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A Study on Online Accounting Software in Firms in Hanoi

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Abstract: This paper is conducted to research online accounting software in firms in Hanoi. This study uses data of firms in Hanoi during 2019. The data used for analysis are 125 observations. We use descriptive statistics, Cronbach's Alpha, Anova for measuring the attrubutes ofonline accounting software. The results show that online accounting softwareincluding ten (10) attrubutes. Based on the findings, some recommendations are given to help software companies improve the quality of online accounting software, firms intending to use online accounting software select suitable online accounting software.

Keywords: online accounting softwarem, accounting, accounting information system

JED codes: M40, M41, L70

I. Introduction

Accounting was the collection, processing, inspection, analysis and provision of economic and financial information in the form of value, in item and working time (National Assembly, 2015). One of the accounting tasks was to provide accounting information and data in accordance with the law (National Assembly, 2015). Therefore, accounting contributes to helping firms regularly monitor the situation of production and business activities, build and implement strategies, plans and decision making; accounting advice to the board of directors regulates the financial situation of the business.

Deshmukh (2006) described the historical evolution of accounting software, where he argued that difficulties in maintaining data manually and cost effectively forces the emergence of accounting software.

Accounting software was one of the basic components in the accounting information system of every firm, so it contributes to collecting, storing, managing, processing, retrieving and providing information for users. Accounting software was a specific product, but theoretically it was the intersection of many research fields, one of the basic components for mechanizing accounting work (Nguyen, 2017).

According to the working method, accounting software is divided into 2 types: (i) online accounting software: Working remotely via the Internet and (ii) offline accounting software: Working locally on the internal LAN. Accounting software can be written by commercially-written companies (packaged accounting software) or accounting software that firms actively order separately from software companies. However, the scope of this study is online accounting software that is sold by software writing companies. Software and accounting data will be stored on server system with high safety and automatic backup by server software. To use the software, customers simply pay for the services they use.

Online accounting software is increasingly popular and extremely useful for firms that business owners want to capture financial, accounting data every time, every where or have many facilities to manage. It is one of the effective tools to manage the financial activities of the firm, provide information to firms, thus helping managers make predictions and decisions on appropriate business strategies in time. Therefore, the attributes of online accounting

software need to be evaluated, analyzed and measured to help software companies improve the quality of online accounting software, firms intending to use online accounting software select suitable online accounting software.

II. Literature Review

Accounting software was an important element of accounting information system. Accounting software was an important part of the organization of the accounting information system, related to the accounting process, recording methods and the method of providing output information (Nguyen, 2014).

From small shop to large companies accounting software has become a solution to manual system of maintaining bulk amount of paper works (Ryan, 2012).

Chong &Nizam (2018) investigated and explored the impact of Accounting Software on business performance of Malaysian firms.The study showed that several characteristics such as: efficiency, reliability, ease of use, data quality and accuracy influenced the use of AIS, thereby affecting the performance of firms.

Nguyen (2017) said that, in market in Vietnam currently, there were more than 100 accounting software products in circulation among a total of more than 100 software manufacturing enterprises. The author used qualitative research methods and quantitative research methods. The research results showed that 96% of enterprises used accounting software sold by commercial writing companies, most accounting software could be upgraded or changed at the request of firms (customers); 63.3% of enterprises using accounting software thought that the cost of accounting software was reasonable; 98.7% of enterprises using accounting software believed that accounting software complied with accounting regulations; accounting software met the requirements of corporate financial management information and accounting software was limited.

Vu (2018) asserted, accounting software was a bridge between information providers and information users; on the other hand, accounting software was also the place to collect, store, process and provide information to form an electronic enterprise through the digitization of information systems, contributing to building an electronic government and electronic society. The research results also showed that 79% of enterprises used specialized software, 76% of enterprises used information technology services.

Previous researches have shown that it is crucial for firms to use accounting software to ensure the survival and sustainability of business in the increasingly competitive environment besides enhancing their business operations competency and efficiency. In this study, the authors propose that the attributes of online accounting software to help software companies improve the quality of online accounting software, firms intending to use online accounting software select suitable online accounting software for improve the performance of business organizations.

III. Methodology

The authors have the research process for the attributes of online accounting software that having two phases following.

Phase 1: We applied the expert methodology

We created a list of attributes gathered from the literature reviews as mentioned in the above studies. We discussed with 10 experts' consultation and 10 accounting lecturers to improve the scale and design of the questionnaire. The results of surveying 10 experts and 10 accounting lecturers showed that the attributes of online accounting software. Based on the above results, we built survey questionnaires for quantitative research (see table 1).

Phase 2: We send surveys to 150 businesses in Hanoi which are using online accounting software. Completed questionnaires were collected from the surveyed enterprises are 120. The research sample is consistent with that of Hair et al. (1998). All data collected from the questionnaire are coded, processed by SPSS 22.0. We tested a reliability scale with Descriptive statistics and Cronbach's Alpha coefficient.Any observational variables with a total correlation coefficient greater than 0.3 and Cronbach's Alpha coefficient greater than 0.6 would ensure reliability of the scale.

Table 1: Attributes (indicators) of online accounting software

Code	Scale	Sources
OAS1	Online accounting software efficiency	Chong &Nizam (2018)
OAS2	Online accounting software reliability	Chong &Nizam (2018)
OAS3	Online accounting software ease of use	Chong &Nizam (2018)
OAS4	Online accounting software data quality	Chong &Nizam (2018)
OAS5	Online accounting software Accuracy	Chong &Nizam (2018)
OAS6	Online accounting software can be upgraded or changed at the request of businesses	Nguyen (2017)
OAS7	Reasonable price for online accounting software	Nguyen (2017)

OAS8	Online accounting software in accordance with accounting rules	Nguyen (2017)
OAS9	Online accounting software meets the requirements of corporate financial management information	Nguyen (2017)
OAS10	Online accounting software was limited	Nguyen (2017)

IV. Research Results

IV.1. Descriptive Statistics

Table 2: Respondents by Gender, Job description, Work experience

	Frequency	Percent	Cumulative Percent
Gender			
Male	37	29.6	29.6
Female	88	70.4	100.0
Job description			
General accountants	44	35.2	35.2
Chief accountants	34	27.2	62.4
Accounting staff	47	37.6	100.0
Work experience			
Over 5 years	72	57.6	57.6
To 5 years	53	42.4	100.0
Total	**125**	**100.0**	

Table 2 shows that among the 125 respondents, about 29.6% were male while the remaining 88 (70.4%) were female. Among the respondents, accounting staffs accounted for 37.6%, general accounting accounted for 35.2%, while the remaining 27.2% or 34 respondents were chief accountant. Of these, 42.4% of the participants have work experiences for 5 years or less, and over 5 years accounted for 57.6%.

Table 3: Descriptive analysis of attributes of online accounting software

	N	Minimum	Maximum	Mean	Std. Deviation
OAS1	125	2.0	5.0	3.53	.758
OAS2	125	1.0	5.0	3.88	.799
OAS3	125	2.0	5.0	3.68	.809
OAS4	125	2.0	5.0	3.70	.672
OAS5	125	2.0	5.0	4.02	.647
OAS6	125	2.0	5.0	4.06	.744
OAS7	125	2.0	5.0	3.97	.792
OAS8	125	2.0	5.0	3.98	.884
OAS9	125	2.0	5.0	3.94	.801

OAS10	125	2.0	5.0	3.93	.732
Valid N (listwise)	**125**			**3.87**	

Table 3 indicates that the respondents agree with the dependent variables of "online accounting software", where ten (10) attributes were quite high with an average of 3.87 compared with the highest of the Likert 5-point scale. All these ten (10) attributes were rated at an average of 3.53 or higher.

IV.2. Cronbach's Alpha

Online accounting software has been measured by the Cronbach's Alpha. Results of testing Cronbach's alpha of attributes are presented in Table 4 below.

Table 4: Results of Cronbach's Alpha Testing of Attributes

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Online accounting software (OAS): Cronbach's Alpha: .744				
OAS1	35.14	15.334	.317	.736
OAS2	34.79	14.908	.363	.730
OAS3	34.99	15.347	.328	.742
OAS4	34.97	15.983	.321	.743
OAS5	34.66	15.195	.430	.721
OAS6	34.62	15.029	.382	.726
OAS7	34.70	14.097	.514	.706
OAS8	34.70	13.939	.464	.714
OAS9	34.74	14.002	.525	.704
OAS10	34.74	14.337	.526	.706

The results also show that attributes of the dependent variables have Cronbach's Alpha coefficients that are greater than 0.6, and the correlation coefficients of all attributes are greater than 0.3. So, all the attributes of the dependent variables are statistically significant (Hoang and Chu, 2008; Hair et al, 2009).

IV.3. ANOVA analysis

ANOVA test helps us perform a comparison for the results of the evaluation of online accounting software between the three subjects, including accounting staff, general accounting and chief accountant.

Table 5: Test of Homogeneity of Variances

OAS

Levene Statistic	df1	df2	Sig.
.589	2	122	.556

Table 6: Anova

OAS

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.547	2	.273	1.551	.216

Within Groups	21.509	122	.176
Total	22.056	124	

Table 5 & table 6 show that Sig Levene Statistic of .556 is more than .05, which means that the variance between the options of the qualitative variable above (different job description) is not different and Sig. = .216ismorethan.05, which indicates that there is not, statistically, significant difference in the level of online accounting software between the mentioned three groups of job description (Hoang and Chu, 2008; Hair et al. 2009).

V. Discussion and administrative implications

V.1. Online accounting software efficiency

The results of Nguyen (2014) showed that the benefits of accounting software to the accounting information system included: Providing quick information, supporting decision-making processes and effective planning; saving time and cost; being convenient in data controlling and minimizing errors. Accounting software has had positive impacts on accounting information systems in Vietnam's service enterprises, providing quicker and more timely information for planning and controlling as well as making management decisions in enterprises (Nguyen, 2014).

Abu-Musa (2004) asserted, accountants admit that uses of accounting software has freed them from manual recording and presentation of transactions and it subsequently reduces time and cost. Accounting software improved the quantity and quality of management information, use of accounting software has increased overall operational effectiveness (Carlton, 1999; Fisher & Fisher, 2001).Accounting software packages increase overall operational effectiveness by improving both the quantity and quality of management information available (Fisher and Fisher, 2001; and Abu-Musa, 2004).

V.2. Online accounting software reliability

Although accounting software provide many benefits, inherent computer security issues are not often addressed by management as many organizations do not realize the importance of computer security until some unauthorized modification to a payroll file, or some other events, occur (West &Zoladz, 1993). Nowadays, financial organizations are searching for accounting software as by using accounting software organizations can achieve maximum throughput with minimum resources because accounting software can accelerate business operations with great performance (Shields, 2011).

Warranty and maintenance were quick and prompt: Normally, software writers and software transfer staff are Vietnamese and in Vietnam, so the geographical distance did not create large costs for warranty and maintenance (Nguyen, 2017).

Online accounting software was especially useful for firms with many branches, offices and facilities. All financial and accounting data of branches, offices, facilities would be stored centrally, helping the synthesis of reports quickly and accurately. As a result, firm managers would also be able to grasp the financial and accounting situation of the entire company immediately, thereby making timely policies (Dau, 2019).

V.3.Online accounting software ease of use

Gurton (2001) argued that power and ease of use are no longer the only criteria for selecting an accounting system. Ease of use is still important but compatibility has increased in importance, too. Goldberg (2010) revealed in his study that uses of accounting software over the paper ledger results in benefits for the organization such as ease of use, backup, ready information, secure storage, and replication of records.

Domestic-made accounting software was usually built in Vietnam and had manuals, which have created favorable conditions for the exploitation and use of accountants (Nguyen, 2017).

One of the benefits of online accounting software was that it could connect with other software such as sales software, personnel, etc. and especially electronic invoices. Connecting with other software would help firms easily receive information, save costs, save time effectively (Dau, 2019).

V.4.Online accounting software data quality

Online accounting software effectively managed assets, such as cash, warehouse and debt management: Instead of having to review from the beginning when something went wrong, online accounting software automatically checked, detected differences between cashier's cash book and cashier's book; users could also look up cash balances, bank account balances at any time. Besides, the software also helped to track the situation of import and export, easily managed goods according to barcodes, batch numbers, categories, etc. Moreover, accountants could use online accounting software to record debt statistics, debt status for effective debt recovery planning (Dau, 2019).

When firms do not have or have little experience in investing in infrastructure to manage data, the choice of online accounting software will be the simple and safe option. Firms need to choose reputable online accounting software providers through achieving a number of international certifications such as ISO/IEC 27000 certification of information security management system; international STAR certificate for information security issued by BSI and CSA; CMMi Level 3 certificate assessing the maturity of the global valuable software production process developed and certified by SEI, etc.

V.5.Online accountingsoftwareaccuracy

Deshmukh& Romine (2002) explored that business' accounting software can provide real-time support for the creation of web-based storefronts and electronic data interchange. Real-time connectivity with the accounting system can enhance forecasting, scheduling, manufacturing, and procurement functions. Changes to inventory or pricing can be made instantaneously. The back-end systems can check and approve credit for new customers, or support an online service that does so.

When accounting branches enter data into online accounting software, the software will automatically sync on the system, the head does not need to re-enter data and the board of directors only need to click on the computer or click on the phone so that they can see. Thus, it contributes to helping the board of directors to capture financial - accounting data anytime, anywhere; helping the management board manage many branches of the firm at the same time and firms can expand operations, increase the number of offices and branches everywhere.

V.6.Online accounting software can be upgraded or changed at the request of firms

Jones (2002) stated that as computers became more robust and integrated databases are more standardized, accounting software developers are now adding more functions-including cost accounting, manufacturing resource planning, customer resource management, human resources, and payroll.

V.7. Online accounting software meets the requirements of corporate financial management information

Accounting software which has become an invaluable resource for modern business can be defined as computer programs that allow detail tracking of financial transactions and provide instant report and analysis of a firm (Wikipedia,2007; Investopedia, 2013).

With online accounting software, accounting, management and firm managers could use anytime, anywhere, on any Internet-connected devices such as desktops, laptops, tablets, phones, even Internet TV. This would help accountants and firm managers to easily monitor the company's financial activities to devise an appropriate strategy despite frequent relocation (Dau, 2019).

V.8. Reasonable price for online accounting software

Henry (1997) mentioned that, the steady decline in the price of information technology and the increasing availability of off the shelf accounting software have led more and more businesses of any size to automate all or part of their accounting functions. Basile et al. (2002) explored most business owners in USA know little about the accounting software packages available and have only rudimentary ideas about how to evaluate the alternatives. Many owners rely on advice from retail store clerks, recommendations from resellers, or national marketing campaigns as the primary basis for their selections.

Online accounting software was specifically designed to be used via an Internet browser, instead of being installed on computers within the company. This new deployment model helped reduce initial IT investment costs such as hardware devices (server systems). The application firm also did not have to maintain information technology personnel to maintain and backup data because the provider would take care of this work. Thus, the initial investment costs would be converted into small subscription fees paid monthly, annually (Dau, 2019).

Domestic accounting software was relatively cheap, under 10 million VND, such as, Misa, AC soft, Vinet, etc. or over 10 million VND, such as, AccNet, Effect, Fast, etc.(Nguyen, 2017). Firms using online accounting software, especially pre-packaged accounting software, will not have to spend money on this server and security because the provider will have to ensure and commit with users.

V.9. Online accounting software in accordance with accounting rules

The accounting system was built into the software complying with the current accounting standards and regime of Vietnam. The regular changes of the Ministry of Finance on Vietnam's accounting standards and the Vietnamese accounting regime were updated quickly (Nguyen, 2017).

Online accounting software allowed users to prepare tax returns and reports online by connecting directly with the State's online tax declaration software. With this utility, accountants did not spend time and effort making tax reports, avoiding the situation of filing overdue reports. In addition, this utility also helped businesses reduce time, costs and manpower when filing a tax on (Dau, 2019).

V.10. Online accounting software was limited

Mattingly (2001) stated that choosing the right accounting software is becoming more difficult as the software market becomes increasingly fragmented. In many cases, more product information makes decision-making more difficult rather than less. Programming stages of accounting software, such as, analysts, programmers, testers, project managers, etc. were often not clearly assigned. Software also had errors and system errors (Nguyen, 2017).

VI. Conclusion

Online accounting software is becoming trendy thanks to its attractive features, convenience and ease of use. Online accounting software is an accounting software program with the ability to connect in a very flexible way, capable of exchanging and exploiting information from anywhere via internet connection. With the advanced features and benefits that it brings, online accounting software will be the necessary solution to help firms manage their finance effectively, thereby improving the business efficiency of the firm.

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