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## A MODIFIED DELONE & MCLEAN MODEL FOR MOBILE BANKING

## Abstract:

Banks all over the world are converting from traditional banking to branchless banking; the substantial advancement in technology facilitated the adoption of new remote services platforms. Mobile banking is one of the most important alternative channels, especially with the widespread of smart phones.

Many factors contributed to the adoption of mobile banking and many models were developed to examine this adoption process. Delone and Mclean introduced their model based on system quality, information quality and service quality, leading to intention to use and satisfaction and then to the net benefit. However, this model was originally developed to examine information system in general. Other researchers modified the original Delone and Mclean model to be more specific to mobile systems. Lee and Chang added interference design quality to the original factors, leading to trust then satisfaction. In this research, the researcher modified the model to include system security (since security of financial information is a major concern to users) and found that satisfaction proceeds trust, and both (satisfaction and trust) will contribute to commitment.

To test the newly modified model, 14 hypotheses were drafted from the model and tested over a stratified random sample. The sample was selected from local banks customers who use mobile banking services on regular basis. Since this research is a causal one and without any control on the conducts of the respondents, quantitative descriptive approach was found appropriate for this research. Survey technique and personally submitted questionnaires were used to collect the data. The questionnaire was developed based on literature review and previous studies and consisted of four parts; the first part collected the respondents' demographics. The second part examined the independent variables of the model (system quality, information quality, interference design quality, system security). The third part examined the dependent variables (satisfaction and trust) and the fourth part examined the effect of satisfaction and trust on the users' commitment to use mobile banking system (application).

Statistical package for social sciences (SPSS) was used to describe and analyze the data of 418 filtered and screened questionnaires out of 500 originally distributed. Despite the fact that all hypotheses were accepted, the hypotheses testing revealed that system security has the main effect on satisfaction and trust followed by system quality. Both, satisfaction and trust significantly contributed to commitment. Although future examination is required, these findings indicate the primary success of the modified model.

## **Keywords:**

Mobile Banking, Adoption, Modified Delone and Mclean Model, Jordan.