

## **Creating Environment Opportunities for New Market Innovation in Developing Economies: A Synthesis, Framework and Research Propositions**

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### **Abstract**

*There is the lack of framework for understanding the external factors influencing innovation by Small Medium Sized Enterprises (SMEs) in Knowledge-Intensive Business Services (KIBS) sector in developing economies. KIBS are private innovative firms that manage knowledge acquired from the environment to provide customised proficient service solutions to client firms. However, a better understanding of such external factors is important for the development of this sector for sustainable economic growth. This study is posited on the institutional theory by recognising the role of formal and informal knowledge institutions in the environment as sources of acquiring knowledge resources for KIBS innovativeness. This theoretical paper therefore develops a framework that consists of the distinctive formal and informal institutions that can influence KIBS SMEs innovation in developing countries. The scope of the study is Sub-Sahara Africa, original propositions that KIBS in developing countries can flourish in new market innovation if they maximize the use of external institutional services for knowledge resources, which can be subjected to future empirical research. Certain suggestions that government should develop informed policy to enhance knowledge networking infrastructure across the formal knowledge institutions is made. Research implications of the framework developed are discussed at the end of the paper. This study contributes originally to literature in entrepreneurship in developing economies.*

**Keywords:** Entrepreneurship, Developing Economies, Institutions, Knowledge-Intensive Business Services (KIBS), Market Innovation

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### **1. Introduction**

While a growing body of research exists on institutional environment of entrepreneurship in developing economies, little attention has been given to innovation in Knowledge-Intensive Business Services (KIBS) (Muller & Doloreux, 2007; Scarso & Bolisani, 2012; Savic and Lawton-Smith, 2013; Pinto et al., 2015; Johnston and Huggins, 2016). This twenty first century is witnessing development in the labour force of the non-agricultural sectors of the developing countries, especially in KIBS like Information and Communications Technology (ICT) (Gross,

2012). This is expressed in growing micro-electronic based, combinations of computing and telecommunications in e-business, e-banking, e-government, e-health, fixed and mobile phones networks and so on in the urban and rural areas which imply that developing economies have started making progress in KIBS sectors (Savic and Lawton-Smith, 2013; Fischer, 2015; Pinto et al. 2015; Johnston and Huggins, 2016). In Nigeria for example, the service sector has increased its importance for GDP and employment, as its contribution increased significantly from 29% and 42% in 2000, in spite of the economic challenges, by 2016, it rose to 59.7% and due to the recession in 2018, it dropped to 55.8%. Nevertheless, it has still accounted to being the largest contributor to the economy (National Bureau of Statistics (NBS), 2018). This is quite significant, considering that KIBS firms have high propensity for innovations and job creation in developing countries. Despite this development, there is little understanding of the environment for innovations in developing countries, especially in knowledge- intensive industries.

In advanced economies, several efforts have been made in literature on innovation to identify the different innovations by small and medium sized enterprises (SMEs) in knowledge-based industries (OECD/Eurostat, 2005). However, existing literature are fragmented as some scholars identified local market size and sources of knowledge as drivers of KIBS location and new firm formation (Andersson & Hellerstedt, 2009; Adeyeye & Adepoju, 2015). Others focussed on the diverse roles of KIBS as drivers of multilevel knowledge dynamics but found that KIBS are influenced by regional knowledge basis and institutional settings (Strambac, 2008; Abubakar, Mitra & Adeyeye, 2018). Thus, while the role of environmental conditions for KIBS entrepreneurship has been recognized, most of these studies have so far focused on matured market economies where the KIBS sector is in an advanced level of growth in terms of its locality across regions. More essentially, most of the studies have not given attention to understanding the framework for the environment of KIBS entrepreneurship in the developing economies especially with respect to New Market Innovation (NMI) in other geographical area. For instances, Javalgi et al. (2011) developed a framework for understanding KIBS in developing economies which links both the domestic and international expansion of firms to the environment. Empirical studies of entrepreneurial environment for KIBS suggest the likelihood that the environment influencing innovative activities in developing countries are different from the advanced countries (Adeyeye, 2013). Hence the need to gain insights into the environments stimulating market innovation in knowledge-based industries in Sub-Saharan Africa is pressing.

This paper thus argues that the emergence of KIBS in developing economies represents an important milestone but under-theorised research agenda in the 21<sup>st</sup> century. Little is known about KIBS in developing economies as entrepreneurship is least studied despite the significance of this sector as an integral part of technological advancement in this present-day. A framework is also missing to incorporate the available literature on KIBS environment and implicit links have not been established between role of KIBS and the place of environment as facilitators in developing economies.

In an attempt to bridge this gap, the main features of KIBS is connected to the environmental dimensions in developing economies by specifying the way institutional environment can foster KIBS SMEs likelihood to innovate. It focusses on new market innovations since innovation in developing countries is often hardly new to the world (Eurostat/OECD, 2005; Adeyeye, 2013). A conceptual framework is developed to incorporate existing literature on KIBS institutional

environment. Later, develops some propositions to facilitate future research, and offer suggestions for policy makers.

## **2. Literature on Environment for Knowledge-Intensive Business Services (KIBS)**

Entrepreneurial environment for KIBS refer to anything outside the firm that has critical implications for how things are done in the firm (Finney, Lueg & Campbell, 2008) in order to obtain knowledge for NMI. This study is relevant in view of the argument presented by Gnyawali and Fogel (1994), and Svetina and Prodan (2008) that environmental factors are more relevant to understanding entrepreneurial activities than personal attributes. Empirical studies in entrepreneurship also established an association between the external environment and entrepreneurial activities in any region (Baumol, 1990; Carter & Wilton, 2006).

Various environmental factors have been recognized in entrepreneurship literature as being influential. Most frequent among them are legal regulations and policies, public policies, markets influence and physical infrastructural facilities (Baumol, 1990; Dobbin & Dowd, 1997; Thorntorn & Ocasio, 1999; Agboli & Ukaegbu, 2006). Nevertheless, Gnyawali and Fogel (1994:44) and Utomi (1998) perceived entrepreneurial environment as ‘the overall economic, socio-cultural and political factors that influence people’s willingness and ability to undertake entrepreneurial activities’. On one hand, Gnyawali and Fogel (1994:44) further referred to it as ‘the availability of assistance and support services that facilitate the start-up processes’. On the other hand, Romanelli (1989) observed such as availability of necessary knowledge resources that lead to the development of entrepreneurship. Sautet (2006) however, asserted that entrepreneurship does not depend on the availability of knowledge resources in an economy but rather on the quality of institutions that foster the exploitation of knowledge resources and opportunities. The overall economic, socio-cultural and political factors as well as the knowledge resources are located in the institutional environment of a country which could have a positive or negative effect on innovation.

The institutional constraint and freedom has been widely acknowledged in literature as influencing organisational set-up (Bruton et al., 2010; Scott, 2008). For instance, if the institutional structure rewards productive activities, organisations will engage in productive activities and vis-à-vis (Baumol, Litan & Schramm, 2009). For example, the recent general wave towards SMEs, innovation and technology (Wennekers & Thurik, 1999) is dependent on institutional support for new market innovation as in the context of this study. Thus, organisations are emanating globally for productive activities. The institutional environment equally set the boundary for entrepreneurial opportunities by affecting the rate, rapidity, size (Gnyawali & Fogel, 1994; Hwang & Powell, 2005) of new market innovation.

Thus, this paper considers ‘the framework for entrepreneurial environment in developing economies’ as a combination of different enabling factors as found in the institutions that ensure new markets innovation by KIBS entrepreneurs in developing economies. The factors are considered in the light of the formal and informal institutions as establishing the basis of motivation for people to embark on entrepreneurial activities (North, 1990; Ayyeetey, 2008).

## **3.0 What is Knowledge-Intensive Business Services (KIBS)?**

KIBS are ‘private firms that generate, collect, analyse and distribute knowledge with the purpose of providing customised proficient service solutions to issues that client firms are unable and unwilling to develop’ (Miles et al., 1995) by themselves. They are ‘knowledge-producing, knowledge-using and knowledge-transforming industry that use knowledge-based methods to present themselves as ‘drivers of knowledge dynamics in multilevel contexts’ (Strambach, 2008).

The KIBS sector covers a wide range of activities based on professional knowledge. Miles et al. (1995) categorised them into 'firms-to-firms' and 'firms-to-customers' services. Subsequently classified as P-KIBS (traditional professional) services like legal, accountancy, business and management, marketing research which are intensive users of technology, T-KIBS (technology-based) services like engineering, R&D and consultancy which are directly related to Information and Communication Technology or technical activities and C-KIBS, referring to computer and software related services (Martinez-Fernandez & Miles, 2006). As KIBS is in growing stage in the developing economies, this study encompasses the total aspects of KIBS without discrimination. KIBS operate mainly with highly qualified professionals who provide expertise services with close interactions with clients particularly in technological fields or any functional area in contrast to the requirements of staff for physical services (Miles et al., 1995; Sengupta & Niranjai, 2018).

Innovation has been particularly attributed to product, process and technology until recently that services such as KIBS are included (Adeyeye, 2013; Savic and Lawton-Smith, 2013; Johnston and Huggins, 2017). KIBS innovation in developing economies is more of connecting innovation generation and diffusion together as entrepreneurial behaviour. However, the developing economy market is often so much about the transfer of innovation found in developed economies to their countries which is market innovation (OECD, 2005).

#### **4. The Significance of Knowledge- Intensive Business Service to the Economies**

Link and Siegel (2007) observed that most of the service sector's developments from the early 1980 are principally services with knowledge content. Hence, the recognition of KIBS as a sub-sector in the service industry becomes a powerful sector with a rapid growth in many economies (EFILWC, 2006; Sengupta & Niranjai, 2018). For instance, the GDP for the service industry which included KIBS doubled within a decade in USA employment to a range of 70-80%. Precisely by 2015, 78.1% and 78.6% of GDP in USA and UK respectively was in service sector (World Bank, 2015). The recent report about knowledge economy stated specifically that more than 20% of UK GDP is KIBS and comfortably the largest singularly growing sector of the economy (Sissons, 2011; Sengupta & Niranjai, 2018). This development is found in both the developed and developing economies at different trends depending on how favourable the environment for entrepreneurship (Baumol, 1990). For example, service sector contributes 50% to GDP in Uganda; 50.4% in Kenya; 52% in India; 56.5 % in Zambia; over 60% in Korea and Brazil (World Bank, 2015). In Nigeria, it contributed about 30% to GDP in 1985 and by 1990, it declined to 25% reaching its lowest as 18.9% in 1992. By 1994, the share of the service sector in the GNI was stabilised to 20% and to almost 27% in 1998 but by 2016 it was 59.7% but decreased to 55.8% in 2018 due to the economic recession, yet, the largest contributor to the economy (National Bureau of Statistics (NBS), 2018). In addition, the general growth in information and communication technology (ICT) as a significant part of KIBS also contributed 8.27% to GDP in 2015 (NBS, 2015). These figures attest to the wave of change in the developing economies towards KIBS thereby requiring investigation.

In view of the above, it can be established that there is presently a global awakening in the KIBS sectors in this technological advancement age and as one of the most rapidly developing sector of the economy (Baró, 2008; Johnston & Huggins, 2017). This is particularly important because there are many firms that experienced tremendous growth due to their vision for NMI (Akoni, 2011). Innovation is critical to growth. Some started small and became multinationals through markets innovation by embracing pioneering work. Examples of such firms in Africa are Safaricom in Kenya, whose pioneering work on mobile banking has become so prominent in

developing economies that now even some developed economies are trying to emulate it (Dahunsi, 2012). Although, most developing countries have issues, for instance, there were concerns over Nigeria as an emerging economy at the national and international level as a high risk frontier market (Cock, 2012) due to the security challenges.

In February, 2009, Laurent, Procter and Gamble's (P&G) Group President in charge of Eastern Europe, the Middle East and Africa announced the target to invest intensely in Nigeria through 2015 (Uzonwanne, 2011; Cock, 2012). Nigeria had an exploratory factory since 1990 and the market has been a top-level issue among the multinationals as well as SMEs. What is so attractive about Nigeria despite the risks? It has population advantage with a fast-growing economy and an emerging middle class displaying an increasing level of confidence despite its non-competitive infrastructure and strong ICT impact (Uzonwanne, 2011; Cock, 2012).

Thus, KIBS are very important in the creation and implementation of new products (hard and soft wares), services and processes as carriers, shapers, facilitators and creators of both technological and managerial innovations in the economy. They structure the infrastructure of the knowledge economy by fostering mobility of knowledge and ideas around the economy, and encouraging firms to maximise the use of new technologies and ideas. They provide support systems like information technology (IT) networks and legal or accountancy functions for business operations. They contribute both to an overall economic growth and specific industry clusters growth (Sissons, 2011). Also, there is a recent shift from the explosion of informal trade in developing countries to the emergence of KIBS (Swedish Trade Council, 2012). For example, Sub-Saharan Africa has emerged as the world's fastest growing ICT sector (Swedish Trade Council, 2012). However, to enable KIBS SMEs function appropriately, the entrepreneurial environment must be favourable in providing resources for new market innovation which seems to be the prominent innovation in the developing economies (Adeyeye, 2013).

### **5. New Market Innovation Concept**

The market is the linkage between societal needs and economic pattern of response to innovation (Mitra, 2012). New Market Innovation (NMI) therefore, is the application of early-entry strategy by a firm into a new market or to a new focused group with an 'existing product', with the functional characteristics of the product not significantly changed, to exploit opportunities in a market and probably gain the first-mover advantages (Schumpeter, 1934; OECD/Eurostat, 2005; Abubakar, 2009). At other instance, it may involve the introduction of new sales channels like a new way of selling or displaying goods and services to customers (Eurostat/OECD, 2005). It is also perceived as the first introduction of 'existing' products /services to new places and new people (Dahunsi, 2012). NMI is about entering a new market with the aim of addressing customers' needs in a better way and increasing firms' profitability. Summarily, the main element of market innovation in Schumpeterian sense is about the gap left in a market by those who currently serve it but recognized by the entrepreneur who exploits and creates values from it. Drawing on this argument, KIBS entrepreneurial environment for new market innovation in a country is dependent on many factors but predominantly on the environment where the innovation will take place (Adeyeye, 2013).

Although, Schumpeter refers to opening of new market as a type of innovation, its importance received less emphasis in comparison to product and process innovations (Liebermann and Montgomery, 1988). This made knowledge and theories about market innovation to be lacking in the literature (Tidd, Bessant and Pavitt, 2005). New market innovation is regarded as the main innovative activities that increase sales and profit (Halpern, 2010). Hence this study focuses on

the framework for environment for KIBS SMEs NMI which can be of significant implication to entrepreneurs and policy makers especially in terms of guidelines on promoting entrepreneurial SMEs in the developing economies.

#### **6. An Institutional Framework for KIBS in Developing Economies**

The institutional theory emphasises that the external environmental factors have great influence on firms' ability to innovate (Baumol, 1990; Li and Matlay (2006). Baumol (1990) argues that different ways entrepreneurs use their resources on innovation is dependent on the quality of institutions in that country. This is pertinent because the structure according to Baumol (1990) affects the incentives on resources invested in productive activities (i.e. legal economic activities) in contrast to unproductive activities (illegal economic activities). Accordingly, Sobel (2008) used different measures of productive, non-productive entrepreneurship and institutional quality to substantiate Baumol's theory. Boettke and Coyne (2006) and Sautet (2006) also empirically establish an association between institutional structure and the form of entrepreneurship arising in different nations. Institutional theorists (Baumol, 1990; North, 1991; Sautet, 2006; Aryeetey, 2008 ) identified the formal and informal environment for entrepreneurship in developing economies. For instance, Sautet (2006) investigated the role of institutions in entrepreneurship in Romania, and discovered that the challenges of most entrepreneurs in developing countries are directly related to the paucity in the formal institutional structure. These studies therefore conclude that where the reward for productive entrepreneurship is somewhat higher than that of the non-productive entrepreneurship, productive activities seem to be prevalent and vice versa.

However, while scientific studies on innovation and institutions clarify reasons for entrepreneurs' involvement in productive or unproductive activities, there is hardly any research that has examined the framework for KIBS environments for NMI in developing countries. This is essential, since institutions set the rules and norms guiding societies and can either limit or promote innovation (Gnyawali and Fogel, 1994; Hwang and Powell, 2005). Such studies assist in uncovering the nature of institutions that encourage or restrain NMI in developing countries. The Formal institutional environment on one hand, are the governmental institutions and other organisations recognized by law, such as research institutes, financial institutions, higher education institutions and formal collaborations with other KIBS firms (Muller and Doloreux, 2007). Informal institutions on the other hand, are the non-governmental institutions and organisations without legal framework (Taylor and Thorpe, 2004) though not illegal but cultural and natural. Such examples are knowledge received through personal contacts, network of friends and family members, or imitations of other KIBS firms (Aidis and Estrin, 2006; Scarso and Bolasini, 2012). However, KIBS firms need knowledge resources from both institutional environment for NMI.

The formal knowledge institutions are places where knowledge is disseminated in recognized and highly institutionalised setting while informal knowledge institutions are found in diverse places outside the formal establishments. They take place more casually, sporadically, spontaneously and cheaply in relation to prevailing circumstances. Informal knowledge institution relies on entrepreneurs' endeavour to network rather than organisational initiatives or directives (Ekpo and Umoh, 2011). They are based on reciprocal exchange of information and favour. This is often accessed through the entrepreneur's or staff network (Minniti, 2005) on one-to-one at homes, offices, social gatherings, daily interactions and shared relationships in the society where knowledge and information are disseminated (Matlay, 2008).

Thus, KIBS SMEs that are embarking on NMI often need to access both formal and informal knowledge which are often external to the firm. In advanced economies, formal institutions, particularly educational institutions are considered important contributors to innovation (Acs, 2002; Li & Matlay, 2006; Adeyeye & Adepoju, 2015; Johnston & Huggins, 2017) while developing countries often have underdeveloped formal institutional environments, especially educational institutions (Acs and Virgill, 2010; Adeyeye, 2013). Such weakness in institutional environments implies that a large amount of economic activities in developing economies occur through informal sources (Minniti, 2005; Amine and Staub, 2009; World Bank, 2012). This is particularly the case for developing countries in Sub-Saharan Africa, which has the highest prevalence of informal economic activities in the world.

The weaknesses or absence of formal institutional architecture often paves way for the prominence of informal institutions (Bruton et al, 2010; Adeyeye & Adepoju, 2015) in innovative activities like NMI. This study, thus, discusses the entrepreneurial environment so that innovative KIBS SMEs will channel the search to where adequate knowledge resources for NMI are accessible. It therefore suggests that informal sources may have greater influence than formal institutional sources of knowledge for NMI in our context.

#### *6.1 The Formal Institutional Sources of Knowledge*

One of the key dimensions for sustainable innovative activity in an entrepreneurial environment by KIBS SMEs is the capability to interact with external formal sources to access, acquire and develop new knowledge to exploit innovation processes (Hollenstein, 2003) like NMI. The expected functions of formal institutions therefore in an economy are reduction of transaction costs, transparent rules and regulations and efficient market mechanisms (Bruton, Ahlstrom & Li, 2010).

Formal knowledge through external R&D (den Hertog, 2000; Muller & Doloreux, 2007) located in specific places like R&D divisions which are not easily accessible to SMEs because of their size is one main source. Researchers (Kessler, Bierly and Gopalakrishnan, 2000; Strambach, 2008; Johnston & Huggins, 2017) have recognized that KIBS SMEs are increasingly engaging in R&D co-operative engagements for many reasons. For instance, they do so to complement internal knowledge resources, access technical competencies, minimize fixed costs related to capital assets acquisition and obtain external resources needed for innovation. Firms can interact in various ways as discussed in this study to access knowledge and mechanisms outside their boundaries. Such interactions enable acquisition, dissemination and production of new knowledge (Muller and Doloreux, 2009) for NMI in the formal institutions. It is known to them that the more they access external sources, the more resources are available for expertise disposal and the more they are able to meet the increased speed and development (Romijn & Albaladejo, 2002; Svetina & Prodan, 2008) especially in ICT as it affects KIBS NMI.

##### *6.1.1 Collaborations*

This is inter-industry or inter-firm linkages that increase the NMI knowledge base. Collaborations (networking) with firms within locally close geographic proximity (Svetina & Prodan, 2008) and outside geographical boundaries, (Kessler et al., 2000) is a form of corporate socialisation. It enhances knowledge stream flow from one firm to another and establishes increased communication through participation for transmission of NMI knowledge between firms. Inter-firm collaborations and alliances were long assumed to be particularly limited to the local level and were studied within the context of clusters (Svetina & Prodan, 2008). However, with advances in ICT, the geographic scope of this interaction is widening and often spreads

across national borders such that firms could collaborate with firms outside and inside the country (Svetna & Prodan, 2008) in order to seek enabling knowledge for NMI. Thus, Adeyeye (2013) in a survey attested to the importance of collaborations within the country and their strong alliances with firms outside the country as the backbone sources of knowledge for NMI by KIBS SMEs. However, KIBS firms are likely to increase the possibility of obtaining knowledge for NMI if they collaborate with other related firms in the environment.

#### *6.1.2 Partnership with Research Institutes and Universities*

Research institutes and universities (Strambach,2008; Muller & Doloreux, 2007) are actively involved in a set of relationships that occurs in the business environment (Strambach, 2010; Johnston & Huggins, 2017). They are renowned for knowledge transfer activities to support firms and industries through research, training and education (Mitra, 2012). They are perceived as lead actors in innovative activity of KIBS by providing scientific and technological research inputs for entrepreneurial firms (Strambach,2008). They are often funded purposely for research thereby serving as empirical guide and source of external R&D (Den Hertog, 2000; Muller & Doloreux, 2007; Johnston & Huggins, 2017) that KIBS firms can benefit for NMI. They offer research-based knowledge and direction like, identifying locations where firms, industries or individuals will need KIBS. The research indication is a source of knowledge for NMI that a new opening will be required for a KIBS firm to take advantage.

#### *6.1.3 Business Associations and Clubs*

Business associations are organised network that accelerate the process of making contacts. Conferences, workshops and seminars (Den Hertog 2000; Muller &Doloreux, 2007) are very important sources. Meetings are remarkable place to learn about market trends, identify market potentials and meeting potential competitors. It creates the opportunity to meet with professionals like accountants, patent attorneys and so on that easily comes in contact with firms that needs the support and services of KIBS. This becomes a formal source of NMI knowledge. The American Electronics Association is a typical example of an association that holds such seminars and meetings. Similarly in Nigeria, most of the KIBS firms in their segments have their business associations meetings regularly for seminars and deliberations (Adeyeye, 2013).

#### *6.2 The Informal Knowledge Institutions*

Another key dimension is the informal institutional sources of knowledge which include customers/client firms (Kessler et al, 2000; Tether &Tarjar, 2008) especially lead users. They are often informed about what they want and know the environment that needs KIBS especially in their locality. Literature and search techniques on internet (Carley, 2006; Muller & Dolloreux, 2007; Pilot study, 2011) expose a world of opportunities; personal contact (Burt, 1997; Pedersen et al., 2002) helps to acquire knowledge of existing and non-existing markets without KIBS for NMI. Firms can imitate competitors (den Hertog,2000; Miles, 2000) in KIBS by improving on their package and making a novel presentation; and social network- connections through strong and weak ties (Burt, 1997;Pedersen et al,2002). This is very paramount in African context because of the culture. Networks could be of relatives, friends, business associates and collaborations that can facilitate information for NMI.

##### *6.2.1 Lead Clients*

Feedbacks from clients are regularly used by many KIBS globally and in Nigeria because they attract little or no transactional cost in comparison to the tremendous benefits obtained from it. In that stream, lead clients are termed as sophisticated customers but very useful source of external knowledge (Kessler et al, 2000; Strambach, 2008; Pedersen et al, 2002) because they offer more



feedbacks that include exchange of technical knowledge and salient information about market conditions and trends needed for innovation into new market and growth. Adeyeye's (2013) findings revealed that clients' feedback is very important in obtaining knowledge of the environment. Lead users are often professionals or experienced people that have conducted research on assets management. They usually sit together with the management team to discuss their findings and express their wish over their assets management. This suggests that KIBS customers could be reliable sources of knowledge for NMI without cost.

#### 6.2.2 Suppliers of Equipment and Materials

The suppliers of equipment and materials (Scarso & Bolisani, 2012) are very dependable and effective in offering essential insight into the organisation of information, logistics and other functions that would offer knowledge for NMI opportunities. Furthermore, the status of equipment and materials in terms of availability is vital for new market opening. Where demand is high and supply is low can lead to crisis such as conflict in usage of resources by competitors, as well as rise in the cost of production which invariably leads to high cost of delivery and less profit. Otherwise, if the demand is low and supply is high, it is an essential knowledge for NMI by identifying and seeking new users/customers for KIBS.

#### 6.2.3 Personal Contact and Local Linkages

Empirical studies (Burt, 1997; Pedersen et al, 2002) show that personal contact through inquiries and survey are reliable sources of knowledge acquisition. Imitation of existing activities of competitors in KIBS (den, Hertog, 2000; Miles, 2001) is another means of acquiring knowledge of the environment. Innovative firms like KIBS might decide to make certain amendments for novelty to have a new market. Local linkages (Pedersen et al, 2002) through friends, relatives and club members are reliable sources of knowledge for NMI. The concept of kinship ties, both strong and weak may be relevant as well. These players are willing to invest necessary knowledge about the absence or inadequacy of KIBS in an environment to the entrepreneur for the benefit of NMI. These are basically forms of knowledge acquired through trust which is as the result of network relationship. A framework is therefore developed (see figure 1).

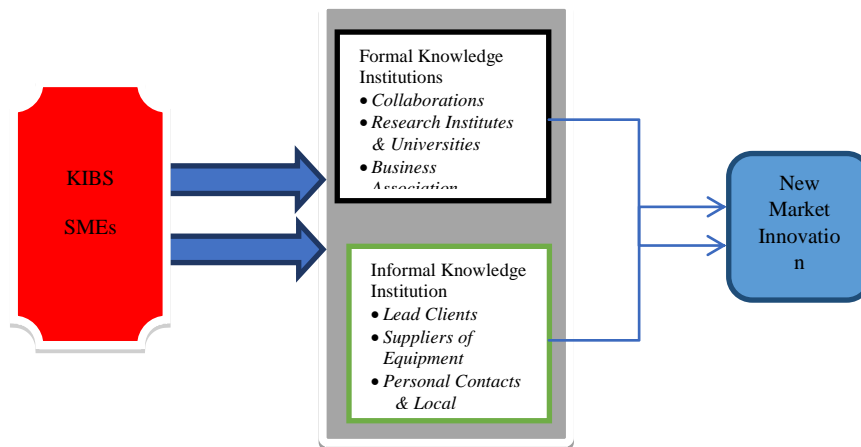


Figure 1: Framework for analyzing Institutional Environment for KIBS NMI in developing economies

Source: Adeyeye (Unpublished thesis, 2013)

Figure 1 reveals that KIBS SMEs can acquire knowledge from the institutional environment of both formal and informal institutions for their entrepreneurial behaviour, NMI.

The formal institutional environment is directly related to macroeconomic policies and procedures (that is, legal and institutional framework). The more supportive the formal knowledge institutions for effective innovative activities in the market, the less the constraints for KIBS firms to acquire knowledge for NMI and the greater the likelihood of KIBS firms NMI. Moreover, the informal institutional environment relates to the socio-cultural factors. The more the informal knowledge institutions place values on KIBS, the greater the people's involvement in acquiring and releasing knowledge for KIBS, and the more likely the propensity for KIBS firm NMI being high. Thus the above analysis suggests the following propositions:

P1: The more supportive the formal knowledge institutions, the more KIBS firms acquire knowledge, then the greater the likelihood for NMI.

*P1(i): The more effective the collaborations between firms in a developing country, the more the KIBS firms acquire knowledge, the greater the likelihood for NMI.*

*P1(ii): The more efficient the research institutes and universities in a developing country, the more the KIBS firms acquire knowledge, the greater the likelihood for NMI.*

*P1(iii): The more favourable the business associations in a developing country, the more the KIBS firms acquire knowledge, the greater the likelihood for NMI.*

P2: The more values placed by the informal knowledge institutions on KIBS, the greater the involvement in acquiring and releasing knowledge for KIBS firms, the higher the propensity for KIBS firm NMI.

*P2 (i): The more the values placed by the lead clients on KIBS, the greater the involvement in acquiring and releasing knowledge for KIBS firms in a developing country, consequently, the higher the propensity for KIBS firm NMI.*

*P2 (ii): The more the values placed by the suppliers of equipment on KIBS, the greater the involvement in acquiring and releasing knowledge for KIBS firms in a developing country, and the higher the propensity for KIBS firm NMI.*

*P2 (iii): The more the values placed on personal contacts and local linkages on KIBS, the greater their involvement in acquiring and releasing knowledge for KIBS firms in a developing country, then the higher the propensity for KIBS firm NMI.*

An essential aspect of this research is to understand the relative importance of each factor of the formal and informal knowledge institutions for KIBS NMI. It would be useful to understand the relative importance as apportioned by KIBS entrepreneurs, policy makers and development agencies like SMEDAN, World Bank and so on in the country. Finally, it might be necessary to study inter- country differences in the level of acquisition of knowledge for KIBS and propensity to NMI. A survey might be appropriate for data collection.

## 7.0 Conclusion and Recommendations

At the firm level, this study has documented the influence of environmental factors on KIBS NMI. The ability to source knowledge from the external environment's institutional sources of formal and informal knowledge would lead to greater likelihood of NMI. The framework of institutional environment developed provides a basis for studying their roles in influencing NMI

by KIBs SMEs in developing countries, thereby serving as a foundation for developing richer theories in KIBs SME/entrepreneurship literature and public policy.

In view of the foregoing, the following recommendations are made: Government can contribute to entrepreneurship by possibly designing informed policies that could provide a broader scope that underpins the development of knowledge networking infrastructure across the formal knowledge institutions; the government should enact laws and regulations to support, promote and protect entrepreneurial knowledge for KIBs NMI. Also, funds should be made available for the formal knowledge institutions to embark on innovative research for NMI as the country develops its capacity for the knowledge-based economy. Moreover, introduction of policy that sensitizes the public for societal recognition of KIBs and innovation, by introducing entrepreneurial values and behaviours in curriculum to enhance the informal knowledge institutions as the formal may soon give way for the informal because of the economic downturn; and KIBs entrepreneurs should strengthen the business associations for knowledge acquisition through seminars, workshop and networking.

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