knowledge transfer as onsite knowledge transfer and whereas Chinese management sees knowledge transfer as off-site training.

5.4.3 Proposition 1- Analysis of interview aspects and literature review points

In total four positive aspects were identified. They are

- a) Competitive pricing
- b) High quality technology
- c) Total customer orientation
- d) Financing

Of these positive aspects competitive pricing and financing have been highlighted in the published literature. High quality technology and total customer orientation were not identified in the published literature.

In total, two negative aspects were identified. They are

- a) Large Chinese contingent within Chinese MNCs
- b) Lack of knowledge transfer.

These two negative aspects were highlighted in the published literature. However, it is possible that these two negative aspects are historical tendencies which are undergoing transformation as per Chinese MNCs. Some in the South African sample set pointed out that these are not applicable to Huawei and only applicable to ZTE. These aspects may also differ from operator to operator and management to management. Schalk Visser of Cell C states “Again 3-4 years ago Chinese Multinationals were not forthcoming with respect to knowledge transfer and intellectual property. But things have improved by better management of Chinese vendors. They have done more training of local staff. They are reaching the levels of Ericsson and NSN. Again Huawei is much ahead of ZTE”.

In summary four aspects identified in the literature review are present in the respondent interviews. In addition, two new aspects were identified from the respondent interviews. All of these new aspects are positive aspects.

5.5 Analysis pertaining to Proposition 2

5.5.1 *Opportunities in the business practices*

Opportunities are as follows;

- a) High productivity of the Chinese personnel including strong work ethics.
- b) Highly qualified Chinese personnel
- c) Learning from South African business practices

These are opportunities for Chinese MNCs as opportunities (a) and (b) give Chinese MNCs competitive advantage over other MNCs. Opportunity (c) help Chinese MNCs to develop their business practices to meet Western standards and thereby penetrate Western markets.

a) High productivity of the Chinese personnel including strong work ethics

South African telecommunications industry needs highly productive personnel especially when their margins are low. South African sample set believe that Chinese personnel are highly productive and thus meet their need. Chinese personnel have strong work ethics and work long hours to deliver effective service and quick solutions to customers. This provides Chinese MNCs an opportunity compared to the traditional MNCs. They also believe that Chinese personnel don't have a work- life balance as they are staying here as single person and in hostel type of environments and does not have the work-life limitations of the South African personnel. Ruben Ramsamy of Vodacom states that "Their work ethics from productivity perspective second to none. They don't have families here. They can put all the effort into work". Chinese MNCs specifically Huawei believe that the strong work ethics of the Chinese personnel is due to company culture of loyalty and dedication. They also stated that Chinese employees work more hours in South Africa than in China. Jiang states that "But here they are working longer. 10 hours and so on."

High productivity of the Chinese personnel gives them a competitive advantage over traditional (western) vendors. In addition, it also gives them preference over South African personnel. South African telecommunications management in general believe that handing over network and in some cases IT operations to Chinese MNCs, provide them reliable and available service.

This opportunity was not identified in literature review.

b) Highly qualified Chinese personnel

Both sample sets believe that the Chinese personnel are highly qualified. Chinese personnel have University degrees and post graduate degrees. Mxolisi Msutwana of Mitsubishi Hitachi states that "Chinese engineers are highly skilled, highly qualified. They have Masters in Engineering compared to SA engineers." Respondents attribute this to their technical knowledge and their technical skills and understanding of operator's business. This attribute was affirmed by Chinese MNCs. High qualifications and comparatively low cost of Chinese personnel give them major advantage over western vendors and as such considered an opportunity for Chinese MNCs. This opportunity is

contradictory to literature which picture Chinese labour as primarily low educated and even in the past called them “prison gangs”.

c) Learning from South African business practices

Some in the South African sample set believe that the superior SA business practices have provided Chinese MNCs an opportunity to develop their business practices and to become competitive in the First world. Huawei who has been in SA for the past ten years has developed its business practices enormously in the ten years. I have personally observed this development. I project managed Huawei in their first project in South Africa, when they deployed the mobile backhaul at Cell C in 2005. At that time their document standards were abhorrent and their practices including language skills were much to be desired. But they worked with South African personnel, learnt from them and now their business practices are equal to if not better than western vendors. Schalk Visser of Cell C states that “When they started in South Africa they followed business practices as they saw fit. But once they started dealing with major operators like Vodacom they improved a lot as Vodacom has high level of standards”.

d) Hierarchical management style facilitating delivery

South African sample set believe that Chinese management structure is hierarchical and bordering on military style management. They believe that there is a total subordination to the leadership. This is contrary to Western or SA management style. However, South African sample set believe that this management style is actually facilitating the speedy delivery of products and services. Clive Cheetham of Vodacom states that “Their hierarchical way of doing business. They engage from government down to the bottom”. Steven Boiles of Econet Wireless states that “Hierarchical approach is effective in delivering”. Chinese MNCs recognise that their management structure is hierarchical. However, they also state that there is complete independence and free thinking in implementation phase.

5.5.2 Opportunities in the business strategies

There is divided opinion whether Chinese multinationals are using South Africa as a gateway to rest of Africa. There is one opinion that Chinese multinationals obtain dominant market share in South Africa and then use it showcase to rest of Africa.

Opportunities identified are

- a) SA as gateway for operations in Africa
- b) Local Partnerships

These are opportunities for Chinese MNCs as they can leverage the superior infra structure, finance sector of South Africa to expand into rest of Africa. These opportunities also benefit South Africa.

a) SA as a gateway for operations in Africa

According to Southafrica.info (2014) South African government has stated that Chinese Multinationals should utilise SA as a gateway to rest of Africa. However, many of the SA respondents do not think that Chinese MNCs are utilising SA as a gateway to rest of Africa. Some of the SA respondents believe that Chinese MNCs have obtained market share in South Africa and used that to showcase to rest of Africa. Ubendra Naidoo of Telkom states that “At the initial entry to the market they used SA as a gateway”. Wellington Sibande of Vodacom states that “Chinese MNCs are not using SA as a gateway to rest of Africa”.

Lack of permanent presence in South Africa is also pointed out as an evidence that SA is not the gateway to rest of Africa. They also point to the fact that the decision making is still done in Shenzhen where Huawei and ZTE have their headquarters. Steven Boiles of Econet wireless states that “I don’t think Chinese MNCs see SA as a hub to expand into rest of Africa”. But SA respondents believe that SA can be used as a gateway to rest of Africa.

Huawei believes that SA has an important role in Africa and considers as one the 10 most important countries in the world. ZTE uses Dubai as the headquarters for its operations in Africa. Jacky Zhang of Huawei states that “We think SA is a very important strategic market

in global market”. Chinese MNCs think that SA as an important market as opposed to SA government’s view of gateway.

b) Local Partnerships

South African sample set believe that Chinese MNCs should have local partnership not only in telecommunications sector, but also in other sectors. As the dividing line between telecommunications and other sectors is becoming blurred local partnerships are seen as an opportunity for Chinese MNCs and local industries. Mohamed Adamjee of Cell C states that “They need to have right partnerships with local partners to do things like testing here”. Local partnerships are an opportunity for Chinese MNCs to establish strong roots in this country.

5.5.3 Opportunities in the financing & investment

Opportunities identified are

- a) Good terms offered to Operators
- b) Strong Bank/Vendor relationship between Chinese banks and vendors.

These are opportunities for Chinese MNCs as they provide competitive advantage over other MNCs.

a) Good terms offered to Operators

As stated earlier South African industry in many cases are looking for financing to implement capital projects such as new network infrastructure. South African sample set believe that Chinese MNCs offer good terms in financing. This has been highly emphasised by respondents in procurement functions within the operators. Chinese MNCs have offered very good terms for financing including allowing 30% of the total financing to buy non-Chinese products. Cell C has already utilised some of the financing from Chinese MNCs to buy products such as cabling from non-Chinese vendors. This financing arrangements are of value to the operators who are having low margins and cash crunch

and an opportunity for the Chinese MNCs. Sherhaad Kajee of Cell C states that “They are prepared to give big loans. There are cheap loan, long term loans very flexible”. Huawei has spent 10 million dollars this year (up to July) on procurement in South Africa. ZTE has spent 0.5 billion dollars in investment in South Africa since 2009.

b) Strong Bank/Vendor relationship between Chinese banks and vendors

South African sample set believe that there is strong relationship between Chinese banks and Chinese vendors. In addition, they believe there are strong relationship between Chinese government and Chinese MNCs in telecommunications. Maria Pienaar of Cell C states that “Cause of their strength is the support given by the government and banks in China”. This was already alluded in the literature review. The relationship between Chinese MNCs and Chinese government has been also subject to scrutiny by U.S House of Representatives(Rogers & Ruppertsberger, 2012). The relationship between Chinese MNCs and Chinese government is debatable. Both Huawei and ZTE leaderships have their roots in Chinese People Liberation Army. So too are the leaders of Western MNCs. Many of them are former U.S or UK army leaders. It is clear that Chinese government support the Chinese MNCs and encourage them. But U.S and British governments also provide the same support to their MNCs. However in spite of negative interest rates in Europe and Japan, Western MNCs are unable to leverage the negative interest rates to increase their market share in South Africa.

Huawei accedes that there is strong relationship with Chinese banks. But Chinese MNCs deny that they have strong relationship with the Chinese government. South African sample set also believe that the strong relationship between Chinese banks and Chinese MNCs may not be much different from the relationship between Western MNCs and Western Banks. Main difference is that Chinese banks have plenty of cash available due to rapid economic growth. Furthermore, Western Banks have rigid and stringent rules in financing and processes are lengthy. Comparatively Chinese banks are very quick in supporting the Chinese Banks. Chinese Banks are also funding the managed services of Chinese MNCs in South African telecommunications industry. Funding and support given by Chinese Banks provide Chinese MNCs a huge opportunity in South African telecommunications to provide financing and at speed compared to Western MNCs.

5.5.4 Opportunities in the CSR.

Opportunity identified is

- a) Authentic CSR efforts to benefit the host country.

This is an opportunity for Chinese MNCs to build their brand and establish themselves as a long term stakeholder in the development of the country

a) Authentic CSR efforts to benefit the host country

South African sample set believe that Chinese MNCs are not involved in authentic CSR efforts. Many of them think that the current efforts are marketing than CSR efforts. They also think that there are no authentic CSR efforts by any other MNCs in South Africa. This is an opportunity for Chinese MNCs to take the lead and implement authentic CSR efforts to benefit South Africa. Wellington Sibande of Vodacom states that “Firstly burning points in the country are education, health and economy. They are contributing to economy. Compare to Vodacom foundation. They are involved in various efforts and campaign. I would like to see them (Chinese MNCs) more engaged with government and local communities rather than just throwing money into marketing initiatives”. Chinese MNCs stated that they are involved in South African government’s broad band roll out effort. However, this role is that of a follower than a leader.

5.5.5 Opportunities in the Technology/R&D

Opportunities identified are

- a) State of art network technology
- b) Speedy solutions
- c) Innovations

These are opportunities for Chinese MNCs as they provide them competitive advantage.

a) State of art network technology

South African sample set believe that R&D efforts of Chinese MNCs gives them an opportunity to provide State of art network technology to SA operators. Themba Zotwane

of MTN states that “I think from R&D there are lots of opportunities for them. They started as followers and quickly became leaders using their R&D”. According to Huawei, 20% of their revenue is spent on R&D. This is in line with the strategy of Huawei founder Rei Zhang Fei (Tao & Chunbo, 2015). Similarly, ZTE spends 10-15% of their revenue on R&D. 50% of Huawei staff are R&D staff. Similarly, ZTE has 30% R&D staff complement.

b) Speedy solutions

South African sample set believe that superior R&D allows both Huawei and ZTE to provide speedy solutions to their issues. They believe that Chinese have an opportunity compared to other MNCs in resolving operational issues rapidly leveraging their R&D. Kuben Ramsamy of Vodacom states that “They have superior technology. Quick to deploy.” Chinese MNCs specifically Huawei has R&D centres in China, India and even in Botswana. As such the turnaround time from issue identification to issue resolution is much less than Western MNCs.

c) Innovations

Some of the South African sample set and Chinese respondents believe that superior R&D gives Chinese MNCs opportunity to come with innovations. However other in South African sample set believe that these innovations are not real innovations and are only improvements to current telco models or architecture. Huawei points out the ability of their 2G and 3G base stations to use the same base station as an innovation. Furthermore, Huawei is already working on 5G. ZTE stated that whenever International telecommunication bodies have come up with new standards, they have always implemented them speedily.

5.5.6 Opportunities in the Competitions

South African sample set believe that the competition between Chinese MNCs benefits the operators. They also believe the competition between Huawei and ZTE is much more intense than the competition with Western MNCs. However, some of the respondents believe that Huawei and ZTE are not in direct competition with each other and they have carved up the network

Opportunity identified is

- a) Competitive pricing to operators.

This is an opportunity for Chinese MNCs as the competition among them allow them to provide competitive pricing and keep out traditional MNCs.

a) Competitive pricing to operators

South African sample set believe that the competition between the Chinese MNCs give the operators leverage to get better pricing from either of them. Over the years Cell C has utilised the competition to obtain good pricing at request for proposal stage. Schalk Visser of Cell C states that “There is real competition between Huawei and ZTE.” The competition between the Chinese MNCs and the resultant competitive pricing has created a “two horse” race and has undermined the Western MNCs.

5.5.7 Proposition 2- Analysis of opportunities and literature review points

In all eleven opportunities were identified from the interviews. They are

- a) High productivity of the Chinese personnel including strong work ethics
- b) Highly qualified Chinese personnel
- c) Learning from South African business practices
- d) SA as a gateway for operations in Africa
- e) Local partnerships
- f) Good financial terms offered to vendors
- g) Strong bank/vendor relationship between Chinese banks and vendors
- h) Authentic CSR efforts to benefit the host country
- i) State of art network technology
- j) Speedy solutions
- k) Competitive pricing to operators

Out of these eleven opportunities good financial terms offered to vendors, Strong bank/vendor relationship between Chinese banks and vendors are opportunities identified in the published literature. Other nine opportunities were not identified in the published literature.

In summary two opportunities identified in the literature review are present in the respondent interviews. In addition, nine new opportunities were identified from the respondent interviews.

5.6 Analysis pertaining to Proposition 3:

5.6.1 Challenges in the business practices

Challenges identified are

- a) Cultural differences between Chinese personnel and local personnel
- b) Lack of local knowledge and conforming to local regulations
- c) Language skills and communications

These are challenges for Chinese MNCs as they impact their operational efficiency. Vodacom recently signed a managed services agreement with Ericsson. Ericsson will manage Vodacom's network operations (Asha, 2015). Ericsson was selected ahead of other MNCs including Huawei and ZTE. Vodacom does not depend on financing from Chinese Banks

a) Cultural differences between Chinese personnel and local personnel

South African sample set believe that the cultural differences between Chinese personnel and local personnel is a challenge for Chinese MNCs at the work place. Mohamed Adamjee of Cell C states that "Culture is very difficult to adapt. More and more leave Chinese companies to work in South African companies. Huawei will continuously face a challenge in adapting to South African culture'. Some of them believe measures can be taken to integrate both personnel by having regular team building or similar exercises. Government has embarked on an exercise to teach mandarin at schools. This effort could also go long way in the integration. Some of the South African sample set also believe that the cultural differences have narrowed in the recent years and they are more pronounced in ZTE.

b) Lack of local knowledge and conforming to local regulations

South African sample set believe that the Chinese MNCs still have a lack of local knowledge and thereby are still having difficulties in conforming to local regulations. This is mainly due to the view that China is still behind South Africa in many regulations including telecommunications, health and safety and environmental regulations. Many SA regulations are derived from Western regulations. Sherhaad Kajee of Cell C states that “Our point reference in western world according to King commission etc. They have difficulties in conforming to Western regulations”. But some of SA respondents believe that Chinese MNCs have caught up in the recent years.

c) Language skills and communications

South African sample set believe that language skills and communications of Chinese personnel are to be further developed. This is more pronounced in ZTE than Huawei. Themba Zotwane of MTN states that “One of the challenges has always been language” However Chinese MNCs acknowledge that the communications is a challenge and has to be improved. They also believe that the language skills have improved over the years. Language skill and communications is not considered a major challenge.

5.6.2 Challenges in the business strategies

Challenges identified are

- a) Initial low capex costs to get market share and higher operational costs
- b) Lack of long term plans in the country

These are challenges for Chinese MNCs as they create uncertainty and negative perception around Chinese MNCs.

a) Initial low capex costs to get market share and higher operational costs

South African sample set believe that Chinese MNCs come with a strategy of low initial capex costs to capture SA market and operational costs increase over the years. Satish

Ajodha states that “But the Chinese vendors came in at low cost and were able achieve the market share. There is a question of the Chinese vendors increasing the prices later”. Clive Cheetham of Vodacom states that “Challenge we have seen is that they come with any cost to win business. Come with initial low capex costs, but operational costs in year 3&4 are setup in such a way, that it is a high cost.” However, the respondents from Cell C believe that they have managed this strategy over the years by signing framework agreements for four years at the onset of contract. Schalk Visser of Cell C states that “It is important not to have very short term contracts as we don’t know the prices at the end of short term contracts. We negotiate 4 year contracts with them including prices and support. At the end of four years we still have two strong vendors in competition”.

Generally, all the MNCs adopt a strategy to have low initial capex costs and higher operational costs over the years, the difference being that Chinese MNCs come with much lower initial capex costs than other MNCs and reach the similar operational costs over the years. From request for tender (RFP) or request for proposal (RFP) point of view, Chinese MNCs look very attractive compared to other MNCs.

b) Lack of long term plans in the country

South African sample set felt that Chinese MNCs do not have long term plans in the country. They do not have fixed presence in terms of fixed assets and according to one respondent their financial operations for SA is based in Mauritius.

Sherhaad Kajee of Cell C states that “They have not invested in fixed presence in the country. There is continuous change of management. People come for a short period “. Themba Zotwane of MTN states that “They have offices. But not branded”

Some South African respondents also felt that central control and decision making is still done from Shenzhen in China where headquarters of Chinese MNCs is situated. Ubendra Naidoo of Telkom states that “But where the money is involved or business decisions they refer to Shenzhen”. However, Huawei stated that their decision making is similar to any MNCs such as Vodafone.

5.6.3 Challenges in the financing & investment

Challenge identified is

- a) Perception of stranglehold and vendor locking on local telecommunications.

This is a challenge for Chinese MNC as there is a negative perception and could be perceived as a potential risk to the country.

a) Perception of stranglehold and vendor locking on SA telecommunications

Many of the South African sample set believe that Chinese MNCs have a stranglehold on SA telecommunications. Pakamile Pongwana of ICASA states that “Operators may become captive to financing”. Mxolisi Msutwana of Mitsubishi Hitachi states that “Taking strategic hold is their strategy”. Chinese MNCs are providing managed services to most of the operators. Some of the South African sample set believe that Chinese MNCs know more about operator networks than operators themselves. They also believe that the R&D of the Chinese MNCs allow them to have an overall view of products and services launched by operators and operational efficiency of all the operators. Again Mxolisi Msutwana states that “Those companies are the only ones with the holistic picture of all the networks”. Other in South African sample set do not agree with this view. They believe that the operator’s management should be well aware of their own network.

Both Huawei and ZTE believe that they do not having a stranglehold on SA telecommunications. ZTE stated that they are only offering a network which is a pipe and IT has the content. As such IT service providers have more control over the operators.

However overall there is a strong perception within the SA telecommunications industry that Chinese MNCs have a stranglehold on SA telecommunications achieved through financing. This perception is a challenge for Chinese MNCs as it could lead to lack of trust between the operators and Chinese MNCs.

5.6.4 Challenges in the CSR

Challenge identified is

- a) Communication about CSR programs initiated by Chinese MNCs.

a) Communication about CSR programs initiated by Chinese MNCs

As discussed in proposition 2, many of the South African sample set believe that Chinese MNCs have not embarked on any tangible CSR programs. Many of them believe that Chinese MNCs have only involved in marketing or cost of sales efforts. However, both Huawei and ZTE are of the view that they are involved in tangible CSR efforts and communications about their CSR efforts is one of the challenges and has to be addressed. Jacky Zhang of Huawei States that “Biggest challenge is also communications”

5.6.5 Challenges in the R&D and Technology

Challenge identified is

a) Commercialize the R&D for local requirements and new Telco models.

This is a serious challenge for Chinese MNCs to continue to maintain the market dominance. It is not sufficient to develop existing products and services or meet international standards. Nokia Siemens is an example of the consequence of the failure to commercialise the R&D.

a) Commercialize the R&D for local requirements and new Telco models

South African sample set believe that Chinese MNCs have leveraged their R&D to improve or customise current products and services. Some of them believe that Chinese MNCs cannot continue to maintain their market leadership in the world (Huawei being number 1 and ZTE number 5) without commercialising their R&D or coming up with new telco or business models. They cite the example of other MNCs such as Nokia which have spent enormous efforts on R&D but without new models they fell behind other MNCs. Chinese MNCs too can meet the same fate. Maria Pienaar of Cell C states that “Most successful companies spend lot on R&D. But they could never commercialise that R&D. Nokia had one of the biggest R&Ds”.

Others in South African sample set are of the view that the R&D of Chinese MNCs should be used to address local requirements such as using telecommunications to fight crime. Kuben Ramsamy of Vodacom states that “Doing smart cities is not of value to us. We need to resolve water and electricity problems in our cities and townships. Focus of the R&D

should be geared towards what does the South African market place require and will be able to provide”. ZTE expressed the view that they utilise the R&D to meet the International Telecommunications Union (ITU)’s standards and requirements.

One historical example of the failure of Chinese R&D to commercialize is the discovery of gun powder. Chinese discovered gun powder, but failed to commercialize. Western powers commercialized gun powder and occupied China.

5.6.6 Challenges in the competition

Challenge identified is

- a) Chinese competitors working together.

This is a challenge for Chinese MNCs as operators in some cases are frustrated with the inability of the Chinese MNCs to work together.

- a) Chinese competitors working together*

South African sample set believe that the competition between the two Chinese MNCs is fierce and stronger than the competition with other MNCs. They cited experiences where getting them to work together in interoperability efforts have been very difficult. Satish Ajodha states that “Once at Cell C personnel from both of them were sitting in the same service centre not talking to each other to solve problem”. Ubendra Naidoo of Telkom states that “When we swapping out RAN at Cell C, both vendors were in the same room and not willing to talk to each other”. Chinese MNCs stated that this challenge is being addressed.

5.6.7 Proposition 3- Analysis of challenges and points from literature review

In total eight challenges were identified from the interviews. They are

- a) Cultural differences between Chinese personnel and local personnel
- b) Lack of local knowledge and conforming to local regulations.

- c) Initial low capex costs to get market share and higher operations costs
- d) Lack of long term plans in the country
- e) Perception of stranglehold and vendor locking on local telecommunications
- f) Communication about CSR programs initiated by Chinese MNCs
- g) Commercialize the R&D for local requirements and new telco models
- h) Chinese competitors working together.

Cultural differences between Chinese personnel and local personnel, lack of local knowledge and conforming to local regulations are challenges which were highlighted in the published literature. Other challenges were not highlighted in the published literature. Language skills and communications was a challenge constantly highlighted in the published literature. However, the interviewees considered that language skills and communications (project and operational) of both Huawei and ZTE have much improved over the years. They considered that the language skills of Huawei are as good as western MNCs.

In summary two points identified in the literature review are present in the respondent interviews. In addition, six new challenges were identified from the respondent interviews.

5.7 Conclusion of the Analysis

The respondent interviews contained a great deal more information on the role of Chinese MNCs in SA telecommunications than the literature review and can be a great source of information to strategic decision makers in the country in telecommunications field and other sectors. It could also be a valuable source of information for the decision makers in the African continent.

The interview feedback dealing with the main problem, combined with trends described in the literature review were discussed first. The conclusion from the interview feedback is that, in general, the role of Chinese MNCs in SA telecommunications is overall positive.

The analysis of the aspects developed from the interviews related to the Proposition 1 and the trends identified in the literature review showing positive and negative aspects in the role of Chinese multinationals in South African telecommunications, concluded that the proposition is correct and valid.

The analysis of the opportunities developed from the interviews related to the Proposition 2 and the trends identified in the literature review showing the opportunities for Chinese multinationals in South African telecommunications, concluded that the proposition is correct and valid.

Similarly, the analysis of the challenges developed from the interviews related to the Proposition 3 and the trends identified in the literature review showing the challenges for Chinese multinationals in South African telecommunications, concluded that the proposition is correct and valid.

CHAPTER 6: CONCLUSIONS & RECOMMENDATIONS

5.8 Introduction

This chapter begins with the conclusions and findings derived from the study. Suggested recommendations are then made to the stakeholders identified in the beginning of the research under the heading “Significance of the research”, based on the results that have been derived from the research done. Finally, this chapter is concluded with suggestions for further research. These suggestions were inspired by the process carried out in the research and the further questions that arose while conducting the research. These questions went beyond the scope of study of this research topic.

5.9 Conclusions and findings of the study

5.9.1 *Proposition 1:*

The proposition states that “Role of the Chinese multinationals in South African telecommunications has both positive and negative aspects. Empirical research of the role of multinationals is required to fully understand these aspects”.

This proposition has been qualitatively tested. The study shows that there are positive and negative aspects for the local industry. Study shows that overall the role of the Chinese multinationals in South African telecommunications industry is positive.

Positive aspects identified are

- a) Chinese multinationals are providing competitive pricing to operators.
- b) Chinese MNCs are providing high quality network technology to the operators.
- c) Chinese MNCs provide total customer orientation including meeting delivery timelines.
- d) Chinese MNCs provide affordable financing to operators who need financing.

Both South African sample set and Chinese sample set agreed on these aspects.

Negative aspects identified by South African sample set are

- a) There is a large Chinese contingent within Chinese MNCs
- b) Lack of knowledge transfer/IP from Chinese MNC to operator

Chinese sample set did not identify any negative aspects.

As discussed in Chapter 5, positive aspects such as competitive pricing and financing were highlighted in published literature. Similarly, negative aspects such as lack knowledge transfer and large Chinese contingent within Chinese MNCs were also highlighted in the published literature. High quality technology and total customer orientation are new findings. In total there are two new findings.

Given the above data, it is deemed safe to conclude that Proposition 1 is valid and true.

5.9.2 Proposition 2:

Proposition states that “Literature review indicates that there are opportunities for Chinese Multinationals in South African Telecommunications. Further empirical research is required to expand on these opportunities and crystallise the opportunities”.

Proposition was qualitatively tested. The study shows that there are areas of opportunities for Chinese MNCS in South African Telecommunications industry.

Opportunities in business practices are

- a) High productivity of the Chinese personnel including strong work ethics
- b) Highly qualified Chinese personnel
- c) Learning from South African business practices

These are opportunities for Chinese MNCs as opportunities (a) and (b) give Chinese MNCs competitive advantage over other MNCs. Opportunity (c) help Chinese MNCs to develop their business practices to meet Western standards and thereby penetrate Western markets.

Opportunities in the business strategies are

- a) SA as a hub for operations in Southern Africa
- b) Local partnerships

These are opportunities for Chinese MNCs as they can leverage the superior infrastructure, finance sector of South Africa to expand into rest of Africa. These opportunities also benefit South Africa.

Opportunities in the financing and investment are

- a) Good terms offered to operators
- b) Strong bank/vendor relationship between Chinese banks and vendors

These are opportunities for Chinese MNCs as they provide competitive advantage over other MNCs.

Opportunities in the Corporate Social Responsibility (CSR) are

- a) Authentic CSR efforts to benefit the host country

This is an opportunity for Chinese MNCs to build their brand and establish themselves as a long term stakeholder in the development of the country.

Opportunities in the Technology/R&D are

- a) State of art network technology
- b) Speedy solutions

These are opportunities for Chinese MNCs as they provide them competitive advantage.

Opportunities in the competitions are

- a) Competitive pricing to operators

This is an opportunity for Chinese MNCs as the competition among them allow them to provide competitive pricing and keep out traditional MNCs.

As discussed in Chapter 5, opportunities such as good financial terms being offered to operators and strong bank/vendor relationship between Chinese banks and vendors were

highlighted in the published literature. However, other opportunities such as SA as a gateway for operations into Africa, local partnerships, highly qualified Chinese personnel, authentic CSR efforts to benefit the host country, state of art network technology, speedy solutions, high network quality to operators, high productivity of the Chinese personnel including strong work ethics, learning from South African business practices and competitive pricing to operators (due to strong competition between Huawei and ZTE) were not highlighted in the published literature. Therefore, later opportunities which are nine in total are new findings.

Given the above data, it deemed safe to conclude that the Proposition 2 is valid and true.

5.9.3 Proposition 3:

Proposition states that “Literature review indicates that there are challenges for Chinese Multinationals in South African Telecommunications. Further empirical research is required to expand on these challenges and crystallise the challenges”

Proposition was qualitatively tested. The study shows that there are areas of challenges for Chinese MNCS in South African Telecommunications industry.

Challenges in business practices are

- a) Cultural differences between Chinese personnel and local personnel
- b) Lack of local knowledge and conforming to local regulations

Chinese MNCs believe that these challenges have been minimised over the period of time. These are challenges for Chinese MNCs as they impact their operational efficiency.

Challenges in the business strategies are

- a) Initial low capex cost to get market share and higher operational costs
- b) Lack of long term plans in the country

Chinese MNCs states that they have long term plans in the country.

These are challenges for Chinese MNCs as they create uncertainty and negative perception around Chinese MNCs.

Challenges in the financing and investment are

- a) Perception of stranglehold and vendor locking on local telecommunications

Chinese MNCs do not agree with this challenge.

This is a challenge for Chinese MNC as there is a negative perception and could be perceived as a potential risk to the country.

Challenges in the Corporate Social Responsibility (CSR) are

- a) Communications about CSR programs initiated by Chinese MNCs.

Chinese MNCs believe that they are embarking on CSR efforts. They also state that communication to the public is a serious challenge.

Challenges in the Technology/R&D are

- a) Commercialize the R&D for local requirements and new Telco models

This is a serious challenge for Chinese MNCs to continue to maintain the market dominance. It is not sufficient to develop existing products and services or meet international standards.

Challenges in the competition are

- a) Chinese competitors working together.

This is a challenge for Chinese MNCs as operators in some cases are frustrated with the inability of the Chinese MNCs to work together.

In summary there are eight challenges. As discussed in Chapter 5, challenges such as cultural differences between Chinese personnel and local personnel, lack of local knowledge and conforming to local regulations are challenges highlighted in the published literature. However, challenges such as Initial low capex costs to get market share and higher operations costs, lack of long term plans in the country, perception of stranglehold and vendor locking on local telecommunications, Communications about CSR programs initiated by Chinese MNCs, Commercialise the R&D for local requirements and new telco

models and Chinese competitors working together were not highlighted in the literature review and are new findings. In total there are six new findings.

Given the above data, it is deemed safe to conclude that the Proposition 3 is valid and true.

5.10 Recommendations

The policy makers identified under “significance of the study” are policy makers and decision makers in South African industry and government who are instrumental in formulating telecommunications and other industry strategies and are also responsible for the implementation of the strategies. In addition, the study was to benefit South African project managers who implement the projects with Chinese MNCs.

The significance of the study was that the decision makers and project managers are faced with many challenges in the formulation and implementation of various industry strategies with Chinese MNCs. As the relationship between China and South Africa grow rapidly in trade and finance, South African decision makers and project managers will have to deal Chinese MNCs virtually at every industry level and thus face many challenges. At the same time the technologies in various industries are evolving rapidly. This study was meant to identify the challenges faced in the Telecommunications industry in managing Chinese MNCs.

There are organisations in South Africa specifically in Telecommunication industry who have managed Chinese MNCs for nearly ten years. An example is Cell C where I worked during this period. Cell C has limited financial leverage over Chinese MNCs. But I believe that Cell C has very skilfully managed the Chinese MNCs Huawei and ZTE. In addition, I believe that the interaction between Chinese MNCs and South African Telecommunications industry has benefitted Chinese MNCs in the fields of technology and business practices.

5.10.1 Recommendations are

South African government to formulate a comprehensive Information and Communications (ICT) strategy in cooperation with South African industry. Currently there are few isolated government strategies such as broadband which is to roll out broadband throughout the country. But what is required is a comprehensive and integrated ICT strategy. Managing Chinese MNCs or any other MNCs in ICT should be an integral part of that strategy. This strategy will give direction to the current and future technological developments in the country.

Government to leverage its strong relationship with its counterpart in China to encourage Chinese MNCs to contribute to the development of the country in the form of corporate social responsibility efforts. China is South Africa's largest trade partner as described in the literature review. In addition, China and South Africa are members of BRICS. One example of a developmental effort could be to assist the universities in the current crisis.

Government should take much more proactive effort in ensuring that the knowledge transfers and intellectual property rights are managed effectively. These issues cannot be left to the realm of individual operator. Operators have made progress in managing these issues. However, as operators become more and more reliant on Chinese financing their leverage on knowledge transfer and intellectual property rights will decrease. As such it is important for the government to take leading role in managing these issues as they pose a great risk for the country. As increasing number of SA telecommunications operators are signing up managed services agreements with Chinese MNCs, there will be less development of professional and highly skilled SA technical staff unless the knowledge transfer is addressed urgently.

South African government has expressed in many occasions that Chinese MNCs should utilise SA as a gateway to rest of Africa. However, the research study has shown that in practice this is not happening. Chinese MNCs do not have long terms plans in the country and are utilising SA as a market or showcase to rest of Africa. Strategic decision making is taken in Shenzhen. This may be happening even in the case of other MNCs. South African government should ensure that all the MNCs including Chinese MNCs utilise SA as a gateway to rest of Africa and have long term plans for the country.

Currently Chinese MNCs want SA operators to pay for their purchases in U.S dollars. As Renminbi is now part of IMF basket of master currencies, it is natural for the operators to pay in renminbi. This should benefit the operators by reducing the risk associated with foreign exchange fluctuations.

South African project managers to be objective in the project management of projects with Chinese MNCs. South African project managers have been working for many years with traditional multinationals and expect same practices from Chinese multinationals. As such most of the project managers initially tend to be subjective and then become objective as they understand the Chinese MNCs. But then valuable time is lost. This study could go a long way in helping South African project managers to understand Chinese multinationals and be objective in the project managing them.

Recommendations to Chinese MNCs are to consider this report to utilise the opportunities and meet the challenges. Chinese MNCs may not agree with the challenges. But they are generally the views of SA Execs and Managers.

5.11 Suggestions for further research

This research study advances itself to further research. Study for further research include:

- A qualitative study on the impact of Chinese MNCs on South African industry in general.
- A quantitative study on the contribution of Information and Communication Technology to the development of the country.
- A qualitative study on the overall growth of Chinese MNCs worldwide and South Africa in particular.
- A qualitative study on the role of Chinese MNCs in African telecommunications.

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APPENDIX A: Interview Protocol

Thanks you for agreeing to participate in this research. As I explained telephonically, I am looking at the current role of the Chinese multinationals in South African telecommunications industry.

My research focusses on the opportunities and challenges for the Chinese multinationals in the South African telecommunications industry. Objective of this interview is to collect data based on the answers given by respondents (such as yourself), who are involved in decision making in telecommunications industry.

Although the completed research falls under the ownership of the Wits Business School the research findings will be public domain and as such, you as a respondent, will therefore have full access to the consolidated findings, should you wish.

DETAILS OF THE RESPONDENT

Respondent's Name:

Title:

Job Description:

Organisation:

Contact Telephone Number:

Email Address:

Date:

Time:

Questions

1. What do you think about the role of Chinese multinationals in South African telecommunications industry?

Probe questions

Is it positive or negative, Why

2. What are the opportunities and challenges in the business practices of the Chinese multinationals in South African telecommunications industry?

Probe questions

Opportunities, Challenges, Why, which practices

3. What are the opportunities and challenges in the business strategies of the Chinese multinationals in South African telecommunications industry?

Probe questions

Opportunities, Challenges, Why, which strategies

4. What are the opportunities and challenges in the financing and investment of the Chinese multinationals in South African telecommunications industry?

Probe questions

Nature of investments, financing, opportunities, challenges, Why, which investments

5. What are the opportunities and challenges in the CSRs of the Chinese multinationals in South African telecommunications industry?

Probe questions

Opportunities, Challenges, Why, which CSRs

6. What are the opportunities and challenges in the Technology/R&D of the Chinese multinationals in South African telecommunications industry?

Probe questions

Opportunities, Challenges, Why, which Technology/R&D

7. What are the opportunities and challenges in the Competitions of the Chinese multinationals in South African telecommunications industry?

Probe questions

Opportunities, Challenges, Why, which competitions

8. Are there any comments you wish to make regarding the activities of Chinese multinationals in South African telecommunications industry? If so please expand.

Close of interview

Thank you very much for your time.

Your contribution has been very valuable.

May I contact you again for clarification or further discussion should this be necessary?

Yes or No

Thank you again

Good bye.

APPENDIX B: Chinese investments in Africa

Country	Industry
South Africa	Energy, technology, mining and metallurgy, electronics, telecommunication , textiles, commercial banking, transportation, manufacturing, construction and automobiles.
Zambia	Mining, construction, energy and manufacturing.
Angola	Oil industry, railway, mining, roads, infrastructure and telecommunications
Nigeria	Oil industry, construction, roads, power plants, railways, retail trade, manufacturing, telecommunications and services.
Kenya	Economic infrastructure, construction, manufacturing, tourism and agriculture
Ghana	Manufacturing, trade, construction, telecommunications.

Table 3 - sourced from (Baah & Jauch, 2009).

APPENDIX C: Chinese investments in South Africa

Number of firms	Present	Possible Entrants	Withdrawals	Total	Percent
Mining	6	3	1	10	13
Consumer goods	2	0	2	4	5
Materials processing	5	1	1	7	9
Automobiles	4	1	1	6	8
Electrical/electric Machinery	6	0	1	7	9
Other machinery	3	3	5	11	14
Infrastructure and construction	11	4	4	19	25
Finance and business services	6	0	1	7	9
Consumer services	4	0	0	4	5
IT/Media	0	0	1	1	1

Unknown	0	0	2	2	3
Total	47	12	19	77	100

Table 4 – sourced from (Gelb, 2010).

APPENDIX D: Consistency Matrix

Table 5: Consistency Matrix

The main problem is to analyse the role and identify the opportunities and challenges for Chinese multinationals (MNCs) in the South African telecommunications industry.					
Sub-problem	Literature Review	Hypotheses or Propositions or Research questions	Source of data	Type of data	Analysis
The first sub-problem is to analyse the role of Chinese MNCs in South African telecommunications industry.	Sachs, Brautigam, Raine, Yan & Yudong, Sachs & Woo, Parmentola, KPMG, Silk, Institute, Alden & Davies, Luo, Xue & Han, Deng, Adam & Gangnes & Shachmurove, Child & Rodriguez, Gullen & Garcia-Canal, Monitor, Jin Yuan, Menzies, Tull, Manning, Gill & Reilly, Baah & Jauch, Giralt, Sandrey, Grimm & Yejov & Ross, MOFCOM, Gelb, Obelholzer & Cullen & Adendorff, SAPA, Huawei, Low, UNCTAD.	The literature reviews indicates that the role of Chinese Multinationals in global, African and South African context has both positive and negative effects on local industry. Further empirical research is required to understand the full impact of Chinese MNCs on South African telecommunications industry	1. What do you think about the role of Chinese multinationals in South African telecommunications industry? Probe questions Is it positive or negative, Why ?	Nominal, Ordinal	Thematic Analysis, Content Analysis

<p>The second sub-problem is to identify the opportunities for Chinese Multinationals in the South African telecommunications industry</p>	<p>Cooke, Cell C. OECD, Hout & Michael, Kuada, My broadband, Nolan & Zhang, Alden & Davies, Jiang, Huawei, fan, Decremer & Zhang, Low, Taka, Porter & Kramer, Economist.</p>	<p>Literature review indicates that there are areas of opportunities for Chinese Multinationals in South African Telecommunications. Further empirical research is required to expand on these areas of opportunities and crystallise the opportunities</p>	<ol style="list-style-type: none"> 1. What are the opportunities and challenges in the business practices of the Chinese multinationals in South African telecommunications industry? Probe questions Opportunities, Challenges, Why, which practices 2. What are the opportunities and challenges in the business strategies of the Chinese multinationals in South African telecommunications industry? Probe questions Opportunities, Challenges, Why, which strategies 3. What are the opportunities and challenges in the financing and investment of the Chinese multinationals in South African telecommunications industry? Probe questions Nature of investments, financing, opportunities, challenges, Why, which investments 4. What are the opportunities and challenges in the CSRs of the Chinese multinationals in South African telecommunications industry? Probe questions Opportunities, Challenges, Why, which CSRs 5. What are the opportunities and challenges in the Technology/R&D of the 	<p>Nominal, Ordinal</p>	<p>Thematic Analysis, Content Analysis</p>
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			<p>Chinese multinationals in South African telecommunications industry?</p> <p>Probe questions</p> <p>Opportunities, Challenges, Why, which Technology/R&D</p> <p>6. What are the opportunities and challenges in the Competitions of the Chinese multinationals in South African telecommunications industry?</p> <p>Probe questions</p> <p>Opportunities, Challenges, Why, which competitions</p>		
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<p>The third sub-problem is to identify the challenges for Chinese Multinationals in the South African telecommunications industry</p>	<p>Raine, Atkins, Brautigam, Abrami & Kirby & Mcfalan, Shu, Zhang.</p>	<p>Literature review indicates that there are areas of challenges for Chinese Multinationals in South African Telecommunications. Further empirical research is required to expand on these areas of challenges and crystallise the challenges.</p>	<ol style="list-style-type: none"> 1. What are the opportunities and challenges in the business practices of the Chinese multinationals in South African telecommunications industry? Probe questions Opportunities, Challenges, Why, which practices 2. What are the opportunities and challenges in the business strategies of the Chinese multinationals in South African telecommunications industry? Probe questions Opportunities, Challenges, Why, which strategies 3. What are the opportunities and challenges in the financing and investment of the Chinese multinationals in South African telecommunications industry? Probe questions Nature of investments, financing, opportunities, challenges, Why, which investments 4. What are the opportunities and challenges in the CSRs of the Chinese multinationals in South African telecommunications industry? Probe questions Opportunities, Challenges, Why, which CSRs 5. What are the opportunities and challenges in the Technology/R&D of the 	<p>Nominal, Ordinal</p>	<p>Thematic Analysis, Content Analysis</p>
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			<p>Chinese multinationals in South African telecommunications industry?</p> <p>Probe questions</p> <p>Opportunities, Challenges, Why, which Technology/R&D</p> <p>6. What are the opportunities and challenges in the Competitions of the Chinese multinationals in South African telecommunications industry?</p> <p>Probe questions</p> <p>Opportunities, Challenges, Why, which competitions</p>		
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