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An Investigation of the Factors Influencing Employees' Behavioral Intention to Use AIS in Bangladesh

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Abstract

Nowadays, accounting software such as Tally, Troyee, Acc Pac, SAP is considered as one of the most vital resources for the modern business corporation by which all functions of accounting are being performed effectively. Accounting software is a type of application that allows employees to record, and process financial transactions by enabling different functional modules such as Chart of Accounts, Accounts Payable, Accounts Receivable, Payroll, Inventory, Purchase Order, Sales Order, Billing, General Ledger, Trial Balance and Balance Sheet. This study aims to identify factors that are affecting employees' behavioral intention to use different accounting software used by different companies in Bangladesh. A total of 80 employees from four different organizations were provided with the self-administrated questionnaire. The study is based on the factors-Perceived Usefulness [PU], Perceived Ease of Use [PEOU], Attitude toward Usage [ATU], Behavioral Intention to Use [BIU] and Perceived Behavioral Control [PBC] as suggested by Davis in his model TAM. SPSS software is used to conduct reliability test and factor analysis. The result of the study shows that use of accounting software makes the processing of financial data effective and easier and employees want to use AIS in their daily working life, but many of the employees do not have sufficient knowledge and skill to run Accounting Information System due to lack of proper training. So, sufficient training is needed to make the employees' interaction with the accounting software clear and understandable.

Keywords: Accounting Information System, Behavioral Intention, Employees' Attitude, Perceived Usefulness, Perceived Ease of Use. Perceived Behavioral Control.

Introduction

The increasing development of technology in a form of various applications has opened up the use of Accounting Information System (AIS) in companies, and eventually transforming the pattern of transactions from manual paper-based to software managed system. Although, accounting information system is considered a kind of software that has a purpose to calculate data, it is linked to various departments with its diverse and dynamic functions or modules pertinent to HR, Finance and Marketing. Moreover, this vital system is assisting all levels of managers to get accessed to its various modules for executing planning and controlling activities by which effective managerial decisions are taken and executed for better financial control. In

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addition, AIS provides quality information to external users that cover six main aspects: people, procedures, data, software, information technology infrastructure, and internal controls. In spite of its countless advantages, AIS received very limited attention by the academic scholar in exploring the factors affecting day to day operation of an employee in an organization. Therefore, we attempt to know the motivation level of employees and to identify the factors affecting employees' behavior towards the accounting software applications.

Literature Review

Jawabreh and Alrabei (2012) identified the implication of accounting information systems in four and five-star hotels' planning, controlling and decision making process in Jodhpur. The study finds that there is no relationship between accounting information system and planning, controlling, and decision-making in four and five-star hotels in Jodhpur. Kasswna (2012) examined the effectiveness of accounting information systems under conditions of uncertainty in the electricity companies in Jordan. The study has found that the characteristics of electronic accounting information systems highly influence the performance of electricity companies of Jordan under conditions of uncertainty. Abdallah (2013) analyzed the use of the accounting information systems' impact on the quality of financial statements submitted to the Income Tax and Sales Department in Jordan. The study suggests that there is a presence of an impact of accounting information systems on the quality of financial statements submitted to the Income Tax and Sales Department in Jordan. Salehi, Rostand & Mogadam (2010) showed the significance of accounting information system in Iran which is a developing country. The study identified that Accounting Information System improves the preparation and accuracy of financial statements and financial reporting. The results also revealed that there is a gap between what AIS is and what should be in the Iranian Corporations. Appiah et al. (2014)identified that computerized accounting information systems' adoption is contributed by the external and internal factors, as well as potential benefits such as accuracy. The study also suggests that if other existing information is integrated with CAIS, it will be virtually insubstantial to allow sharing of financial information on real time basis. Adjei (2013) has made a study to show the importance Ghanaian banks confer on computerized banking technology, the extent to which this technology is being employed and how relevant this banking technology is to customers and staff as a whole. Soudani (2012)analyzed the impact of AIS on the performance management and financial performance of the listed companies in Dubai financial market (DFM). The results of this study showed that although AIS is very useful and have effect on organizational performance to listed companies in DFM, there is no relationship between AIS and performance management. Amin et al. (2015)analyzed consumers' behavioral intention to use mobile wallet services in Bangladesh by applying the model TAM. The result showed that all variables of the model except perceived ease of use, significantly affect users' behavioral intention to use mobile wallet.

Methodology

The respondents of this study are mainly employees of the Accounts Division from different companies who are fully or partially using various accounting applications for interpreting financial data. A total of 82 questionnaires were distributed among the employees in four different types of companies located in Dhaka, Bangladesh. Questionnaire was divided into two parts; part one of the questionnaire consisted of several demographic questions while part two of the questionnaire comprised several questions based on the factors- Perceived Usefulness [PU], Perceived Ease of Use [PEOU], Attitude toward Usage [ATU], Behavioral Intention to Use [BIU] and Perceived Behavioral Control [PBC]. However, all questionnaire items were primarily adopted from the prior studies, and some wording changes were made to match the research context. It this study which is conclusive in nature, we simply adopted purposive sampling technique in which all samples were chosen based their technical knowledge about various AIS applications available in Bangladesh. All respondents were provided with the structured and non-disguised questionnaire and requested to fill out the questionnaire in a seven–point likert scale ranging from (1) strongly disagree to (7) strongly agree for each block. The collected data were coded into SPSS program for reliability analysis and factor analysis.

Reliability and Validity Analysis (Cronbach's Alpha)

Table 1: Reliability Analysis (n=80)

LV	Cronbach's Alpha	No. of Items
ATU	0.8915	5
BIU	0.8980	3
PBC	0.7861	3
PEOU	0.8128	5
PU	0.8014	5

Cronbach's alpha, α (or COEFFICIENT ALPHA), developed by Lee Cronbach in 1951, measures reliability, or internal consistency. Cronbach's alpha reliability coefficient normally ranges between 0 and 1. The closer Cronbach's alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. As shown in the table 1, four variable's Cronbach's Alpha values are above 0.80, which is "Good" and one variable's Cronbach's Alpha value is above 0.70 which is "Acceptable" according to the rules of thumb of George and Mallery (2003).

Factor Analysis and Findings

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.838
Bartlett's Test of Sphericity	Approx. Chi-Square	1046.028
	df	190
	Sig.	.000

The KMO measures if the responses given with the sample are adequate or not which should be close than 0.5 for a satisfactory factor analysis to proceed. Kaiser (1974) recommend 0.5 (value for KMO) as minimum (barely accepted), values between 0.7-0.8 acceptable, and values above 0.9 are superb. From the table-2, the KMO measure is 0.838, which is between 0.7-0.8. Therefore the sample are acceptable and adequate to proceed factor analysis.

Bartlett's test measures the strength of the relationship among variables. From the table-2, Bartlett's test of sphericity is significant at 0.000 ($p < 0.001$), and therefore it can be stated that the dataset is quite appropriate for conducting factor analysis.

Table 3: Communalities of different factors

Statements	Initial	Extraction
I found using accounting software useful.	1.000	.710
Using the accounting software enhanced my effectiveness in processing financial data	1.000	.837
Using the accounting software enabled me to accomplish my data processing more quickly.	1.000	.768
Using the accounting software improved my work performance.	1.000	.621
Using the accounting software made my life easier.	1.000	.849
Overall, I found the accounting software easy to use.	1.000	.675
It is easy for me to remember how to carry out tasks using the accounting software.	1.000	.769
My interaction with the accounting software is clear and understandable.	1.000	.574
It was easy for me to become skillful at using the accounting software.	1.000	.607
I have a generally positive attitude toward using the accounting software.	1.000	.671
Overall, I enjoyed using the accounting software.	1.000	.736
I believe it is a good idea to use the accounting software at work.	1.000	.727
I like the idea of using the accounting software.	1.000	.772
The accounting software provided me with an attractive learning environment.	1.000	.745
I intend to use the accounting software frequently in my working life.	1.000	.780
I intend to use the accounting software as often as possible.	1.000	.823
I plan to use the accounting software in the future.	1.000	.766
Using accounting software is entirely within my control.	1.000	.796
I have the knowledge and ability to make use of the accounting software.	1.000	.779

Extraction Method: Principal Component Analysis.

Communalities show how much of variance in the variables has been accounted for by the extracted factors. The communality value more than 0.5 is considered acceptable for further analysis.

In table-3, 84.9% of the variance in "Using the accounting software made my life easier" is accounted for, while 57.4% of the variance in "My interaction with the accounting software is clear and understandable" is accounted for.It can be summarized that all calculated values are above 0.50 which is the standard cut point.

Table 4: Rotated Component Matrix

	Components(Retained)				
	1	2	3	4	5
I intend to use the accounting software as often as possible.	.860				
I intend to use the accounting software frequently in my working life.	.822				
I plan to use the accounting software in the future.	.789				
I like the idea of using the accounting software.	.698				
I believe it is a good idea to use the accounting software at work.	.652				
It is easy for me to remember how to carry out tasks using the accounting software.		.795			
Overall, I found the accounting software easy to use.		.733			
My interaction with the accounting software is clear and understandable.		.651			
It was easy for me to become skillful at using the accounting software.		.650			
I have a generally positive attitude toward using the accounting software.		.555			
Using the accounting software enhanced my effectiveness in processing financial data.			.846		
Using the accounting software enabled me to accomplish my data processing more quickly.			.844		
Using the accounting software improved my work performance.			.684		
I found using accounting software useful.			.681		
Using the accounting software made my life easier.				.891	

The accounting software provided me with an attractive learning environment.				.608	
Overall, I enjoyed using the accounting software.				.543	
Using accounting software is entirely within my control.					.860
I have the knowledge and ability to make use of the accounting software.					.775
Eigen value	8.625	2.049	1.545	1.301	1.131
Variance explained (%)	43.126	10.243	7.724	6.506	5.656
Cumulative variance explained (%)	43.126	53.370	61.094	67.600	73.256

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Discussion on Rotated Factor Analysis

From the table 4, it can be seen that all five retained components explained over 73.256% of the variance. All components were retained based on the calculated Eigen value portrayed in table 4. Furthermore, total twenty observed variables are classified into five retained factors.

The first factor includes five observed variables, which are categorized under Behavioral Intention to Use (BIU). In this block, the statement titled "Employees are intended to use the accounting software as often as possible" has got the highest importance, and the statement titled "Using the accounting software at work is a good idea" has got the lowest importance. The second factor includes five observed variables, which are categorized under Perceived Ease of Use (PEOU). Among them, the statements such as "It is easy to remember how to carry out tasks using the accounting software" has got the highest importance and the statement namely, "Employees have generally positive attitude toward using the accounting software" has got the lowest importance. There are four observed variables in third factor which are categorized under Perceived Usefulness (PU). In this block, the statement anchored with the theme "Using the accounting software enhanced employee's effectiveness in processing financial data" has got highest importance and "Use of accounting software is useful" has got the lowest importance. There are three observed variables in the fourth factor which are categorized under Perceived Usefulness (PU) and Attitude towards Usage (ATU). Among the variables, "Using the accounting software made my life easier" has got the highest importance and "Overall, I enjoyed using the accounting software" has got the lowest importance. Lastly, the fifth factor includes two observed variables which are categorized under perceived behavioral control (PBC). Among them, "Using accounting software is entirely within my control" got the highest importance.

Conclusion and Future Research Direction

Through this study, we wanted to identify different factors affecting private enterprise employees' behavioral intention to adopt Accounting Information System in Bangladesh. The results of the study confirmed that use of accounting software is very effective to process financial data and employees intend to use AIS as often as possible and they also want to use AIS in future, but many of them do not have sufficient knowledge to run Accounting Information System. So, sufficient training is needed to make the adoption of AIS easier. The study can further be extended by exploring the relationship amongst five retained variables or by showing the effect of all five variables on Intention to use (ITU).

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