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Economics

COMPARING CLOUD ACCOUNTING AND TRADITIONAL ACCOUNTING APPS: A CASE STUDY FOR ROMANIA

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ABSTRACT The business environment has been significantly changed over the past few years by information technologies (C. Christauskas & R. Miseviciene, 2012). Communication's universal remedy that is applicable throughout all spheres of activity is now represented by mobile devices. The rapid evolution of the mobile market has transformed it in the perfect environment for the global spread of the cloud computing and mobile cloud computing concepts. The current trend in accounting software appears to slowly shift from traditional on-premise solutions to cloud solutions. The present study assesses the usability of browser-based and mobile app-based accounting software when compared to traditional accounting solutions.

KEYWORDS : Cloud Computing, Mobile Cloud Computing, Cloud Accounting

INTRODUCTION

The rapid evolution of the mobile market has transformed it in the perfect environment for the global spread of the cloud computing and mobile cloud computing concepts. The current trend in accounting software appears to slowly shift from traditional on-premise solutions to cloud solutions   The objective of this study was to assess the usability of browser-based and mobile app-based cloud accounting app when compared to traditional accounting solutions. All participants were asked to use the same cloud accounting and traditional accounting software for two months and then they were asked to fill in the questionnaire.

The data collection method used was the questionnaire. In this stage, the main objective was to assess the usability of web-based and app-based cloud accounting app when compared to traditional accounting solutions from the perspective of practicing accountants. The questionnaire was structured in factual, knowledge assessment and opinion questions, the use of these types of questions allowing the transversal analysis among practicing accountants in the Romanian economic environment between March and May 2018. 34 valid answers were collected.

The statistical analysis was completed with the use of software that allowed the data set to be cleaned (MS Excel) and analyzed (IBM SPSS).

CASE STUDY

The detailed presentation of the study's results is carried out below:

1. **Prerequisites for setup:** All respondents assessed that both the browser and the mobile app version of the cloud accounting software do not require any prerequisites for setup. Regarding the traditional software, 23.5% of the respondents said that there are no prerequisites for the initial setup, while the rest of the respondents said that they were asked to install Visual C++ Redistributable 2015 on their machines.

2. **Initial setup (includes account creation, company creation):** the respondents were asked to assess the initial setup while taking into consideration the account creation and the company configuration – using a Liker scale from very easy to very difficult. Regarding the browser version, 5.9% of the respondents assessed that the initial setup is difficult, 29.4% assessed that is was easy, 38.2% assessed that it was moderate, 11.8% assessed that it was very difficult and 14.7% assessed that it was very easy. Regarding the app version, 32.4% of the respondents assessed that the initial setup is difficult, 20.6% assessed that it was easy, 11.8% assessed that it was moderately difficult, 8.8% assessed that it was very difficult, while 26.5% assessed that it was easy. Regarding the traditional app, 5.9% of the respondents assessed that the initial setup is difficult, 35.3% assessed that it is easy, 29.4% assessed that it is moderately difficult, 2.9% assessed that if is very difficult and 26.5% assessed that it is very easy. The differences are caused by the respondent's ability to interact with new software and different devices.

3. **Document autonumbering:** All respondents assessed that the browser and mobile versions of the app include the document autonumbering feature which simplifies the invoices creation. For the traditional app, 23.5% of the respondents said that the document autonumbering feature does not exist, while the rest stated that it does exist, but it is well hidden in the settings and not advertised to the end-user.

4. **Save system:** All respondents assessed that the browser and mobile versions of the app have an automatic saving system. For the traditional app, 76.5% of the respondents said that the save system is mostly manual, 2.9% said that is automatic, while the rest stated that it is both automatic and manual. The author of the study appreciates that these differences are caused by the different settings used by the respondents.

5. **General settings:** 64.7% of the respondents assessed that the interaction with the general settings was easy for the browser version of the app, while the rest assessed it the be very easy. When assessing the interaction with the general settings for the mobile app, 67.6% of the respondents said that it was easy, while the rest said that it was very easy. For the traditional app, 38.2% of the respondents assessed the interaction with the general settings as easy, 32.4% assessed it as moderately difficult and the rest assessed it as very easy.

6. **Maintenance:** 64.7% of the respondents assessed that the maintenance occurs automatically, while the rest assessed that it occurs both automatically and manually for the browser version of the app. For the mobile app, 67.6% of the respondents said that the maintenance occurs automatically, while the rest said that it occurs both manually and automatically. For the traditional app, 2.9% of the respondents assessed that the maintenance occurs automatically, 35.3% of the respondents assessed that it is both manual and automatic and the rest of 61.8% said that it was only manual. Again, the differences are caused by the different user preferences established by each respondent when Interacting with the software.
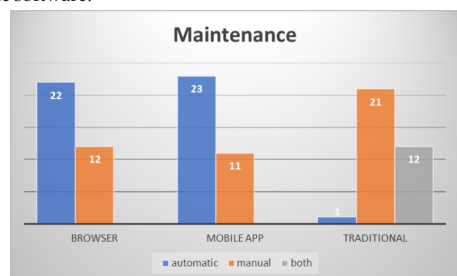

Figure1 : Analysis of maintenance for the browser, mobile and traditional app

Source: SPSS data analysis output

7. **Does the account have enhanced security?** All respondents agree that the account used for the browser and mobile version of the app has enhanced security, to the best of their knowledge. For the traditional app, only 70.6% of the respondents consider that their account has enhanced security.

8. ***Is data encrypted?*** 97.1% of the respondents agreed that the data is well encrypted and therefore safe in regard to the browser version of the app. All respondents assessed that the data is encrypted for the mobile app. For the traditional app, 94.1% of the respondents consider that the data is not encrypted.

9. ***Can you add more security settings?*** 97.1% of the respondents agreed that additional security settings can be added to their account in regard to the browser version of the app. All respondents assessed that additional security settings can be deployed for the mobile app, a good example being the use of biometric data for account authentication. For the traditional app, 94.1% of the respondents assessed that additional security settings cannot be implemented until a new update is deployed.

10. ***User Interface***: half of the respondents assessed that the user interface is very easy to use, while the other half assessed that it is easy to use for the browser version of the app. For the mobile app, 2.9% of the respondents assessed that the user interface is easy to interact with, 47.1% said that it is moderately difficult to interact with and 50% said it was very easy to interact with. For the traditional app, 97.1% of the respondents assessed that the user interface is moderately difficult to use, while the rest consider it very easy to use.

11. ***Data Input***: 52.9% of the respondents assessed that the data input method was moderately difficult, while the rest assessed it to be easy for the browser version of the app. For the mobile app, 2.9% of the respondents assessed that data input is difficult on small screen devices while the rest assessed it as moderately difficult. For the traditional app, 97.1% of the respondents assessed that the data input is moderately difficult.

12. ***Can data be imported from different software?*** 97.1% of the respondents have tried importing data from other accounting software and evaluated the process as being possible, but very difficult for the browser version of the app. 2.9% of the respondents said that they have not tried importing data from another accounting software while using the mobile app, 47.1% said that they could not successfully import data and the rest said that they were able to import data only with additional resources, such as the use of a personal computer. For the traditional app, 50% of the respondents have not tried to import data from a different accounting software, 47.1% said that data import from another accounting app is not possible because the database might be incompatible, and the rest said that it is possible but with great difficulty.

13. ***Name a feature that you would like to use but is currently missing***: 97.1% of the respondents would like it if the browser version of the app would have a financial statements creation feature, while the rest would like it if it had a tax reporting feature. 52.9% of the respondents said that the financial statements feature is missing from the mobile app, while the rest said that the tax reports feature is missing. When asked to name a feature that they would like to use but is currently missing from the traditional app, all respondents agreed that the traditional app contains all the features that they need.
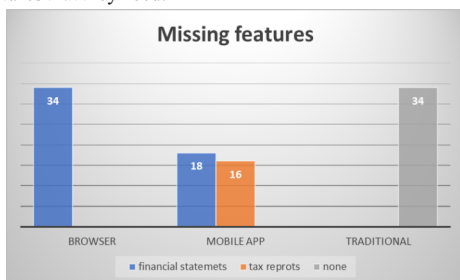

Figure 2: Analysis of missing features for the browser, mobile and traditional app

Source: SPSS data analysis output

CONCLUSIONS

The use of cloud accounting apps has become more popular over the past 5 years in the Romanian economic environment. This study revealed that practicing accountants consider that the browser-based and mobile app-based accounting software is just as easy or even more easy to use – in some cases- that traditional accounting solutions.

However, the use of traditional accounting solutions remains widely spread because of the financial statements and tax reporting features that are currently missing from cloud accounting-based solutions.

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