



## **Chapter V**

# **Ageing and its Implications for Elderly Web Experience**

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## **Abstract**

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*This chapter discusses ageing-related issues and their implications to the Web experience of elderly users. Particular emphasis is placed on ageing in a developing region, highlighting some cases from Malaysia. The first section consists of a brief review regarding ageing functional abilities and their implications for Web interaction. Examples are given based on studies by other researchers in this area, covering major age-related impairments, namely visual and mental impairment. The potential benefits of the Internet and the elderly user as an ideal partner is examined. The second section presents more examples of the Internet as a platform for elderly people to pursue self-fulfilment. This can be achieved through the available facilities, including communication, services, personal enjoyment, and lifelong education, that facilitate an independent life and valued membership of society. The third section investigates some of the barriers that inhibit elderly users in utilising*

*Web features. These include issues regarding interface design, assistive devices, and software aids for elderly users. A summary of the ICT penetration among elderly users in Malaysia is included after the three main sections. Finally, the chapter is concluded with some ideas concerning the cultural and demographic differences in determining new trends, directions, and opportunities in advanced Web design specifically for elderly users.*

## Introduction

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Internet evolution has driven economic and social change remarkably in many developed countries such as the U.S., UK, and Japan. It continues to progress and reshape society in many ways including communication, education, and Internet technology itself. This principle has penetrated the public consciousness both in developed and less-developed regions such that the Internet is greeted as a tool to improve quality of life. The Internet is a product of computer technology that continuously expands and is well accepted by the public, including some older people. The United Nations has estimated a global population of 629 million people aged 60 years or older in 2002, and is projected to grow 2 billion by 2050, when the majority of the world's elderly (54%) will reside in Asia, while Europe will have the next largest share at 24% (United Nations, 2002). In this digital era, the Internet was seen as a new potential platform that could benefit the ageing population securing their social and economic viability. The United Nations (2002) distinguishes three global regions: *developed*, *developing* (those which are making progress on development), and *least developed*. The ageing population has increased, particularly in developing and least developed countries. There are differences, though, between regions in the number and proportion of elderly people. Referring to Figure 1, in more developed regions, almost 20% of the elderly population was aged 60 or older in the year 2000, and by 2050, this proportion is expected to reach 30%. In the less developed regions, only 8% of the population is currently aged over 60; however, by 2050, the elderly will make up nearly 20% of the population (United Nations, 2002).

The increase in the elderly population is the result of the demographic transition resulting from rising levels of fertility and lower mortality rates. The rate of change has been greater in developing countries than in developed countries, so that developing countries have had less time to adapt to the consequences of population ageing. Also, globalization has been mainly led by the developed countries, so that the use of information and communication technology (ICT) has spread unevenly between the developed and less developed regions. As a result, many less developed countries are not only struggling with the consequences of ageing, but also in bridging the socioeconomic gaps with developed countries. Hence, in spite of the globalization

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