

The impact of ict on export

[Technology](#), [Innovation](#)



The world has increasingly recognized the importance of information, communication and technology in commercial services. Consequently, trade in services has been growing at an average of 7.9% annually since 1980 (World Trade Organization, 2010). The growth of exports around the globe is faster in services than in goods. Unlike merchandised exports which has had net deficits, service exports in Kenya has had overall net surplus.

Information and communication technology (ICT) sector has become extremely important for any economy. This is as a result of increased innovation and growth in the ICT (Valle and Yobesia, 2009). M-Pesa was developed by means of R&D involving basic research, following which the money transfer service was developed and successfully marketed domestically and internationally. The distinctive features that classify M-Pesa as a technology-push innovation include the fact that it was an idea from an R&D team that initiated the development of a new product based on their knowledge of users' needs (Meng, 2011). In addition, potential users were not involved in providing input regarding the product specification and design. Hence, the innovation compulsion arose from R&D with the market being viewed as a receptacle for the product. Although Kenya has great potentials to export services, most exporters of services do not have prior objectives when entering the foreign market (Dihel, Fernandes, Gicho, Kashangaki&Strychacz, 2011).

International trade plays a key role in economic growth and development. Previously, research in international trade focused on macro-data because of unavailability of micro-data in transactions. But current firm level data is available in several countries and this makes it possible to carry out firm

level analysis in explaining trade. At the firm level we can obtain information related to trade policy because the firm is a unit of an economy that engages in International trade. This study looks at international trade from a micro perspective. It examines the factors that determine performance and duration of export for service exporting firms in Kenya¹. Existing literature portrays exporters as large, more productive, more skill intensive, more capital intensive, and pay higher wages than non-exporters. These stylized facts commenced with Bernard and Jensen (1995) and a number of studies continue to affirm and elucidate them. Salient to this study is creation of stylized facts on service exporters and exporter survival.

A few studies have been carried out on ICT and exports. These studies indicated that ICT significantly contributes to exports. However, these studies were centered on developed countries and other countries other than Kenya. Therefore, the findings of such studies cannot be applied to Kenya. This is because the market size and marketing integration of developed countries are significantly different from that of a developing country, of which Kenya is a developing country. Furthermore, these studies were not based on firm level analysis.

The current study seeks to establish the effect of ICT on exports in Kenya. The study will be based on a firm level analysis. Firm-level studies relating to export performance have the advantage of modeling firm-specific effects on exports. Therefore, the current study will address the contextual and empirical gaps in literature.

Mpesa

Safaricom and its mobile innovation M-pesa is applied in many countries to transfer money across mobile subscribers and transact other business services such as paying bills. M-Pesa has been described as the most successful and largest mobile money transfer service in the world (Mas & Morawczynski, 2009). The origins of M-Pesa are traced back to the conceptualization of a money transfer service by researchers for meeting the needs of the unbanked population. This idea was developed by a team of researchers and Safaricom, an affiliate of United Kingdom's (UK) Vodafone Group following which the M-Pesa service was introduced to the market. The development of M-Pesa involved intensive investment in R&D for designing and developing the money transfer software (Shaikh & Karjaluo, 2014). Additionally, Safaricom engaged in extensive market creation activities aimed at pushing the uptake of the M-Pesa service in both rural and urban areas. M-Pesa can be termed as a financial inclusion breakthrough in SSA. The potential applications of M-Pesa have evolved over time to include formal banking transactions.

This implies that potential applications of the money transfer services were largely unknown during its development. M-Pesa services have been exported to Tanzania, Uganda, Rwanda, India, Egypt, Afghanistan, Romania and Albania. From the outset, scientific and technological skills were applied for inventing the mobile money transfer service. Yet, the specific need for mobile money transfer services did not exist because the market had not identified such a need. Hence, the success of M-Pesa is attributed to encouraging a latent need by providing the market with an innovative product (Mas & Morawczynski, 2009).

The Kenya National Bureau of Statistics released the 2016 economic survey highlights today. According to the report the Kenya's GDP expanded by 5.6% in 2015 as compared to 5.3% in 2014. This expansion was as a result of significant growth in some key sectors among them agriculture, construction, real estate and financial and insurance. Some sectors such as ICT, mining and trade witnessed declines. The ICT sector was a significant contributor of growth in 2014 with an expansion of 13.4% from 12.3% in 2013. However, the sector's growth slowed to 7.3 per cent in 2015. The value of ICT goods exported increased by 64.1 per cent to KSh 2.1 billion in 2015 compared to KSh 1.3 billion in 2014. The value of ICT equipment imports increased by 23.1 per cent to KSh 51.3 billion in 2015.

Exports in Kenya

Exports in Kenya decreased to 49310.12 Million KES in December from 50875 Million KES in November of 2017. Exports in Kenya averaged 28779 Million KES from 1998 until 2017, reaching an all-time high of 59405 Million KES in July of 2015 and a record low of 9007 Million KES in January of 1999. Agricultural products are central to Kenya's export industry with horticultural and tea being the most important. Other export items include textiles, coffee, tobacco, iron and steel products, petroleum products, cement. Kenya main exports partners are UK, Netherlands, Uganda, Tanzania, United States and Pakistan.

Kenya's exports to the region dropped by the largest margin in three years in the third quarter of last year, to \$275.7 million from \$380.3 million in the first nine months of 2015. All countries in the region, with the exception of

the Democratic Republic of Congo, cut their uptake of imports from Kenya (Kenya National Bureau of Statistics, 2017). While the drop in exports has been attributed to encroachment in key market segments by Chinese products, local factors like taxation, new competing industries in export markets and instability in South Sudan have contributed to the trade downturn. Goods from China, some of dubious quality, have flooded the market, making the Asian giant the biggest exporter to the region.

Kenya relies on Africa to absorb more than 40 per cent of its manufactured exports. The data shows a 30 per cent drop in exports to Uganda to \$152. 1 million in the period under review, from \$228. 18 million over the same period in 2015. “ Africa remained the leading destination of the country’s exports, accounting for 40. 6 per cent of the total during the review period. Within Africa, Uganda was the largest market for Kenya’s exports, accounting for 11. 3 per cent of total export earnings, followed by Tanzania, which accounted for 5 per cent of total export earnings in the third quarter of 2016,”(Kenya National Bureau of Statistics, 2017).

Kenya’s export has been volatile with a consistent decreasing trend in the last 5 years. In 2005 exports in Kenya was 28. 5 which declined to 22. 9 the following year. 2007 saw a further decrease in exports to 21. 9, however, there was a slight increase in 2008 which was 22. 6. The period 2009 to 2012 was characterized by fluctuations in exports which stood at 22. 22 as at 2012. However, the exports of Kenya has been on the decline from 2012 which stood at 14. 6 in 2016 (World Bank, 2017). Thus, representing a

significant decline in the exports of Kenya which is a source of concern to the government and other stakeholders.

Statement of the Problem

The Kenyan ICT services cluster can be traced back to the late 1990s but has only really developed over the past 8 years. One of the catalysts was the implementation of 4 submarine fiber optic cables in Mombasa between 2009 and 2012 which brought high-speed internet to the country (Rubadiri, 2012).

Exports serve as a great source of economic growth and development in a country. High exports lead to favorable balance of trade which is recommended for the wellbeing of any economy. However, low exports bring about unfavorable balance of trade for a country. Despite the expansion of services sector, Kenya has not been able to increase its share of global services trade in the last fifteen years (WTO, 2010). Not many studies have been done on this to find out the reasons why. However, a survey carried out in 1994 found out that some of the factors that hinder exports of services in Kenya include: high ports tariffs, border insecurity, bureaucracy, convertibility of local currencies, technological constraints, government controls and political interference, discriminatory legislation and weak regional integration.

After more than a decade this has not improved yet. A study by Dihelet al. (2011) found that exports of services in Kenya still face a lot of challenges and are restricted by barriers in communication. Due to lack of awareness about the importance of services trade in developing countries, there has

been lack of consistency in formulating relevant services trade policy; thus this prevents potential investors in investing in this sector (Mkapo, 2013). In the long run, it hinders service trade despite the absence of restrictions to market access. Clearly, there seems to be a challenge in exporting services from Kenya.

The link between ICT and exporting has received little attention. Similarly, previous studies were not based on firm level analysis. The current study seeks to establish the effect of M-Pesa on exports in Kenya. The study will be based on a firm level analysis. Firm-level studies relating to export performance have the advantage of modeling firm-specific effects on exports.

Objectives of the Study

The general objective of the study is to establish the effect of ICT on Exports in the Manufacturing Sector of Kenya.

Specific Objectives

The specific objectives of the study will be:

To determine the impact of M-Pesa on exports in the Manufacturing Sector of Kenya.

To determine the mechanisms through which M-Pesa affects Exports Manufacturing Sector of Kenya.

To determine whether the impact of Mpesa on exports differ with firm size in the Manufacturing Sector of Kenya.

Significance of the Study

The proposed study will be of significance in many ways. First, the Government of Kenya, it will assist policy makers in formulation of policies relating to exports and trade in general. Secondly, the study will enlighten the society effect of ICT on export in Kenya. Lastly, the study will lay foundation for academicians who may want to carry out further research in similar field.

Organization of the Study

The research proposal will be structured as follows: the current chapter provides the research background, statement of the problem, research objectives, and significance of the study and organization of the study. Chapter two provides the literature review. It will look at the theoretical review and empirical review of the study.