

The Impacts of Broadband Internet on the Value Chain of the Tourism Sector in Kenya

The tourism sector is regarded as the second largest source of foreign exchange revenue in Kenya. Kenya has witnessed revolutionary development of ICTs, especially the recent development in internet with the arrival of the undersea fibre bandwidth in East Africa in 2009/2010. This development has led to many players in the tourism sector in Kenya adopting different ICT platforms to derive positive strategic and operational management and marketing benefits. Specifically, big and medium players have used these platforms to fight off competition and maintain market share, while informal and small players have used the same platforms to make entry into the sector. At the same time, customers are using the ICT platforms to by-pass the middle players and access services directly from the destination holiday providers. The net effect has been increased competition as well as both positive and negative impacts for most of the players. However, there are challenges that prevent the deepening of the more positive impacts. The key ones were found to be the high cost of developing and maintaining the ICT platforms, relatively unaffordable broadband Internet, lack of adequate human resource skills, lack of affordable online payment platforms and poor quality of broadband connectivity. We provide appropriate policy recommendations to address these challenges.

Impacts of broadband internet. The key impacts on Porter's 5 competition forces are:

- intensified competition between existing players;
- increased bargaining power of suppliers;
- increased the bargaining power of customers vis-à-vis the suppliers;
- lowered barriers to entry; and
- increased extent of disintermediation.

Challenges. The key challenges to the adoption of broadband internet are:

- high cost of developing and maintaining the ICT platform;
- lack of skills to sustain the ever-changing technology;
- inadequate online payment platforms,

- including their related problems of high cost and lack of adequate trust and security of online transactions;
- information overload and its apparent dichotomous challenge of inadequate online information in certain circumstances; and
- inadequate quality of broadband connectivity.

Policy recommendations. The key policy recommendations are:

- policy and regulatory interventions to reduce the cost of ownership and use of ICTs by the consumer;
- creation of middle level colleges focused on development of engineering and technology technologists

and engineers to address capacity issues;

- acceleration of the implementation of the planned integrated national payment system;
- the banking regulator takes regulatory interventions to bring down the cost of transactions on the payment platforms;
- the ICT regulator takes serious actions against operators that do not meet the set minimum quality of service standards; and
- Government provides support to informal entrepreneurs who are making efforts to enter the tourism sector.

Methods

Data for this study was collected through an exploratory survey of 40 organizations in the tourism sector. These include tourism authorities, national parks, tour operators, travel agencies, hotels, tour guides, taxi operators, beach operators, stakeholder associations and ancillary service providers in Nairobi and the Coastal region, which is the destination of most tourists. Interviews were held with sales managers, directors, ICT managers, general managers or deputy general managers. Data was collected over twelve months, between April 2012 and March 2013. Data analysis was carried out through coding of all interview logs and transcriptions in order to identify and determine the most dominant concepts found in the dataset.

Impacts of broadband internet on tourism sector

The results of the study show that the majority of the players in the industry had embraced broadband internet. The specific ICT platforms that are in use include internet connectivity, information systems applications (online reservation systems, online marketing systems, online payment systems, etc.), web hosting, social networks (LinkedIn, YouTube, FaceBook), third party websites, and so on. The players use these ICT platforms to market their packages and wait for inquiries from clients who are globally dispersed. Other respondents mentioned that they had more than one website at their disposal just to boost their chances of being found online.

Broadband internet was found to have had an effect on Michael Porter's five competition forces (Porter, 1980). These impacts are shown on Table 1.

Table 1: Illustration of impacts of broadband internet based on Porter's five forces

| Forces | Impacts |
|------------------------------------|---|
| Rivalry among existing competitors | <ul style="list-style-type: none"> • Intensified rivalry due to lowered barriers to entry, leading to an increase in the number of competitors • Access to wider markets by existing players because of the ability to form global and local partnerships, in turn posing competition in new areas • Access to clients directly, without players going through intermediaries, thereby increasing competition for market share |
| Bargaining power of suppliers | <ul style="list-style-type: none"> • Enabling suppliers to not only access more cost-effective distribution platforms but also to interact directly with their customers |
| Bargaining power of customers | <ul style="list-style-type: none"> • Increase bargaining power of customers vis-à-vis that of suppliers by enabling them to carry out research on travel options, compare prices and make reservations for hotels and airlines directly, leading to cost savings and less loyalty to suppliers • Increased transparency, especially access to cost information, in turn intensifying price competition and rivalry |
| Threat of substitutes | <ul style="list-style-type: none"> • Increased disintermediation due to online sales to customers becoming the near substitutes for traditional service provision by travel agencies and tour operators |
| Barriers to entry | <ul style="list-style-type: none"> • Drastic reduction in start up, distribution and operational costs, in turn intensifying competition |

- e.g.1 New entrants had been able to represent themselves to customers through websites and social media, thereby threatening the position of existing rivals and their control of the market
- e.g.2 Suppliers were now able to access a wider markets using internet and related technologies

Challenges

The study found challenges with adoption of broadband internet that are important. The first is the cost of developing and maintaining the ICT platform. For example, one respondent complained that the cost of developing and maintaining a website was too expensive for his business. He also complained that clients were not able to use third party websites and online booking systems due to lack of access to ICT infrastructure.

There were a number of respondents who felt that the cost reduction that was promised with fibre-optic broadband was never realized. One respondent seemed to complain that internet prices had not reduced with the landing of under-sea fibre connectivity as promised by the policy makers. Although this sounds like broken promises, the reality is that the cost of broadband Internet connectivity had come down, but perhaps not in the way and to the level most players had expected. This could partly be because broadband internet service providers took a strategy not to reduce customers' bills but provided customers with more bandwidth for the same price. This was to encourage consumption of the increased capacity and to prevent their revenues from dipping. Customers therefore never realized a reduction in their recurrent internet costs.

A second challenge is with respect to lack of skills to sustain the ever-changing technology. For example, one respondent mentioned that his firm was not able to use social media because they lacked the skills and ability to create a social media profile for their business. A third challenge is the high transaction cost of online payments. For example, one respondent mentioned that PesaPal charges 12% of the transaction value, which is deemed to be too high. Another related challenge is lack of adequate trust and security of online transactions.

A further challenge is information overload. With faster internet, information is far more accessible than ever before. A number of respondents felt that there was too much information online that it ends up confusing them. The problem of information overload is becoming more widespread with the development and growing availability of the internet. A dichotomous challenge is an apparent lack of online information in the websites of tourism destinations for clients to make informed decisions. In some cases, a tour operator would intentionally provide inadequate information so as to encourage offline interaction with the clients for more information and to extract a commitment. The final challenge is the quality of the broadband connectivity. Several companies reported poor availability of the internet connections while others experienced inadequate connectivity speeds.

Conclusions

It was found that broadband Internet played an increasingly important role in the strategic and operational management and marketing activities of the tourism sector players, especially from a competition standpoint. The study found that new ICT platforms had an impact on all Porter's forces of competition, in turn having varying impacts on the players in the various parts of the

tourism chain. For example, the use of social networks, websites and other online reservations systems has gained importance by players in the hospitality industry. This had led to hotels and other accommodation facilities cutting off other players off the value chain. ICT has changed some roles played by travel agencies and tour operators. Some activities such as airline reservations and hotels booking can now be done directly via the Internet. In addition, players can advertise their products and services at reduced rates to a wider audience spread all over the world.

The study has made a contribution on the effects of broadband internet in the tourism sector based on rich empirical evidence. This is one of the few studies in this area and the authors recommend other researchers to initiate research on the impacts of broadband on other sectors. The study found several challenges that need to be overcome in order for ICT to have an even deeper impact on the tourism sector. The policy interventions to diminish the effects of these challenges are recommended below.

Policy recommendations

The Kenyan economic blueprint, Vision 2030, prioritises tourism as one of the key economic sectors. If this sector is to make significant contributions towards socio-economic development, then all bottlenecks associated with the cost of developing ICT platforms for this sector as well as the relatively high cost of broadband must be addressed. We therefore recommend policy and regulatory interventions to reduce the cost of ownership and use of ICTs by the consumer. Key here is the reduction of the retail cost of broadband. Such interventions should aim at increasing affordability of broadband and in turn enhancing universal access and utilization. This can be achieved through fast-tracking the implementation of the universal access through utilizing the universal service fund created by the Kenya Communications (Amendment) Act, 2009 as recommended by Waema and Obadia (Waema and Okinda, 2011).

Kenya has witnessed a huge growth in university education, often at the expense of middle level education. One of the key forces to drive the economy into middle level status as planned in Vision 2030 is rapidly developing human resource capabilities, especially in engineering and technology. Therefore with respect to lack of technical skills, we recommend creation of middle level colleges focused on development of engineering and technology technologists and engineers.

Since the launch of the world-famous M-pesa platform for mobile money transfers and payments, Kenya has experienced the growth of many local payment platforms that work for and in the country. However, these platforms are not integrated and are expensive. We therefore recommend an acceleration of the implementation of the planned integrated national payment system. We also recommend that the Central Bank, the regulator of the banking sector, to make regulatory interventions to bring down the cost of transactions on these payment platforms.

Customers have for many years experienced low quality of services from the mobile operators (e.g. dropped calls, uncompleted calls, undelivered sms, hanging sms, low Internet speeds, etc.) and other broadband service providers. Although the regulator monitors the quality of service by the licensed operators, no serious action has been taken against providers who do not meet the quality of service standards in their license obligations. The only action that we know of in this regard is that the regulator has given one of the largest mobile operators a condition of adhering to the set minimum quality of services standards before the renewal of their GSM license in June 2014. With these kinds of actions, the operators are unlikely to take the regulator seriously and customers will continue to experience low quality services.

We therefore recommend that the regulator takes serious actions against operators that do not meet the set minimum quality of service standards. In addition, efforts should be made by the public, the Government and other stakeholders to make the regulator more independent and have “teeth”.

Finally, we found very little support for informal tourism operators, e.g. beach operators. These informal entrepreneurship efforts are critical to solving the huge unemployment problem among the youth in the country. We therefore recommend that the Government provides support to informal entrepreneurs who are making efforts to enter the tourism sector. This will help to grow the tourism market, and in turn, the economy.

References

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