Chapter 5
A Lisibility Assessment for Mobile Phones

Francisco V. Cipolla-Ficarra
Latin Association of Human-Computer Interaction, Spain & International Association of Interactive Communication, Italy

Jacqueline Alma
Electronic Arts, Canada

Jim Carré
University of the Netherlands Antilles, Curaçao

ABSTRACT

In the current chapter the lisibility or readability factor in mobile phones is analyzed, together with other components of usability engineering, communicability and ergonomics. Besides, we present the first results of readability in multimedia mobile phones for adult users, between classical mobile phones and the last generation of multimedia phone devices. In both cases the experiments have been carried out with the low price-range of those devices.

INTRODUCTION

Currently there is a tendency to range the potential users of the new technologies in relation to their date of birth, thus generating pseudosets of potential knowledge for the use of ICT (information and communication technology) devices. The term ‘pseudo’ refers to the fact that these classifications respond
rather to mercantilists factors of the sciences than to the purely scientific aspects. Some examples are given in (Cipolla-Ficarra, 2014). Those mercantilists factors interrelate with the workplace market, where in principle, the people who were not born in the digital era are theoretically not capable of the interaction in the new ICTs devices. That is, the greater the age, the more are the communicability problems. However, these communicability programs belong to the set of lack of heuristic information in the process of design of the interactive systems, whether they are of the latest generation or not. For example, evaluating the size and disposition of the keys in the different phone models on the screen of the device, the wealth of the interactive design of the device, in adapting quickly and automatically vertical or horizontal reading of those keys, etc. Factors of the interactive design must be constantly evaluated in the design process to boost the communicability between the user and those multimedia devices for telecommunications.

Through the lisibility or readability notion of semiotics, it is possible to detect quickly the communicability, for instance. Lisible is a French word meaning legible or readable but often translated “readerly”. Roland Barthes (Nöth, 1995) used this term to identify a particular kind of text, one in which the reader is called upon to do nothing more than consume a pregiven meaning. The reading of the components of the interface brings about that an adult user, in our work, can interact in an intuitive way the first time that he/she gets in touch with the phone device. The notion of readability is superior to the quality attributes within usability engineering, aimed at multimedia systems, such as prediction, self-evidence and the transparency of meaning. Now the readability has a bidirectional relationship with the self-evidence and transparency of meaning quality attributes.

Briefly, the prediction attribute is the skill of the user to anticipate the meaning of a structure or the result of an operation, previously analyzing a structure or a similar operation but in different situations. The transparency of the meaning is the use of terms (mainly), images and sounds within the interface that do not bring up ambiguities between the level of content and the level of expression (these two levels are related to the notion of significant and signification. Both concepts have their origin in linguistics and that later on have been studied in semiotics or semiology). The elements that make up the interface are interrelated: thus accomplishing a function of bolstering of the signification (Saussure, 1983; Cipolla-Ficarra, 1995). Finally, the self-evidence is related to the ability of inference of the user towards the different components of the system. When self-evidence exists, the user has the feeling
Related Content

Digital Divide
Patrick Flanagan (2019). Advanced Methodologies and Technologies in Artificial Intelligence, Computer Simulation, and Human-Computer Interaction (pp. 737-748).
www.igi-global.com/chapter/digital-divide/213173?camid=4v1a

Special Educational Needs Workshop Online: Play Activity – Homework in the Jungle
www.igi-global.com/chapter/special-educational-needs-workshop-online/94228?camid=4v1a
Application of Fuzzy Numbers to Assessment Processes
[www.igi-global.com/chapter/application-of-fuzzy-numbers-to-assessment-processes/213146?camid=4v1a](www.igi-global.com/chapter/application-of-fuzzy-numbers-to-assessment-processes/213146?camid=4v1a)

Energy Conservation in the Era of Ubiquitous Computing
[www.igi-global.com/chapter/energy-conservation-in-the-era-of-ubiquitous-computing/213204?camid=4v1a](www.igi-global.com/chapter/energy-conservation-in-the-era-of-ubiquitous-computing/213204?camid=4v1a)