How can African Countries Advance their Outsourcing Industries: An overview of possible approaches

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How can African Countries Advance their Outsourcing Industries: An overview of possible approaches

Editorial

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ABSTRACT

Offshore outsourcing has become a multi-billion dollar industry with global dominance. This editorial provides an overview of offshore outsourcing and identifies factors affecting success of offshore outsourcing in low-income countries.

Keywords: globalization, outsourcing, ICT, Africa, low-income country

BRIEF OVERVIEW OF OFFSHORE OUTSOURCING

It has been often reported that globalization has brought opportunities for low-income countries to become part of an ever-growing global workforce (B. B. M. Shao & David 2007; Javalgi et al. 2009). This is especially the case where globalized work involves the use of information and communication technologies (ICTs), whose ubiquity and relatively low cost of investment has underpinned the increasing prevalence of industries such as offshore software outsourcing (Friedman 2005). Offshoring became a dominant global industry during the “millennium bug” crisis in the 1990s when abundant and cheap labor was needed by higher-income countries to address the rollover date problem, which threatened to put thousands of software applications out of commission including those that were critical to geospatial and defense technology (Rivard & Aubert 2008). This crisis was a catalyst for the offshoring industry but its popularity grew when it became clear that the lower cost of labor and the flexibility and scale that offshoring provided made a financial and strategic proposition that most companies could not ignore (Oshri et al. 2011; Carmel & Tjia 2005). Large corporations such as Eastman-Kodak and General Dynamics had already led the way in making domestic (onshore) outsourcing of IT services an acceptable business proposition (Grover et al. 1994; Loh & Venkatraman 1992). The move to offshore was just one further step which organizations could embrace, once their “fear of the unknown,” i.e., of doing business in a foreign country could be addressed.

Academics studying the offshoring phenomenon have developed models that help to explain how clients come to embrace offshore outsourcing and how these relationships grow (e.g. Carmel & Agarwal 2002; Willcocks & Lacity 2006). Potential client organizations would generally test the concept by sending small tasks overseas until they grew in confidence with the quality of the deliverables from, and the capabilities of, the provider organization. There were many failures, of
course, while offshore models were being tested to see what worked best. Now, there are a wide variety of “shoring” and sourcing models, each representing some combination of strategies related to costs, resources and locations that could be manipulated to provide a particular strategic advantage (Carmel & Tjia 2005; Oshri et al. 2007). Some of these models and their descriptions are outlined in Table 1.

<table>
<thead>
<tr>
<th>Term</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offshore</td>
<td>In a different country</td>
</tr>
<tr>
<td>Onshore</td>
<td>In the same country</td>
</tr>
<tr>
<td>Nearshore</td>
<td>In a country nearby</td>
</tr>
<tr>
<td>Noshore</td>
<td>In no country</td>
</tr>
<tr>
<td>Farshore</td>
<td>In a remote country</td>
</tr>
<tr>
<td>Best Shore (EDS)</td>
<td>Blend of different countries</td>
</tr>
<tr>
<td>Anyshore (Bearing Point)</td>
<td>In any of a number of countries</td>
</tr>
<tr>
<td>Rightshore (Capgemini)</td>
<td>In many countries where the right combination of resources could be found</td>
</tr>
<tr>
<td>Dualshore (NIIT)</td>
<td>In two countries</td>
</tr>
<tr>
<td>Offsourcing (HCL)</td>
<td>Inshore outsourcing</td>
</tr>
<tr>
<td>Multishore</td>
<td>In more than 1 country</td>
</tr>
<tr>
<td>Seacode</td>
<td>In the sea (on a cruise liner, e.g.)</td>
</tr>
<tr>
<td>Netsourcing</td>
<td>Over the Internet</td>
</tr>
<tr>
<td>Cloudsourcing</td>
<td>Outsourcing enabled by cloud services</td>
</tr>
<tr>
<td>Crowdsourcing</td>
<td>Outsourcing to a large online community</td>
</tr>
<tr>
<td>Rural Sourcing</td>
<td>Domestic sourcing from a rural, underprivileged areas</td>
</tr>
<tr>
<td>Impact Sourcing</td>
<td>Sustainable outsourcing</td>
</tr>
</tbody>
</table>

Table 1. "Shoring" and Sourcing Models Developed Over Time

In fact offshore outsourcing has become a multi-billion dollar industry (NASSCOM 2012) in which more and more countries are participating (Gartner 2008). A survey of nearshoring activity through content-analysis of various academic and non-academic sources revealed that in 2006, 51 countries were part of the nearshore landscape (Carmel & Abbott 2007), including five African countries, namely, South Africa, Morocco, Algeria, Tunisia and Egypt. The list of offshore providing countries was even larger in 2008, standing at 72 (Gartner 2008), with Egypt, South Africa and Morocco appearing in the top 30 list. South Africa remains a dominant player in this industry in the African continent (Barget 2012) while North African countries are struggling to retain their former popularity due to business uncertainty arising from recent political upheaval in the region (The Africa Report 2012). Notwithstanding the assumed power of ICTs to render location irrelevant in a globalized world (Cairncross 1997), this industry is nonetheless very sensitive to geopolitical events. Take for example, the withdrawal of outsourcing contracts from Indian providers subsequent to the Mumbai terror attacks in 2008 (O’Donoghue 2009).
FACTORS AFFECTING OFFSHORE OUTSOURCING AS AN INDUSTRY

The emergence of offshore outsourcing as an export industry has clearly become a priority for African nations as seen from the data above and recent reports and articles written on the topic (Imara Africa Securities Team 2011; Willcocks et al. 2012). There remains controversy, however, as to whether and how low-income countries can take advantage of the assumed benefits of this type of industry. The first issue lies in the uneven distribution of economic advancement within the country incurred by the introduction of software and services outsourcing hubs (Heeks 1999; Kumar 2005). The trickledown effect on the wider economy of these foreign IT-related investments is very often not realized outside of the narrow enclaves that they serve (Upadhya & Vasavi 2006; Suri & Abbott 2012). A second issue relates to whether export-only IT services models are ultimately sustainable, that is, whether indeed a vibrant (and possibly large) local software/IT market is essential to the longevity of an export market, given accepted norms of national competitiveness in any industry (Porter 1990; Heeks 1999; Schware 1992). The third issue relates to emulating the success of “first mover nations” like India and Ireland that have been successful in establishing these export-oriented IT services industries. Researchers are unsure of the specific “mix” of conditions that will lead to success in this area and how “follower” nations can emulate this success (Arora & Gambardella 2005). For example, it has been claimed that India’s success is not due to one factor but to a confluence of mostly serendipitous aspects that have created the unique conditions for their “first mover” advantage (Krishna et al. 2000). Among these aspects are claimed, for instance, indigenous traits of Indians such as innate mathematical ability (Balasubramanyam & Balasubramanyam 1997), the extensive networks set up by expatriate Indians from Western organizations to their homeland (Saxenian 2002) and organizational and cultural legacies particular to the Indian experience (Krishna et al. 2000). These factors are claimed in addition to economic indicators such as labor arbitrage, cultural distance/proximity, government policy, political ideology and others (Joshi & Mudigonda 2008). In fact, most research on country attractiveness for offshore outsourcing posits indicators such as these and evaluates whole countries on their bases (Rao 2004; Zatolyuk & Allgood 2004; Minevich & Richter 2005).

Earlier research on the offshoring phenomenon, for example, has produced some taxonomies that were widely used to assess offshoring countries’ ability to create an export industry out of selling IT-based services (Heeks & Nicholson 2004; Carmel 2003a; Carmel 2003b). These early taxonomies categorized African countries into the non-competing category, i.e., not thought likely to succeed in such endeavors. It must be noted such models concentrated on software/technology-related outsourcing, and not so much on the type of offshore outsourcing that has become more prevalent in recent years: business process outsourcing. In fact, broadly speaking, offshored services can be divided into two categories: information technology outsourcing (ITO) and business process outsourcing (BPO) (Oshri et al. 2011). ITO is mainly related to software solution development, maintenance and management while BPO concerns business services that can be decomposed into processes (workflows, e.g.) which can be remotely executed, and which are enabled by information technology. Call and contact centers are a very popular example of low-end BPO work, which, it can be observed, is a mainstay in many African countries that are pursuing offshoring as an industry (Imara Africa Securities Team 2011; The Economist 2010). Higher-end BPO work could involve financial analysis of data banks, perhaps, in different languages for example, which would then provide output to Western clients for more critical reports and analyses. Countries like India and China are well-positioned for gaining a high percentage of this market share; India through its first mover advantage and competitive positioning in the value chain (NASSCOM 2011) and China through the advances of its more mature software and services offshore providers (The Economist 2006). The key factor in differentiating between the low-end and high-end BPO work is the level of expertise and knowledge needed by the offshore worker to complete the offshored task.
The following table presents a general list of location-specific factors from the literature, which are considered to affect the development of an ITO or BPO industry in a particular country. Broadly speaking, these factors fall under the categories: infrastructure, country risk, government policy, culture, and human capital (Bunyaratavej et al. 2007; Hätönen 2009), resources, networks, institutional structures or other (McCann & Mudambi 2004; Graf & Mudambi 2005). A full discussion of the derivation of these categories is given in Abbott & Jones (2012). The factors are similar for both the ITO and BPO sectors and differ only in the detail. For example, labor availability for ITO projects may depend on particular specialized talent such as programming in a particular language, whereas for BPO projects the need for labor may mean acquiring resources skilled in a particular business area, e.g. marketing. The table lists these location-specific factors linked to general problems usually faced by low-income countries regarding these factors (Heeks 1999; Kshetri 2007a; Doh 2005), and then makes suggestions as to practices and policies that can be put into place by investors, government bodies and local entrepreneurs in the industry to mitigate these problems.

<table>
<thead>
<tr>
<th>Factors affecting location</th>
<th>Explanation of factors</th>
<th>Associated problems in Low-income Countries</th>
<th>Practices/policies to address these issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure</td>
<td>Transportation,</td>
<td>Lack of adequate infrastructure, faulty</td>
<td>Develop technology parks which have stable electricity supplies, dedicated telecommunication infrastructure and other incentives to develop the industry</td>
</tr>
<tr>
<td></td>
<td>telecommunication</td>
<td>electricity supply, unstable telecommunication infrastructure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>utilities, technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geographic proximity/distance</td>
<td>Geographic closeness or distance of location or issues related to time zone differences</td>
<td>Inadequate access via air transport, distance from international airports</td>
<td>Place offshore outsourcing sites close to international airport links, take advantage of similar time zones for synchronous communication</td>
</tr>
<tr>
<td>Economic system</td>
<td>Inflation rate, exchange rate volatility, GDP growth rate</td>
<td>High inflation affecting property prices, rents, cost of living etc., low GDP causing depressed economy, exchange rate fluctuations</td>
<td>Adopt policies for fixing currency rates, give investors preferential rents, take advantage of low GDP to pay locally competitive salaries</td>
</tr>
<tr>
<td>Political risk</td>
<td>Attitudes towards free market economies, stability of political system, relationship with neighbors, security, attitudes towards Western political systems</td>
<td>Political upheaval, frequent changes of government, anti-Western political rhetoric, anti-Western sentiment, disputes with neighboring countries, internal disputes amongst tribal groups</td>
<td>Foster international business links with political allies, address political unrest swiftly and in a politically sensitive manner, address sources of anti-Western sentiment</td>
</tr>
<tr>
<td>Government Regulations</td>
<td>Import/export restrictions, policies, taxation structure, attitudes/incentives towards FDI</td>
<td>High duties and taxes on technology equipment, high corporation tax, anti-foreign investment attitudes</td>
<td>Give ITO/BPO protected industry status to avoid tax and duty regime, provide incentives for foreign investment in this industry</td>
</tr>
<tr>
<td>Cultural similarity/difference</td>
<td>Cultural similarity to home country or disadvantages of cultural distance or psychic distance</td>
<td>Dissimilar cultures, unfamiliarity with the business language</td>
<td>Exploit any similarities in culture, learn about the other country’s business culture</td>
</tr>
<tr>
<td>Factors affecting location</td>
<td>Explanation of factors</td>
<td>Associated problems in Low-income Countries</td>
<td>Practices/policies to address these issues</td>
</tr>
<tr>
<td>---------------------------</td>
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</tr>
<tr>
<td>Labor force</td>
<td>Skilled workforce, labor productivity, size of labor force, availability of labor force, human resource policies, specific skills, e.g. language skills, technical skills</td>
<td>Not enough skilled labor, lax attitudes towards productivity, punitive human resource policies</td>
<td>Establish training facilities for specific missing skill sets, offer training in business culture of client organizations, establish people-centric human resource policies that cover career progression, exposure to foreign cultures, exposure to new technologies and assistance with living costs</td>
</tr>
<tr>
<td>Costs</td>
<td>Cost of factors of production/input costs, e.g. labor, materials, transport, energy, natural resources, telecommunications, living/occupancy, capital costs</td>
<td>High cost of living affecting costs of inputs to production especially telecommunications, transport, imported material</td>
<td>Practice approaches to telecommunications that bypass local restrictions, lobby for de-regulation of the telecommunications industry to encourage competition and drive down costs, enter into contracts with third parties to bring down the cost of transport and rents, lobby for government incentives to import material at lower prices</td>
</tr>
<tr>
<td>Linkages</td>
<td>Connections through a diaspora or expatriate community that act as a catalyst for attracting work, and exposure to foreign influences that help build relationships</td>
<td>Some low-income countries have few ties to the international community and little power in international affairs</td>
<td>Take advantage of expatriates and inpatriates with external business connections, encourage repatriates living or working abroad or studying abroad with ties to potential client countries and linkages there to act as brokers for seeking work</td>
</tr>
<tr>
<td>Institutional support</td>
<td>Legal structures, e.g. IP legislation, operation of public services, educational system, financing, trade associations</td>
<td>Non-functioning institutions, lack of proper IP protection, dysfunctional public services, etc.</td>
<td>Lobby government to change areas that are critical to the industry, e.g. putting an IP protection policy into place, aligning World Bank development programs with improvements to existing institutions e.g. educational system</td>
</tr>
<tr>
<td>Industry characteristics</td>
<td>Structure of competition, supporting industries, size, growth</td>
<td>Lack of supporting IT industry, lack of local market for products</td>
<td>Adopt an export-oriented focus, look for niche market areas perhaps regionally rather than locally</td>
</tr>
<tr>
<td>Attractive (business) environment</td>
<td>Attractiveness to outsiders to do business, quality of life</td>
<td>Various socio-cultural factors that affect the attractiveness of the country for doing business, e.g. taking shots to avoid tropical diseases</td>
<td>Offer potential clients visits to the offshore sites, and introduction to the most attractive aspects of the culture of the country to sensitize them to other beneficial aspects of the environment</td>
</tr>
<tr>
<td>Reputation</td>
<td>Established capability of suppliers in providing service/product, adoption of international standards by suppliers</td>
<td>“Fear, uncertainty and doubt” (Heeks, 1999) associated with lack of trust in capabilities of low-income country staff</td>
<td>Encourage international quality assessments, e.g. CMMI, ISO 9000, encourage clients to visit the site to observe the facilities and working practices, establish ties with existing reputable international outsourcing organizations and associations</td>
</tr>
</tbody>
</table>

Table 2 (continued). Factors affecting success of ITO/BPO in low-income countries

**TAKING A MORE SUSTAINABLE VIEW**

More recent work on location factors has reasserted the importance of other non-economic factors in assessing the suitability of not just countries, but regions in providing stable environments for
offshore outsourcing to succeed (Kotlarsky & Oshri 2008; Kshetri 2007; Abbott & Jones 2012). Kotlarsky & Oshri (2008), for example, eschew country attractiveness indices in favor of a complementary match between the client’s strategic purposes for outsourcing and the strength of the vendor’s global and local presence. Kshetri (2007) reviews institutional and social factors and their influence on the selection and sustainability of an outsourcing location. Abbott & Jones (2012) identify highly changeable and unanticipated contextual factors inherent to particular locations that over time influence their suitability for offshore work. This latter work demonstrates how sensitivity to, and embeddedness in, the local context can overcome presumed disadvantages to offshore success due to negative economic factors such as low labor availability, economic frailty and lack of reputation in the high-tech sector. Such factors should have rendered the case study companies (located in the Caribbean) as non-competing (Carmel 2003b) and, therefore, ineligible for success in this type of industry; however, these factors were found to be amenable to change and, counter-intuitively, able to provide impetuses to pursue more sustainable strategies.

If these countries attractiveness indices were used without caution, African countries could similarly be marginalized by crude, static economic measures and categorized as unsuitable or likely to fail. Rather, in addition to factors such as those outlined in Table 2, a broad range of non-economic factors need to be identified and assessed with regard to each country (and within the country, region) that wants to pursue an offshore outsourcing strategy for economic development. For African countries, there may be two sub-strategies to consider: low-end BPO to gain a foothold and trust from the market, taking advantage of abundant resources before attempting more advanced modes suitable to higher-end knowledge workers; and pursuing a socially responsible outsourcing route like impact sourcing (Babin & Nicholson 2013), both to allow more sustainable models of offshore services to emerge and to achieve a more even distribution of economic development from the offshoring activity. Both of these approaches are sensitive to the socio-political contexts, cultural and colonial legacies and eclectic mix of location factors (some amenable, some not) that an African country would present. In cases where there are already specialized talent (such as those with mathematical abilities) in certain regions in Africa (e.g. Ethiopia), ITO work could be considered where appropriate links to the community and existing educational systems are also considered. Clients for these types of work would have to be specially sought out and encouraged to invest. The lower wage structure for high quality work would be a distinct incentive for such clients (nazret.com 2007). Future research in this area would benefit from adopting frameworks that not only address economic indices of development but also those that also carefully address sustainability issues.

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