



# Proceeding Paper Investigating the Factors Which Determine the Adoption of Mobile Banking Apps by Youth: The Case of Kuwait and Serbia<sup>+</sup>

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**Abstract:** The research objective of the study is to assess the impact of perceived ease of use, perceived usefulness, personal innovativeness, perceived risk, and social influence on the intention to use mobile banking applications by university students in Kuwait and Serbia. Preliminary (Kuwait sample size = 51, Serbia sample size = 31) descriptive statistics and comparisons of means between Kuwait and Serbia confirmed that Kuwaitis perceive mobile banking as related to higher risk compared to Serbians, explaining why Serbians have a more positive attitude towards mobile banking and higher intention to use it.

**Keywords:** mobile banking applications; digital financial services; adoption of banking technology; digital skills; innovative banking

# 1. Objectives

The main goal of this study is to determine the factors that have an impact on the intention to use mobile banking applications by university students in Kuwait and Serbia. The research objectives are:

- To determine which of the proposed adoption factors by the literature represent, and to what extent, are the main predictors of the intention to use mobile banking applications by the youth. These factors are: the perceived ease of use, the perceived usefulness, the perceival innovativeness, the perceived risk, and social influence [1–8].
- To compare the key predictors of the adoption of mobile banking by the youth in Kuwait and Serbia.

# 2. Methodology

The study used a descriptive and causal research design; the sample consisted of 900 university students from Kuwait and Serbia. Figure 1 presents the three phases of the study. Firstly, using confirmatory factor analysis, it will be checked if the selected adoption factors from the literature review are appropriate for our sample. In the case of a rejection of the measurement theory, the new extracted factors will be used to proceed with a regression analysis. The second phase will be the construction of two regression models (one for Kuwait and one for Serbia), using the factors, instead of the original variables, for estimating the probability of increasing the intention to use mobile banking. Finally, the two regression models will be compared, and *t*-tests will be conducted to identify the differences between the means of the selected variables from the Kuwaiti and Serbian samples.



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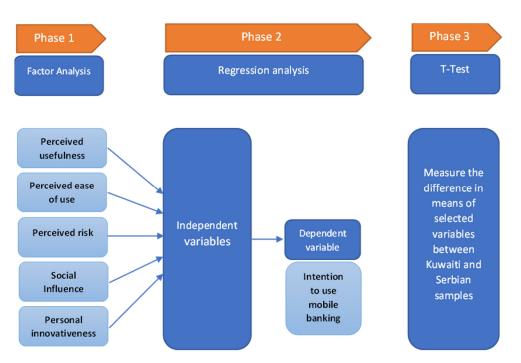


Figure 1. The three phases of the study.

## 3. Results

The results of this research will be useful in understanding the impact of the studied factors on mobile banking adoption. Furthermore, the authors aim to uncover the influence of a descriptive video related to mobile banking on the intention to adopt it. These results will help banks to better understand the driving factors for youth to start using their cutting-edge services, to identify critical areas for improvements, and to enhance their digital strategies accordingly. Finally, the comparison of the empirical findings between Kuwait and Serbia will provide insights into the differences in the willingness to adopt mobile banking applications, which could be explained due to the diverse cultural contexts between the two countries. Table 1 presents the preliminary (Kuwait sample size = 51, Serbia sample size = 31) descriptive statistics and comparisons of means between Kuwait and Serbia using independent samples T-tests. 7.8% of Kuwaitis never heard about mobile banking, while all Serbians interviewed mentioned they were aware of mobile banking applications. 78.4% of Kuwaitis declared they use mobile banking, while the relevant percentage for Serbians is 74.2%. Although the independent sample t-test statistic did not reveal any statistically significant differences between the means of the constructs under study (perceived ease of use, perceived usefulness, personal innovativeness, perceived risk, social influence and intention to use), it is worth noting the difference between the perception of risk (Kuwaitis M = 3.49, Serbians M = 2.85) and the difference between the attitude towards mobile banking (Kuwaitis M = 3.50, Serbians M = 4.09). Based on the findings, Kuwaitis perceive that mobile banking is related to higher risk compared to the Serbians, explaining why the Serbians have a more positive attitude towards mobile banking and higher intention to use it.

	Kuwait	Serbia	Independent Samples T-Test
Heard about M-Banking	Yes = 88.2% No = 7.8%	Yes = 100% No = 0%	
Use M-Banking	Yes = 78.4% No = 21.6%	Yes = 74.2% No =25.8%	
Perceived Usefulness	M = 3.95	M = 3.90	t(17) = 0.212,
(5 = Agree, 1 = Disagree)	SD = 0.44	SD = 0.54	p = 0.835
Ease of Use	M = 3.75	M = 3.95	t(17) = -0.554,
(5 = Agree, 1 = Disagree)	SD = 0.79	SD = 0.76	p = 0.587
Risk	M = 3.49	M = 2.85	t(17) = 1.212,
(5 = High risk, 1 = Low Risk)	SD = 0.88	SD = 1.42	p = 0.242
Social Influence	M = 2.93	M = 3.12	t(17) = -0.407,
(5 = High, 1 = Low)	SD = 0.76	SD = 1.30	p = 0.689
Personal Innovativeness	M = 3.34	M = 3.56	t(17) = -0.441,
(5 = High, 1 = Low)	SD = 0.77	SD = 1.41	p = 0.665
Environmental Awareness $(5 = High, 1 = Low)$	M = 3.91	M = 4.25	t(17) = -0.707,
	SD = 1.07	SD = 0.97	p = 0.489
Attitudes towards M-Banking	M = 3.50	M = 4.09	t(17) = -1.421,
(5 = Positive, 1 = Negative)	SD = 0.79	SD = 1.02	p = 0.173
Intention to use M-Banking	M = 3.61	M = 4.09	t(17) = -1.068,
(5 = High, 1 = Low)	SD = 0.77	SD = 1.18	p = 0.300

**Table 1.** Preliminary descriptive statistics (percentages, mean values, standard deviations) and T-test statistics between the Kuwaiti and Serbian samples.

#### 4. Implications

The results of this research will be important in understanding the impact of the selected variables on mobile banking adoption by the youth. Additionally, the results could form a good basis for understanding the adoption of other digital services. This study also examined the extent to which a descriptive video related to a mobile banking app influenced the decision to use the mobile banking application in the future. The implication of this issue is reflected in the creation of informative videos which describe, in detail, the financial services offered by a bank.

#### 5. Originality-Value

The research conducted in Kuwait on this topic explored the existing users' continuous intention to use mobile banking [9], but not potential users, such as university students, who had not adopted mobile banking. Also, to the best of our knowledge, no comparative study has examined the impact of the perceived ease of use, perceived usefulness, personal innovativeness, perceived risk, and social influence on the intention to use mobile banking by the youth in Kuwait and Serbia.

### 6. Contribution

The scientific contribution of the study will be achieved through the systematization of previous knowledge and the development of new theoretical knowledge on the adoption of mobile banking by the youth. The conceptual model, the methodology, and the results of the empirical analysis will form a basis for future research on similar topics, since the banking sector is characterized by dynamic changes involving constant innovation. The results will be valuable for banks in Kuwait and Serbia to improve their business strategy.

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