

ICT Assimilation in Selected Ethiopian Public Organizations¹

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ABSTRACT

Information and Communication Technology (ICT) affects how organizations deliver services to their customers. ICT is now used not only to improve back office routine activities but also to act as strategic tools for achieving organizational goals. It increases internal efficiency and reduces costs. Although ICT has many benefits for organizations, its assimilation is the most challenging process as there are high failure rates as reported by many researchers. This paper develops a conceptual framework that is used to investigate the success of ICT assimilation in public organizations. The study uses a field survey research method to empirically test the proposed model. The result of the study shows that ICT staff support services, top management participation, consultant involvement and consultant knowledge transfer as important factors that affect ICT assimilation in Ethiopian public organizations. Managers as well as decision makers should pay emphasis to those variables to increase the success of ICT in their organizations. Although the proposed model was adapted from international experiences, the factors that are identified as important determinant factors of ICT assimilation weakly explains the study phenomenon thereby further research with qualitative methods are recommended to identify factors that best explains the phenomenon of ICT assimilation in public organizations.

Keyword: ICT assimilation, public organizations, top management championship

1. INTRODUCTION

Integration of ICT in organization helps organizations to improve their internal operations, reduces costs, innovate new products and services [2], [3]. For example, organizations can publish their product information on a Website and make it easily accessible to their customers. Customers can easily check requirements to get the service, the schedule of service delivery time or make appointment online before they leave their home. ICT also improves communication with customers as well as suppliers through fast e-mail messaging. Most decisions in the organizations are done based on past and current records of the organizations. Quick access to this information allows managers to make informed decisions than they would kill more time to find information here and there. ICT also increases transparency and shared vision among employees through better information access by databases and instant messaging over local Intranets.

However ICT integration within the organization is a very demanding process. Implementing ICT projects within budget and schedule does not mean organizations have achieved the benefits of ICT. ICT is integrated in the organizations at different stages starting from initiation phase to adoption, implementation and assimilation [2], [5]. Managers as well as practitioners believe that completion of ICT projects within budget and schedule as a success. Little attention has been given after project implementation phase, specifically at assimilation phase [2]. Organizations enjoy the capabilities of ICT to minimize costs and innovate new products and services when they assimilate in their business process [5] [6].

ICT assimilation process has usually encountered a high failure rates that went up to 70 percent [10]. The failure is higher for developing countries than developed countries [3]. A study by Heeks [11] on more than 40 e-Government development projects in developing countries reveal that around 35 percent from these projects were totally fail, while 50 percent partially failed, and there is only 15 percent were success [3]. Bajwa et al [7] states that "... the assimilation of ICT in an organization can lead to different 'end states' or 'transitional states' as IT innovations are acquired and deployed". Employees need to learn new routines which require extra effort "...or they may also be 'de-skilling', requiring workers to be less skilled than previously [8]".

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This research identifies high failure rate of ICT assimilation as research gap which calls for more information how to best assimilate ICT in the organizations. The researcher also believes that factors that affect ICT assimilation are context dependent and the need to investigate what factors contribute for successful ICT assimilation in Ethiopian context. Previous research on ICT focussed on ICT adoption and implementation with little regard to ICT assimilation [13]. This also calls for additional research to better understand the phenomena of ICT assimilation. Therefore this research will answer the following research question:

- *What are the factors that strongly affect ICT assimilation in the Ethiopian public organizations?*

2. Research Methods

A field survey research method was used to investigate the relationship between factors that affect ICT assimilation in Ethiopian public organizations. This research method was selected because it measures participants' behaviour in their natural settings. The finding of the research can well explain the real phenomenon.

2.1 Research Instrument

The questionnaire items for this research were collected from different published journal articles. This increases the validity of the research as it is based on already empirically tested instruments. However, instrument reliability and validity were also checked for its usefulness in Ethiopian context. The use of existing instruments also reduces the time required to develop a new instrument from the scratch.

Table 1. Sources of survey instruments

	Constructs	Sources
1	ICT assimilation	Armstrong & SambaMurthy (1999)
2	Top management commitment	Liang et al (2007); Chatterjee et al, 2002
3	Organizational compatibility	Liang et al (2007)
5	ICT staff Expertise knowledge and support	Landrum and Prybutok, 2009; Wu and Wang (2006)
6	ERP Attribute: Perceived usefulness	Davis, 1989
7	ERP Attribute: Perceived Ease of use	Davis, 1989
8	Reward Systems	Jerez-Gomez, Cespedes-Lorente and Valle-Cabrera, 2007
9	Consultant support: involvement	Kourki et al, 2006; Haines and Goodhue, 2003
10	Consultant support: knowledge transfer	Jerez-Gomez, Cespedes-Lorente and Valle-Cabrera, 2007

2.2 Data Collection and Analysis

Eight federal government organizations which have implemented an ICT system to improve their organizational efficiency were selected randomly by considering their use of ICT system developed in house or customized software application to automate organizational processes or routines. Then employees who work on system as end users as well as ICT support service providers were selected randomly to fill the questionnaire. A total of 130 questionnaires were distributed in December 2010 and January 2011 of which 87 questionnaires were properly filled and returned.

The data was analyzed using simple descriptive statistics, figures, Correlation coefficient and linear regression. Correlation coefficient was used to investigate the association between independent and dependant variables and linear regression is used to examine the strength of the model in explaining the variation on dependant variable of ICT assimilation.

2.3 Reliability of instrument

The instruments were adopted from literatures which were already published on journals. After the data was collected, a factor analysis was applied to remove items which have a lower loading factor (i.e below .5). This implies that the instruments are not a valid measure of that construct. After removing items which have a lower factor loading, Cronbach's Alpha was used to check the reliability of the survey instruments. All constructs' measurement instruments have good reliability which is above the minimum requirement of Cronbach's Alpha (.7). The organizational compatibility construct is excluded from the data analysis as it does not meet reliability requirement. Table 2 shows reliability of the instruments.

Table 2 Reliability of the Survey Instruments

Constructs	Original Cronbach's Alpha	No. of Items
ICT staff support services	.974	17
Perceived usefulness	.938	14
Perceived Ease of use	.817	8
Organizational compatibility ²	.310	2
Top Management participation	.932	3
Reward and Incentive	.816	6
Consultant involvement	.660	5
Consultant knowledge transfer	.844	3
ICT assimilation	.856	6

3. LITERATURE REVIEW

ICTs increase organizational competitiveness by facilitating internal operations, flow of information and the development of new or improved products and services. ICT improves organizational performance in value chain activities such as cost reduction, market expansion, and supply chain coordination [13]. In order to bring such benefits in the organization, ICT has to be accepted, adopted and assimilated in organization routines and procedures. There are different ICT tools and systems that are used by organizations to improve their operations. In this research, we are referring to ICT system which is adapted and implemented by organizations to improve their internal operations and relationship with their customers and suppliers.

Kouki et al [2] identify ICT systems integration in the organization as four cycle processes which starts from initiation to adoption, implementation and assimilation. This research focuses on assimilation phase as it more critical for adopting organizations. It is only if organizations successfully assimilate ICT systems, they can enjoy the benefit of their investment.

It is important to clarify the concept of 'assimilation' and 'ICT assimilation' in the context of organization. Dictionary.com defines the word assimilation 'to become absorbed, incorporated, or learned and understood'. Although the word originates from anthropology, it is widely used in other disciplines such as sociology, management science and marketing. For example assimilation of migrants implies integrating new comers to adapt the culture (such as language, food and work practice) of host society. ICT assimilation refers to the extent to which the use of a technology diffuses across organizational work processes and becomes routinized in the activities associated with those processes [6]. It also indicates the ability of the organization to utilize the capability of the technology to improve their business performance [5].

How do we know if ICT is successfully assimilated in the organization? Markus et al [23] mention three indicators of successful ICT assimilation- (1) achievement of business results expected for the ICT project, such as reduced IT

² Excluded from data analysis

operating costs and reduced inventory carrying costs, (2) Ongoing improvements in business results after the expected results have been achieved, and (3) Ease in adopting new ICT releases, other new ITs, improved business practices, improved decision making, etc., after the ICT system has achieved stable operations. If ICT system has online communication support, users prefer to use online tools such as e-mail, workgroup computing and online inquiry instead of telephone or paper documents to exchange information [25]. Users develop a positive attitude to work on the system [2]. They use the system as the only means of accomplishing their tasks. Users also start to use the system in some innovative ways that were not envisioned by the system's designers [25].

3.1 Theoretical Framework

Individual acceptance of new innovation was extensively examined using diffusion of innovation theory as a theoretical lens [15]. Researchers also used diffusion of innovation theory to investigate ICT systems assimilation in the organization (see Hashim [24]; Pudjianto and Hangjung [3]). The diffusion of innovation theory identifies four factors that affect adoption of new innovation: (1) the innovation itself, (2) the communication channels used to spread information about the innovation, (3) time, and (4) the nature of users [15]. According to Rogers (1995), diffusion of innovation theory is a metatheory which consist of four other theories. These are (1) the innovation-decision process theory, (2) the individual innovativeness theory, (3) the rate of adoption theory, and (4) the theory of perceived attributes. The theory of perceived attributes is selected because it informs us why individuals in the public organization assimilate ICT systems.

According to theory of perceived attributes, individuals assimilate new innovations if the innovation demonstrates the following attributes [14]. First, the innovation should have a relative advantage over an existing innovation. Second, the innovation should be compatible with existing practices and values of the adopter. Third, the innovation should not be complex to learn and use it. Fourth, the innovation should have an option for testing before adoption. Fifth, the innovation must offer tangible benefits [14].

Diffusion of innovation theory explains factors that affect individual acceptance of new innovation. It is not sufficient to explain the diffusion of innovation in a complex organization where decisions are made at different management layers and involve group consensus [3]. Tornatzky and Fleischer [19] develop Technological, Organizational and Environmental context (TOE) framework to include other factors that affect ICT assimilation in the organization. Technological context is represented by availability of the necessary IT infrastructure and knowledgeable IT staff [20]. Organizational context includes organizational compatibility, top management support, rewards and incentives, management structure, scope and its size [6], [21],[3].

The technical people are responsible to build and leverage technology assets and plan an IT infrastructure in the organization. Once the necessary technologies are in place, the IT staffs are also responsible to manage and maintain the technologies in place. The technical IT staffs have intangible knowledge which is acquired through experience and is important for successful ICT assimilation. On the other hand, different researchers use institutional theories to identify environmental factors that affect ICT assimilation in the organization [22], [23]. Liang et al [22] identify government policies, professional associations and networks and environmental uncertainties as important environmental context that pressurize organizations to assimilate ICT. Tornatzky and Fleischer [19] also state nature of the organization, competitive pressure, regulatory environment and customer readiness as elements of environmental context.

The two theories discussed above inform us what factors affect ICT assimilation in the organization. Accordingly we identify seven constructs that affect ICT assimilation in Ethiopian public organizations (See Fig. 1).

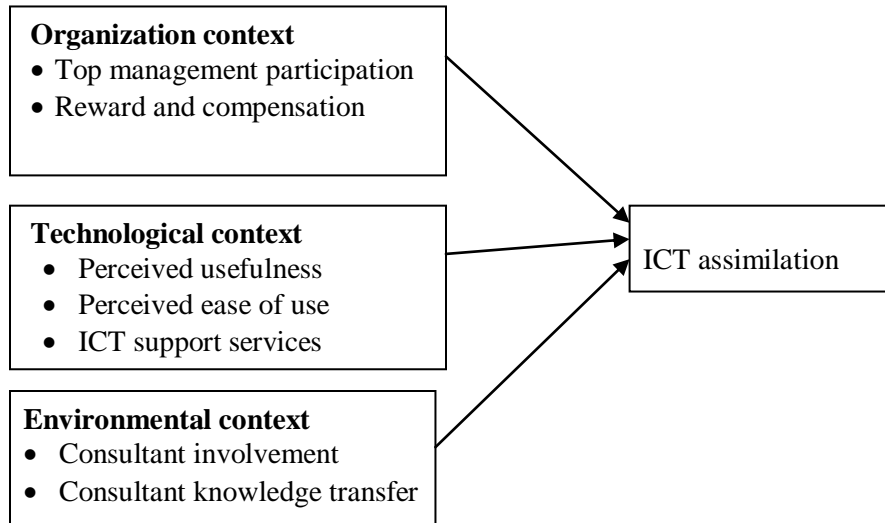


Figure 1 Proposed Conceptual Framework for ICT Assimilation in Public organizations.

3.2 Operationalization of the Research Model

Technological context

Technological context has three important components that affect assimilation of ICT in the organization. These are ICT staff support service, perceived usefulness and perceived ease of use. ICT expertise is defined as one having a knowledge and skill to operate organizational ICT infrastructures and provide reliable support to end users [3]. After implementation of the ICT system, it is the responsibility of the technical support staff to solve end users problems and maintain the system [2]. Technical support staff needs to have skills to solve end users problems. They also possess the necessary knowledge and skill to configure and scale up the existing system to incorporate emerging user and organizational needs. Therefore the presence of ICT support services in the organization increases the rate of technology assimilation within the organization [2]. Many systems are failed or underutilized due to lack of proper support during the ICT assimilation process. Therefore it can be hypothesized that

Hypothesis 1: Reliable technical support service will positively affect ICT assimilation in the public organizations.

Perceived ease of use refers to “the degree to which a person believes that using a particular system would be free of effort” [29]. The ICT system should be simple to learn and use it. The new technology enables users to perform their task with minimum learning effort as compared to the existing technology [17]. Wu and Wang [30] empirically verified the influence of ease of use, relative advantage and compatibility on ICT system assimilation. A good example is integration of a telephone technology in the office. The telephone technology is easy to use and enhances communication than existing technologies and it is easily assimilated in the organizations’ routines. Therefore

Hypothesis 2: Perceived ease of use has a direct impact on ICT assimilation in the public organization

Perceived usefulness is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance [29]. The users use new technology if it reduces their workload and increases their productivity and quality of work. Unless the new technology does not support such expectation of users, it is very likely to get acceptance by users. Provision of adequate information in the form of user manual and technical support services will increase users’ knowledge of ICT system and their intention to use it. Therefore

Hypothesis 3: Perceived usefulness has a direct impact on ICT assimilation in the public organization

Organization context

Organizational context includes top management participation and organizational incentive. Top management support consistently mentioned as important factor for success of IT project's implementation and assimilation [6], [2], [3]. "Top management championship is a metastructuring action because it defines institutional norms and values regarding how managers should engage in structuring actions related to the Web technology [6]. They also have clear vision how ICT applications are used to create new opportunities and solutions such as operational efficiency, better customer service, and increased ability to compete [20]. Leaders are also responsible to manage conflicts and resistance in the course of ICT assimilation [5]. The higher need of managers for ICT increases the level of ICT assimilation in the organization [12]. Without the top management support, the process of ICT assimilation will not be materialized. Top management commitment for ICT assimilation is indicated by top management belief and participation [6]. If the top management team has a positive belief for ICT, they are willing to participate in the process of ICT assimilation by communicating the benefit of ICT for the organization and availing the necessary resources. Therefore the top management championship has a direct influence on ICT assimilation in the organization [3], [6].

Hypothesis 4: Top management participation for ICT systems has a strong influence on the success of ICT assimilation in the organization.

Rewards and compensation mechanism influence ERP assimilation in the organization. ERP is a new innovation to the organization. It requires employees to learn new skills and knowledge. Unless employees develop learning capability, they will not able to use the functionalities of ERP systems. Organizations should create an environment that facilitates on-job learning for their employees. One way they encourage such behavior is by motivating employees through reward and compensation mechanism to learn and apply new knowledge and skills for success of their organization [20]. Compensation and reward mechanism also help to retain senior IT staff that leave organizations for better payment [2]. IT staff have unique knowledge and skill which is desired by other organizations. Low payment in public organizations is one of the frequently cited problems for high employment turnover [2]. Unless the organizations retain their senior IT staff, they cannot use the capabilities of ICT. These staff invests a lot of time to learn how to operate and maintain the system. When organizations lose such people, they are losing their knowledge which cannot be substituted from anywhere in a short time.

Hypothesis 5: Reward and compensation mechanism will have a positive impact on ERP assimilation in the organization

Environmental context

The two important environmental factors that affect ICT assimilation in public organizations are consultant involvement and consultant knowledge transfer. Kouki et al [2] mention the impact of consultant effectiveness on ICT assimilation. Many organizations implementing ICT system don't have good experience in using ICT to support their operational activities and business strategies. Haines and Goodhue [31] also assert that it is very difficult for organizations to successfully assimilate ICT systems without external support. Therefore it is hypothesized that

Hypothesis 6: the level of consultant involvement has a strong influence on ICT assimilation in the public organizations.

Consultants are usually selected based on their reputation, experience and costs. Haines and Goodhue [31] stress the necessity to consider the consultant's knowledge transferring capability as one criteria in the selection of consultants. This knowledge transferring capability creates internal capability of the organization to successfully assimilate ERP. The higher level of consultant's involvement in knowledge transfer facilitates learning of ERP system that would require more time and resource if learning is done by yourself approach. Therefore the level of consultant involvement in ERP project implementation and knowledge transfer to the organizations are the two important variables of consultant support that strongly affects ERP assimilation in the organization. Therefore it is hypothesized that

Hypothesis 7: knowledge transferring capability of consultants will have a strong influence on ICT assimilation in the public organizations.

4. RESULTS

Respondents were selected to represent all age and sex group so as to avoid any bias on ICT assimilation due to age and sex demographic factors. Although most of the respondents are male (74%), there is a significant representation by female respondents (26%)

When we look at respondents by experience and educational level, there is good representation of respondents from all groups. Respondents who have more than 5 years experience account for about 51% of the total respondents. Only respondents who account for 7% has less than one year experience. The longer year of experience indicates better commitment to the organization and knowledge of the organization’s culture and practice and consequently developing a positive attitude to perform activities that build the organizational image. One of such activity is striving to learn and use ICT as tools to increase their organizational efficiency. Likewise 67% and 30% of respondent are degree and diploma holders. Higher level of education is one factor that affects successful assimilation of ICT in the public organizations. As ICT requires a literate person who can retrieve, integrate and interpret information from different sources.

Table 3 Result of Descriptive Statistics for different constructs

Constructs	Number of items	Mean	Std. Deviation
ICT Staff Support	85	3.5402	1.08754
Perceived Usefulness	84	4.3624	.80168
Perceived ease of use	83	2.1251	.95101
Top management participation	78	3.4487	1.31022
Consultant Involvement	65	3.4787	1.07172
Consultant knowledge Transfer	67	3.0796	1.29502
Organizational Incentive	79	2.1631	1.14100
ICT Assimilation	71	3.2873	1.29665

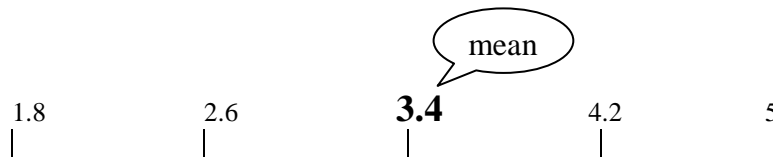


Fig. 2 Questionnaire Rating Scale

The result of the descriptive statistics shows organizations are performing well on providing technical support services for end users, acquiring ICT systems useful for the end users, top management participation and involving consultants in the assimilation process. They score above the mean in those areas (See Table 3 and Figure 2).

Perceived usefulness has very high mean score indicating its relevance for ICT assimilation. On the other hand, respondents indicate difficulty of the new system, lack of incentive and poor knowledge transfer from consultant to the staff of the organizations. The assimilation of ICT is a little bit lower than the mean value which is about 3.3.

In order to see the relationship between the factors identified as independent variable and ICT assimilation which is designated as dependant variable, we computed a spearman correlation coefficient (See Table 3). There is a positive association between ICT staff support services and ICT which is statistically significant at 99% level of confidence (See Table 3). The Hypothesis that states reliable technical support service will positively affect ICT assimilation in the organization is accepted. The presence of reliable technical support service in the organization will facilitate end users' learning of the new ICT system. They have also a role to solve end users problems and increase users' confidence in using the ICT systems.

There is no association between perceived usefulness and perceived ease of use on the one hand and ICT assimilation on the other (See Table 4). The hypotheses that state perceived usefulness and ease of use have a direct impact on ICT assimilation in the public organization are rejected.

Top management commitment is identified as one important factor for assimilation of ICT in Ethiopian public organizations. Top management actively participate in the ICT assimilation process by allocating resources, providing clear vision how ICT applications are used to create new opportunities and solutions in the organization. The empirical data collected from Ethiopian public organizations shows that there is a positive correlation (.386) which is statistically significant at 99% level of confidence. Therefore the hypothesis that states *top management participation has a strong influence on the success of ICT assimilation in the public organization* is accepted.

Many organizations implementing ICT system don't have good experience in using ICT to support their operational activities and business strategies. The role of consultant is very important not only during project implementation phase but also during assimilation phase. The empirical data collected from public organizations shows that there is a statistically significant association (.381) at 99% level of confidence. Therefore the hypothesis that states *the level of consultant involvement has a strong influence on ICT assimilation in the public organizations* is accepted. Public Organizations should select a consultant that is committed to work together not only during project implementation phase but also during the assimilation phase. There is also strong relationship between consultant knowledge transfer and ICT assimilation (.566) which is statistically significant at 99% level of confidence. However there is no statistically significant correlation between organizational incentive and ICT assimilation. Different literatures mention the importance of organizational incentive for ICT assimilation; this is not supported in case of Ethiopian public institutions.

Table 4: Result of Spearman Correlation coefficient

Independent variables		Dependant variable (assimilation)
ICT Staff Support	Correlation Coefficient	.346(**)
	Sig. (2-tailed)	.003
	N	71
Perceived Usefulness	Correlation Coefficient	.153
	Sig. (2-tailed)	.207
	N	70
Perceived ease of use	Correlation Coefficient	.006
	Sig. (2-tailed)	.960
	N	71
Top management participation	Correlation Coefficient	.386(**)
	Sig. (2-tailed)	.001
	N	69
Consultant Involvement	Correlation Coefficient	.381(**)

	Sig. (2-tailed)	.003
	N	60
Consultant knowledge Transfer	Correlation Coefficient	.566(**)
	Sig. (2-tailed)	.000
	N	61
Organizational incentive	Correlation Coefficient	.213
	Sig. (2-tailed)	.078
	N	69

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

The correlation coefficient shows the association between the independent and dependant variables. It does not explain the amount of variation explained by the factors identified as independent variables. We used the linear regression model. One of the requirements to apply linear regression is to test the data if it is normally distributed. As Fig. 3 shows the histogram is almost similar to the normal curve and it meets the linear regression requirement. We have used only variables which have positive association with ICT assimilation.

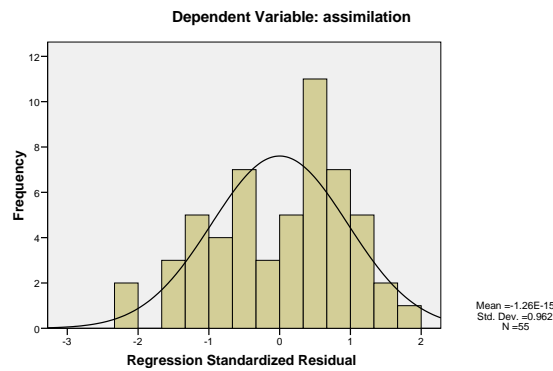


Fig. 3 Distribution of data as plotted by the Normal Curve.

Table 4. Linear Regression Model Summary (b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.653(a)	.426	.380	.91231

a Predictors: (Constant), knowledge, participation, Involvement, ICT Staff Support

b Dependent Variable: assimilation

As Table 4 indicates the identified factors which affect ICT assimilation can explain only 38% of the variation in the assimilation of ICT. This implies that about 62% of the variation is explained by other factors which need further research to identify those factors.

Table 5 Acceptability of Model Fitness (ANOVA (b))

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.884	4	7.721	9.277	.000(a)
	Residual	41.616	50	.832		
	Total	72.499	54			

a Predictors: (Constant), knowledge, participation, Involvement, ICT Staff Support

b Dependent Variable: assimilation

We have also checked the acceptability of the model with ANOVA. As Table 5 indicates the model is acceptable which is statistically significant at 99% level of confidence. The value of the sum of squares for regression is a little bit smaller as compared to residual which indicates the presence of other more important factors that affect ICT assimilation in the public organizations.

5. DISCUSSION

ICT has become an important tool in the public organization to improve efficiency of internal operations and the relationship with customers. Organizations can enjoy the benefit ICT only when they assimilate in their business routine activities. Implementing a successful IT project does not guarantee repayment of investment on ICT. Although many organizations are striving to acquire and use ICT in the purpose to improve their efficiency and relationship with their customers and suppliers, most of them are not successful. The failure rate is very high for developing countries like Ethiopia [11]. Knowledge of factors that affect ICT assimilation guides managers and decision makers to reduce the failure rate of ICT systems. This study found a positive association between ICT staff support services, top management participation, consultant involvement and consultant knowledge transfer on the one hand and ICT assimilation on the other in the Ethiopian public organizations. This finding is also consistent with previous research finding (see [2], [3], [6], [12]). The role of ICT staff support is critical to increase the success of ICT assimilation in public organizations as learning the new system takes a period of months for users to begin to feel comfortable [26]. Technical support staffs have also knowledge and skills how the system is used and solve end users problems. Alam and Noor [23] identify a positive association between perceived usefulness and ICT assimilation but this association is not found in the Ethiopian public organizations. This requires further investigation why perceived usefulness is not a factor for ICT assimilation.

Many organizations implementing ICT system don't have good experience and knowledgeable internal technical IT staff. The level of consultant involvement during project implementation as well during assimilation phase is very critical. Consultants assist organizations to learn the new system and share their knowledge so that organizations can build their own capacity to manage the new ICT system by their own. Haines and Goodhue [31] also assert that it is very difficult for public organizations to successfully assimilate ICT systems without external support. Organizations are advised to select constants that have good experience in implementing ICT projects and sharing their knowledge to make the implemented project sustainable. Selection of consultant based on least price may outweigh its disadvantage than its advantage.

Previous literatures (see Musaji [26]; Alam and Noor [23]; Pudjianto and Hangjung [3] identify a list of factors that affect ICT assimilation in the organizations, these factors account only for about 38% of the variation on the ICT assimilation in the Ethiopian public organizations. This indicates the factors that affect ICT assimilation are highly contextual and the need for more in depth investigation with qualitative research method than the quantitative research counter part.

6. CONCLUSION

ICT has a lot of potentials to increase organizational performance. However the rate of IT failure is very high among organizations which initiate and implement IT projects. Implementation of ICT projects within schedule and on budget does not imply that organizations are securing the benefits of ICT. Before ICT brings value to adopting

organization, it has to be routinized and embedded in the business value chain activities. Researchers identify different factors that influence assimilation of ICT in organizations. The empirical data collected from eight Ethiopian public organizations show that ICT staff support services, top management participation, consultant involvement and consultant knowledge transfer. However these factors explain only a smaller portion of the variation on ICT assimilation. This indicates factors that affect ICT assimilation are highly contextual and the need for more in depth investigation with qualitative research method than the quantitative research method. Therefore managers and decision makers of Ethiopian public organizations should give attention to increase the technical support services, top management participation and selection of experienced and qualified consultants to increase the success of ICT assimilation in their organization.

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