

Chapter 19

Assessing Mobile Value-Added Preference Structures: The Case of a Developing Country

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ABSTRACT

Globally, the telecommunications industry is transitioning from a business model that relied heavily on voice communication as the primary source of income to one in which data services provide the largest share of revenues. This trend is evident in Europe, the United States, India, and several other countries. However, while data services have been introduced widely, not all countries have experienced the same level of success. In this chapter, we posit that the differences in economic benefit are directly related to the cultural uniqueness of each mobile market and recommend a consumer-centric approach as a potential solution to successful market uptake. Cultural uniqueness is evident in the consumption of high levels of multimedia content in South Korea which is not enjoyed in other economies despite the push by telecommunication providers. It is also evident in the success of mobile banking for the unbanked poor in parts of Africa but western societies have not exploited its potential. In this research, we used Ankar and D’Incau’s (2002) analytical framework to assess consumer value-added preference structures by exploring the market preferences of a developing country which exhibits the characteristics of a telecommunication market that is saturated and poised for data services integration. The findings suggest that all value-added characteristics evaluated had a positive impact on consumer desirability for a mobile application. Most importantly, the findings highlighted that the inclusion of value-added features within a mobile application is not enough but optimizing the desired combination for a user group may be critical.

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INTRODUCTION

In this chapter we examine the value-added preference structure of mobile consumers in a developing country. In 2006, the mobile phone became the first communications technology to have attracted more users in developing than in developed countries (Ivatury & Pickens, 2006). According to Singh (2009) the number of mobile subscribers globally was estimated to have reached four billion in 2008 with a mobile penetration of 61 percent of which 58 percent were from developing countries. This was particularly significant for developing countries because of its implications for economic development. The Jamaican mobile telecommunication market is at the core of this research. The penetration of mobile devices in Jamaica has reached the point of saturation by international standards. More specifically, the Jamaican mobile industry has been exhibiting the characteristics of a saturated market with the most conspicuous symptom of stagnating growth. The penetration of mobile phones in Jamaica has surpassed the 100 percent mark (United Nations, 2006). Baker (2009) further reported that the penetration rate had reached 103 percent as at June 2009 and estimated an annual growth rate of 5 percent.

Researchers intimate that market saturation is indicative of potential declines in average revenue per user (ARPU). The problem of declining ARPU facing telecommunications industries is experienced in both developed and developing economies and has dire implications for both telecommunications providers and economic growth. In order to address declines in ARPU several companies have introduced data services to compensate for declines in voice revenues. However, despite the high level of mobile phone penetration within the Jamaican market, the availability of mobile data services is considered sparse (United Nations, 2006). The level of mobile phone diffusion observed in Jamaica's mobile market and the lack of m-commerce services

have created an ideal environment for conducting this research. In this chapter we assert that (1) in order for developing nations to transition from a high level of diffusion of mobile devices to a state of infusion of mobile applications, value-added services must be provided to mobile consumers, and (2) the delivery of valuable services requires the adoption of a consumer-centric approach in the development of those applications.

There is a paucity of research in the academic literature on mobile consumer behaviour for consumer-centric development. According to Anckar and D'Incau (2002), many empirically supported (optimistic) predictions on the future popularity of m-commerce rely on indirect units of measurement rather than direct studies on consumers' willingness to embrace m-commerce. Many scholars have, for instance, intimated that there is a huge market potential for mobile applications, primarily supporting their assumptions with predictions of the global penetration rate of mobile devices (Anckar & D'Incau, 2002). The arguments presented by Anckar and D'Incau provide a fundamental premise for the current research which involves the movement from predictions based on proxy measurement to direct sampling. Additionally, empirical evidence suggests that despite the many development methodologies and development life cycles that exist for the creation of information systems, there is no existing consumer-centric approach for the development of mobile applications. Our proposed approach has potential benefits for both research and practise.

In this chapter we therefore discuss a consumer centric intervention. More specifically, we recommend the use of conjoint analysis, typically employed in marketing as an appropriate technique for incorporating consumer perspectives in the creation of mobile applications. We design and implement a conjoint experiment using the value-added analytical framework proposed by Anckar and D'Incau (2002) in order to evaluate the preference structure of mobile consumers in

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