MyBaby: Design and Development of the Interactive Baby Care System for Young Malaysian Parents

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Abstract

This paper presents a report on design and development of the prototype of MyBaby. It provides a guideline to take care of a newborn baby with information about feeding, diapering etc. We argue that from the user experience, critical success factors for a usable childcare information system are not so well understood. This paper highlights several important usability factors to be considered. We report the usability evaluation result on 5 parents. The output of this research provides a basis for better design of web-based childcare system especially for the Malaysian parents.

Keywords: Web-based, usability, multimedia design

1. Introduction

Multimedia, with its enormous potential [6] has brought a revolutionary effect on our lives. With new revolutions are still to come [2], the evolution of interactive multimedia has opened up new perspective especially for human-related activity development.

One emerging application includes interactive multimedia system of baby care information. In the Malaysian context, nowadays most of the younger generation of parents, both father and mother are busy with their career. They find lack of time to read about childcare books or learn it from their own parents. Thus, design and development of an interactive information system for baby care especially for young Malaysian parent is important.

In addition, the parents are also facing difficulty to record and maintain their baby development. They may lose the manual record card or documents. Besides that, all the information is being filled in manually and it may cause mistakes, etc. Furthermore, researchers have proposed that, sooner or later, technology will replace all the clerical tasks done manually.

This paper contributes to existing literature in two ways. First, it generates knowledge about how to integrate baby care process through interactive multimedia application of the prototype. Second, as far as we concern, little or no published effort on representing baby care information in an interactive way especially focused on Malaysian parents could be found.

The rest of this paper is structured as follows. In the next section, we present a literature review of related multimedia design consideration. Section 3 describes the prototype design of MyBaby. After that we highlight several lessons that we learnt from the usability testing (section 4). We conclude and propose the future works in the final section.