Internet-based information and foreign direct investment (FDI) location decision making: An information cost perspective

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Information and communication technology (ICT) is considered to play an important role to reduce information cost for potential foreign investors. While a growing body of literature has suggested such connections, conceptual clarity is yet to be achieved. This study introduces a conceptual framework based on the Information-theoretic approach and transaction cost perspective to explore how ICT may reduce information cost. To illustrate our proposed framework, we apply it to examine the role of Internet-based information, published by the Investment Promotion Agencies (IPAs) on the information needs for foreign investors intending to invest in Tanzania. The findings indicated that general information on investment opportunities and regulatory entry procedures is mainly accessible through IPA’s web pages. Nevertheless, the findings revealed that more specific information on industry competitiveness is not found, although it is important for strategic investment location choice. Public information is combined with alternative sources of information to meet the information requirement for potential investors. Our findings indicate that Internet-based sources of information can reduce part of the information cost facing foreign investors, if properly organized. Our proposed framework extends the discourse on how ICT may influence information cost for foreign investors and contributes to our knowledge on the impact of ICT in the business sector focusing on the Government to business domain. Based on our findings we propose insights into studying and developing ICT-based services for IPAs in their efforts to attract Foreign Direct Investment.

Key words: Foreign direct investment (FDI), competitiveness, attraction, investment promotion agency (IPA), liability of foreignness, information and communication technology (ICT).

INTRODUCTION

Foreign investors make decisions on Foreign Direct Investment (FDI) locations under conditions of uncertainty. A lack of proximity between home and host countries in terms of political, cultural, economic and institutional environments increases the cost of doing business abroad (Zaheer, 1995). Because of this, the concept ‘liability of foreign’ has continuously been used in International Business literature to depict disadvantages or additional costs incurred by foreign firms, but are not incurred by local firms (Eden and Miller, 2004; Luo and Mezias, 2002). Liability of foreignness is ubiquitous because of informational asymmetry and the unpredictability of the foreign business environment (He, 2002; Hymer, 1960; Hymer, 1976; Lu and Hwang, 2009; Mariotti and Piscitello, 1995; Zaheer, 1995). Since uncertainties and informational asymmetry in foreign markets increase the cost of information (Matambalya and Wolf, 2001), it is argued that FDI locations are informationally driven (He, 2002; Mariotti and Piscitello, 1995) and thus foreign investors tend to favour location that are likely to minimize their information costs (He, 2002; Morisset and Lumenga-Neso, 2002). In the context of emerging markets that are characterized by limited reliable information on business operating conditions
(Kinoshita and Mody, 2001; Matambalya and Wolf, 2001; Nwankwo, 2000), the cost of information may be even higher.

However, it has been argued that the development and diffusion of ICT are creating an ‘information economy’ in which information is a vital resource and is a basis for competition (Talero and Gaudette, 1995). ICT can be used to acquire and process information, thereby reducing uncertainties (Bedia, 1999). In the case of outward internationalization (Danford, 2008), ICT lowers the transaction cost of foreign investors by improving their access to information on various investment opportunities in developing countries (Addison and Heshmati, 2004). For example, Internet based technologies are considered to be a helpful tool for the dissemination and promotion of investment opportunities (Lozada and Fishler, 2005). Similarly, electronic government (e-government) services may have positive impacts on other variables that impede foreign investors in developing countries; for example, by improving the efficiency of public administrations and reducing bribes in business transactions (Ojha et al., 2008). From this perspective, developing countries may utilize the opportunities of ICT to reduce uncertainties and information costs facing foreign investors during their start-up period.

Various literary sources suggest that ICT can be a basis for competition by reducing information problems and increasing knowledge acquisition in markets (Bedia, 1999; Eggleston et al., 2002; Nooteboom, 1992; Porter, 2001; Porter and Millar, 1985). The basic premise of the argument is that the advent and successful adoption of ICT is said to simplify accessibility of commercial and political information that was previously unavailable or restricted by economic actors (Gholami et al., 2006). Based on this view, ICT can adequately offer opportunities for public and private information accessibility, which can ultimately reduce the liability of foreignness (de la Torre and Moxon, 2001). By recognizing the need and importance of information accessibility on FDI locations, many countries have continually embarked on heavy investment in ICT for the efficient and timely supply of necessary information to investors, regardless of their geographical locations. Various government agencies are increasingly embracing e-government as an innovative and necessary form of public service and administration (Koh and Prybutok, 2003). The Investment Promotion Agencies (IPAs) are one example of a government agency employing rapid adoption and utilization of the Internet in delivering necessary information on host country businesses to potential investors. Although, these agencies may have varieties of promotional goals, one of the most vital roles of the investment promotion activities is the dissemination of necessary information to the respective investors in an attempt to create a positive image of the host country’s investment location (Wells and Wint, 2000).

Eventually, nearly every investment agency have their own website (Loewendahl, 2001). These websites are expected to be one of the best sources of information for investors seeking to obtain knowledge regarding the business environment in the target country. As Harding and Smarzynska-Javorcik (2007) argue, IPAs aiming to provide up-to-date, detailed and accurate data (information) on their websites may increase the likelihood of their countries (investment locations) being included in investor’s short list for investment considerations. Providing accurate and reliable information on the website about the host country’s business environment will likely reduce the information cost facing foreign investors, thereby increasing the changes for investments.

Despite the fact that a vast amount of normative literature claims that ICT (e-government services in particular) can reduce information cost; this phenomenon is still empirically unexplored, especially within the context of developing countries. Claims about the positive impact of ICT on development issues are, however, usually perceived to be axiomatic (Bedia, 1999; Nooteboom, 1992), without a clear theoretical basis (Eggleston et al., 2002) and limited in their empirical support (Matambalya and Wolf, 2001). In the immature field of ICT and development, there is still a need for more precise knowledge on how ICT- based services influence information costs. Therefore, this article illustrates the role of Internet-based information published by the IPAs on the cost of information facing foreign investors in Tanzania. Specifically, the article focuses on the following three research questions: What information do foreign investors seek when searching investment locations and opportunities? Does electronic information published in IPAs’ website meet the informational needs of foreign investors? What are the alternative sources of information used by foreign investors to compliment Internet-based information published on IPAs’ websites? The contributions of this paper are two-fold: First, in view of the need for the clear link between ICT and transaction cost, the authors present a conceptual framework based on the Information-theoretic approach and Transaction cost perspective indicating the source of information cost in international business and how ICT is expected to reduce information cost. Secondly, previous studies on the impact of ICT in the business sector tend to focus more on Business-to-Business domain (B2B); this study twists the topic by studying the impact of ICT in the business sector while focusing on the Government-to-Business domain (G2B).

THEORETICAL FRAMEWORK

Information is a crucial resource, especially when facing uncertainty in terms of making risky decisions. However,
the acquisition of valuable information is always costly; thus, foreign investors face a significant information search cost when they go abroad. Information search is therefore, one of the vital activities to be conducted prior to committing other resources and contributes a significant amount of cost for doing businesses in certain investment locations. In a situation where there is lack of proximity between the investor's home and host countries in term of cultural, political, economic and institutional environments, the cost of doing business is expected to be high (Calhoun, 2002; Elango, 2009; Zaheer, 1995). Based on these perspectives, it suffices to argue that the intensity of an information search is likely to be higher for foreign investors than for local investors. The reason for this being that foreign investors may face more challenges brought about by cultural distance (Kogut and Singh, 1988), informational asymmetry (Mariotti and Piscitello, 1995), and the liability of foreignness (Zaheer, 1995). Therefore, the cost of information has become one of the key factors influencing the location of an investment (He, 2002; Mariotti and Piscitello, 1995; Morisset and Lumenga-Neso, 2002). It is important to note that there is a need for a theoretical approach to explore, why under market imperfection, information cost is ubiquitous and how ICT can mitigate some of these costs.

Information cost in location choice: The Information-theoretic approach and transaction cost perspective

Decisions regarding investment locations are normally made within an uncertain environment. Investors respond to such uncertainties by seeking more information before committing valuable resources, since the decision is in most cases irreversible. The decision involves sunken cost and some assets may be so specific that they cannot be redeployed without loosing their values. On the other hand, though the concept of asset specificity is normally used to study an organization's human, physical and other dedicated assets using the Transaction cost approach, it is argued that transaction specificity may also occur in the case of a location, that is, site specificity (Nooteboom, 1992; Williamson, 1983). Therefore, the choice of a location involves high switching costs. Consequently, foreign investors will incur the significant costs of an information search before committing a significant amount of resources.

Using an information economics perspective or its ameliorated version known as the 'information-theoretic approach' combined with the transaction cost perspective (Stiglitz, 1988; Williamson, 1985), it is logically sound to argue for the existence of information cost in international markets and how ICT can reduce these costs. The theory's main argument lies on the premise that markets are full of incomplete information. Foreign investors may possess asymmetric information regarding an investment location in terms of resource accessibility, infrastructure, profitability, industry performance and competitiveness. Such asymmetric information is a source of the liability of foreignness. Consequently, investors will tend to reduce uncertainty through information seeking and thus information cost becomes ubiquitous. The information problem does not exist only under perfect market conditions (Essig and Arnold, 2001).

Among the central tenets of the information-theoretic approach and transaction cost is that information (whether public or private) is costly to acquire, especially within the context of less developed countries (Bedia, 1999; Matambalya and Wolf, 2001; Stiglitz, 1988). As far as foreign investments are concerned, both private and public information are relevant for investment decisions (Kinoshita and Mody, 1999; Loibi and Hira, 2009; Yeoh, 2000). Foreign investors may utilize public information to acquire knowledge on market size, stocks of infrastructure, costs of business operations, foreign investment policies and other host country characteristics (Kinoshita and Mody, 1999). Since information is costly to acquire, it suffices to argue that information cost is an important part of transaction cost (Stiglitz, 1988) and is one of the major factors influencing investment location choice. Therefore, by providing the stock of information sought by foreign investors, a country reduces investors' information cost and makes its location competitive and attractive for investment.

Information search and investment location choice

Foreign investors seek different types of information during their process of searching for a location. It is therefore expected that IPAs' websites should be customized so that foreign investors are able to find updated information on various issues. Firms intending to go abroad as inward or outward internationalizations can use Internet-based sources of information for acquiring knowledge about potential countries, customers, competitors' actions, price comparisons, foreign market demand conditions and business environment conditions (Danford, 2007, 2008). Other types of information sought by foreign investors include: site facilities and infrastructure, skilled labour and labour costs, incentive packages, joint venture opportunities, taxes and regulations, education and training, political and economic stability, local market conditions and the overall quality of life (Kotler et al., 1993, 1999; UNIDO, 2003). Countries' marketers, for example, IPAs, should be able to understand how companies make their site selections and the factors that they consider in order to anticipate information needs (Kotler et al., 1993, 1999; Kotler and Gertner, 2002; UNIDO, 2003). In many cases, once a location is preferred and selected, the entry process in both developed and developing countries begins with compliance to various entry regulations and procedures;
for example; company registration, residence and work permits, foreign investment licensing, health care and pension plans, social security registration, access to land, building permits and acquiring services to various utilities (Morisset and Lumenga-Neso, 2002). It is therefore, expected that foreign investors understand the necessary regulatory procedures, depending on the type of investment projects.

For analytical purposes, and for narrowing the scope of our study, we summarize the information above into three major categories. The first category is information on investment climate, which includes information such as political stability, economic and financial performance and infrastructure, for example, transport facilities, electricity, education, training, research and development facilities. The second group is related to information on market and investment opportunities, which includes information such as local labour market conditions, customer and supplier markets, quality of life, capital availability, labour costs, raw materials, industry competitiveness, incentive packages, joint venture opportunities, business contacts and specific investment proposals. The third is information on entry and regulatory procedures, which includes information such as company registration, residence and work permit, tax office registration, foreign investment licensing, health care and pension plans, social security registration, access to land, building permits and services to various utilities, for example, water, electricity and telephones. These categories are created subjectively, but with reference to previous studies (Danford, 2007, 2008; Kotler et al., 1999; Morisset and Lumenga-Neso, 2002), and allows meaningful analysis, serving to make the analysis more focused. The information in the second category, that is; ‘market and investment opportunities’ is very important because in most cases it might be the one dictating a firm’s profitability and competitive positioning in the market. As noted above, this category may also include information on competitors’ actions and their market positioning.

**How can ICT reduce information cost and create location competitiveness of a nation?**

As FDI attraction becomes competitive among nations, each country strives to create a more attractive business environment in order to continually attract more FDIs than its rivals. Though there may be several ways for countries to create a competitive business environment, the application of ICT in the public sector can be one of the sources of a nation’s competitiveness. While there are numerous applications of ICT in the public sector, this paper is limited to the application of ICT by the IPAs under the umbrella of e-government, with a particular focus on information dissemination to the business sector. Several authors have already documented the positive role of ICT in the context of competition. For example, it is argued that the advent and rapid spread of ICT is creating a new information economy in which the information infrastructure has become a significant resource and the basis for competition (Lozada and Fishler, 2005; Matambalya and Wolf, 2001; Taleroa and Gaudettea, 1995). Similarly, it has been argued that application of innovative ICT has become a factor for competitiveness in modern governments (Wimmer et al., 2007). Highlighting the role of ICT in global businesses, Porter and Millar comment, ‘it is hard to underestimate the strategic significance of the new information technology’ (Porter and Millar, 1985: 149). This implies that the benefits accrued from ICT application in the business sector can also be observed in public sector organizations, for example the accessibility of high quality information (Barzilai-Nahon and Scholl, 2010). Therefore, models and frameworks, which have been used to study how ICT transforms competitiveness amongst firms, can be modified and hence fits into the government sector.

The focus of our discussion centres on the application of ICT by IPAs (government sector) targeting foreign investments (business sector). There is no single widely accepted definition of e-government (Halchin, 2004; Schedler and Scharf, 2001) but several of these definitions exist (Grönlund, 2010). The common understanding include the use of ICT to deliver government services better, faster, more efficiently and more cost effectively (Backus, 2001; Bannister, 2005; DeBenedictis et al., 2002). For the purpose of this study, e-government means a government’s use of ICT, especially web-based applications, in delivering services to businesses for the purpose of providing convenient access to government information (Brown and Brudney, 2001; Golden et al., 2003). This definition is delimited in the context of this study, but it is important to note that e-government services to firms (G2B) are more than information-based. There are also transactional services, which are not the main focus here because the discussion of this article centres on the contribution of Internet-based information on FDI location decision-making. Similarly, government services can target stakeholders other than businesses, for example, by targeting citizens.

In order to analyze the impact of ICT on location competitiveness based on the transaction cost and information-theoretic perspectives, it is important to consider the fact that economies and emerging markets in particular are said to be characterized by limited information on the business environment (Kinoshita and Mody, 2001). Since the decision of choosing an investment site is characterized by asymmetric information, the choice is driven by the information available on relevant key factors (Ehrman and Hamburg, 1986). So, because ICT facilitates information access about a host country’s business environment, one will expect it to reduce both information cost and transaction costs.
cost (Nooteboom, 1992). This may become possible when firms have access to updated and reliable information before making decisions on location choices (Bedia, 1999). In this regard, firms may be in opposition to utilizing ICT to acquire and process information, thereby reducing their existent uncertainties (Matambalya and Wolf, 2001). Compared to the traditional modes of information processing and dissemination, ICT has the potential to deliver market information effectively and efficiently (Gurbaxani and Whang, 1991). By providing e-government services, the supply side can update information and reach as many customers as possible; while on the demand side, information can be accessed at any time regardless of the geographical distance (Nooteboom, 1992). The improved market function resulting from new information technologies is expected to reduce information cost and therefore the subsequent transaction cost (Clemens and Row, 1991; Gholami et al., 2006; Gurbaxani and Whang, 1991).

In a special case of ICT application in the public sector, e-government is used by IPAs to improve the Investment Environment of the host country by disseminating information to investors regarding investment laws and regulation, increasing transparency of the administrative system and investment procedures in the host country, which all together simplify the process for foreign investors to predict the costs of establishing particular types of investment projects (Cho, 2003). It is no wonder that every IPA has set up a website with an intention to market countries by reaching global investors (Loewendahl, 2001; Lozada and Fishler, 2005; Lozada and Kritz, 2007). Since accurate and reliable information from the government is said to minimize risk and any negative consequences in the foreign market (Souchon and Diamantopoulos, 1997), the use of the Internet is perceived as an efficient way to deliver government information to a wider audiences of foreign investors (Lozada and Fishler, 2005; Lozada and Kritz, 2007).

Synergy between public electronic information and private information sources

In many instances, some of the electronic information supplied by governments to investors mainly portrays the front stage information. The back stage information is not supplied on the website and is therefore not visible to customers (Glushko and Tabas, 2008). In other words, even in website information there may still be informational asymmetry because the information that discredits the image of the country might not always be published. Hence, foreign investors can still face information search costs associated with gathering private information to supplement deficits in electronic government information. For a firm to gain strategic value from their information resources, it is imperative to combine both public and private information. Public information alone is rarely a sufficient guide for making strategic investment decisions and thus publicly and privately available information complement each other by offering a wider knowledge base for foreign investment strategic decisions (Kinoshita and Mody, 1999). It has also been argued that economic actors will still search for heterogeneous information about investment locations and opportunities from network contacts even if such information is publicly available through advertisements, promotions and other forms of publicity (Uzzi, 1999).

Empirical studies show that foreign investors rely more on private information when screening investment locations (Kinoshita and Mody, 1997, 2001). The information network of a foreign market has been noted to be a potential knowledge base for both small and large companies (Andersen, 2006; Greve, 1995; Zacharakis, 1997). In a survey conducted in Sub-Saharan Africa in 2003, it was found that foreign investors had sought information about a location from various personal business related contacts (UNIDO, 2003). Investors' perceptions indicated that existing investors and other personal contacts were the key information source for gathering information on investment opportunities in Sub-Saharan Africa. In essence, personal sources of information are normally perceived as more trustworthy and credible than published information, which is often perceived as less accurate (Yeoh, 2000). Contrary to this argument, results from a study on investor information searches conducted in the USA show that Internet-based information was among the dominant sources of information (Loibl and Hira, 2009). From this discussion, it is notable that foreign investors will tend to compliment electronic public information published mainly in the websites of IPAs with other alternative private sources of information. If this is the case, the relevant empirical question in this study is then how do investors compliment electronic government information with alternative sources of information? We therefore argue critically that foreign investors should not rely on Internet-based information alone, but should strive for a synergy between Internet-based information with other alternative private sources of information.

RESEARCH METHODS

This section presents the research strategies used in data collection and analysis in order to answer the research questions. However, the way research questions are formulated and how the research should be carried out depends on the ontological stance (Bryman and Bell, 2007). Similarly, it is imperative to note that studying any research topic related to internationalization is complex due to the cultural, linguistic and institutional heterogeneity characterizing international business phenomena (Madureira, 2007). Conversely, Ghauri (2004) encourages researchers with international business research topics to use case studies in order to provide a more in-depth understanding and insight into cultural embedded phenomena. The recommendations by various scholars suggest that case study design is a suitable research strategy when studying a contemporary phenomenon within its real-life setting, less explored and particularly for deeper understanding of the phenomenon rather than generalizations; and when research
questions of ‘How, What and Why’ are posed (Ghauri, 2004; Yin, 2003). Based on these criteria, we found a case study research strategy appropriate for answering the research questions.

Selecting the case

Selecting the appropriate case is one of the fundamental steps when using a case study as a research strategy (Eisenhardt, 1989) because it defines the scope of the target population to be used in the investigation (Ghauri, 2004). After a long period of socialist policies, Tanzanian has embarked on a wide range of political, institutional and economic reforms since 1990s. The reforms were aimed at, among other things, providing a favourable business environment that would accelerate the growth and development of the private sector. In order to efficiently assist and serve the investors, Tanzania established special government agencies for investment promotion. The first agency is the Tanzania Investment Centre (TIC), which is operating in the Tanzania mainland; and the second agency is the Zanzibar Investment Promotion Agency (ZIPA), which is active in Tanzania Zanzibar. These two cases were selected as a unit of analysis and they rely more on websites as one of the important communication strategies. Although, IPAs such as TIC and ZIPA use traditional communication strategies such as advertising on TV, radio, paper based publications such as brochures, conferences and trade missions, the Internet has become one of the most popular strategies (Lozada and Fishler, 2005). While foreign investors may have a variety of investment opportunities in Tanzania, the majority of FDI inflows are recorded in sectors such as mining, tourism, manufacturing and agriculture. The preferred mode of entry has been Greenfield investments (Wangwe et al., 2005).

Data collection

One of the advantages of a case study research strategy is its flexible ability to use various multiple data sources (GAO, 1990). We therefore reaped this opportunity by relying on multiple sources of evidence, that is, interviews, observation, web page, documents and e-mail archival data. The major purpose of triangulating data collection methods is to search for converging evidence in order to increase construct validity (Yin, 1994). Triangulating data collection methods may also reduce the bias associated with self-protection and misinterpretation, for example, information claimed by one of the interviewees (Gao, 1990; Ghauri, 2004).

In the first step, in-depth interviews were conducted with the senior staff responsible for information systems within organizations. The interviews were recorded and notes were taken simultaneously. Next, we requested e-mail records in order to garner knowledge on the communication between IPAs and foreign investors. The archived e-mail data displays the contact information of investors and why they wrote e-mails to IPA staff. These contacts were used to search for foreign investors who could participate in interviews. Since our interest was to understand how Internet-based information can solve the issue of high information costs facing foreign investors, we targeted investors who were in the initial processes of investment because they can easily recall their history and experience with information search activities compared to those investors who are already in the market. The interviews represent a diverse group of investors that are interested in investing in Tanzania in various sectors, including agriculture, manufacturing, mining, tourism and construction. Lastly, we conducted website analysis and read various documents by matching information from other sources with information found on websites. The research method for studying the case is summarized in Figure 1.

The data analysis strategy is guided by existing knowledge obtained from literature. As Yin (1994) recommends, a good strategy is to analyze the case study by following the theoretical basis that led to the study itself. Theoretical case analyses are used to identify common themes relevant to the research questions. The identified themes are then put into categories to compare and contrast them as they appear in the data source (Glaser and Strauss, 1967; LeCompte, 2000).

FINDINGS

From the described procedures, Firstly, the general information describing the cases is presented and then the findings are presented as they pertain to the specific research questions.
Tanzania Investment Centre (TIC)

The Tanzania Investment Centre (TIC) is the primary governmental agency that coordinates, promotes and facilitates investment in Tanzania. TIC also advises the government on investment related matters. It is the first point of call for potential investors. TIC’s primary functions include obtaining necessary licenses, work permits, visas, approvals, facilities or services, sorting out any administrative barriers confronting both local and foreign investments, securing investment sites, and providing and disseminating up-to-date information on existing investment opportunities, benefits or incentives available to investors. Based on the secondary data sources, the average number of projects approved by TIC per year is 435.

Zanzibar Investment Promotion Authority (ZIPA)

To demonstrate its commitment to creating a supportive environment for investment, the Government of Zanzibar enacted a new Investment Code in 2004 to establish a one-stop centre called the Zanzibar Investment Promotion Authority (ZIPA). ZIPA was created to act as focal point for investment promotion and facilitation in Zanzibar. ZIPA’s main objectives are to attract foreign investors by marketing Zanzibar as an attractive and competitive investment destination, and to guide these investors through the process of conducting business at Zanzibar. Promotion activities are conducted in various sectors where Zanzibar has competitive advantages, including tourism, fishing and agriculture. The average annual number of projects approved by ZIPA is 32. Figure 2 summarizes the number of projects approved by TIC and ZIPA for the period of 1998-2009.

General Interpretation

By combining the data obtained from interviews, e-mail records, documents and website analysis, we compared actual Internet-based information published on IPA websites with the informational needs of foreign investors listed in Table 1. The comparability is based on investors’ experience after using Internet-based information and our direct observation on the actual information available on the website at that time. By doing so, we were able to illustrate a gap or disparity between performance and expectations. Findings indicate that investors can find most of the information sought except for some information on industry analysis in order to understand any possible opportunities and threats. The description and degree of information availability for each information group is summarized below.

Information sought by foreign investors when searching for investment locations

As introduced earlier, we summarized information sought by foreign investors into three categories, namely: information on the investment climate; information on the market and investment opportunities; information on entry and regulatory procedures. Findings indicate that various investors’ information needs fall into one of these...
Table 1. Information sought by foreign investors in Tanzania.

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<th>Example of information sought</th>
<th>Actual information available in the Website</th>
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<td><strong>Investment climatic conditions</strong></td>
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<tr>
<td>Investment security, conditions of infrastructure around the proposed investment site.</td>
<td>-Detailed information is available and informative for both investment security and infrastructure.</td>
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<tr>
<td><strong>Market and investment opportunities</strong></td>
<td></td>
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<tr>
<td>Local markets, investment opportunities in various sectors, list of competitors, competitors’ market positioning, joint ventures (JVs) opportunities, skilled labour, and cost of labour; and list of proposed projects.</td>
<td>-Information available on investment opportunities, JV opportunities and proposed projects. -No information on industry competitiveness. -General information without disaggregated data.</td>
</tr>
<tr>
<td><strong>Entry and regulatory procedures</strong></td>
<td></td>
</tr>
<tr>
<td>Employment regulations, taxation system, migration procedures, employment of foreign employees, cost of setting up the company, procedures to acquire land and procedures to acquire various permits</td>
<td>-Information available and informative. -Can be downloaded in a single document.</td>
</tr>
</tbody>
</table>

categories. However, foreign investors sought more information on market and investment opportunities, information on entry and regulatory procedures and less on the present investment climate. Table 1 summarizes examples of different types of information in each category.

Investors rarely sought information on the climatic investment condition. There are only two examples under investment climate conditions where investors indicated the need for this information. While Table 1 summarizes examples of different types of information from various data sources, findings revealed that information on local markets, lists of competitors, the cost of labour, joint venture opportunities, local suppliers and incentive packages are frequently sought and emphasized by foreign investors as important information in searching for an investment location.

**Investment climate**

Investment security and infrastructure conditions within the proposed investment site are the main information sought after. Although, findings indicate that there were limited examples of various types of information within the investment climate category, detailed information was found on the IPA websites portraying this information, especially the political and economic conditions. Information related to investment security, property rights, political stability and macroeconomic performance can be found on the website. Therefore, there may be a match between informational needs and actual Internet-based information.

**Market and investment opportunities**

The findings indicate that there is more information on investment opportunities in various key sectors, particularly from TIC. For example, a detailed document called the 'Tanzania Investment Guide 2008 and Beyond' is available from TIC’s website and contains information on investment opportunities in various sectors such as agriculture, manufacturing, mining and tourism. Conversely, it was observed on TIC’s website under the section ‘bankable project’ that investors can find information on proposed projects in various sectors, including calls for joint ventures. For example, appendix 1 is a specimen with a piece of information downloaded from TIC’s website. It summarizes an example of a proposed project in the mining and quarrying sector, where investors are being informed for a joint venture project with an estimated annual turnover of $7.4 million. However, while some investors required information on industry competitiveness, for example, a list of competitors, competitors’ market positioning and cost of labour, the findings indicate that this information was not found on the website.

**Entry and regulatory procedures**

From the analysis of multiple data sources, our findings also indicate that this kind of information can be easily
found on the TIC website. Potential investors can find detailed information on tax structure and administration, company registration, immigration procedures, land acquisition, application and acquisition of various business licenses and employment regulations. In this sense, there may be a high degree of conformity between investors’ informational needs and the actual information available. From a content analysis of e-mail records, it was also found that some foreign investors showed positive commentary and congratulation for an informative website, illustrated by the example:

“I would just like to congratulate you on your well structured website. It is very well set up and information is very easy to find. I think every document in your office is available for download from your website, this is very convenient for some who may not be able to visit your offices or do not have much available time to sit and talk to your staff. I have found all the information I needed, and a lot more information that I did not know about which will assist me with my investments here in Tanzania. (Quotation from an e-mail sent by the Investor from Kenya to TIC’s Management in 2009)”.

Synergy between Internet-based information and other private sources of information

There is a tendency for investors to combine both public and private information when searching for investment locations. This behaviour was observed when analyzing information from interviews and e-mail archives. Findings from the case study indicate that there is a synergy when combining the two sources of information in order to obtain reliability on the information collected and reducing the information gap from one source. Furthermore, foreign investors intending to invest in Tanzania combine Internet-based source of information from IPAs with other sources. These sources include information from friends in Tanzania, information from conducting their own research, communication with family members in neighbouring countries, asking existing investors, or contacting Tanzanian embassies, supplier/agent and Chief Executive Officer. The findings also indicate that the use of these information sources is not mutually exclusive and thus Internet-based information may be combined with one or more of the other sources. Foreign investors also expressed interest in visiting the host country even after receiving important information from agents and websites. The following excerpt can help to describe this behaviour:

“XYZ is a multinational company providing international telecommunication operators, equipment manufacturers and other overseas customers with top-quality services. Currently, we have received increasing number of business initiatives in Tanzania and thus made our decision to expand our operation. Therefore, we have planned to set up a private Limited liability Company in your country…We have preliminary information from our agents and Website but we would like to arrange a business visit to your office for further information. We are looking forward to a successful business relationship. (Quotation from an e-mail sent by the Investor from China to TIC’s Management)”.

Most investors with interest to visit the country for business purposes requested that IPAs facilitate the process and set appointments for detailed discussions regarding the proposed investment projects. Apart from Internet information, Internet services from IPAs’ websites were found to facilitate the process of collecting private information, especially for investors who wish to have detailed face-to-face discussions with an IPA’s staff and visit the proposed investment site. Internet-based information sources facilitated this process at two levels, as can be seen summarized in Table 2.

The process may begin at a private source, for example, an embassy abroad or a friend recommending that a foreign investor contact IPA officials, especially the

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<th>LEVEL 1: Preliminary information</th>
<th>LEVEL 2: Detailed information</th>
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<td>A private source, for example embassy recommends an investor to contact an IPA’s staff and website. The Internet facilitates this process to:</td>
<td>An investor receives important information but would like to visit the investment site. The Internet facilitates this process in three ways:</td>
</tr>
<tr>
<td>Inform the relevant contacts preferably e-mail contacts.</td>
<td>An investor sends an e-mail requesting IPAs to arrange for an official business visit.</td>
</tr>
<tr>
<td>Send e-mail to IPA specifically to the CEO by introducing the investment intention.</td>
<td>Appointments are made through e-mail communication.</td>
</tr>
<tr>
<td>Request more information and detailed discussion through e-mail communication.</td>
<td>Once an investor has already visited the investment site and is satisfied, there may be contract negotiations going on through e-mail communication between IPA and the investor.</td>
</tr>
</tbody>
</table>
CEO. They are sometimes advised to visit the IPA’s website for more information. Thereafter, investors obtain information on contacts and begin negotiations with the IPA on relevant investment opportunities as the following excerpt indicates:

"Thank you for the precious time you spent for meeting with us and discuss at great length the investment opportunity in Agricultural and Food processing sector in Tanzania. Discussion with you was a real pleasure and informative....As per your advice and suggestions we have visited Bagamoyo prison farm project and found it suitable for our requirement. Even when we were in Dar Es Salaam, we have indicated this and requested further details regarding the leasing terms, rent and other terms of conditions (Quotation from an e-mail sent by the Investor from India to TIC’s Management)".

From this excerpt, it can be noted that an investor came to Tanzania, met with the TIC’s staff for a detailed discussion and then visited the investment site. The investor seems to be satisfied with the proposed project. Contract negotiations were conducted through Internet-based communication services.

**DISCUSSION**

We begin the discussion by revisiting the three research questions and we relate them with our findings. What information do foreign investors seek when searching for investment locations and opportunities? Based on the analysis of information from data sources, our findings indicated that the information sought depends on the type of investment projects. Although investors are heterogeneous, there is some commonality on the information needed across investors. Information on market analysis, for example, local markets, competition, labour costs, suppliers, incentive packages and joint venture opportunities were found to be more important for all investors regardless of the type of investment projects. From a strategic business analysis standpoint, this information is crucial because it may determine firms' entry strategies and market positioning. This may be the reason why such information is commonly sought by various investors regardless of their proposed projects. Other important information is related to regulatory procedures. As Morisset and Lumenga-Neso (2002) argue, excessive regulatory and administrative procedure is one of the largest cost components for doing business in developing countries. Foreign investors respond to this uncertainty by searching for more information on entry regulatory procedures for various projects. In limited situations however, foreign investors sought information on the investment climate. There may be two explanations for this result. Firstly, Tanzania has long been cited as a politically ‘peaceful island’ when compared to other countries in Africa. So, political information may not be a critical issue in this investment destination. Secondly, political and economic reforms that have taken place since the 1990s corresponding with growing FDI inflows to Tanzania may be signalling to foreign investors that Tanzania is a safe and predictable place to invest.

The second research question (Does Internet-based information published on an IPA’s website meet the informational needs of foreign investors?) is closely related to the first question. The combination of the two research questions can provide any possible deviation between informational needs and the actual information found. Our findings indicate that when investors’ informational needs are compared with the actual information available on the IPA’s website, various types of information. For example: information on investment opportunities, incentive packages and entry regulatory procedures can be found, except for information related to industry competitiveness. It is noteworthy to look at the information on industry competitiveness. By industry competitiveness we refer to the information regarding lists of competitors in the respective industry and market positioning of the players within that particular industry. These findings interpret Porter’s argument that competitive forces such as the threat of new entrants, rivalry among existing competitors and the threat of substitute products determine competitiveness within the industry (Porter, 1980). This information is crucial to the investor because it provides a first impression regarding the number of players and the possible barriers to market entry. Why then, is this information not published on the IPA’s website? The answer for this question can be obtained from the following excerpt:

"One of our roles is to protect investors’ intellectual property rights. Suppose an investor with interest to invest in ICT requests information from TIC based on the following questions: How many players are in the ICT sector and what exactly each player is doing? TIC officials will only provide information on the number of players but not what players are exactly doing. We will advise the investor to conduct own research because it is our obligation to keep secrecy of investors (Quotation from interview with TIC’s official in 2010)".

While information on the list of competitors’ can be supplied by IPAs, investors may still be responsible for any information portraying competitors’ strategies, competitive advantages, strengths and market positioning. Our findings indicate that some investors had already taken some initiatives to acquire this information by conducting their own marketing survey in their respective industry. Therefore, from an ethical point of view, IPAs may not publish critical information regarding companies’ activities for fear of violating property rights contracts signed between IPAs and companies. Nevertheless, individual companies are allowed to
Table 3. Summary of key findings from the case.

<table>
<thead>
<tr>
<th>Information sought by foreign investors in Tanzania</th>
<th>Does actual information on the IPAs website meet the outlined needs?</th>
<th>Comments on alternative sources to compliment Internet sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment climatic conditions</td>
<td>1. Yes, detailed information available.</td>
<td>1. No single information source is sufficiently enough as a guide for strategic investment decisions.</td>
</tr>
<tr>
<td>for example: Investment security, conditions of infrastructure around the proposed investment site</td>
<td>2. Investors did not seek more information in this category.</td>
<td>2. Synergy is gained by complimenting public and private sources.</td>
</tr>
<tr>
<td>Market and investment opportunities</td>
<td>1. Some, but important information is not available.</td>
<td>3. Foreign investors with intention to invest in Tanzania had combined Internet-based source of information from an IPA with other sources.</td>
</tr>
<tr>
<td>For example local markets, investment opportunities, cost of labour, JV opportunities, list of competitors and competitors' market positioning.</td>
<td>2. Detailed information on investment opportunities can be found in a single document named “Tanzania Investment Guide 2008 and beyond” and “Zanzibar Investment Policy”.</td>
<td>4. The listed private sources include: friends in Tanzania, conducting personal research, contacting family members in neighbouring countries, existing investors, Tanzanian embassy abroad and supplier/Agent.</td>
</tr>
<tr>
<td>Entry and regulatory procedures</td>
<td>1. Yes, detailed information is available.</td>
<td>5. IPA websites facilitate the process of collecting private information, especially for investors who wish to have detailed face-to-face discussions with an IPA’s staff and visit the proposed investment site.</td>
</tr>
<tr>
<td>For example employment regulations, taxes, migration procedures, cost of setting up the company and procedures to acquire various permits</td>
<td>2. Detailed information can be found in a single document.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Investors sought more information in this category.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

conduct their own research to understand the level of industry competitiveness and market positioning of various competitors. In this regard, foreign investors may still be obliged to incur information costs in order to acquire this type of information, either by conducting their own research or consulting any other alternative source of information.

With regard to the third research question (What are the alternative sources of information used by foreign investors to compliment Internet-based information published on an IPA’s website?), our findings corroborate results of previous authors, (Kinoshita and Mody, 1999) who argue that no single information source is sufficient enough as a guide for strategic investment decisions and thus a synergy can be gained by complimenting public and private sources. Internet-based information from an IPA’s website plays an important role in informing foreign investors about the business environment, regulatory frameworks and investment opportunities in various sectors. However, as a public information source, Internet-based information does not meet all the informational needs required by foreign investors. Hence, there is a tendency for foreign investors to combine public information with other private sources. Our findings also indicate that there is a need for foreign investors to visit the country for detailed discussions with IPA officials on one hand, but also visiting the proposed investment site. This finding suggests that there will always be a need to visit the country, even after receiving important information from the Internet, for example investors with intention to invest in the agricultural sector. Visiting the investment site is crucial in the agricultural sector because investors require a huge amount of land. Moreover, investment in the agricultural sector depends on the quality of land in terms of fertility and any risk to the environment as a consequence of the project implementation. Therefore, foreign investors in the agricultural sector may need to visit the host country for face-to-face discussion with an IPA’s officials and directly visit the investment sites in order to gather more information on the investment potentiality and any possible risks. Table 3 summarizes the findings from the case based on the research questions.

CONCLUSION, FUTURE RESEARCH AND PRACTICAL IMPLICATIONS

In this article, we have studied the role of ICT in reducing information cost facing foreign investors when searching
for investment locations. The revolution of ICT in the conduct of international business activities has become theoretically apparent and therefore, calls for empirical support. There is a need for researchers to identify all possible areas where ICT is likely to yield an impact. To address these needs, we have focused on the application of ICT in the public sector, especially on how IPAs as government agencies can utilize Internet technology to disseminate valuable information to foreign investors searching for investment opportunities. Based on the case analysis, we conclude that Internet-based sources of information can reduce part of the information cost facing foreign investors, if properly organized.

We further argue that the information-theoretic approach and transaction cost perspective can help to study the rationale of sources of information cost in international business. These theories fit into the context of our study, but also represent examples of theoretical constructs in which their basic market failure arguments are likely to be altered or diluted by ICT revolution (Rao, 2001). If ICT has the potential to reduce search costs due to easy accessibility of both public and private information, then the internalization theory based on the argument of market failure and liability of foreignness due to a lack of knowledge are among the examples of constructs sensitive to the ICT revolution (de la Torre and Moxon, 2001). The remaining unanswered question, which could be of interest for theoretical development, is whether the impact of ICT on information cost and other transaction cost may result in higher FDI inflows. Future research should be designed to answer this question.

Our findings provide some practical implications for IPAs in their efforts to attract FDI. Publication of information on websites will only be useful if this information meets the needs of investors. This implies that it is crucial to understand their needs in order to publish customized information. Furthermore, TIC and ZIPA should work closely with Tanzanian National Statistical agencies and research institutions in order to collect useful information on various industries and sectors. For example, this should include information on the supply and demand of goods and services, lists of competitors in various sectors, labour supplies and cost of labour. This kind of information is helpful for the purpose of estimating preliminary industry competitiveness.

REFERENCES


Andersen PH (2006). Listening to the global grapevine: SME export manager* personal contacts as a vehicle for export information generation. J. World Bus., 41(1); 81-96.


Danford GL (2007), Internationalizing: An information-processing perspective. A study of the level of ICT use during internationalization, Helsinki School of Economics, Helsinki, Finland.


APPENDIX

Appendix 1. Example of Information on Proposed Investment Project in Mining and Quarrying sector.

<table>
<thead>
<tr>
<th>HEADING</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project title</strong></td>
<td>LIGANGA SPONGE IRON PROJECT</td>
</tr>
<tr>
<td></td>
<td>The Liganga V-Ti Magnetite Ore deposits are located about 850 km Southwest of Dar es Salaam in the Iringa region near Lake Nyassa.</td>
</tr>
<tr>
<td></td>
<td><strong>SPONGE IRON PROJECT</strong></td>
</tr>
<tr>
<td></td>
<td>With the opening up &amp; development of the coal mine in Mchuchuma there is an opportunity to open up the Liganga mine to produce ‘sponge iron (si)’.</td>
</tr>
<tr>
<td></td>
<td>During the process the raw iron is upgraded to a concentrate suitable for palletising prior to ‘direct reduction’ and iron ore will be in excess of 60% with very low 0.02% sulphur. The sponge iron is iron ore reduced in a solid state by a reduction process using natural gas or coal as a reluctant also known as Direct Reduced Iron (DRI) and the DR (Direct Iron) is a process of producing iron from iron oxide (from lumps or pellets) directly into a solid state – unlike going thru the molten stage in blast furnace. The final product is honeycombed hence the name ‘sponge iron’ which also still includes impurities. The final product will be + 80-90% Fe; metallizen % of about 92% with impurities containing; S1O2; S; P; Pb; 2n; Cu; Sn; Cn; Ni; and As. Sponge Iron is used as an input in production of iron &amp; steel products in furnace processing. Production is expected to be in the region of 50,000 mt/y and will expand into the next phase if successful. Water supply, electricity supply and auxiliary facilities including township will be part of the development.</td>
</tr>
<tr>
<td><strong>Programme</strong></td>
<td>Mtwara Development Corridor</td>
</tr>
<tr>
<td><strong>Country</strong></td>
<td>Tanzania</td>
</tr>
<tr>
<td><strong>Economic sector</strong></td>
<td>Mining and Quarrying</td>
</tr>
<tr>
<td><strong>Contact person</strong></td>
<td>Mr. Kimambo (Chairman) KDCL Minerals (T) Limited P.O. BOX 9233 Dar es Salaam E-Mail: <a href="mailto:kdclmine@africaonline.co.tz">kdclmine@africaonline.co.tz</a> Tel: +255 (0)75 4434209</td>
</tr>
<tr>
<td><strong>Estimated capex</strong></td>
<td>US$ 50 million</td>
</tr>
<tr>
<td><strong>Estimated annual turnover (US$$</strong></td>
<td>$20 million</td>
</tr>
<tr>
<td><strong>Project stage</strong></td>
<td>Pre-feasibility</td>
</tr>
<tr>
<td><strong>Current status</strong></td>
<td>The project promoters, KDCL invite JV partnership to develop the mineral potential for commercial exploitation. Further geological exploration would be required to augment the proven reserve to be followed by feasibility study in order to establish project viability</td>
</tr>
<tr>
<td><strong>Investor type</strong></td>
<td>Private Sector</td>
</tr>
<tr>
<td><strong>No. of jobs</strong></td>
<td>200 direct jobs and 400 indirect jobs</td>
</tr>
<tr>
<td><strong>Movement of cargo, where &amp; How much?</strong></td>
<td>About 100,000tons per annum of cement and gypsum boards will be generated and handled at Rushungi Port, Lindi</td>
</tr>
</tbody>
</table>