Survey resource based on UTAUT model for acceptance of mobile learning among students and teachers

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Introduction

This document presents an instrument based on the TAM model (Davis, 1989) and UTAUT Model (Venkatesh, Morris, Davis, & Davis, 2003) and adapted to measure the acceptance of mobile technologies among students and teachers by adding two additional constructs: reliability and recommendation in order to measure the level of necessity of a new tool to certificate Apps (Briz-Ponce, Juanes-Méndez, & García-Peñalvo, 2014a).

The first part of the survey has the goal of obtain the required data related to demographic information, participants' experience with mobile technologies and it is formed by 19 items.

The second part collects the data related with the acceptance of mobile technologies and is formed by 34 items (first 32 items provided by UTAUT model).

The detailed information regarding the constructs employed in this survey has been published in other articles (Briz-Ponce & García-Peñalvo, 2015; Briz-Ponce & Juanes-Méndez, 2015; Briz-Ponce, Juanes-Méndez, & García-Peñalvo, 2014c, 2014b; Briz-Ponce et al., 2014a)

PhD. PROGRAMME

EDUCATION IN THE KNOWLEDGE SOCIETY

QUESTIONNAIRE

CONTEXT DATA

Nº	QUESTION
1	My profile is (it is possible to select different options): ☐ Student. Course [ ] ☐ Medical Resident. Years of experience [ ] ☐ Medical Specialist. Years of experience [ ] ☐ Teacher. Years of experience [ ]
2	My age is within the range: ☐ 18-25 years ☐ 26-35 years ☐ 36-45 years ☐ 46-55 years ☐ + 55 years
3	My gender is: ☐ Male ☐ Female
4	I own the following devices (it is possible to select several options): ☐ Smartphone ☐ Tablet. ☐ Smartphone o Tablet ☐ None
5	The operating system of my Smartphone is: (if you do not own a Smartphone, select N/A): ☐ iOS (iPhone) ☐ Android ☐ Windows 8 ☐ Other ☐ N/A
6	The operating system of my Tablet is: (if you do not own a Tablet, select N/A) ☐ iOS (iPad) ☐ Android ☐ Windows 8 ☐ Other ☐ N/A
7	Within the scope of mobile devices, I know what is a mobile application (App): ☐ Yes ☐ No
8	To download Apps, I use: ☐ My Smartphone ☐ My Tablet ☐ My Smartphone and my Tablet ☐ None
9	The time that I use Apps on my Smartphone is: ☐ < 1h /day ☐ 1-2h/day ☐ 3-4h/day ☐ >4h /day ☐ I do not use them
10	The time that I use Apps on my Tablet is: ☐ < 1h /day ☐ 1-2h/day ☐ 3-4h/day ☐ >4h /day ☐ I do not use them
11	During last month, I have downloaded on my Smartphone the following number of Apps (if you do not own a Smartphone, select N/A): ☐ Among 1- 10 ☐ Among 11-20 ☐ Among 21-30 ☐ More than 30 ☐ None ☐ N/A

Nº	QUESTION
12	During last month, I have downloaded on my Tablet the following number of Apps (if you do not own a Smartphone, select N/A): ☐ Among 1- 10　☐ Among 11-20　☐ Among 21-30　☐ More than 30　☐ None　☐ N/A
13	I have paid any for downloading any App: ☐ Yes, sometimes　　☐ No, never
14	Regarding the trust, I have on the Apps that I download: ☐ I trust on the origin of the App ☐ I do not trust, but I download it anyway ☐ I do not know. I have not thought about it
15	When I have to download an App, I take into account (You can select several options): ☐ Security/Privacy　☐ Content　☐ Usability　☐ Accessibility　☐ Data Connexion ☐ Recommendation of a friend, journal etc. ☐Information provided by the developer　☐ None
16	Is there any characteristic more that I take into account ? ☐ Yes. Please, write down which one: [＿＿＿＿＿＿＿＿＿＿] ☐ No
17	Among the different options of the question 15, the most important characteristic that I consider more important is (please, select only one option): ☐ Security/Privacy　☐ Content　☐ Usability　☐ Accessibility　☐ Data Connexion ☐ Recommendation of a friend, journal etc. ☐Information provided by the developer　☐ None
18	I have used a medical App for my medical education: ☐ Yes. Please, write down which one [＿＿＿＿＿＿＿＿＿＿] ☐ No. The reasons are: [＿＿＿＿＿＿＿＿]
19	The type of Apps that I downloaded on my Tablet/Smartphone are (you are allowed to select more than one option): ☐ Entertainment (trips, sport, weather, maps)　☐ News　☐ Social Networks ☐ Mail　☐ Games　☐ Apps related with medicine (for example: diagnosis etc.) ☐ Medical education (for example: information, atlas.). ☐ Other.　☐ None

ACCEPTANCE MODEL

ID	ITEMS	1	2	3	4	5
I1	I would find the system useful in my job	☐	☐	☐	☐	☐
I2	Using the system enables me to accomplish tasks more quickly	☐	☐	☐	☐	☐
I3	Using the system increases my productivity	☐	☐	☐	☐	☐
I4	If I use the system, I will increase my chances of getting a raise	☐	☐	☐	☐	☐
I5	My interaction with the system would be clear and understandable	☐	☐	☐	☐	☐
I6	It would be easy for me to become skilful at using the system	☐	☐	☐	☐	☐
I7	I would find the system easy to use	☐	☐	☐	☐	☐
I8	Learning to operate the system is easy for me	☐	☐	☐	☐	☐
I9	Using the system is a bad/good idea	☐	☐	☐	☐	☐
I10	The system makes work more interesting	☐	☐	☐	☐	☐
I11	Working with the system is fun	☐	☐	☐	☐	☐
I12	I like working with the system	☐	☐	☐	☐	☐
I13	People who influence my behaviour think that I should use the system	☐	☐	☐	☐	☐
I14	People who are important to me think that I should use the system	☐	☐	☐	☐	☐
I15	The senior Management of this business has been helpful in the use of the system	☐	☐	☐	☐	☐
I16	In general the organization has supported the use of the system	☐	☐	☐	☐	☐
I17	I have the resources necessary to use the system	☐	☐	☐	☐	☐
I18	I have the knowledge necessary to use the system	☐	☐	☐	☐	☐
I19	The system is not compatible with other systems I use	☐	☐	☐	☐	☐
I20	A specific person (or group) is available for assistance with system difficulties	☐	☐	☐	☐	☐
I21	If there was no one around to tell me what to do as I go	☐	☐	☐	☐	☐
I22	If I could call someone for help if I got stuck	☐	☐	☐	☐	☐
I23	If I had a lot of time to complete the job for which the software was provided	☐	☐	☐	☐	☐
I24	If I had just the built-in help facility for assistance	☐	☐	☐	☐	☐
I25	I feel apprehensive about using the system	☐	☐	☐	☐	☐
I26	It scares me to think that I could lose a lot of information using the system by hitting the wrong key	☐	☐	☐	☐	☐
I27	I hesitate to use the system for fear of making mistakes I cannot correct	☐	☐	☐	☐	☐
I28	The system is somewhat intimidating to me	☐	☐	☐	☐	☐
I29	I intend to use the system in the next <n> months	☐	☐	☐	☐	☐
I30	I predict I would use the system in the next <n> months	☐	☐	☐	☐	☐
I31	I plan to use the system in the next <n> months	☐	☐	☐	☐	☐
I32	I won´t use the apps for my learning	☐	☐	☐	☐	☐
I33	I think that a quality certification of Apps is necessary	☐	☐	☐	☐	☐
I34	I Would recommend the use of App for learning to my colleagues	☐	☐	☐	☐	☐

REFERENCES

Briz-Ponce, L., & García-Peñalvo, F. J. (2015). An Empirical Assessment of a Technology Acceptance Model for Apps in Medical Education. *Journal of Medical Systems*, *39*(11), 176. doi:10.1007/s10916-015-0352-x

Briz-Ponce, L., & Juanes-Méndez, J. A. (2015). Mobile Devices and Apps, Characteristics and Current Potential on Learning. *Journal of Information Technology Research*, *8*(4), 26–37. doi:10.4018/JITR.2015100102

Briz-Ponce, L., Juanes-Méndez, J. A., & García-Peñalvo, F. J. (2014a). Analysis of Certificated Mobile Application for Medical Education Purposes. In F. J. García-Peñalvo (Ed.), *Proceedings of the Second International Conference on Technological Ecosystems for Enhancing Multiculturality-TEEM14* (pp. 13–17). New York: ACM. doi:10.1145/2669711.2669871

Briz-Ponce, L., Juanes-Méndez, J. A., & García-Peñalvo, F. J. (2014b). A systematic review of using mobile devices in medical education. In J. . Sierra-Rodriguez, J. Dodero-Beardo, & D. Burgos (Eds.), *Proceedings of 2014 International Symposium on Computers in Education (SIIE)* (pp. 205–210). Logroño, La Rioja, Spain: Universidad Internacional de La Rioja.

Briz-Ponce, L., Juanes-Méndez, J. A., & García-Peñalvo, F. J. (2014c). First Approach of Mobile Applications Study for Medical Education purposes. In *Proceedings of the Second International Conference on Technological Ecosystems for Enhancing Multiculturality-TEEM14* (pp. 647–651). New York, USA: ACM New York. doi:10.1145/2669711.2669968

Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, *13*(3), 319–340.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, *27*(3), 425–478.