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ABSTRACTS

Experiments on Adaptation of foreign accented speakers in native Arabic ASR systems

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Keywords: *Arabic language, Adaptation, Foreign accents, MLLR, MAP, HMM, WestPoint, LDC, Native*

Abstract: This paper addresses the adaptation of Arabic speech recognition systems to foreign accented speakers. This adaptation is accomplished by using the adaptation techniques; namely, the Maximum Likelihood Linear Regression (MLLR), the Maximum a posteriori (MAP), and the combination of MLLR and MAP. The LDC-WestPoint Modern Standard Arabic corpus and HTK toolkit were used throughout all experiments. The systems were evaluated using both word and phoneme levels. Results show that particular Arabic Phonemes such as pharyngeal and emphatic consonants, that are hard to pronounce for non-native speakers, benefit from the adaptation process using MLLR and MAP combination. An overall improvement of 7.37% has been obtained.



Assessing the Quality of Web Sites

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Keywords: *e-Commerce, Electronic services, Website criteria, Website evaluation, Website quality*

Abstract: This paper reviewed the most recent evaluation criteria methods which were used in different e-business services. Furthermore, it proposes general criteria for evaluating the quality of any website regardless of the type of service that it offers. The dimensions of the criteria are content quality, design quality, organization quality, and user-friendly quality. These dimensions together with their comprehensive indicators and check list can be used by web designers and developers to create quality websites to improve the electronic service and then the image of any organization on the Internet.

E-learning in the Saudi Tertiary Education: Potential and Challenges

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Keywords: *e-Learning, Higher education, Adoption Factors*

Abstract: The advent of the Internet in the twenty-first century has led to remarkable changes in several aspects of our lives. This advanced technology has become an essential tool of communication and information, thus offering unique advantages to both educators and students. Despite a recent educational revolution in Saudi Arabian educational systems, the issue of access to higher education still remains one of the more enduring challenges. The need for more delivery modes that take education to learners wherever they are, and not within the boundaries of the campus, is thus a necessity. E-learning could dramatically increase access to tertiary education and training, especially for those learners who were once denied learning opportunities for any reason such as health, distance or the like. Yet, successful implementation of e-learning requires an understanding of the issues that promote the effective use of the technologies. This article discusses the factors that influence e-learning in Saudi higher education through analyzing the perceptions and attitudes of Saudi university students (n. 531). It reports the results of a survey conducted to investigate the acceptance of e-learning in a Saudi

higher education institution as perceived by university students. The findings demonstrated that attitudes toward e-learning, subjective norms, perceived behavioral control as well as e-learning systems attributes were critical determinants of students' behavioral intention to use e-learning. By explaining students' behavioral intentions, the findings of this study will help to provide insight into the best way to promote e-learning acceptance among students.

Modeling the Electronic Transactions Acceptance using an Extended Technology Acceptance Model

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Keywords: *e-Commerce, e-Government, On-line transactions, Internet, Trust, Credibility, Risk, Technology acceptance model, TAM, Saudi Arabia*

Abstract: The outlook for e-commerce and e-government depends not only on individuals' acceptance of Internet technologies as viable transaction means, but also on the recognition of the Web as a reliable milieu. In light of this, a comprehensive model describing the factors that drive individuals to accept on-line transactions over the Web was developed and tested. This study attempts to integrate the well-established technology acceptance model (TAM) with three constructs; namely trust, credibility and risk, which are of paramount importance in predicting individual acceptance of on-line transactions.

This study seeks empirical support for an extended TAM with three constructs related to e-transactions in Saudi Arabia. The structural equation modeling technique was used to evaluate the causal model and to examine the reliability and validity of the measurement model. Our findings show that each of trust, credibility and risk plays an important role toward the acceptance of on-line transactions in the Saudi settings. To view a broader picture of electronic transaction acceptance in Saudi Arabia, general Internet use with four demographic variables were also incorporated into the model. We hope this study would contribute to a better understanding of individual on-line behavior in the emerging e-commerce and e-government environments. Such understanding would enable Saudi IT policy and decision makers solve problems in moving to the digital economy and information society.

Implications for management and practice of these findings are discussed to improve the acceptance of e-commerce and e-government as new technologies in Saudi Arabia.

Book Review: User Interface Design Books

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User interface design or user interface engineering is the design of computers, mobile communication devices, software applications, websites with the focus on the user's experience and interaction. The goal of user interface design is to improve users experience with simplicity and efficiency while keeping the design ergonomically sound. In literature this phenomenon is known as "User Centered Design". The term user friendly is often used as a synonym for usability which denotes the ease with which people can employ a particular tool or other human-made object in order to achieve a particular goal.

The key benefits of usability are increased user efficiency and productivity, reduced development costs and most importantly increased customer satisfaction. The improved interface would also tend to lower the time needed to perform necessary tasks. Usability is now recognized as an important software quality attribute, earning its place among more traditional attributes such as performance and robustness. Indeed, various academic programs in Information technology and software development around the globe focus on usability design and engineering. Here we review recently published popular books in the area of User Interface Design.
