Computerized Accounting Information System in Nepalese Micro Hydropower Companies

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Abstract
As technology takes over modern business tasks, Computerized Accounting Information Systems (CAIS) help companies record, review, and create up-to-date financial reports while supporting eco-friendly, paperless work. Reliable financial reports are important for managers to create strong business plans. This study looks at how ready and willing micro-hydropower businesses (MHPs) in Nepal are to use CAIS. It uses five main ideas: Decision-Maker's Context, Organizational Qualities, Technological Aspects, Environmental Influence, and Data Security, and analyzes information from surveys of 510 MHP owner-managers. The study tested the model using several statistical methods. The results show that the choice to adopt CAIS is greatly influenced by the decision-maker's attitude, commitment, and IT knowledge; how easy, reliable, and user-friendly the accounting software is; the organization's needs, vendor quality, and internal strength; and outside factors like IT outsourcing, government support, and outside pressure. Strong data security also plays an important role in adoption. The study highlights the urgent need for Nepalese MHPs to combine traditional bookkeeping with digital tools. Even though data security is still a major worry, interest in CAIS is growing, showing a wider shift where accounting is moving from a traditional job to a more active service field.

Keywords: CAIS, decision maker's context, technology aspect, organizational attributes, environmental influence, data security.

1. Introduction

The innovation of human beings to manage the economic life of the people in society, social science rather than natural science is an Accounting. Accounting being man-made system, need of mankind, not rigid as laws of natural science (Sehgal & Sehgal, 2008; Osmond, 2011). The process of recording financial transactions & events to measure the financial performance of the organization and communication financial information with concerned persons or parties for right and prompt decisions is an Accounting (Omonuk 2009). Financial information is essential to prepare tax-related documents, to support other functions of the organization, to develop strong strategies. since most of the decisions of a business are directly or indirectly related to the financial matter accounting system of the business organization is responsible to maintain a complete and systematic record of financial events, analyze them, and to produce necessary documents at the right time.

For the smooth run of the business, businessmen must know the operating result and financial affairs of their business venture. Businessmen must know his financial strength so that he can prepare himself for competition. It is the Accounting which maintains the complete record of financial transactions; to obtain information about the operating result and economic condition of the business, to provide economic information to the concerned persons or parties for right & prompt decision.

Computerized Accounting Information System is getting popularity in recent decades. Computerized accounting system blends accounting with technology and linked with information technology. Easy availability of suitable accounting software and training facility helped the business organization to adopt CAIS. Recording, organizing, summarizing, analyzing, preparation & interpretation of financial information to the concerned persons & parties now easier with CAIS. Speed and accuracy on recording and processing of financial transactions increase the efficiency of SMEs (Marivic, 2009). The integration of information technology with accounting enables the business organization to achieve accuracy, quality, timeliness, speed, and storage of volumes' financial transactions(Akanni,1998).

In 2000, Alternative Energy Promotion Centre was formed to look after the micro-hydropower in Nepal. It defined the plants in the range of 10-100 kW as SMEs. According to Nepal Micro Hydro Development Association there are approximately 3300 community-owned and community-operated MHPs installed in Nepal. The sound financial reporting system is equally important for micro hydro power businesses to make a prompt decision that supplies accurate and reliable financial information. Decision-based on accurate and reliable is likely the right decision. The accounting system adopted by the SME should be reliable, easy to use, accurate, complete, and fulfill the objectives of accounting(Hatteu,2012).

Technology (CAIS) enhances the productivity of accounting personnel, supplies accurate & reliable information at the right time for right and prompt decisions (Burgess, 1997). One of the chief causes of the misfortune of SMEs is the lack of accurate and reliable financial information which hinders the planning function of SME (Dyer &Ross, 2008; Kamyabi & Devi, 2011). SME has limited human resources, unable to hire accounting professionals, depends on a manual accounting system where data processing is slow and chances of human errors

(Evaraert et al., 2010). CAIS can address those problems of SMEs but still many SMEs are not adopting such technology (Ibarra & Velasco 2015). Nepalese SMEs are no exception.

Many studies exist on computerized accounting information systems(CAIS). CAIS is also regarded as e-accounting by many researchers. Empirical studies on the intention of CAIS in SMEs of developing countries are scarce. This study adopts and extends the CAIS adoption model presented by Thong (1999). The study also integrates prior studies on CAIS in examining the intention of CAIS adaptation by SMEs.

The decision based on facts with appropriate analysis is likely the right decision. For financial decisions, accurate financial information at right time are to be made available by the accounting system of the small and medium enterprise. Information from the accounting department is used to measure and communicate the economic results of a business to make the proper decision, planning, controlling, and coordinating activities of the business. Delay in processing, chances of human errors are the common problems of record-keeping in a manual accounting system which can be avoided by automation of the accounting system. Computerized accounting packages serve easy processing and quick reporting so, management can make a right and prompt decision.

There is a strong relationship between electrification and fundamental tenets of eco-friendly progress. The United Nations' Sustainable Development Goals cannot be met without increasing low-income people's access to modern energy services. Access to energy as a means of increasing economic prosperity is often prioritized by decision-makers. Such monetary development is undeniably crucial to the success of any rural electrification initiative. Unless the owners or managers of SMEs are aware of the economic performance of their business venture, they don't able to develop a control mechanism for the success of their business venture. So, appropriate accounting information is important for the successful management of any business entity (European Commission (EC, 2008). The management of SMEs required financial information related to financial accounting, taxation, management accounting, and strategic planning to gain competitive advantages and success in the business field (Harun et al., 2010). Accurate, reliable, and timely financial information for right & prompt decision is essential for SMEs to gain competitive advantage, their growth & expansion, although manual accounting system does not serve this function, so whether Nepalese SMEs are ready to adopt CAIS is the main issue of this study. The issue of this study raises the following questions: Do Nepalese SMEs are ready to adopt CAIS for effective and efficient management of their business ventures? Do owners or managers of Nepalese SMEs are aware of the importance of information technology for the smooth operation of their business? The focus of this study was to explore the factors responsible for CAIS intention by Nepalese SMEs which enhances effectiveness and efficiency as well as their competitive advantages.

The aim of this study was to examine the relationship between Decision Maker's context and Intention of CAIS, to evaluate the relation of Technological aspect with CAIS Intention, to identify the impact of Organizational attributes on CAIS Intention, to identify Environmental impact on CAIS Intention and to explore the role of Data security on CAIS Intention in Nepalese SMEs.

2. Materials and Methods

Structured questionnaire survey was used to investigate the relationship between CASI Intention and its constructs. Past knowledge was used to identify the dependent variable of the study: CAIS Intention. Independent variables of the study: Decision Maker's context, Technological aspect, Organizational attributes, Environmental influence, and Data security were also based on a literature review. Diffusion on innovation theory and Accounting theories and its impacts on the attitudes of the Nepalese SMEs are considered. Detailed description of the variables and relevant hypotheses are presented below:

2.1 CAIS Intention: The Dependent Variable

CAIS Intention will be measured by four indicators (Willingness, fund management, supplier management, and employee development). All those indicating variables are measured with 7-point rating scales. In this study, owner-managers of Nepalese hydropower plants were asked to give the rating for those four statements to know their intention on the adaptation of CAIS in their business.

2.2 Decision Maker's Context

Most SMEs are managed by their owner so the owner of the SME is also the manager of his business venture. Decisions are made by the owner of SME himself. In SMEs, owner-manager is all in all (Thong. 1999). Whether the business venture is positive and ready to adopt the new technology in different functional areas of the business depends on the knowledge, attitude, and commitment of the owner-manager of a firm. Attributes of decision-makers are one of the important indicators of CAIS adoption (Awa et al. ,2011; Thong & Yap, 1995). IT knowledge of decision-makers helps him to select appropriate accounting software for his business, helps to give direction to their employees, and enhances positive attitude for the adoption of CAIS (Varukolu and Park-Poaps,2009; Hameed & Counsell,2012; DeLone. 1988). The interest of decision-makers in IT, understanding of advantages of CAIS by the decision-maker, and experience of computer use build commitment and support for CAIS by the decision-maker. Decision maker's commitment and support determine whether the SME is going to adopt CAIS or not (Yang et al., 2012; Varukolu and ParkPoaps, 2009). In this study owner-managers of SMEs were asked to give the rating for the five statements which are related to Decision-makers context (attitude, Knowledge, and commitment) on CAIS Intention. 7 point answering scales were used to measure the decision maker's IT knowledge, attitude towards IT, and commitment.

Thus: H1: Decision maker's context predicts the intention of CAIS adoption in SMEs.

2. 3 Technological Aspect

The technological context of CAIS intention depends on the technology available in the SME. Whether the available technology supports the CAIS is the key concern of the SME to adopt CAIS (Chau & Tam, 1997).

Comparison of benefits, additional advantages of new technology, desirability, and relevancy of CAIS to the firm are considered to make adaptation decisions. Dose CAIS enhance competitive advantage? Does CAIS meet the requirements of a firm? Are the quarries of the decision-maker (Henderson et.al.,2012; Oliver & Martins, 2010; Prem Kumar &Roberts, 1999). The availability of user-friendly accounting software and the combability of CAIS encourage the SEM to adopt CAIS. In this study owner-manager of Nepalese SMEs were asked to give the rating for the five statements which are related to the Technological context of CAIS Intention to measure the technological aspect of CAIS Intention.

Thus: H2: Technological aspect predicts the intention of CAIS adoption in SMEs.

2.4 Organizational Attributes

Organizational resources, internal strength of the organization in terms of financial resources, employee's IT level, the technological readiness of the organization, dissatisfaction with the manual system are the organizational context of SMEs to adopt CAIS. CAIS's intention of SMEs depends on organizational context (Tan & Felix, 2010). Diffusion of Innovation Theory (DOI) suggests that organization resources and the acceptance of new technology are directly related to each other. The adoption of CAIS by the SME is determined by the financial strength and technological resources in terms of hardware and software available within the SME as well as a fund available in the organization (Yoon, 2009). Many SMEs are unable to adopt CAIS due to a lack of financial resources. Some SMEs are not ready to adopt CAIS although they are financially strong. one of the important reasons for ignoring new technology is the employee's fear factor (Tan & Felix, 2010). Prior studies suggested that employee's readiness to adopt CAIS by the SMEs is influenced by the employees' level of IT knowledge (Ifinedo, 2012). Employees are regarded as human capital and the key area of competition and need to be developed. Employees with know-how regarding the information technology influence the organization to adopt technology like CAIS (Nguyen, 2009). SMEs postpone the use of accounting software if their employees are computer illiterate, (Hung et. al., 2010). CAIS could fulfill the information requirements of SMEs otherwise they are not ready to adopt it. The benefits of CAIS should be heavier than its cost. Dissatisfaction with the manual system leads the SME to adopt CAIS (McClery et.al.,2005). In this study organizational readiness, the employee's IT level, and satisfaction with the manual system were regarded as the organizational context of CAIS intention among Nepalese SMEs. Respondents were asked to give the rating for the five statements which are related to Organizational context on CAIS Intention with 7 point answering scales to measure the organizational context on the CAIS intention of Nepalese SMEs.

Thus: H3: Organizational attributes determine the intention of CAIS adoption in SMEs.

2.5 Environmental Influence

As per the TOE structure, factors that relate to the environmental context have an impact on the adoption of technological innovation by the organization. The environmental context of the organization is the surrounding of the organization which influences the activities of the organization (Tornatzky &Fleischer, 1990). Environmental factors either inspire or discourage the organization to adopt new technology in its operation (Teo and Ranganathan, 2004). The choice to receive IT is relying upon the owner-manager and internal needs of the organization, decisions, and actions are affected by the external environment and an organization develops policy to adjust the firm with external factors (Alatawi et al., 2012). One of the significant parts of the IT reception process is the help of suppliers. The vendor's support on the installation & operation of a computerized accounting information system is a key element of acceptance (Ramdani et al., 2009). Nguyen (2009), mentioned that counseling by IT professionals is valuable to convince computer illiterate owners or managers. Ifinedo (2012) focused on that merchant backing ought to be considered in the arranging procedure and usage of IT selection. Yang et al. (2012) likewise bolstered the urgent job of the outer merchant for the execution of IT advancements, particularly when the association is new to the innovation. It has for some time been experimentally perceived that competition can put pressure on SMEs to accept CAIS (Thong, 1999; Yoon, 2009). In a competitive market, IT advancement or selection is important to gain competitive advantages (Yoon, 2009). Non-reception of an IT development that is embraced by others in such a situation may bring about serious inconvenience. CAIS appropriation can empower SMEs to gain competitive advantages in either cost-effectiveness and differentiation. Receiving CAIS may empower SMEs to separate it from their competitors. The squeezing and down to earth explanations behind SMEs to embrace IT may originate from government impact (Kuan & Chau, 2001). Government impact alludes to the dedication and help gave by the power to energize its spread/IS advancement in its specific situation (Ifinedo, 2012). Government impact can likewise have alluded as government support in numerous investigations (Hameed & Counsell, 2012). The government has an incredible impact on any sort of organization (Yang et al., 2012). Governments from different nations likewise see that IT is so essential to their country's development (Chong and Ooi, 2008). This is because, without equal improvement of laws, strategies, and key headings by the government can bring about maltreatment and demoralizes the reception and utilization of mechanical development (Riyard et al., 2009). Thatcher et al. (2006) brought up that the presence (or non-presence) of governance arrangements and impetuses are compelling in empowering (or demoralizing) organizations to receive innovation. In this study owner-managers of SMEs were asked to give the rating for the five statements which were related to Environmental Influence on CAIS Intention. 7 point answering scales were used to measure environmental influence.

Thus: H4: Environment of a firm influences the intention of CAIS adoption in SMEs.

2.6 Data security/ Fear Factor

Financial data are stored in digital form, the facility of back up, and the restorations system helps to retain huge data for a long time. Cloud storage facility protects financial data from floods, landslides, and other natural calamities. The use of a strong password helps to avoid assessing the data by unauthorized parties. Negligence of

management towards data protection, weak password, employee's negligence, and sharing passwords with other employees increases the risk of leaking confidential information. Security issues should be kept in touch concerning CAIS to avoid threats in an organization. Organizations should use a specialized computer for only accounting purposes. The issue of security is important as there is a danger of appropriation of human mediation with computer programs, pc documents, and PC projects, since employees in the association may disappointment records with the end goal of the intentionally mispresent accounting information. Real-time accounting and online data processing facility in CAIS has made access to these systems for different users. To protect data in CAIS required continual evaluation of security gaps and weaknesses. Since information is one of the most important assets of the SME, protection, and safeguard of information is an essential function of the management. Losing business, decrease in reputation, losing competitiveness, and losing secrets ultimately leads the SME towards failure are the consequences of data security deficiencies. Dimensions of data security are deterrent security control, preventive security control, detective security control, and corrective security control (Katz, 2000). Deterrent security control creates an atmosphere of control compliance, preventive control reduces the possibility of attack, detective control identifies the harm and security breach and corrective control minimizes the loss when data loss has occurred (Qureshi & Siegel, 1997). Data security could be classified based on the stage of data processing and analysis as input control, processing control, storing control, and output control (Abu-Muas, 2004). In this study owner-managers of SMEs were asked to give the rating for the four statements which were related to the Data security variable. 7 point answering scales will be used to measure data security.

Thus: H5: There is an inverse relationship between Data Security and Computerized Accounting Information System.

2.6 Research Model

Components of computerized accounting information system: Decision-maker context, Technological Aspect, Organizational Attributes, Environmental influence, and Data Security in Nepalese SMEs are analyzed. This study surveys over 510 MHPs owner-managers of Nepal. The dependent variable CAIS Intention was measured with four items. The proposed research model is given in figure 1

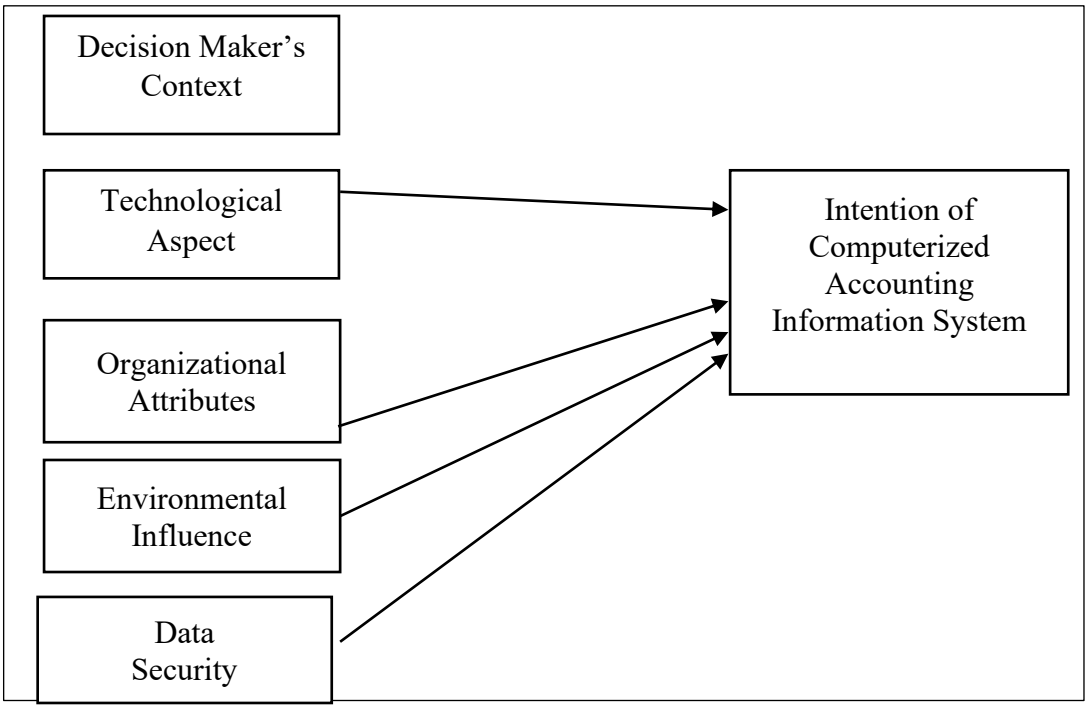

Figure 1: Research model (adopted & modified from Wan & Azwadi, 2013)

2.7 Instrument Development and data collection

The main sources of data were the primary data. A structured questionnaire with 28 items was used to measure the variables involved, broken down as follows: CAIS intention 4 items; Decision maker's context 5 items; Technology aspect 5 items; Organizational attributes 5 items, Environment influence 5 items and Data security 4 items. The questionnaire was developed both in English and Nepali. The sample size was 510. Missing data and unengaged responses were analyzed using MS EXCEL program to determine the adequacy of data. Data were entered into the statistical package for social science (SPSS) version 22, AMOS 22, and various analyzes were run to establish the study objectives and test hypothesis. Structural equation modeling was used to analyze the data.

2.8 Statistical Analysis

2.8.1 Analytical Procedures

CFA was conducted to assess the reliability and validity of multi-item measures for the five research constructs using AMOS 20 and maximum likelihood estimation (MLE) procedure. The measurement model was evaluated with the following indices: CMIN / DF, GFI, AGFI, CFI, NFI, and RMSEA. When the measurement model

seemed appropriate, variables are included in the structural model. Evaluation criteria was: CMIN / DF = 1 to 3(Carmines & McIver, 1981), RMSEA < 0.05(Hu & Bentler, 1999; Kline, 2005), GFI, AGFI, CFI, NFI, and TLI > 0.90 (Bentler & Bonett, 1980).

2.8.2 Measurement model

The measurement model with all six constructs was assessed using confirmatory factor analysis (Anderson & Gerbing, 1992). The survey included 28 items for measuring the intention of CAIS. The measurement model included paths from each construct to all items used to measure it. These paths were examined using standardized factor loadings and modification indices (Hult et al., 2000). With the theoretical consideration, a measurement model was developed which articulates five dimensions: Decision maker's context, Environmental influence, Technological aspect, Organizational attributes, and Data security of CAIS intention. Preliminary analysis of all 28 items included in the survey revealed that there is no need to exclude any item from further analysis. Based on statistical analysis and theoretical considerations inappropriate items can be discarded from further analysis.

3. Results

Table 2 revealed that the overall model fit was good, with $p \leq 0.000$, GFI, CFI, and NFI over 0.90 and AGFI of 0.894, RMSEA was 0.045 with p-value 0.948 insignificant. All those indicators indicate the model is appropriate for further analysis.

Table 2: Measurement of CAIS intention

Construct	Items	loading
Organizational Attributes	We have enough technical resources to use CAIS.	.884
	CAIS enhances efficiency accounting function.	.865
	The poor performance of the organization is the result of manual technology.	.795
	Advice from an IT professional encourage the firm to adopt CAIS.	.709
	We are financially ready to use CAIS.	.728
Decision Maker's Context	Accurate financial information enhances business performance.	.910
	A computerized accounting system allows managers to easily identify and solve problems instantly.	.871
	I encourage my employee to prepare computerized financial reports.	.858
	I am motivated to apply for a computerized accounting system.	.891
	Information technology provides many benefits to the firm in a competitive environment.	.857
Technological Aspect	Using CAIS is compatible with our preferred work practices.	.943
	Using CAIS can reduce our operating costs and time.	.930
	I am ready to acquire new technology if the technology is suitable to replace existing technology.	.916
	To adopt CAIS, the firm should have sufficient Hardware or software facilities.	.871
	Available infrastructure motivates an organization to adopt CAIS.	.816
Environmental Influence	Organizational activities are to be acceptable within their external environment.	.839
	Automation of the accounting system differentiates the firm from its competitors.	.805
	Our business will be left behind if not using CAIS.	.814
	The inspiring role of government motivates the firm to adopt CAIS.	.728
	CAIS vendor provides support services if difficulties in using CAIS are encountered.	.662
Data Security	The extra burden will be there to protect information.	.893
	An unauthorized person may enter the computer room.	.896
	A sincere computer operator is essential to protect accounting information.	.834
	Secret business information may leak.	.726
CAIS	I am managing funds to set up a computerized accounting system.	.839
	I am searching for reliable accounting software.	.807
	I am going to try hard to set up a computerized accounting system.	.773
	I have trained my employee in information technology.	.743
	Overall fit: χ^2 = 589.042 Degree of freedom =291 χ^2 / d.f. = 2.024 p- value =.000 GFI = 0.924 AGFI =0.894 CFI = 0.983 NFI = 0.967 RMSEA = 0.045	

3.2 Reliability of the measurement model

The reliability of the multi-item scale for each variable (IVs and DV) was measured by using the indicator and composite reliability. Table 3 summarizes the results for indicator reliability and table 4 summarizes the result for composite reliability.

Table 3 indicator reliability revealed that CAIS vendor provides support services if difficulties in using CAIS are encountered has the lowest indicator reliability with 0.438 square of standardized factor loading and Using CAIS is compatible with our preferred work practices has the highest indicator reliability with 0.889 square of standardized factor loading. It seemed that indicator reliability is at an acceptable level.

Table 3: Indicator reliability

Items	Reliability
We have enough technical resources to use CAIS.	0.781
CAIS enhances efficiency accounting function.	0.748
The poor performance of the organization is the result of manual technology.	0.632
Advice from an IT professional encourage the firm to adopt CAIS.	0.503
We are financially ready to use CAIS.	0.530
Accurate financial information enhances business performance.	0.828
A computerized accounting system allows managers to easily identify and solve problems instantly.	0.759
I encourage my employee to prepare computerized financial reports.	0.736
I am motivated to apply for a computerized accounting system.	0.794
Information technology provides many benefits to the firm in a competitive environment.	0.734
Using CAIS is compatible with our preferred work practices.	0.889
Using CAIS can reduce our operating costs and time.	0.865
I am ready to acquire new technology if the technology is suitable to replace existing technology.	0.839
To adopt CAIS, the firm should have sufficient Hardware or software facilities.	0.759
Available infrastructure motivates an organization to adopt CAIS.	0.666
Organizational activities are to be acceptable within their external environment.	0.704
Automation of the accounting system differentiates the firm with its competitors.	0.648
Our business will be left behind if not using CAIS.	0.663
The inspiring role of government motivates the firm to adopt CAIS.	0.530
CAIS vendor provides support services if difficulties in using CAIS are encountered.	0.438
The extra burden will be there to protect information.	0.797
An unauthorized person may enter the computer room.	0.803
A sincere computer operator is essential to protect accounting information.	0.696
Secret business information may leak.	0.527
I am managing funds to set up a computerized accounting system.	0.704
I am searching for reliable accounting software.	0.651
I am going to try hard to set up a computerized accounting system.	0.598
I have trained my employee in information technology.	0.552

Table 4 indicates that composite reliability of each variables is greater than 0.60 seemed that composite reliability is at an acceptable level.

Table 4: Composite reliability

Variables	Composite reliability
Organizational Attributes	0.898
Decision maker's Context	0.944
Technological Aspect	0.953
Environmental Influence	0.880
Data Security	0.905
CAIS intention	0.870

3.3 Validity of the measurement model

3.3.1 Convergent validity

Table 5 revealed that the least Average variance extracted 0.626 (CAIS intention) and the highest value 0.804 (Technological Aspect) seems adequate convergent validity
Table 5 summarizes the test of convergent validity.

Table 5: Convergent validity

Latent Variables	AVE
Organizational Attributes	0.639
Decision maker's context	0.770
Technological Aspect	0.804
Environmental Influence	0.597
Data Security	0.706

CAIS intention	0.626

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3.3.2. Discriminant validity

Discriminant validity was assessed by comparison of average variance extracted and squared correlation between the constructs. Table 6 summarizes the test result of discriminant validity. Table 6 shows that no squared correlation value is higher than the average variance extracted.

Table 6: Discriminant validity of the model

	CAIS	DS	EI	TA	DMC	OA	
CAIS		**0.791**					
DS	0.186	**0.840**					
EI	0.199	0.043	**0.772**				
TA	0.135	0.069	0.128	**0.896**			
DMC		0.127	0.005	0.002	0.008	**0.878**	
OA		0.089	0.001	0.074	0.024	0.002	**0.799**

3.4. Common Method Effect Test

A self-report survey may create a problem of response bias from the respondent. The existence of common method bias on responses may create a problem to identify the exact numbers of constructs develop. The examination of the common method effect is a concern of the study. In the first test: the unrotated factor solution is examined. No general factor was apparent in the unrotated factor solution that indicates common method bias was not a major problem in this study. Again, a common latent factor was introduced and linked with all the 28 items. Only 7.5 percent variance was explained by the common latent factor. Composite variables were developed by the factors retaining the common latent factor to minimizes the impact of common method bias. Data are imputed using Amos 20 and the software produced a new data file named _c file. CAS (Intention of Computerized accounting information system) the dependent variable of the study, DS (Data Security), ENV (Environmental Influence), TEC (Technological Aspect), DEC (Decision Maker's Context) and ORG (Organizational Attributes) are the independent variables of the study. EFA, CFA, reliability, validity, common method bias, and formation of composite variables support the appropriateness of measurement.

3.5 Linearity Test

The linearity was tested with regression analysis (curve estimation) in SPSS 20. Table 7 revealed that there is a linear relationship between CAS and ENV, TEC, DEC, ORG, and DS since the p-value is significant ($p \leq 0.001$) in all cases.

Table 7 summarizes the result of the linearity test result.

Table 7: Linear relationship between DV and IVs

DV	IV	Equation	F value	P-value
CAS	ENV	Linear	126.089	.000
CAS	TEC	Linear	79.609	0.000
CAS	DEC	Linear	74.410	0.000
CAS	ORG	Linear	49.647	0.000
CAS	DS	Linear	116.162	0.000

3.6 Multicollinearity Test

Multicollinearity was tested using Regression analysis. Table 8 summarizes the result of the multicollinearity test. Table 8 revealed that there is no problem of multicollinearity since values of tolerance are greater than 0.2, VIF values are less than 5.

Table 8: Multicollinearity test

IV	Tolerance	VIF
ENV	0.754	1.327
TEC	.766	1.306
DEC	.988	1.012
ORG	.850	1.176
DS	.913	1.096

3.7 Result of Structural Equation Models

First, the theoretical model was tested and then revised it. This is done by either constraining or relaxing certain parameters and moving toward a model that better fits the empirical data (Anderson & Gerbing, 1992). Table 9 provides the results. Theoretical model (A)with all the hypothesized paths freed was tasted. The result is displayed in table 9 for the theoretical model (A) indicate this model was just identified. Revised model (B) was tested by setting covariance between Data Security and Organizational Attributes, organizational Attributes, and Decision Maker's Context, Environmental influence, and Decision Maker's Context at zero as per modification indices.

The result tabulated in table 8 indicates that the model is over-defined. Model (B) is one that can be:(a) understood theoretically, and (b) best fits the empirical data. The model is presented in figure 2.

Table 9: Results of the structural models

	Theoretical Model (A)	Model (B)
Indices		
χ^2	308.798	3.252
D.F.	0	3
χ^2 / D.F.	0	1.084
p-value		0.762
GFI	1	0.998
AGFI	0	0.985
CFI	1	1.00
NFI	1	0.994
RMSEA	0.267	0.013

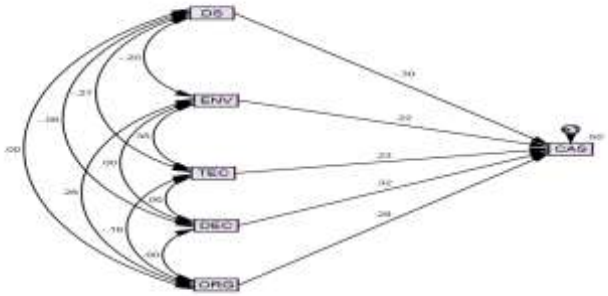

Figure 2: Structural model.

The path from Data security and CAIS intention was significant ($p \leq 0.001$) and the Data security explained -30 percent of the variance of CAIS intention. This result supported hypothesis 5. Similarly, paths from the Environmental Influence to CAIS intention, Technological Aspect to CAIS intention, and Decision maker's context to CAIS intention and Organizational Attributes to CAIS Intention were significant. Environmental Influence explained 22 percent, Technological Aspect explained 23 percent, Decision maker's context explained 32 percent and Organizational Attributes explained 28 percent of the variance of CAIS intention. These results supported hypotheses 4,2,1 and 3.

4. Discussion and conclusions

The objective of the study was twofold. First, it provides an overview of the computerized accounting information system. Second, it builds on existing literature in the computerized accounting system (CAIS). This study aimed to explore the causes of automation of accounting system by Nepalese SMEs which increases competitive advantages.

The study was motivated by the lack of research on causes of adaptation or not of CAIS among Nepalese SMEs. The study highlights the role of the decision maker's context, technological aspect, organizational attributes, environmental influence, and data security to adopt CAIS by SMEs. 50 percent variance has explained by the research model. The result revealed: CAIS Intention = -0.30 Data security + 0.22 Environmental influence +0.23 Technological aspect +0.32 Decision maker's context + 0.28 Organizational attributes.

The study found that there is a positive significant relationship between Decision Maker's context and CAIS intention. The adoption of CAIS depends on decision-makers' level of IT knowledge, their attitude, and commitment to information technology, perception of decision-makers towards the advantages, compatibility, and complexity of new technology. This is in the line with findings of Thong & Yap, 1995, Roger 1995, Nguyen, 2009; Alam, 2009. Acceptance of technology by the firm is affected by the perception of decision-makers towards the new technology (Awa et al.,2011). Successful adoption of CAIS depends on the engagement of decision-makers in the automation of the organization (DeLone.1988). Unless the decision-maker is committed and supportive adoption of new technology cannot be successful (Yang et al., 2012; Varukolu and ParkPoaps, 2009).

The study revealed that the intention to adopt CAIS is affected by the technological aspect of the SME. Relative advantages of CAIS over the manual system, compatibility, and complexity of CAIS are the predicators of the technological aspect. As the technological aspect increases the intention of CAIS is also increases. This finding is consistent with the findings of Prem Kumar and Roberts (1999), relative advantages of new technology encourage the firm to adopt an innovation (Ifinedo, 2011; Hung et al., 2010). Well-matched with existing technology is easily acceptable technology. When CAIS is companionable to the firm in terms of know-how, value system, and

infrastructure, there is a likelihood of acceptance and adoption. User-friendly technology is easily adopted by the firm (Davis et al., 2009).

A significant positive relationship between organizational attributes and CAIS intention was found in this study. People, processes, and structures constitute the organizational attributes. Organizational readiness in terms of physical resources, an employee's IT knowledge, and performance of existing technology are the determinant factors to adopt CAIS. The finding of the study is consistent with the finding of Chau & Tam, (1997).

Environmental influence mainly external environment: competition, government influence, and suppliers support describe the environmental context of the firm. In this empirical study environmental context was found as the strongest predictor of CAIS intention than other predictors. This finding is in line with Alatawi et al., (2012), pressure from competitors, encouraging government policy, and assistance of vendor motivates the firm to adopt CAIS, (Ramdani et al., 2009); Nguyen (2009); Yang et al. (2012). IT adoption can enable an organization to achieve competitive advantage in either cost or differentiation, (Zailani et al., 2009); Hameed & Counsell, (2012); and Chewlos et al., (2001).

The result of the study revealed that there is an inverse relationship between data security and CAIS intention. Although CAIS enhances the efficiency of SMEs, they relucted to adopt CAIS due to fear of losing information. Data security is one of the important aspects of technology acceptance. This finding is in the line of Gurpreet Dhillon, (1999), increased in the use of IT demanded increased safeguard of the information. Abu-Musa, (2004) mentioned that accidental and intentional security breaches are the security threats of CAIS.

This study focused on the intention of CAIS among Nepalese SMEs. Researchers may also consider mediating and moderators like owner/managers' age, education, software characteristics such as software adequacy which can be added to the model. It would be interesting to expand the research in this area linking Cloud computing as a service industry.

Nepal is rich in water resources. More than 6000 streams, three major rivers (koshi, Gandaki, and Karnali), steep land scape in Himalayan and hilly region, provides the great opportunities to generate hydroelectricity. Traditional sources of energy e.g. firewood produces carbon die-oxide which can be replaced by green energy. The most dominated business sector at present is energy business. The Nepalese entrepreneur can get benefits if they involved in hydropower business sector. The decision based on facts with appropriate analysis is likely the right decision. The adoption of information technology enables the firm a shift from forecasting to nowcasting. Financial intelligence in Nepalese hydropower business can play important role to shift traditional decision system to data driven decision system.

The results of the study contribute to the existing literature in the following ways. First, the study responds to the call for additional research in CAIS. Second, CAIS is attracting a large number of SMEs and more Nepalese SMEs are expected to use this technology in the future (Post COVID- 19, Currency less economy and paperless office). Third Findings will explore the dimensions of CAIS in the context of SMEs which blends accounting knowledge with information technology. CAIS may shift the accounting paradigm as a service industry rather than a job or profession. The findings of the study will explore the importance of CAIS to maintain transparency and social responsibility (economic responsibility) by the SMEs.

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