GUEST EDITORIAL PREFACE

Special Issue on eHealth

Raija Järvinen, Consumer Society Research Centre, University of Helsinki, Helsinki, Finland

Minna Kaarakainen, Department of Political and Economic Studies, University of Helsinki, Helsinki, Finland

Ehealth has become a global trend. Both private and public organizations all over the world develop various ehealth systems in order to provide more extensive services for their customers. Changes in societies and welfare sector have rapidly increased demand of information and data on health-related issues and activities. Increasing number of elderly people challenges the health and welfare systems both in developed and developing countries. As a consequence there are attempts to develop either e- or m-services by the aid of advanced technology in order to meet increasing demand of health and wellbeing services.

Ehealth (there are variations in writing and also E-Health, e-Health and ehealth are widely used) refers to tools and services using information and communication technologies (ICTs) that can improve prevention, diagnosis, treatment, monitoring and management. It can also include health applications and links on mobile phones, referred to as mhealth or m-Health.

Research concerning ehealth is implemented in various scientific fields, e.g. health sciences, medicine, computer science and engineering, social sciences just to mention a few. In this special issue focus is in consumer perspective, consumer acceptance and consumer value together with ehealth services especially targeted to consumers or used in interaction with consumers. They may outline technical instructions or descriptions as well as medical machinery and softas.

Increasing demand of various kinds of self-monitoring and self-government is challenging both information system equipment developers and traditional health care service organizations. They have to find solutions, for example, how it would be possible to combine data from different sources to meet consumers' needs and demands on effective and secure way. On their part, public and private health organizations have to consider their customers when developing and implementing ehealth systems and information system equipment. In other words, health and wellbeing organizations should bear in their minds consumer driven ehealth solutions.

All five articles in this special issue represent different aspects of eHealth, eServices and mobile applications. In the first article Raija Järvinen and Uolevi Lehtinen discuss influence of transition from traditional health services to e-health services in service characteristics. The theoretical roots of the article rely on service characteristics and new service development (NSD).

Four empirical case examples serve as an exploratory examination of service characteristics in transition. Article reveals that the level of manifestation of service characteristics varies from service to service regardless of them being e-services or traditional services. In both traditional services and e-services process nature and non-ownership seem to be the most representative characteristics, but all the studied characteristics are important. Interaction and perishability seem to materialise much less in the connection of e-services than in the context of traditional services.

The second article is authored by Apramey Dube and Kirsti Lindberg-Repo and it is focusing to customer value dimensions in E-healthcare services. It is one of the first empirical researches dealing this issue in Finland. In their empirical study, they have used narrative techniques to investigate customer experiences of e-healthcare services offered by eight Finnish private health care clinics. Their study identifies a four-dimensional value framework for e-healthcare service among customers. The four value dimensions are related to the e-healthcare service process, service outcome, timing and responsiveness of e-healthcare services, and location of the customer. The study contributes to value literature in expanding the four-dimensional value framework to apply to an e-healthcare context.

The third article focuses on the elderly people. Authors, Vatcharapong Sukkird and Kunio Shirahada, are reporting results concerning eHealth service modelling based on a case study of emergency medical service for the elderly in a developing country. Their conclusions confirm that ehealth can be a significant service platform. In fact, it can function as a new service management system to Asian countries to overcome lack of resources in health systems. The authors suggest that value co-creation concept in ehealth is an alternative service concept for developing countries who lack in apply ICT in healthcare service. However, they admit that there are challenges to apply ehealth on poor setting in developing countries that are limited with investment funds and resources.

The fourth article by Reija Kuoremäki and Marita Poskiparta deal with the engagement of the elderly with a new health-enhancing mobile-optimised web-service. The article reports results from an eight-week study where the elderly people tested tablet-based service. Relatively short training had a major positive influence on engagement to service use. The activity was highest during the first week of the study, and it decreased during the eight-week period, but 62 percent of participants remained active in each week. Memory training was found the most popular component, and it is an encouraging method to improve memory skills, especially for persons suffering mild cognitive impairment. Self-monitoring of physical activity was also one of the most used components, even though it is not evaluated very high. The usability of the service correlated with the age of the participants, but the activity was not dependent on age. The authors conclude that the complete modular solution will be suitable for end-users in the group of elderly.

The fifth article titled "Analysing e-services and mobile applications with companied conjoint analysis and fMRI technique" by Jarmo Heinonen is methodological in its nature. Conjoint analysis and fMRI are suggested to be used as tools to analyze consumers' preferences and decision making processes especially in e-health, m-health and other ITC based health products. The author claims that modern E-services and mobile applications need modern marketing analyzing methods like companied conjoint analysis with fMRI. Combined fMRI and conjoint analysis make it easier to evaluate more material or attributes between products or services to understand user´s preferences and decision making in e-health and information and communication technologies. For example, computerized self-help programs, online psychotherapy, websites and social media approaches for e-health and mobile applications should be evaluated by the aid of these techniques before marketing launch. The results will assist producers to target new applications to relevant marketing segments.

The above articles represent only some examples, how ehealth and mhealth can be utilised and how they can benefit both consumers and health service organizations. Even though the advanced technology has enabled many ICT based e- and m-services that could not be possible without technological development, we are confident that the e-health service development is still at its early phase, and during the coming years there will be more and more new ehealth service launches that we could not even imagine today. There has been already many success stories in this area, but it is our belief that the majority of success stories are yet about to be invented. In order to survive future challenges, there is a growing need for academic multiscientific research to support ehealth development in various arenas in the society.

Raija Järvinen
Minna Kaarakainen
Guest Editors
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