

# Factors Influencing Employees Learning Initiatives in Promoting Natural Heritage in Sabah

Constance Rinen Justin Wah<sup>1</sup>

**Abstract**— This paper aims to identify the key factors influencing employee-learning initiatives in promoting the natural heritage in Sabah. The data gathered through survey questionnaires collection to various nature heritage organizations involved in Sabah. Five hypotheses were proposed and tested to find out factors, which were ICT usage, creativity, peer influence, management support and training that influence effective learning in the context of an organization. The outcomes from the survey further reveal that factors such as ICT utilization, training and management support can directly influence employee's learning efforts. Interestingly, this study found no significant relationship between peer influence and creativity.

**Keywords** — Employees, Learning Initiatives, Natural Heritage and Sabah.

## I. INTRODUCTION

THE concept of heritage is the inherited property transmitted from past to present generations which are morally obliged to give to future generations so they can learn from, increase and enjoy it. By assets of a nation, the natural heritage consists of land, water, geology, landscapes, biological diversity, biological processes and ecosystem that provide environmental services. Made up of three (3) countries namely Malaysia (Sabah and Sarawak), Brunei Darussalam and Indonesia (Kalimantan), these countries are declare as the Heart of Borneo (HoB) and have scored the international brand image recognition and publicity (WWF, 2007). It is the effort to conserve the Borneo forest home to 221 species of mammals, 620 species of birds, 35 percent of 15,000 of rare plant species and over 150 species of trees. The presence of HoB has proactively involved the various sectors and industries in the effort to manage the natural heritage and raise the image of the region. Indeed, it is by conscious or unconsciously that the nature attractions of the Borneo island have been in line with national tourism destination. The beautiful scenic environment has successfully attracted tourists internationally and locally.

In the context of tourism industry, the total number visitors' arrival to Sabah parks is approximately 1.75 million with yearly growth of 6 percent (Sabah Parks Visitors Statistics, 2012). The number of visitors has significantly associates with the globalization,

aggressive promotion through Internet communication and technology (ICT) and above all is the organizational initiatives efforts to manage the natural heritage. For example, Sabah Parks utilised the website to promote, protect and conserve the terrestrial parks (*i.e.*: Kinabalu Park, Tawau Hills Park and Croker Range Park), marine parks (*i.e.*: Tunku Abdul Rahman Park, Turtle Park, Pulau Tiga Park, Tun Sakaran Island and Sipadan Island) and others. The national parks are one of the initiatives by organizations the government bodies, either non-government organizations (NGOs) or private sectors to protect the flora and fauna, scenic environment, historical features and about the recreation and tourism.



Fig. 1 Sabah map at [www.googlemap.com](http://www.googlemap.com), 2013.

Tourism sector in Sabah is at the stage of stabilization in the service industry life cycle. It shows that tourism industry has developed very well and competition considered intense. To be an efficient organization, the employees of the particular organization should be very knowledgeable in their core businesses. One way to achieve this is to understand organizational learning initiatives that is adapt by the institutions. The concept of organizational learning has taken its prominence in the past several years to achieve competitive advantage. This study investigates to what extent the employees in the related institution in Sabah initiates learning and the utilization of ICT in promoting systematic learning.

The general objective of this study is to identify the organizational learning initiatives in promoting the natural heritage in Sabah.

The specific objectives of this study are to:

- i. Identify factors that contribute to the employees learning effort in promoting natural heritage.
- ii. Investigate how ICT applications have been engaged in promoting systematic learning.

## II. LITERATURE REVIEW

In the context of today's digital economy, organizations are being pushed to reassess their strategic approaches to effectively function

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and compete. To date, many forms of change initiatives that have been implemented at the organizational level from various organizations (particularly in the developed countries) have been strategically focused on capitalizing old and new knowledge. Modern organizations now are making a serious attempt to become a learning organization and treat knowledge as an important organizational asset.

A learning organization refers to an organization that attempts to realize certain work attributes such as teamwork, long-life learning, employee participation and development that constantly orientates towards knowledge acquisition and sharing, as well as promoting innovation and creativity. It was argued that an organization can learn only through the constructive participation and efforts of its employees to learn (Senge et. al, 1994). Zuboff (1988) mentioned that:

“Learning is no longer a separate activity that occurs either before one enters the workplace or in remote classroom settings. Nor it is an activity preserved for a managerial group. The behaviors that define learning and the behaviors that defines being productive are one and the same. Learning is not something that requires time out from being engaged in productivity activity; learning is the heart of productive activity. To put it simply, learning is the new form of labor (p. 395)”.

Further, Dixon (1999) argued that the process of learning in organization must involve various work levels (individual and group) and has to be strategically integrated. This is important to ensure an effective learning process will take place in the organization’s context, where activities such as creating and sharing information and knowledge are being emphasized.

Information Communication Technologies (ICTs) are implemented and utilize to promote and facilitate learning activities and processes in organization. Many studies have reported evidence of how ICT can effectively facilitate in the learning process at various work levels. From the perspective of tourism and cultural related organizations, there have been many ongoing efforts globally to encourage effective learning process to take place in organization. In the museum sector, for example, ICTs have been engaged extensively. Beler et al. (2004) elaborate that effective web navigation can facilitate users to obtain the right information and promote user personalization. These ICT attributes no doubt offer enormous potential to promote museum. In general, ICTs can improve learning process, stimulate visitor’s loyalty, attract new audience and can contribute towards the creation and development of online communities.

Despite the ongoing calls and efforts to encourage the participation of tourism and cultural related organizations to become a learning organization, pertinent research in this area is still underdeveloped.

### III. METHODOLOGY

In general, this study deployed quantitative survey method. This study undertaking primary research approaches which consists of questionnaires survey. The reason primary research is employed in this study is due to its benefit. It allow computer codable for quick analysis and repetition in SPSS. In the survey method, five (5) variables are indentified to influence the organizational learning initiatives that are ICT usage, creativity, peer influence, top management support and training. The survey method carried out in

this study because it used to describe the characteristics of a large population and it has high capability in making the results statistically significant even when analyzing multiple variables. The Figure 2 below shows the conceptual model that guides this research.

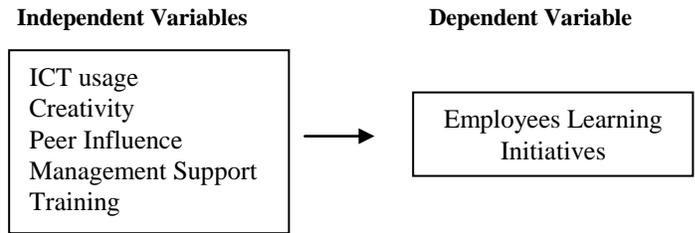


Fig. 2 Conceptual Framework

The study population involved from the governments, NGOs and private sectors responsible in managing the natural heritage in Sabah. These includes Sabah Parks in Tawau, various places in Kota Kinabalu such as Tunku Abdul Rahman Parks, Kinabalu Parks, Croker Range Parks and Sabah Tourism Board. Initially, 168 questionnaires were returned through mail and via hands from the total of 300.

The lists of organizations are collected based on public information search in the Internet and the Tourism Board in Sabah. The sampling method for organizations used in this study is the purposive sampling as we want to access to particular subset of people. Furthermore, Purposive sampling is based on specific purposed associated with answering research study questions where it helps the best information possible as they explore their concepts and inquiries (Teddlie and Yu, 2007). Kota Kinabalu and Tawau were the selected cities during the data collection in this research. The questionnaire design is using a Five-point Likert Rating Scale. Respondents were requested to state how strongly they agree or disagree with the statement with 1 is strongly disagree to 5 is strongly agree. The questions constructed in this section is arranged randomly as to avoid biasness among the respondent when answering or completing the survey. The questionnaires were numbered and each item coded for systematic analysis of data. Some of the statistical procedures used to analyze the data including the following: Section A: Personal information. Frequency and percentage value were used to analyse this data. In section B, this study will determine the organizational learning initiatives. Factor analysis is used to identify the variability among the five variables that contributes towards employees learning initiatives.

### IV. FINDING AND DISCUSSION

The survey data were analyzed using SPSS Version 21.0 to determine the coefficient Cronbach’s Alpha. The result of the reliability test is shown in TABLE 1.

TABLE 1  
CRONBACH’S ALPHA VALUE

Variables	Cronbach’s Alpha Value
ICT usage	0.921
Creativity	0.886
Peer influence	0.873
Management support	0.879
Training	0.924

**Socio-demographic Background**

As shown in TABLE 2, the majority of respondents in the survey are female (58.9%). Male respondents were 41.1%. With regard to the ethnic distribution, we found that the majority of the respondents were Malays (45.4%). The Sabah indigenous ethnic community includes Dusun, Kadazan, SinoKadazan and Iranun respondents were about 39.3%. A majority of the respondents were between the age 30-39 (33.9%), then followed by 30.1% at the age 24-29 years old. Our survey results also indicate that a majority of our respondents (63.4%) had tertiary education background.

TABLE 2  
SOCIO-DEMOGRAPHIC BACKGROUND

Demographic	Results (%)
<b>Gender</b>	
Male	69 (41.1)
Female	99 (58.9)
<b>Age</b>	
18-23	12 (7.1)
24-29	40 (23.8)
30-39	62 (36.9)
40-49	36 (21.4)
> 50	18 (10.7)
<b>Ethnic</b>	
Sabahan Indigenous	83 (49.4)
Malay	56 (33.3)
Chinese	23 (13.7)
India	5 (2.9)

Further, Figure 3 shows that more than 70% of our respondents have been working in their organization in less than 10 years.

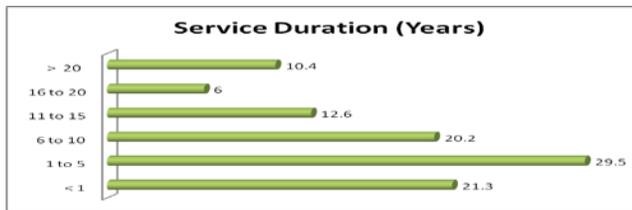


Fig 3 Duration of Service in the Organization

**ICT Use in Organization**

With regard to ICT use (see Figure 5), we found that a majority of the respondents who have accessed to ICT (i.e., a computer) in their workplace reported that they commonly utilized applications such the Internet and the web browser, e-mail and search engine. In general, our findings reveal that most of the respondents acquire some basic skills in using PC, the Internet applications and participating in online communication and information sharing. Further, the lowest means score for the ICT tools are digital and virtual documentation, remote sensing based representation and game technologies. These advanced technologies considered very costly and require advanced technical skills to use the application. Issues such as limited funds and technical expertise will restrict the ability of these organizations to deploy more advanced and expensive ICT resources and tools. At present however, more and more tourism related organizations deploy advanced technologies to enable them to have an online presence and to become a learning organization. For example in the context of museums, there are a large numbers of museums worldwide that applied virtual documentation such as Virtual Museums of Canada (WMC) [www.virtualmuseum.ca]. This virtual museum serves as a

national aggregator of content and links and act as a hub for the entire Canadian cultural heritage community.

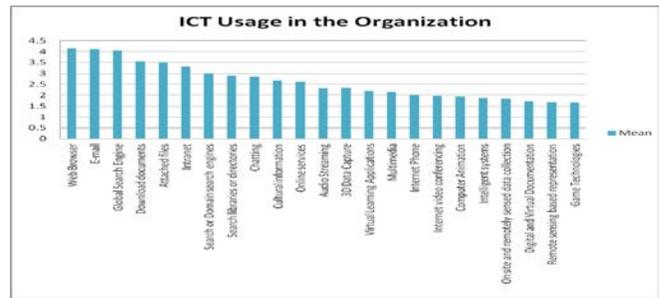


Fig 3: ICT Usage in Organization

**Factors that Influence Employee’s Learning Initiatives**

Further, we performed factor analysis using KMO and Bartlett’s Test. As shown in the TABLE 3, the initial Kaiser-Mayer-Olkin (KMO) degree of variance is 0.952. The result shows that the factor analysis is appropriate for these data. Also, all elements on the diagonal of the matrix are more than 0.5, and hence the results indicate that the sample is adequate. The statistic test also indicates that Bartlett’s Test of Sphericity is significant (Chi Square = 3938.095, p<0.001).

TABLE 3  
KMO AND BARTLETT’S TEST ON LEARNING EFFORT

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</b>		.952
<b>Bartlett’s Test of Sphericity</b>	<b>Approx. Chi-Square</b>	3938.095
	<b>Df</b>	300
	<b>Sig.</b>	.000

Three components were extracted with a cumulative variance of 67.60%. Upon rotation, the number of components was 3 showing the stability of the components. The detailed of the factor analysis results is shown in TABLE 4. Factor 1 (ICT Usage) account 57.382% of the variance, Factor 2 (Management support and training) for 5.334% and Factor 3 (creativity) accounts 4.882%. This sum of eigenvalues is equal to the number of variables. The three components extracted are: (1) ICT usage; (2) management support and (3) training.

TABLE 4  
ROTATED COMPONENT MATRIX FOR LEARNING INITIATIVES

Variables	ICT	Management Support	Training
The ICT in my organization is useful which has increased my job performance and this motivates me to have continuous learning.	.690		
ICT usage in my organization enables me to accomplish my work tasks more quickly and empowered me to have continuous learning.	.618		
The top management generally considered requests for learning opportunities and training to enable continuous improvement in learning.		.838	

My organization provides adequate resources to ensure that learning is shared across all management level.		.704	
My organization always integrates learning into meetings, work groups and work processes regardless of management level.		.704	
All individual in the organization, regardless to position, have equal access to learning.		.687	
My organization encouraged the staff to develop wide range of contact with other agencies and to actively learn from their experience.		.675	
My superior gives me the opportunity to learn and develop myself which empowers me to have continuous learning		.668	
My work requires me to perform better with widen tasks and responsibility thus persuade me to have continuous learning		.616	
		.604	
In my organization, training provides me the opportunity to learn from each other.			.824
I have been given adequate training in my organization that gives me motivation to have continuous learning.			.715
The modules content that I gained from training has given me the opportunity to have continuous learning.			.693
The training provided by my organization has empowered me to upgrade my skills and techniques thus allow me to have continuous learning.			.637
<i>Eigenvalue</i>	15.600	1.367	1.225
<i>% of Variance</i>	57.776	5.064	4.538
<i>Cumulative % of Variance</i>	57.776	62.840	67.378
<i>Reliability</i>	0.933	0.932	0.867

TABLE 4  
SELECTED VIEWS FROM THE SURVEY RESPONDENTS REGARDING  
ON HOW TO IMPROVE LEARNING PROCESS IN YOUR ORGANIZATION

- |      |   |
|------|---|
| [1]  | Continuous training and development   |
| [2]  | Continuous investment in HRD and ICT  |
| [3]  | Top management have to give corporation to the officers for the purpose of sharing of information |
| [4]  | Continuous practice of knowledge sharing in the organization                                      |
| [5]  | Full support and commitment from the decision maker at the line level                             |
| [6]  | Informal discussion with top management   |
| [7]  | Update current information to employee  |
| [8]  | More courses and workshop   |
| [9]  | To provide more facilities  |
| [10] | All level must have access to ICT   |

In the context of our study, it is not surprising to see that ICT use can influence employee’s learning efforts. It is widely acknowledged in the literature that the use of ICT can enhance individual learning processes. ICT applications also have been extensively integrated in today’s work activities. Brynjolfsson and Hitt (2000) argued that ICT applications are strategic and useful for an organization to access competencies of an individual employee whilst these employees engaging and participating in creating and sharing knowledge such as in activities related to developing new products. With regard to the management support, the findings of our research support the findings of several other studies. For example, Billet (2001) reported that a workplace supervisor and also experienced co-workers can facilitate the learners’ access because of the effective guidance. We also found that training and creativity in works are positively associated with employee learning effort. Hence, training should be made available continuously to enhance and upgrade employees’ skills and knowledge. The participated organizations also should continue to encourage challenging work activities that demand creativity from their organizations.

Interestingly, the survey results revealed that peer influence and creativity does not influence employee-learning effort. In the context of these organizations, it is possible that this could be attributed by the nature of the routine works where the assigned tasks do not promote motivation through own-learning initiatives. For example, with routine works that are less complex and do not encourage creativity, it is possible that there is a lack of activities of knowledge sharing among peers. Other potential factor is about trust, which also can shape the social relationships and interactions between peers in the workplace context. Chowdhury (2006) for example mentioned that one of the most challenging barriers that can hinder a co-worker from participating in knowledge sharing activities is trust. When there is a lack of trust, there will a lack of confidence in the worker to share and exchange expertise among their peers. An employee is also probably afraid with the top management if the organizational culture does not orientate towards knowledge sharing and free flow of information. This is especially quite true in the context of Asian culture as highlighted by Chowdhury (2006). In the Western context, many organizations encourage freedom of expression and individualism because these attributes can stimulate creativity and innovation. Further, the extensive use of advanced ICT tools in their work context has encouraged more knowledge sharing among peers.

## V.CONCLUSION

Overall, the outcomes of the research suggest employees’ learning initiatives influenced by several factors. We specifically found that factors such as ICT use, training, and top management support are crucial towards encouraging learning initiatives among employees. The findings of our research further support other research findings in the present literature. Sally (2002) for example, provides empirical evidence from 200 large organizations across seven European countries. Her study found that learning at workplace can be greatly enhanced through factors such as the development of learning culture, increase motivation to learn with the use of reward systems, communicating clearly about responsibility for learning and continuous support by the top management. Oxtoby (2009) further mentioned that building a learning organization demand commitment from the senior management team. The team has to champion the concept of learning and enable ample resources to invest for learning to take place in the context of organization (Training Zone, 2010).

It is recommended that ICT resources should be made widely accessible to the employees at all level because ICT can enhance learning tremendously. However, organizations must be cautious and

equip with proper planning and knowledge when deciding to integrate ICT into workplace to promote learning among employees. Dogson (1993) reminded us that organizations should only embark upon ICT-enabled change if they have a clear roadmap leading to beneficial outcomes and, the roadmap can also show the capabilities required to realize the objectives and to gain the benefits in the long run.

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#### REFERENCES

- [1] Beler, A., Borda, A., Bowen, J. P., & Fantoni-Filippini, S. (2004). The Building of Online Communities: An Approach for Learning Organizations, with a Particular Focus on the Electronic Imaging & the Visual Arts Conference. London, July August, from [arxiv.org/abs/cs.CY/0409055](http://arxiv.org/abs/cs.CY/0409055).
- [2] Billett, S. (2001). *Learning in the Workplace: Strategies for Effective Practice*, Allen & Unwin, Crows Nest.
- [3] Brynjolfsson, E. & Hitt, L. M. (2000). Beyond Computation: Information Technology, Organizational Transformation And Business Performance. *The Journal of Economic Perspectives*, 14(4), 23-48.
- [4] Chowdhury, N. (2006). Building Knowledge Management in Malaysia. *Inside Knowledge*, 9(7). [online]: <http://www.km4dev.org/index.php/articles/news/744>.
- [5] Dixon, N. (1999). *the Organizational Learning Cycle: How We Can Learn Collectively*. Gowen Publishing. From: [http://books.google.com.my/books?id=gTn1rJFSOm0C&prints\\_frontendcover&source=gbs\\_ge\\_summary\\_r&cad=0#v=onepage&q&f=false](http://books.google.com.my/books?id=gTn1rJFSOm0C&prints_frontendcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false).
- [6] Dodgson, M. (1993). Organizational Learning: A Review of Some Literature, *Organization Studies*, 14 (3), 375-394.
- [7] Google Maps (2013) [Sabah, Malaysia] [Street Map] Retrieved from [online], <http://maps.google.com.my>.
- [8] Oxtoby, B. (2009). Creating a Learning Organisation: The Rover Group and Open Learning. In *Open Learning in The Mainstream*, Eds M. Thorpe and D. Grudgeon. Longman, London.
- [9] Sabah Parks Visitors Statistics (2012). *Statistics of Sabah Tourists Arrival*. Excel File.
- [10] Sally, S. (2002). Factors Influencing Learning in Work: A Comparison of Two Research Projects (European – and united Kingdom-based). *European Educational Research Journal*, 1(3), 522-537.
- [11] Senge, P. et. al. (1994) *The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organization*.
- [12] Training Zone (2010). Xebec-McGraw-Hill's Survey Results: Has the E-Learning Bubble Burst?' dated 16 October. [www.trainingzone.co.uk/cgi-bin/search.cgi?qt=xebec](http://www.trainingzone.co.uk/cgi-bin/search.cgi?qt=xebec).
- [13] WWF (2007). Roadmap for a green economy in the Heart of Borneo: a scoping study. Retrieved January 19, 2013, from [http://awsassets.panda.org/downloads/pwc\\_report\\_green\\_economy\\_roadmap\\_1.pdf](http://awsassets.panda.org/downloads/pwc_report_green_economy_roadmap_1.pdf).
- [14] Zuboff, S. (1988) *In the Age of the Smart Machine; The Future of Work and Power*, New York: Basic Books.