

EHEALTH MARKET SEGMENTATION FRAMEWORK IN DEVELOPING COUNTRIES

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Abstract: e-Health is an e-Service bringing better access to medical information and expertiseⁱ to medical staff and patients for the improvement of diagnosis and treatments among patients. In order to attract the private sector to the implementation of eHealth services in developing countries; it is important to provide a market study. The market segmentation theory is a tool to divide the market for the purpose of understanding who your potential customers are. According to the classical approach, market segmentation can be characterized as follows:

- Demographic (age, gender, geographic, income, education)
- Psychographic (attitudes, life-style)
- Behavioral (usage patterns, use, loyalty)

One common criterion for developing market segmentation is grouping potential customers based on needs. The qualitative study showed that the needs for e-Health center on diagnosis, treatments, and education. Medical personnel are seeking to improve the accuracy of diagnosis and treatments, as well as the quantity and quality of education.

e-Health segmentation in developing countries should have specific- developing country segmentation. In this paper, the framework for segmentation is presented. The first level segmentation based on differences among developed and developing countries is public (state-owned) vs. private sector segmentation. In order to develop marketing strategies, the needs and behavior of medical professionals in these two very different sectors must be understood.

The standard market segmentation variables that are widely used in marketing strategies in developed countries will need to be adapted to developing countries.

Keywords: eHealth in developing countries, eHealth market.

Introduction

eHealth is an e-Service bringing better access to medical information and expertiseⁱⁱ to medical staff and patients for the improvement of diagnosis and treatments among patients. eHealth is an Information and communication Technology (ICT) application in the domain of eServices.

There is a big shortage of medical staff in developing countries and eHealth could be a solution to this growing problem and has been on the agenda of important International Organizations, such as the International Telecommunications Union (ITU) and the World Health Organization (WHO). These organizations have made e-Health an essential agenda item with national organizations from developing countries given incentives to develop an e-Health strategic plan in their respective countries. Coming to the implementation phase, there is a forecast that some of eHealth services could be introduced by private sector [1]. Therefore there is a need for a professional approach to marketing of eHealth services [2].

Marketing strategy

In the development of marketing strategy it is important to understand who your potential customers are. This tool is called the market segmentation. It divides the market into groups based on needs and priorities. According to the classical approach [3], market segmentation can be characterized as follows:

- Demographic (age, gender, geographic, income, education)
- Psychographic (attitudes, life-style)
- Behavioral (usage patterns, use, loyalty)

One common criterion for developing market segmentation is grouping potential customers based on needs. A needs-based segmentation clusters potential buyers based on having similar needs. Market segmentations should first start with needs. Needs-based clusters form the highest level of segmentation. Once the needs-based clusters are formed, these clusters can be further segmented using demographic, psychographic, and behavioral groupings. Empirical studies that I have been involved in indicate that demographic segmentation is too general and does not tell you enough about the customer. However, in developing countries due to the vast differences between rural and urban environments, a demographic segmentation will be important.

The qualitative study made in several developing countries [4] showed that the needs for e-Health center on diagnosis, treatments, and education. Medical personnel are seeking to improve the accuracy of diagnosis and treatments, as well as the quantity and quality of education. Using the above qualitative study in developing countries, a preliminary market segmentation strategy for developing countries can be made.

The first step for eHealth market segmentation in developing countries will divide public and private sector medical staff. The characteristics of the public sector for eHealth are centered on the Health authority. The public sector is driven by the eHealth master plan for specific implementation features within state-owned hospitals and medical institutions. Many doctors who work in the state-owned hospitals also have their own private office or clinic. Most doctors practice in the public sector due to Health Authority policies and to stay close to this important body.

In comparison to the public sector, the private sector in developing countries is based on a single office setting where family doctors are in need of IT support tools and software applications. The motivation for doctors to work in the private sector is financial and driven by technology such as the Internet.

The research further states further segmentation in developing countries based on the urban vs. rural environmental characteristics, as there is a vast difference in these two geographic regions in developing countries. The literature supports this special grouping [5], where the design of e-Health readiness in rural areas was researched. Similarities and differences were found among urban and rural in Canada and therefore, this study along with my qualitative study provides the basis for this segmentation. As readiness models were different in Canada among urban and rural areas, and then this can be applied to developing countries as well as supporting evidence to this market segmentation theory.

The second market segmentation step after the urban vs. rural groupings could be type of environment, such as hospital or community. Rural regions in developing countries will be more community-oriented.

A second strong contender to a needs-based segmentation is behavioral market segmentation in developing countries. In developing countries, we can look at community vs. hospitals' use of e-Health. Specific e-Health applications such as cardiology, skin diseases, Malaria, and HIV/AIDS segmentation is an example of behavioral segmentation. These areas of diseases and the types of diseases are very different from developed countries and thus, warrant a different market segmentation strategy.

The next research for market segmentation in developing countries will identify if a relationship exists such as: e-Health to age, gender, and education. The question is how strong are these factors for warranting separate market segmentation in developing countries?

A psychographic segmentation based on attitudes to e-Health could also be explored. This was preliminarily investigated in the qualitative research study published in [4], where an overwhelmingly number of respondents were favorable about eHealth. The respondents cited the importance of medical experts in the acceptance of e-Health services in their hospitals and/or clinics. Currently, when the medical staff that was surveyed encounters a difficult patient situation and needs further medical advice and possible solutions, they tend to turn to other medical

experts in their environment for further discussion. This is consistent with Everett Roger's theory of innovation adoption where opinion leaders (medical experts) are key to innovation adoption. The next sources of additional advice are through traditional medical books and if access exists, the Internet and on-line medical journals and databases.

Conclusion

In developing countries, the role of the private sector is becoming increasingly important as the private sector and only the private sector will have the financial means to develop eHealth products and services. This paper gives providers of e-Health solutions (products and services) guidelines as to the factors that influence customer needs in developing countries and some different characteristics for developing specific market segmentation strategies.

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