

# **FACTORS AFFECTING THE IMPLEMENTATION OF ONE STOP BORDER POST STRATEGY: A CASE STUDY OF THE MALABA BORDER**

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## **ABSTRACT**

The aim of this study will be to assess the implementation of one stop border post strategy and its impact on the Kenyan border. The study will be guided by four specific objectives; to assess the effect of technology, infrastructure, stakeholders cooperation and capacity of the personnel on the implementation of one stop border post strategy at the Malaba border in Kenya. The study was guided by diffusion of innovation theory, stakeholder theory and theory of planned behavior. The study used a descriptive research design. The target population of this study was the staff of the KRA, Immigration, KEBS, Port Health, KENTRADE, Department of Veterinary (DVS), Forestry, Pharmacy And Poisons Board (PPB), AFFA (Agricultural fish and food authority), EAC, Dairy Board and Border Police and Intelligence. The study employed stratified random sampling technique in coming up with a sample size of 59 respondents which was 30% of the total 197 staff targeted. Simple random sampling was used to select respondents from each strata. The study employed a questionnaire to collect primary data. The questionnaire comprised of both open and close-ended questions. The study generated both qualitative and quantitative data. Quantitative data was coded and entered into Statistical Packages for Social Scientists (SPSS Version 20.0) and

analyzed using descriptive statistics. Quantitative data was presented in tables and graphs and explanation was presented in prose. The study also found that use technology such as automated risk analysis, data base automation and use of border management information system significantly influenced the implementation of OSBP strategy. The study established that significant investment had been made on roads and buildings to ensure the border has sufficient infrastructural capacity to allow for the implementation of One Stop Border Post Strategy since infrastructure influences implementation of OSBP strategy. The study established that multiple agencies required to work harmoniously to implement the strategy since collaboration was found to be an impediment in successful implementation of the OSBP strategy. The study further established employees capacity influenced implementation of OSBP strategy. The study found out that improvement in the efficiency of customs services and other government agencies through avoiding unnecessary duplication of clearance procedures and increasing cooperation has been a major impact of implementation of OSBPs.

***Key Words:*** *one-stop border post strategy, technology, infrastructure, stakeholder's cooperation, capacity of the personnel*

## **INTRODUCTION**

Trade and Transport costs in East Africa (EA) are amongst the highest in the world largely attributed to bureaucracies in documentation of trade in goods, uncoordinated goods inspection processes by border agencies as well as the multiple steps involved in the clearance of goods across borders (World Bank, 2016). These impede the region's ability to

trade competitively in the international market. In particular, the time taken to get to and from the ports to land locked countries is singled out as a major factor (Wheelen & Hunger, 2008). International borders impose barriers to trade in terms of additional costs such as tariffs, time costs due to border delays and costs associated with country differences such as language, the legal system or culture. Additionally, international border management is becoming more complex with the multiplicity of state agencies involved in their management as goods moving across international borders are subject to duties, taxes and other regulatory controls by national customs administrations and other agencies present at the frontier; these include those with a responsibility for agriculture, food safety, health, immigration, policing and standards (Wheelen & Hunger, 2008).

According to the World Bank (2016), in Africa 25% of border delays are caused by infrastructure while 75% are caused by poor trade facilitation. These delays and bureaucracy make African transport costs to be on average, three times more expensive than those of South America and five times more expensive than Asian ones: these impacts negatively on the competitiveness of African goods on the international markets, (International Charity for Africa (icafrica), 2010).

According to the Kieck (2010) many countries are realizing the benefits of less restriction to cross border trade and thus are pushing for less restrictive borders and adopting a strategy known as the One Stop Border Post (OSBP) as a mechanism to improve the movement of goods and services across shared international borders. Where implemented, this strategy has been found to have both economic and customs law enforcement benefits. However, to succeed its implementation required the support of all border management stakeholders.

Regional cooperation and integration took a new dimension following the end of the Cold War and was spurred on by the successful story of the European Union. The One Stop Border Post initiative which was developed under the rubric of the World Trade Organization and treaties of the World Customs Organization through the Revised Kyoto Convention has been forwarded as one of the various instruments for trade facilitation. Crucially, the concept was meant to improve efficiency in border management by reducing cargo inspections, rationalizing import, export and transit documents (WDB, 2013). This would result in reduced border clearance/transit times, reduced transport costs as well as greater reliability / predictability in the supply chain. One stop and joint control arrangements have been applied in Western Europe since the early 1960s. More recently, the Common Market of the Southern Cone (Mercosur) countries concluded the Recife Agreement on integrated controls for application at their shared borders. As part of this Agreement, consensus was reached on 16 border points where integrated controls should be applied (MERCOSUR, 2013).

While African continent has experienced rapid growth in trade over decade, trade within African countries has been slow due to low level of trade facilitation and industrialization. Many impediments to growth and competitive in Africa are carried by time lost at the port border and clear points along transit corridors. Trade within Africa countries accounts for

10% of the global world trade, this way below other countries such as America at 22% and Asia at 50% (WTO, 2015).

Factor mobility across the borders and the coordination of policies would facilitate economic growth and greater welfare for participating countries thereby reducing poverty and solving unemployment (Kieck, 2010). Member states are to initiate measures for trade facilitation programmes such as promoting, developing and adopting common solutions to problems in trade facilitation and establishing joint programmes among member states for easier movement of goods and people. One such measure is the introduction of the One Stop Border Post system.

Border delays represent one of the remaining major non-tariff barriers in Africa for they impede the faster movement of goods and people across the continent. These delays curtail trade facilitation which research to date has identified as a solution to most economic ills bedeviling the Third World countries. In the Southern African Customs Union (SACU), the establishment of one stop border posts was identified as one of the priority issues of trade facilitation (NEPAD, 2017). In Southern Africa, a one stop arrangement was recently introduced at the Chirundu border post between Zambia and Zimbabwe, and Mozambique and South Africa have signed a one stop border post agreement and are working towards implementation (AfDB, 2012).

In the East African Community (EAC), progress has been made in establishing a one stop border post between Kenya and Uganda at Malaba. The main objective of the current EAC is to promote cooperation in “political, economic and social fields” by encouraging economic development (including trade liberalization, monetary and financial integration, the free movement of persons, capital, goods and services); science and technology (including infrastructure, health and education); as well as political and legal matters. It envisages deepening regional integration by establishing a customs union (CU). Common market, a monetary union and ultimately a political federation among the partner countries (LAC Treaty, 2001).

The launch of the EAC Customs Union in December 2004 marked the introduction of Common External tariffs and Internal tariffs for Extra regional imports and intra-regional trade, respectively. The EAC Customs Union will create a single market of over 90 million people and a combined GDP of around US\$30 billion. The main goals of the East African Community Customs Union are: Liberalizing intra-regional trade in goods on the basis of mutually beneficial trade arrangements among the Partner States; Promoting efficiency in production; Enhancing domestic, cross border trade and foreign investment; and Promoting economic development and diversification as well as industrialization (GoK, 2009).

This study focused on implementation of one stop border post and its impact on the Kenyan borders. The Malaba border post is one of the busiest and main gateways for both imported and exported goods between Kenya and Uganda. The border post receives heavy traffic flow of trucks, buses, small vehicles and is a key point on the northern corridor. There are well established government institutions that oversee the smooth flow of traffic and trade. The

border has river Malaba as a barrier separating the two countries. There is a railway line and road network connecting Uganda and Kenya. Other infrastructure available is the telecommunications, Posta and financial institutions. The financial services are provided by Stanbic and Barclays Banks, which are both in Malaba and Tororo towns. There is no forex bureau in Malaba. However, currency conversion is handled through the informal system of money changers who are registered by the local authorities (GoU, 2007).

### **Concept of One Stop Border Post**

The notion of the 'border' is central to the concept of statehood and state sovereignty. The border demarcates the zone in which a state exercises jurisdiction and this includes the development, application and enforcement of policies and laws. It defines states in legal and geographical terms (Ladley & Simmonds, 2007). The border also connects countries with each other and the effectiveness and smooth operation of these connections are central to the economic and social development of countries. At the same time, the protection of the border is essential for the protection of the state and its people and economy.

In the context of a developmental state, the border also has special significance (Aniszewski, 2009). The border and flows of people and goods across that border connect the state to economic opportunities through trade, tourism and foreign investment. At the same time, these flows also present risks. It has been recognized that the real difference with respect to success or failure in economic development is made by, amongst others, the creation of appropriate policy and legal frameworks that are enforced by a competent and effective state institutional infrastructure.

Increasingly, the attention is shifting to international 'coordination' of border activities, not only national coordination (Doyle, 2010). These activities include the establishment of one stop border posts between neighbouring countries and 'virtual integration' where border agencies of countries engage in the advance electronic transmission of data or, to prevent duplication, undertake inspections on behalf of each other through mutual recognition arrangements (Ladley & Simmonds, 2007). There is no single definition of what constitutes a one-stop border post. International examples highlight the several principal features.

Offices of both states are relocated in close proximity, necessitating only 'one stop' for border crossings. Secondly a control zone (or zones) is demarcated within which officers from both states conduct controls in terms of their respective laws. The control zone comprises offices, inspection areas and related facilities and is usually located within the national territory of only one state (Aniszewski, 2009). Thirdly immigration and import and export formalities are handled as a seamless transaction between the two countries. Inspections and searches of cargoes or vehicles are generally conducted in the presence of officers from both states.

The rationale for the establishment of one-stop border posts is clear in terms of both enforcement and economic benefits (Doyle, 2010). At the core of the one stop concept is the ability of border authorities from two countries to perform joint controls. This results in

improved enforcement efficiencies through cooperation, the sharing of intelligence and better resource utilization. In working side-by-side, cooperation is enhanced and communication is easier.

The concept also provides for the sharing of ideas, information and experiences (Ladley & Simmonds, 2007). By way of example, the one stop concept can be used to combat fraud by enabling the clearance of goods on the basis of a single customs declaration thereby preventing the substitution of one set of documents with another. The concept also enables the sharing of infrastructure and law enforcement assets, for example, by jointly using one scanner to examine containers. Cooperation with counterpart administrations, when implemented properly, does not weaken control rather it reinforces control (Aniszewski, 2009). Over time, joint controls enable customs administrations to better utilize personnel and resources. As trust is built between customs administrations, it may be possible to reduce personnel and rely to a greater extent on the counterpart administration.

### **Malaba Border**

Malaba is a border post for both road and rail transit between Kenya and Uganda. At Malaba, the two customs areas are just separated by a bridge. A USAID-funded rail OSBP is already operational at this crossing, and the World Bank is working toward upgrading the road crossing to a full-scale OSBP. Traffic is estimated at 200 heavy goods vehicles (HGVs) per direction per day, the highest volume at any crossing in the EAC (East African Community, 2011). Insufficient parking for waiting trucks is a major constraint, and a new two-lane bridge is also needed to improve traffic flow.

One Stop Border Posts (OSBPs) was envisioned to help the region to deal with smuggling activities at the border post this was happening through the transiting goods via the border post without paying import duties; the use of fake documents and false declarations and transiting goods. Before the implementation, smuggling was rampant resulting from the challenge of border delays. Notably implementation of the OSBP at Malaba has helped to reduce border delays and congestion through the introduction of a Single Window clearing system; this has led to the reduction of smuggling activities as well as improving border security (Nkwemu 2011). Before the implementation, the border point had poor infrastructure, the border facility has had over twenty Government agencies in total for both governments enforcing various pieces of legislation individually. The business community was legally compelled to comply with all the various pieces of legislation separately on both sides of the border. Considering that the requirements by both countries were largely the same, the processing of commercial and passenger traffic was repetitive and bureaucratic, resulting in inevitable delays, congestion and confusion within the border facility and surrounding areas and communities. OSBP has significantly reduced administration costs at the border post. The governments were experiencing some revenue losses due to unnecessary border delays. This has been enabled by the sharing of essential border equipments such as intrusive scanning machines, buildings, desks, printers and related office equipments. The implementation of OSBP has therefore strengthened the attainment of Kenya's overall trade

objective of increasing the rate of traffic flow across the border thereby improving border liberalisation.

The flagship project is Malaba on the Northern Corridor between Kenya and Uganda. OSBP operations have been introduced incrementally. At the beginning of 2012, the Malaba border post achieved a significant reduction in crossing time. Trucks loaded with goods that had been routinely taking over 48 hours dropped to less than six hours, and average border-crossing time dropped from 24 hours to 4 hours. This has resulted in the total savings generated by the improvement of the situation amounts to approximately US\$ 70 million per year and more trucks transporting goods through the border (World Bank, 2013).

It should be noted that this Malaba OSBP was created to OSBP to boot intra-regional trade and cohesion prominent element of African regional integration and economic development. Therefore, Malaba border seeks to address challenges related to the poor quality of trade related infrastructure and promote trade enhancement efforts making it easier for cross border trade in the region. Upon its implementation, this border post has been hailed for its advantages that include reducing time and number of process for passengers and commercial clearance at the border. This reduction on clearance time eventually leads to cost saving. Also the enhanced efficiency at the border has enhanced traffic flow through the boarder and thus increased revenue for the governments.

Despite the success, Malaba OSBP has seen a myriad of challenges. Delays may eventually result from the fact that the boarder post is only open from 8am to 5pm and thus may result in delays in cargo clearance (Buyonge & Kireeva, 2008). Another challenge at the border include in adequate skills by the staff at the border point. There is therefore need for training especially for the new staff. Also the border point is faced with system down time, inadequate office space on either side of the border for staff on each side. Further, OSPB has high costs associated such as infrastructural requirements, operational procedures and human resources (Buyonge & Kireeva 2008:43). Thus, the implementation of trade facilitation measures poses multiple demands on limited resources of developing countries. The major costs associated with implementing trade facilitation reforms include institutional costs, regulatory costs, training and education costs, equipment and infrastructure costs (World Bank, 2014).

Other challenges at Malaba OSBP include bureaucracy and rigidity on the part of the government. Disbursement of funds to the OSBP is heavily marred by bureaucratic pathology. The governments involved also heavily relies on international donors which actually enhance the dependency syndrome. Depending on international donors actually undermines national sovereignty in the sense that the country will bow to the conditions offered by the funders. Malaba border operations are also limited by severe challenges related to Information, Communication and Technology (ICT). During the initial phases, there was a severe challenge of poor internet connectivity. In the event of low Internet connectivity or power outage, there is huge traffic pile up as a result of slow clearance. Finally, both side party to OSBP experience lag in implementation of updated version of OSBP system leading to challenges related to the use of different customs clearance systems.

## **STATEMENT OF THE PROBLEM**

Malaba border has been criticized for delays of transit good, high cost of doing business and poor infrastructure. Also, other challenges include porosity, corruption, incompetence employees, delays in cargo and person clearance time, poor storage for goods, working environment for employees and loss of revenue (World Bank, 2013). This is said to emanate from smuggling activities at the border post this was happening through the transiting goods via the border post without paying import duties; the use of fake documents and false declarations and transiting goods (World Bank, 2013). One stop border post strategy is a new concept in Kenya that has been implemented in order to address traditional problems which acted as a barrier to international trade. There have been calls for expansion of the border post to cater for more efficient implementation of the project. According to (Crown Agents, 2014) the Malaba border post has been blamed for delays consequently resulting to congestion at the port of Mombasa. These delays have in the past led to strikes and go slows by transporters and clearing agents. The Malaba border needs to be widened and the Kenyan OSBP constructed to handle exports coming into the country (East Africa Customs, 2016). Mfunne (2015) conducted a study on customs trade facilitation at Zambia's Kasumbalesa border post. Further, Mureverwi (2015) conducted a study on effect of one stop border post strategy on Trade Facilitation in Southern Africa. Ndunda (2013) did a study to establish factors influencing implementation of one stop border post strategy at the Busia border. Based on the above review, little empirical inquiry have been undertaken on implementation of one stop border post strategy and its impact. This study therefore sought to fill the gap by assessing the implementation of one stop border post strategy and its impact on the Kenyan border. The study therefore sought to establish the effect of technology, infrastructure, stakeholders' cooperation and capacity of the personnel on the implementation of one stop border post strategy at the Malaba border, Kenya.

## **GENERAL OBJECTIVE**

The overall objective of this study was to assess the factors hat affect the implementation of one stop border post strategy and its impact on the Kenyan border.

## **SPECIFIC OBJECTIVES**

1. To assess the effect of technology on the implementation of one stop border post strategy at the Malaba border, Kenya.
2. To evaluate the effect of infrastructure on the implementation of one stop border post strategy at the Malaba border, Kenya.
3. To determine the effect of stakeholder's cooperation on the implementation of one stop border post strategy at the Malaba border, Kenya.
4. To establish the effect of capacity of the personnel on the implementation of one stop border post strategy at the Malaba border, Kenya.



## **THEORETICAL REVIEW**

### **Diffusion of Innovation Theory**

The theory of Diffusion of Innovations as described by Rogers (1995) is well known. Rogers describes diffusion of innovations as: “the process by which an innovation is communicated through certain channels over time among the members of social systems. It is a special type of communication, in that the messages are concerned with new ideas” (Rogers, 1995). Technology diffusion is an indispensable process through which technological potential of innovative activities can be actually turned into productivity. Various characteristics of the economic environment in which diffusion takes place may affect the pace of diffusion, while the diffusion itself may also have feedbacks on the environment. A decision not to adopt an innovation relates to the rejection of the available new idea. However, in order to explain the rate of adoption of innovations Rogers suggests measurement of the following perceived characteristics of innovations: relative advantage compatibility; complexity; trialability; and observability. Rogers (1995) postulated that the adoption of innovations is influenced by these five characteristics, and that they can explain the rate of technology adoption.

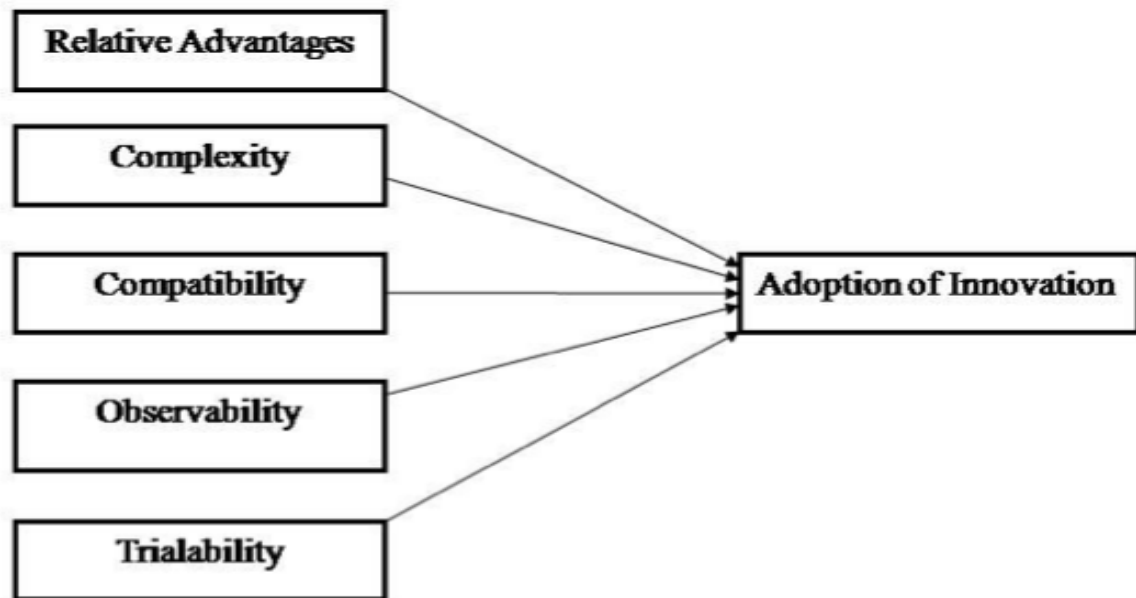
Cheung et al. (2000) defined complexity as the extent to which an innovation can be considered relatively difficult to understand and use. They found that complexity negatively influences the adoption of internet usage. Complexity is the opposite of ease of use. Ease of use refers to the extent to which mobile banking is perceived as easy to understand and operate. Lin, (2011) suggests that there is a strong impact of perceived ease of use of new technology on its adoption As banking services have very user friendly interfaces, users see them as easy to use, and hence to form positive attitudes towards them (Lin, 2011).

Observability of an innovation describes the extent to which an innovation is visible to the members of a social system, and the benefits can be easily observed and communicated (Rogers, 2003). Moore and Benbasat (1991) simplified the original construct by redefining observability into two constructs: visibility and result demonstrability. In the context of banking, observability is defined as the ability to access the banking services at any time and from any location without any delay or queue, and seeing the effect of banking transactions immediately, and conveying the accessibility benefits to others.

Diffusion of Innovation (DOI) Theory is one of the oldest social science theories. It originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system. The end result of this diffusion is that people, as part of a social system, adopt a new idea, behavior, or product. Adoption means that a person does something differently than what they had previously (i.e., purchase or use a new product, acquire and perform a new behavior, etc.). The key to adoption is that the person must perceive the idea, behavior, or product as new or innovative. It is through this that diffusion is possible.

Adoption of a new idea, behavior, or product (i.e., innovation) for example that of mobile led financial services does not happen simultaneously in a social system; rather it is a process

whereby some people are more apt to adopt the innovation than others. Researchers have found that people who adopt an innovation early have different characteristics than people who adopt an innovation later. When promoting an innovation to a target population, it is important to understand the characteristics of the target population that will help or hinder adoption of the innovation (Rogers, 1995).



**Figure 1: Diffusion of Innovations Theory**

Researchers have attributed poor strategy implementation consistency to firms with low financial performance. Love, Priem and Lumpkin (2012) observe that the major reason for this has been seen in the fact that over performers presumably have a great interest in ‘conserving’ their level of strategy implementation consistency. More importantly, firms with adequate financial resources have the ability to align past strategies with new ones for effective production. Financial resources include the money required to effectively implement the strategies laid out in the farms under the area of study. Financial resources enable all the other variables including performance management, leadership, capacity and culture to be achieved.

### **Stakeholder Theory**

Stakeholder theory asserts that organisations should consider the concerns of individuals and groups that can affect or are affected by their activities (Gibson, 2000) while making decisions and achieving organizational goals. Organisations are expected to do so because they are responsible and accountable to a broad range of stakeholders for their activities, rather than just shareholders. Stakeholder theory recognizes the existence of a dynamic and complex relationship between organisations and their stakeholders (Gray, Owen & Adams, 2014) and, emphasizes the management of these relationships (Friedman & Miles, 2002). Therefore, stakeholder theory plays a significant role in understanding the stakeholders’ influences on organizations’ actions and how organisations respond to these influences.

Modern stakeholder theory is an expansion of Freeman's seminal work *Strategic Management: A Stakeholder Approach* (Freeman, 2013). Before this, theorists were struggling to establish the duties and responsibilities that an organization has towards other groups and individuals besides shareholders, suppliers, customers and employees (Shankman, 2014). Stakeholders can be defined as any group or individual who can affect or are affected by the achievement of the organization's objectives (Freeman 2013). According to this definition stakeholders have the potential to both benefit and harm organisations (Gibson, 2000). Therefore stakeholders' concerns should be recognized and addressed by organisations to ensure their survival and successful goal accomplishment.

In order to recognize and address stakeholder's needs and expectations Clarkson (1995) categorizes stakeholders into primary and secondary stakeholders. The primary stakeholders are those individuals and groups whose support is essential for the survival of an organization, whereas secondary stakeholders are those individuals and groups who affect or are affected by the activities of an organization. On the basis of the above categorization, organisations can have a wide range of current and potential stakeholders such as: fund providers, employees, suppliers, investors, shareholders, regulatory authorities, Non-Government Organisations, media, labour unions, society and local community.

Organisations can have a broad range of stakeholders with different interests and it is not possible for organisations to address the issues and concerns of all their stakeholders. Therefore identification of stakeholders which can impact or are impacted by an organization's actions becomes essential. In the absence of stakeholder identification, the effectiveness of stakeholder engagement becomes questionable or doubtful (Belal, 2002). The key criteria for identifying and prioritizing stakeholders include: attributes of power, legitimacy and urgency; and the stakeholders' ability to affect or be affected by the organization's actions (Mitchell, Agle & Wood, 2014).

As normally OSBP involves different actors in the implementation process, it may cause the redistribution of power of some government agencies. As Jain (2012) identified, conflict of interests of different stakeholders may sabotage efforts towards successful implementation of OSBP. Therefore clear understanding and support for implementation of OSBP from government is vital. Political will and commitment are identified as starting points for effective public reforms. For example, as shown in the example of bilateral agreement between Canada and USA, government commitment played the most important role in the formation and execution of Action Plan of Smart Borders. Additionally, during the implementation process of OSBP different ministries and agencies are distributing responsibilities and procedures. Mostly, customs administration plays leading role at the border. But motivation and commitment of other agencies are equally important.

### **Theory of Planned Behavior**

This theory of planned behavior is a theory about the link between beliefs and behavior. The concept was proposed by Ajzen (1991) to improve on the predictive power of the theory of reasoned action by including perceived behavioural control (Ajzen, 1991). It is one of the

most predictive persuasion theories. It has been applied to studies of the relations among beliefs, attitudes, behavioral intentions and behaviors in various fields such as advertising, public relations, advertising campaigns and healthcare. The theory states that attitude toward behavior, subjective norms, and perceived behavioral control, together shape an individual's behavioral intentions and behaviors. In relation to the study, this theory was used to explain effect of capacity of the personnel on the implementation of one stop border post strategy. This is because the policies put in place would predict how the capacity of the personnel affect implementation of one stop border post strategy at the Malaba border, Kenya.

## **RESEARCH METHODOLOGY**

### **Research Design**

The study used a descriptive research design. Descriptive research is a scientific method of investigation which involves collection and analyzing of both quantitative and qualitative data. Mugenda and Mugenda, (2008) state that the descriptive design is a method, which enables the researcher to summarize and organize data in an effective and meaningful way. According to Kombo and Tromp (2006), research design can be thought of as the structure of research. According to Cooper and Schindler (2003), a descriptive study is concerned with finding out the what, where and how of a phenomenon. This study therefore was able to generalize the findings to all the border posts in the country.

### **Target Population**

Target population as described by Borg and Crall (2009) is a universal set of study of all members of real or hypothetical set of people, events or objects to which an investigator generalized the result. The target population of this study was the 197 staff of the key agencies and other government agencies found in Malaba border post. The key agencies included KRA, Immigration, KEBS, Port Health and KENTRADE while other government agencies will include Department of Veterinary (DVS), Forestry, Pharmacy And Poisons Board (PPB), AFFA (Agricultural fish and food authority), EAC, Dairy Board and Border Police and Intelligence.

### **Sampling and Sample Size**

The study employed stratified random sampling technique in coming up with a sample size of 59 respondents which is 30% of the total 197 staff targeted. According to Mugenda and Mugenda (2011), a good sample should be between 10- 30% of the accessible population. Also, sampling within each stratum was done through simple random sampling. Stratified random sampling is unbiased sampling method of grouping heterogeneous population into homogenous subsets then making a selection within the individual subset to ensure representativeness. In stratified random sampling subjects are selected in such a way that the existing sub-groups in the population are more or less represented in the sample (Mugenda & Mugenda (2008).

## **Data Collection**

The study employed a questionnaire to collect primary data. The questionnaire was comprising of both open and close-ended questions. According to Field (2005), structured questions are usually accompanied by a list of all possible alternatives from which respondents select the answer that best describes their position. Questions were constructed so as to address specific objectives and provide a variety of possible responses. Unstructured questions give the respondent freedom of response which helps the researcher to gauge the feelings of the respondent. These kinds of questions expose respondents' attitudes and views very well (Field, 2005). Questionnaires give the researcher comprehensive data on a wide range of factors. Both open-ended and closed-ended questions will be used. Questionnaires allow greater uniformity in the way questions are asked, ensuring greater compatibility in the responses. According to Franker, (2006) questionnaires have the added advantage of being less costly and using less time as instruments of data collection. A 5-point Likert scale ranging from 1 to 5 was used as answers to statement like questions. The Likert - type format is selected as the format yields equal - interval data, a fact that allows for the use of more powerful statistical to be used to test hypotheses (Kiess & Bloomquist, 2008).

## **Pilot Testing**

The pilot testing was conducted using the questionnaire on 10 officials. The pilot group was done through random sampling. The purpose of the pilot testing was to establish the validity and reliability of the research instruments and hence enhance face validity (Joppe, 2000).

## **Reliability**

Reliability of the questionnaire was evaluated through administration of the said instrument to the pilot group. A construct composite reliability co-efficient (Cronbach alpha) of 0.6 or above, for all the constructs, was considered adequate for this study. The acceptable reliability coefficient is 0.6 and above (Rousson, Gasser and Seifer, 2002). Cronbach Alpha will be used to test the reliability of the research instrument. A reliability coefficient of below 0.6 will be poor and unacceptable. A low value of alpha can be due to a low number of questions, poor interrelatedness between items or heterogeneous constructs. This value was therefore be rejected while a value of between 0.6 and above was accepted as reliable.

## **Validity**

According to Mugenda and Mugenda (2011) validity is the accuracy and meaningfulness of inferences, based on the research results. One of the main reasons for conducting the pilot study was to ascertain the validity of the questionnaire. The study used both face and content validity to ascertain the validity of the questionnaires. Content validity draws an inference from test scores to a large domain of items similar to those on the test. Content validity is concerned with sample-population representativeness. Gillham (2008) stated that the knowledge and skills covered by the test items should be representative to the larger domain of knowledge and skills.

## **Data Analysis**

Before processing the responses, the completed questionnaires were edited for completeness and consistency. The study generated both qualitative and quantitative data. Quantitative data was coded and entered into Statistical Packages for Social Scientists (SPSS Version 20.0) and analyzed using descriptive statistics. Qualitative data was analyzed based on the content matter of the responses. Responses with common themes or patterns were grouped together into coherent categories. Data analyzed was presented using charts, tables and graphs.

Descriptive statistics involved the use of absolute and relative (percentages) frequencies, measures of central tendency and dispersion (mean and standard deviation respectively). Quantitative data was presented in tables and graphs and explanation were presented in prose. The study will also use inferential statistics to establish the factors affecting the implementation of one stop border post strategy at the Malaba border. Specifically, the study used Karl Pearson's coefficient of correlation to establish this relationship. The correlation coefficient is expected to be two-tailed as the relationship outcome is expected to be either positive or negative and at 95% confidence level. The regression equation was:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where: **Y** = Implementation of One Stop Border Post strategy; **X<sub>1</sub>** = Technology; **X<sub>2</sub>** = Infrastructure; **X<sub>3</sub>** = Collaboration; **X<sub>4</sub>** = Employee Capacity; While **β<sub>1</sub>**, **β<sub>2</sub>**, **β<sub>3</sub>** and **β<sub>4</sub>** are coefficients of determination and **ε** is the error term.

A regression analysis was done in order to predict the value of the dependent variable for individuals for whom some information concerning the explanatory variables is available, or in order to estimate the effect of some explanatory variable on the dependent variable (Armstrong, 2012).

## **RESEARCH FINDINGS**

### **Reliability Analysis**

To determine the reliability and internal consistency of the questionnaire, a pre-test study was conducted. A reliability analysis was conducted with the help of Statistical Package for Social Scientists (SPSS) using Cronbach's Alpha. Cronbach Alpha was determined for every objective which formed a scale in the research. Cronbach's Alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. To assess the reliability of the instruments to determine how well different items on a scale measures the concepts which they are purported to measure; a reliability test was done. Internal consistency is calculated by measuring a statistic known as the Cronbach's alpha. Cronbach's alpha is considered a good measure of reliability in social science research when it is found to be 0.70 or above. This reliability estimate was measured using Cronbach Alpha coefficient ( $\alpha$ ). Nunnally (1978) recommends that instruments used in research should have reliability of at 0.70 or above. The results are as shown in table 1.

**Table 1: Reliability Analysis**

	<b>Cronbach's Alpha</b>	<b>No. of Items</b>
Technology	.814	7
Infrastructure	.981	8
Collaboration of shareholders	.903	7
Employees Capacity	.715	6

The findings of the pilot study showed that infrastructure had a Cronbach's reliability alpha of 0.981, collaboration of shareholders had a Cronbach's reliability alpha of 0.903, technology had a Cronbach's reliability alpha of 0.814 and employee capacity had a Cronbach's reliability alpha of 0.715. The high Cronbach's alpha values indicate potential high as the intercorrelations among test items and is thus evidence for an internal consistency which is an estimate of reliability of test scores.

### **Inferential Statistics**

The study also conducted inferential statistics. Correlation analysis and regression analysis were also conducted. Pearson correlation analysis was used to assess the relationship between the variables while multiple regressions was used to determine the predictive power of factors (technology, infrastructure, collaboration and employee capacity) and Implementation of OSBPS.

### **Correlations Analysis**

After the descriptive analysis, the study conducted Pearson correlation analysis to assess the strength of the association between the predicted and explanatory variables or among the latter. It thus helps in determining the strengths of association in the model, that is, which variable best explained the relationship between the implementation of the One Stop Border Post Strategy.

The findings show that there was a weak negative association between collaboration and implementation of OSBPS. The Pearson correlation of Implementation of OSBPS and Collaboration was = -0.142 and the P-Value = 0.304. In conclusion, the output indicates that the strength of association between the variables is very low ( $r = -0.142$ ), and that the correlation coefficient is not significantly different from zero ( $P > 0.001$ ). Also, we can say that 2% ( $-0.019^2$ ) of the variation in of successful adoption and implementation of OSBPS is explained by collaboration efforts at the border.

The study found very strong positive correlation between technology and employees. The Pearson correlation of Technology and Implementation of OSBPS was = 0.512 and the P-Value = 0.000. In conclusion, the output indicates that the strength of association between the variables is very high ( $r = 0.512$ ), and that the correlation coefficient is very highly significantly different from zero ( $P > 0.001$ ). Also, we can say that 26% ( $0.512^2$ ) of the variation in response of successful adoption and implementation of OSBPS is explained by integration of technological at the border.

**Table 2: Correlation Analysis**

		Technology	Infrastructure	Collaboration	Employee	Implementation OSBPS
Technology	Pearson Correlation	1	.648**	-.165	-.019	.512**
	Sig. (2-tailed)		.000	.223	.889	.000
	N	56	56	56	56	56
Infrastructure	Pearson Correlation	.648**	1	-.186	-.064	.382**
	Sig. (2-tailed)	.000		.170	.640	.004
	N	56	56	56	56	56
Collaboration	Pearson Correlation	-.165	-.186	1	.116	-.140
	Sig. (2-tailed)	.223	.170		.395	.304
	N	56	56	56	56	56
Employee	Pearson Correlation	-.019	-.064	.116	1	.415**
	Sig. (2-tailed)	.889	.640	.395		.001
	N	56	56	56	56	56
Implementation OSBPS	Pearson Correlation	.512**	.382**	-.140	.415**	1
	Sig. (2-tailed)	.000	.004	.304	.001	
	N	56	56	56	56	56

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Moreover, the findings indicate that there was a strong positive correlation between employee capacity and implementation of OSBPS. The Pearson correlation of Technology and Implementation of OSBPS was = 0.415 and the P-Value = 0.001. In conclusion, the output indicates that the strength of association between the variables is very high ( $r = 0.415$ ), and that the correlation coefficient is very highly significantly different from zero ( $P > 0.001$ ). Also, we can say that 17% ( $0.415^2$ ) of the variation in response of successful adoption and implementation of OSBPS is explained by integration of technological at the border.

### Regression Analysis

In this study, a multiple regression analysis was conducted to test the influence among predictor variables. The research used statistical package for social sciences (SPSS V 21.0) to code, enter and compute the measurements of the multiple regressions. The model summary table provides information about the regression line’s ability to account for the total variation in the dependent variable. The results are displayed in the table below.

**Table 3: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.679 <sup>a</sup>	.461	.419	16.43198

a. Predictors: (Constant), Employee, Technology, Collaboration, Infrastructure

This table provides the R and R<sup>2</sup> values. The R value represents the simple correlation and is 0.679 which indicates a high degree of correlation. The R<sup>2</sup> indicates how much of the total



variation in the dependent variable, Implementation of OSBPS, can be explained by the independent variables, (technology, infrastructure, collaboration and employee capacity). In this case, 46.1% can be explained, which is relatively large.

**Table 4: Analysis of Variance**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11781.987	4	2945.497	10.909	.000 <sup>b</sup>
	Residual	13770.513	51	270.010		
	Total	25552.500	55			

a. Dependent Variable: Implementation OSBPS

b. Predictors: (Constant), Employee, Technology, Collaboration, Infrastructure

This finding from the table indicates that the regression model predicts the dependent variable significantly well. The table indicates the statistical significance of the regression model that was run. The  $p < 0.000$ , which is less than 0.05, and indicates that, overall, the regression model statistically significantly predicts the outcome variable (i.e., it is a good fit for the data). The F critical at 5% level of significance is 2.55 from the Standard F-tables, since F calculated (value = 10.909) is greater than the F critical; this shows that the overall model was significant.

The Unstandardized coefficients indicate how much the dependent variable varies with an independent variable when all other independent variables are held constant.

**Table 5: Regression Coefficient**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	19.123	6.822		2.803	.007
	Technology	.584	.183	.431	3.187	.002
	Infrastructure	.406	.490	.112	.827	.012
	Collaboration	.388	.201	.099	.937	.053
	Employee	.593	.139	.442	4.267	.000

a. Dependent Variable: Implementation OSBPS

As per the SPSS generated output as presented in table above, the equation regression equation yielded ( $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$ ), now becomes:

$$Y = 19.123 + 0.584 X_1 + 0.406 X_2 + 0.388 X_3 + 0.593 X_4$$

From the regression model obtained above, a unit change in technology aspects holding the other factors constant would lead to change in Implementation of OSBPS by 0.584; a unit change in infrastructure while holding the other factors constant would lead to a change Implementation of OSBPS by 0.406; a unit change in collaboration aspects while holding the other factors constant would lead to a change Implementation of OSBPS 0.388 while a unit

change in employee capacity aspects while holding the other factors constant would lead to a change in Implementation of OSBPS by a factor of 0.593.

The analysis was undertaken at 5% significance level. The criteria for comparing whether the predictor variables were significant in the model was through comparing the obtained probability value and  $\alpha=0.05$ . If the probability value was less than  $\alpha$ , then the predictor variable was significant otherwise it wasn't. Therefore, only two predictors were significant technology and employee capacity with P-value=0.02 and P-value=0.000 respectively. Infrastructure and collaboration were also significant predictors of Implementation of OSBPS because their P-values (0.012 and 0.053) were greater than 0.05.

## **DISCUSSION OF THE FINDINGS**

### **Effect of Technology on Implementation of OSBPS**

The study found that there have been steps taken to integrate technology in the implementation and integration of One Stop Border Post Strategy. The study found that technological aspects such as automated risk analysis, data base automation and use of border management information system (BMIS) have been adopted to aid in the implementation of and integration of One Stop Border Post Strategy. The findings of the study are in line with the studies by Doyle (2010) who identified that Information and Communications Technology (ICT) plays significant role in OSBP implementation. Success of OSBP is heavily dependent on ICT systems during both domestic and international level cooperation. For domestic intra-service cooperation effectiveness of operations and services are supported by availability of ICT network.

### **Effect of Infrastructure on Implementation of OSBPS**

The study also found that there have been substantial steps taken in terms of changing and improving the infrastructure at the border to allow for the adoption of the One Stop Border Post Strategy. A majority of the participants indicated there have been significant investment made on roads and buildings to ensure the border has sufficient infrastructural capacity to allow for the implementation of One Stop Border Post Strategy. The study found that the One Stop Border Post Strategy had had contributed to the effectiveness and efficiency of delivery of services at the Malaba border. The study found that One Stop Border Post Strategy had managed to reduce delays caused by physical examination and management time and thus the time taken to clear cargo has significantly reduced. In view of the above findings, we can find corroborating literature in the works of Freund and Nadia, (2010), who determined that for domestic cooperation customs administrations should consider development of Border Crossing Points, surveillance units for borders, space for parking, reception centers and customs infrastructure. According to them Infrastructure allow for the integration of control avoids duplication of procedures by different border agencies. For international cooperation common infrastructure, like joint crossing points can be developed by the customs administrations for to realize cost-effectiveness.

### **Effect of Collaboration on Implementation of OSBPS**

The research determined that the adoption of joint controls at the border has reduced formalities and required time for goods and persons to cross borders, as well as to help prevent irregular practices. In addition, One Stop Border Post Strategy was found to have improved efficiency of customs services and other government agencies by avoiding unnecessary duplication of clearance procedures, increasing cooperation, sharing of information and trade data and enabling better resource utilization. The study also found that the strategy has improved border enforcement efficiencies with the custom authorities from the Kenyan and Ugandan side both involved in joint verification of cargo. The main elements of the study are in agreement with those of Huynh (2013), who supposed that strong cooperation between agencies brings together efficiency of operations and eliminates duplication of procedures. Therefore, the implementation of OSBP requires organization of daily operations, development of mutually recognized legal framework for information exchange, joint use of equipment and infrastructure and standardization of documentation.

### **Effect of Employee Capacity on Implementation of OSBPS**

The study found that the human resources committed to One Stop Border Post Strategy by different stakeholders were not sufficient to match the level of commitment required to fully support the One Stop Border Post Strategy. Strategy ranged from environmental factors, institutional factors to operational structures. The study found that there was resistance to change among various stakeholders was noted with clearing agents and brokers fearing for loss of their livelihoods, traders seeing One Stop Border Post Strategy as a threat to their business and officers from various. A number of government agencies at the border are similarly anxious about embracing new procedures mostly due to lack of motivation and prior training. The participants identified limited resources and inadequate involvement as the operational challenges affecting the One Stop Border Post Strategy implementation. The findings are in concurrence with those of Doyle (2010) who argued that committed employees represent driving force for the implementation of changes in the border management and for achievement of its objectives. Therefore, capacity of the personnel is one of the major elements for effective OSBP implementation. OSBP requires skilled officers of border agencies with adequate expertise and behavior for proper management of the processes. Therefore, both domestic and international level cooperation requires proper human resource management and development.

### **CONCLUSIONS**

The study concluded that the One Stop Border Post Strategy was gradually being implemented at the Malaba border. However, the integration of the system has not been completed. Although not complete yet, some predicted benefits of the One Stop Border Post Strategy have already started being enjoyed by users of the border and this may have the effect of endorsing the importance of the strategy and motivating the complete implementation of the strategy.

The study concluded further that since the commencement of the implementation of the One Stop Border Post Strategy there have been signs of co-operation and transparency amongst all the stakeholders at the Malaba, Kenya. In addition, the study concluded that it was paramount for government agencies to be working together and perform inspections together in order to cut down on costs and time. Joint border committees, MOUs formed and regular meetings amongst the Malaba Kenya users and across the border have led to improved efficiency and working conditions. Further modern technology including use of computers, internet, radio communication and data exchange has advanced tremendously.

The study concluded that implementing the One Stop Border Post Strategy was made harder by the fact that it was a multi-agency process with various stakeholders having a part to play in successfully implementing the strategy. This was seen through the institutional and operational challenges to implementation some of which were common to all stakeholders but others were tied to specific stakeholders. Additionally, the resources availed in terms of human resource and finances were not sufficient to support successful implementation. The study did note the effect which changes in external environment could have on the ongoing implementation of a strategy where a new strategy within the general operating environment could affect the relevance of a strategy being implemented.

## **RECOMMENDATIONS**

The discussions and conclusions have revealed that One Stop Border Post Strategy is a complex system to be implemented and the custom authority requires help to successfully implement the strategy. The study therefore recommends that help should be sort from donors and other high-level consultants in government and private sector to help in the successful integration of the strategy.

The study recommends that there is a need to sensitize and empower border users and other stakeholders about the changes in procedures that have been brought by the implementation of One Stop Border Post Strategy. The implementers also ought to set practical implementation objectives with regards to timeframes, the clarity of their action plans and the allocation of resources both human and financial.

Finally, the study recommends that although the ongoing process of implementing the One Stop Border Post Strategy at Malaba border seems to be successful given that some envisaged benefits of the strategy have started being felt, the study recommends a need to conduct a mid-stream evaluation of the strategy. This will determine if the factors surrounding formulation of the strategy are still constant.

## **REFERENCES**

- Adongo W. (2008). *Challenges of strategy implementation in health. NGO's in Nairobi.* (Unpublished Masters Research Project) School of Business, University of Nairobi, Nairobi.
- Ahmad, S., & Schroeder, R. (2013). The impact of management in small and medium enterprises, *Journal of Operations Management*, 21(1), 19-43.

- Aniszewski, S. (2009). Coordinated border management. *A concept paper*. (WCO Research Paper No.2), 6-16.
- Aosa, E. (1992). An empirical investigation of aspects of strategy formulation and implementation within large, private manufacturing companies in Kenya (*Unpublished PhD thesis*). Strathclyde University, Glasgow.
- Brown, E. D. (2007). Competitive advantage and the resource based view of the firm. Retrieved from <http://ericbrown.com/competitive-advantage-and-the-resourcebased-view-of-the-firm>.
- Bruns, M. (2011). Inter-organizational innovation processes in the agrifood industry: An approach to improving management support services applied to the meat industry. *Dissertation*. Supervised by Petersen, B. and L. Theuvsen. Rheinische Friedrich-Wilhelms-Universität zu Bonn, Bonn.
- Crown agents (2014). Report on Trade Corridors [www.crownagents.com](http://www.crownagents.com).
- David, F. R. (2014). *Strategic Management: Concepts and Case* (9<sup>th</sup> Ed.). Upper Saddle River, New Jersey: Pearson Prentice Hall.
- Doyle, T. (2010). Collaborative border management. *World Customs Journal*, 4(1), 15-20.
- East African Community (2007). *Customs Union*. EAC Customs Union Common External Tariffs.
- Freund, C. L. & Nadia, R. (2010). What Constrains Africa's Exports. *Policy Research Working Paper*, 5184, World Bank.
- Hoekman, B., & Alessandro, N. (2009). Trade Policy, Trade Cost and Developing Country Trade, *Policy Research Working Paper* 4797, World Bank.
- Huynh, N. D. (2013). Job rotation, corruption, and tax administration in the developing countries, 2-10.
- Jain, S. (2012). Coordinated border management: the experience of Asia and the Pacific region. *World Customs Journal*, 6(1), 63-67.
- Kieck, E. (2010). Coordinated Border Management: Unlocking Trade Opportunities through One Stop Border post. *World Customs Journal*, 4(1), 73-78.
- Kieck, E. (2010). Coordinated Border Management: Unlocking Trade Opportunities through One Stop Border post. *World Customs Journal*, 4(1), 45-63.
- Koh Tat Tsen, J. (2011). Single Windows and Supply Chains in the Next Decade, ten years of single window implementation: lessons learned for the future Discussion paper Global Trade Facilitation Conference.
- Lee, F., Lee T. & Wu, W. (2010). The Relationship between Human Resource Management Practices; CEOs' Characteristics and their Development Business Strategy and Firm Performance. *Human Resource Management*, 21 (9), 1351- 1372.
- Leeuwis, L., Van Mierlo, B., Smits, R., & Wolthuis, R. K. (2010): Learning towards system innovation: Evaluating a systemic instrument, in: *Technological Forecasting and Social Change*, 77(2), 318-334.
- Makundi, M. M. (2012). *Strategic responses by KRA's customs services department to changes in the external environment*. (Unpublished MBA Research Project) School of Business, University of Nairobi, Kenya.

- Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: guided by information power. *Qualitative health research*, 26(13), 1753-1760.
- Mugenda O. M., & Mugenda A. G. (2011). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Acts Press.
- Ogalo, V. (2010). Informal Cross Border Trade in East Africa: Issues for EAC Regional Integration and Economic Growth. BIEAC-II Regional Workshop presentation, Nairobi, Kenya.
- The World Trade Organization (2005). Border Agency Cooperation. Customs border cooperation between Norway, Sweden and Finland. A Contribution from Norway, 1-3.
- The World Trade Organization (2011). Globalization and Trade. 15-20.
- Trademark East Africa (2010). Trademark East Africa to Set up One Stop Border Posts 2013, retrieved in May 2013 from <http://www.trademarka.jobballard.net>.
- UNCTAD (2013). *Key Trends in International Merchandise Trade, United Nations*. New York and Geneva: Author.
- Van Mierlo, B., Leeuwis, L., Smits, R., & Wolthuis, R. K. (2010). Learning towards system innovation: Evaluating a systemic instrument. *Technological Forecasting and Social Change*, 77(2), 318-334.
- World Economic Forum in collaboration with Bain and Company and the World Bank. (2013). *Enabling trade: Valuing growth opportunities*. Geneva: ImPrimerie Centrale.
- Yang, L., Sun, G. & Martin, J. E. (2008). *Making strategy work: A literature review on the factors influencing strategy implementation*. (Unpublished Masters Thesis) Switzerland: University of Lugano.