

*Learning Organization Characteristics
Contributed to its Readiness-to-Change:
A Study of the Thai Mobile Phone
Service Industry*

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This paper aims to verify the relationship between Learning Organizations (LO) characteristics and an organization's readiness-to-change. LOs, based on a review of the literature, seem to have the competitive advantage of high readiness-to-change in today's economic business environment. The mobile service providers in Thailand are selected for this study. The results have shown a substantial relationship between readiness-to-change and the LO characteristics of cultural values, leadership commitment and empowerment, communication, knowledge transfer, employee characteristics, and performance upgrading. This study confirms that LO characteristics are correlated to an organization's readiness-to-change, suggesting that it is essential for organizations to develop into LOs in order to survive and/or prosper in a competitive and ever changing in business environment.

Introduction

The notion of a learning organization (LO) has been familiar to business organizations for decades (Watkins and Golembiewski 1995; DiBella 1997; Roth and Kleiner 1998; Van der Bent et al. 1999). Some evidence shows that organizations that apply the LO concept such as Corning, General Electric, Honda, British Petroleum, and Xerox, can keep moving ahead of change (Nonaka 1991; Garvin 1993; Prokesch, 1997). Therefore, it has been proposed that becoming an LO is an opportunity for organizations not only to gain a competitive advantage in an unstable business environment, but also to keep ahead of the dramatic rapidity of change (Stata 1989; Senge 1990a; Hedgetts et al. 1994; Hitt 1995).

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The purpose of this paper is to propose an inventory of LO characteristics as a tool for measuring an LO for the further benefit of research and practices, as well as to confirm whether an organization with these LO characteristics possesses organizational readiness-to-change. The paper begins with an examination of the LO concept, then moves on to developing measurements for LO characteristics and organizational readiness-to-change. After that, the research methodology is suggested. Finally, the results of the study are presented and discussed.

Learning Organization

For the purpose of this paper, an LO is defined as *an organization that continuously learns through its members individually and collectively to create a sustainable competitive advantage by effectively managing internally and externally generated change* (Senge 1990b; Nevens 1992; Ulrich and Van Glinow 1993; Bennett and O'Brien, 1994; Watkins and Golembiewski 1995; Gephart and Marsick 1996; Appelbaum and Reichart 1997; DiBella 1997; Ahmed et al. 1999; Porth et al. 1999; Popper and Lipshitz 2000).

LO Characteristics

From the review of the literature, to be able to develop itself into an LO, an organization requires a set of specific characteristics. They are described as 'LO characteristics' that can be categorized into cultural values, leadership commitment and empowerment, communication, knowledge transfer, employee characteristics and performance upgrading. Each characteristic builds up organizations' capability to become learning organizations that can effectively manage change.

Cultural values involve the learning culture in organization. Scholars and practitioners have pointed out that continuous learning in order to acquire new skills for the organization to meet ever-changing customer demands is an important capability of LOS (Nevens 1992; Barrett 1995; Leitch et al. 1996; Wong 1996; Appelbaum and Reichart 1997; DiBella 1997; Robinson et al. 1997; Teare and Dealtry 1998; Porth et al. 1999; Addleson 2000). Along with continuous learning and training, allocating resources for these processes is essential since the ability to learn is not sufficient. An organization also needs to emphasize its continuous improvement (Barrett 1995; Huang 1998). An organization with a learning culture displays a number of features. Firstly it has a set of life long learning processes, covering continuous learning and training, as

well as encouragement and facilitation of members' learning and experimentation (Barrett 1995; Leitch et al. 1996). Secondly, it is an organization with a learning environment, demonstrated by the freedom to try things and fail, acceptance of mistakes and failure without punishment (Barrett 1995; Mayo and Lank 1995; Ahmed et al. 1999). Thirdly, it is a boundaryless organization, in which members desire learning and are forced to share, thereby facilitating a learning culture (Ulrich and Van Glinow 1993; Abernathy 1999). Finally, continuous innovation (Hitt 1995; Walderssee 1997) is also one of the characteristics of an LO.

Cultural values in an organization need to be supported by managers or leaders. Leaders have important roles in an LO since they not only originate commitment to change (Senge 1996) but also enhance the employees' ability to learn. Leaders' actions will shape organizational structure, decision-making processes, the teamwork (Ulrich 1993). Therefore, leadership commitment and empowerment is suggested as one of the LO characteristics. Leaders in an LO instill a clear, shared sense of purpose to encourage teamwork, empowerment investigation and risk-taking (Locke and Jain 1995). They provide role models for employees' learning and continuous improvement as well as encouraging an experimental culture (Gephart and Marsick 1996; Goh 1998; Ahmed et al. 1999; Popper and Lipshitz 2000). They create vision and an atmosphere of trust, scan the environment for opportunities and threats, and develop employees (Johnson 1998). Moreover, leaders in LOS should pursue the aim of empowering all members to take part in the organization's goal (Roberts 1997), give power to affiliates so that they understand their roles within the organization (Nesan and Holt 2002). Therefore, leadership commitment and empowerment is a key to developing LOS.

Leaders in LOS have the responsibility for communicating organizational missions and goals to all organizational members. As a result, members can head in the same direction. Communication among organizational members is essential in supporting learning in an organization. It means giving as well as receiving information (Beck 1989). West III and Meyer (1997) propose that an effective and efficient communication network in an organization promotes learning by providing access to tacit knowledge which leads to the creation of new knowledge. Communication between management and employees, both upward and downward and among members, allows advanced development of knowledge, insight and meaning within an organization (Stambaugh 1995; King 1996; West III and Meyer 1997; Nesan and Holt 2002).

Additionally, communication provides the link between individuals' behaviour and organizational performance (Senge 1996). Communication in LOS must be:

- free and open between members, customers, suppliers, competitors and all stakeholders;
- fast, clear, and focused;
- open and shared;
- expect and accept conflict;
- view mistakes as a shared opportunity for learning, entail a willingness to share ideas and opinions;
- conducted in a climate of trust, a blame free culture in which members feel free to report errors. Therefore, communication is a condition for an LO.

The more knowledge is communicated, the more is the expansion of knowledge (Sunoo 1999). Hence, knowledge transfer is an important characteristic of LOS. Knowledge transfer arises when knowledge is circulated from one individual to others (Roberts 2000). The more interactions between individual employees are encouraged, the higher is the level of knowledge transfer (Bresman et al. 1999). The transfer of knowledge provides opportunities and is an information base for members, groups or teams in organizations who are learning so that they can continually innovate products or services and processes. Knowledge transfer can be observed in the speed and efficient spread of knowledge throughout an organization (Garvin 1993). Advanced technology and the web are suggested as a means to obtain and distribute knowledge.

Employees are the most significant assets of an organization (Hedgetts et al. 1994). In an LO, employees not only know how to do their job, they also understand why they are important and how they contribute to the organization's goals (Stambaugh 1995). Thus, all employees are heading in the same direction and are in line with the organization's objectives. To have such employees, firstly the organization must have an appropriate selection process as well as the human resource policy, which emphasizes planning, recruiting, selecting and hiring people who fit the organization. These have to be reinforced through continuous educating, training and upgrading of employees' skills. The skill sets required in an LO include shared leadership and coaching behaviour (Goh 1998), ability in teamwork and problem solving (Bhasin 1998), a strong commitment to generating and transferring new knowledge and technology (Hedgetts

et al. 1994), and a commitment to lifelong learning (Hill 1996). As a result, there is a high percentage of people in the organization who take pleasure in well honed, self-development and learning-to-learn skills in an LO.

Last but not least, performance upgrading is included as one of the LO characteristics. It is an important indicator for checking whether an organization is on the right track. Performance upgrading means continuous improvement and innovation, both of which can be achieved in processes, products and services (Buckler 1998). The former is doing things better over time, while the latter is doing better things. Gill (1995) suggested that high organization performance can be observed by:

- the integration of all business functions and all activities as a part of processes of continuous improvement;
- no assumption about quick fixes; attention given to analytical problem solving and a long-term view for meaningful results;
- emphasis on leverage change and employees' responsibility for the systems in which they work.

Meanwhile, Bennett and O'Brien (1994) suggest benchmarking as a tool for measuring change in behaviours. Hitt (1995) and Garvin (1993) recommend a balance scorecard in which critical indicators for performance include excellence in:

- on-time and better delivery,
- superior quality,
- increased market shared and zero rejection,
- financial performance improvement which can be seen from revenue, cost and project overruns,
- organization renewal, cross fictional teams, networking,
- staff development,
- investment in research and development, and process design.

Organizational Readiness-to-Change

Organizational readiness-to-change is defined as an organization's ability to manage change. To assess the organizational readiness-to-change, this study applies available tools from Stewart (1994), Trahan and Burke (1996), Parker (1997), and Maurer (2001), which claim that an organization with a high degree of change readiness should have seven attributes. Firstly, it should recognize the business environment. The orga-

nization needs to look to the future in order to understand and predict possible changes in technology, the economy, demographics, lifestyle and public policies. Secondly, leadership is regraded as an important influence on readiness-to-change. Leaders should lead and motivate strategic initiatives for their organization. Thirdly, organizational culture that views change as the normal, ongoing practice of extending organizational capabilities is another important attributes of readiness-to-change. Fourthly, management practices are observed as an aspect of readiness-to-change since they will have an influence on organizational change. Fifthly, skill and job matching is vital as a checklist for employees' skill and competencies, so that it can be sure that the employee will have the ability to adjust to the changing situations. Sixthly, reward and recognition is recognized as a key success factor for change implementation. Maurer (2001) advocated that people are willing to change if that change is directly beneficial to them. Seventhly, an organizational structure that support members to perform their work, so that they can adjust to new situations.

Scholars such as Drew and Smith (1995), Garvin (2000), and Edmondson (2002) agree that concepts of LO need to include change, because an organization that learns and changes can adapt itself by appropriately applying new knowledge to actions. This study argues that if an organization has acquired a high level of LO characteristics, it should also possess a high level of organizational readiness-to-change.

From the preceding discussion, LO characteristics of cultural values, leadership commitment and empowerment, communication, knowledge transfer, employee characteristics and performance upgrading are found in the existing literature to be vital characteristics of LOS. Meanwhile, organizational readiness-to-change is required for survival and prosperity in a rapidly changing business environment. The argument is that these two concepts are highly correlated and that an organization with LO characteristics should also display a high level of readiness-to-change.

Methodology

This study has focused on mobile phone service providers in Thailand. The Thai mobile phone industry is chosen for the study as it is going through a period of rapid change due to privatisation. Thailand is chosen, since relatively few studies on learning organizations have been conducted outside the more developed economies. Two companies have

been selected, as they are the market leaders in the industry. However, at the companies' request, their names have been suppressed. Together the two companies have acquired ninety percent (90%) of the total mobile phone service market in Thailand, hence their selection for this study.

A self-administered, delivered and collected questionnaire (Saunders et al. 2000) is distributed to employees in the two companies in which the authors were permitted to conduct the survey. The sample of this survey is both management and non-management personnel in the companies.

The questionnaire has been developed following an extensive review of the literature by the authors under the auspices of 'the inventory of LO characteristics'. The inventory covers cultural values, leadership commitment and empowerment, communication, knowledge transfer, employee characteristics as well as performance upgrading. For assessing organizational-readiness-to-change, the authors integrate questions from existing instruments developed by Trahan and Burke (1996), Laczniak and Lusch (1997), Parker (1997), Smith and Mourier (1999), Maurer (2001), Rowden (2001), Coutu (2002) to form part of the questionnaire.

A Multiple Rating List Scale is selected for this study. The scales are assigned as: Strongly agree (7), Agree (6), Mildly agree (5), Indifferent (4), Mildly disagree (3), Disagree (2) and Strongly disagree (1). The purpose was to record attitudes, behaviour, and behaviour intention (Cooper and Schindler 2001) under the headings of: cultural values, leadership commitment and empowerment, communication, knowledge transfer, employee characteristic, performance upgrading and readiness-to-change assessment. A pilot test of the questionnaire was conducted in the second week of January 2003 before the actual survey process during mid-February mid-April 2003, and the intention was to review errors in the design and translation (Thai-English), and to refine the instrument for local contexts. The back-translation was also conducted to verify the differences from the original English version questionnaire. The questionnaire consists of 129 questions. The authors have received return rates of seventy-six point four percent (76.4%) and fifty-two point eight percent (52.8%) from company A and B respectively.

This paper hypothesizes that if an organization possesses LO characteristics of cultural values, leadership commitment and empowerment, communication, knowledge transfer employee characteristics and performance upgrading, then it should also embrace a high level of organizational readiness-to-change.

Results of the Study

This paper illustrates the survey results of LO characteristics and organizational readiness-to-change in two companies. It aims to establish the relationship between independent variables of LO characteristics and the dependent variable of readiness-to-change.

LO Characteristics

From the Factor analysis using SPSS11 for Windows, the LO characteristics of cultural values, leadership commitment and empowerment, communication, knowledge transfer, employee characteristics and performance upgrading are assessed through factors according to Table 1. The LO characteristic of cultural values at company A is determined by two factors of enhancement learning culture and knowledge expanded through resources; the Cronbach alpha coefficients for these factors are 0.817 and 0.702 respectively. Company B is appraised from three factors, which have slight grouping difference according to the factor analysis. The factors are supportive learning culture, training background and learning from resources; the Cronbach alpha coefficients are 0.853, 0.719 and 0.490 respectively.

One factor is extracted from the LO characteristic of leadership commitment and empowerment in both companies. However, variables drawn under this factor are different between Company A and B; the Cronbach alpha coefficient of leaders' role and empowerment of company A is 0.947, whereas leadership and empowerment at company B is 0.957.

In regard to communication, two factors are extracted at company A: the extracted factors are supportiveness and willingness, and openness and shared communication which are presented by the Cronbach alpha as 0.812 and 0.677 respectively. At company B, only one factor is extracted, which is openness communication (culture). The Cronbach alpha is presented at the level of 0.884.

Three factors are extracted from the LO characteristic of knowledge transfer at company A. The extracted factors are accessible storage system, willingness to share knowledge and supportive data system, the Cronbach alphas for these factors are 0.858, 0.846, and 0.642, respectively. At company B, the two extracted factors are knowledge distribution and memory system, and willingness to share knowledge, with Cronbach alpha at 0.913, and 0.848 respectively.

Factor analysis of employee characteristics involves two factors extracted from both companies. Employee proficiency is a shared factor in both companies A and B. Another factor at company A is human resource highlighting, while another factor at company B is human resource emphasis. At company A, the Cronbach alpha for employee proficiency is 0.889 and for human resources highlighting is 0.840. At company, B the Cronbach alpha for employee proficiency is 0.907 and for human resource emphasis is 0.809.

Regarding performance upgrading, two factors are extracted from both A and B. At company A, the factors extracted are improvement approach and performance outcome, and the Cronbach alpha coefficients are 0.796 and 0.753 respectively. At company B, the factors extracted are improvement outcome and performance driving, for which Cronbach alphas are presented at 0.853 and 0.798 respectively.

The Cronbach alpha coefficients of these factors are all acceptable which means that these factor reliably measure each of the LO characteristics of cultural values, leadership commitment and empowerment, communication, knowledge transfer, employee characteristics and performance upgrading respectively.

Organizational Readiness-to-Change

At company A, the extracted factors are leaders' role in change, change understanding, and company position, with the Cronbach alpha at 0.956, 0.884, and 0.732, respectively. At company B, the four extracted factors are leaders' role in change, employee awareness, change communication and company position, with the Cronbach alpha at 0.948, 0.800, 0.865 and 0.649, respectively.

By the same token, the Cronbach alpha coefficients of organizational readiness-to-change are all acceptable in both companies; hence, these factors are reliable in measuring organizational readiness-to-change.

To determine the relationship between LO characteristics and organizational readiness-to-change, the correlation coefficient of the variables is presented in Table 2: Correlation matrix of LO characteristics and organizational readiness-to-change.

Conclusion

In this study, it is proposed that LO characteristics can be measured by an inventory covering cultural values, leadership commitment and empowerment, communication, knowledge transfer, employee characteristics,

Table 1. Factor analysis of LO characteristics and organizational readiness-to-change

Factor	α	Factor	α
Cultural values	0.853	F1 – Supportive learning culture	0.817
	0.719	F2 – Training background	0.702
	0.490	F3 – Learning sources	
Leadership commitment and empowerment	0.957	F1 – Leadership and empowerment	0.947
Communication	0.884	F1 – Openness communication (culture)	0.812
		F2 – Openness and shared communication	0.677
Knowledge transfer	0.913	F1 – Accessible storage system	0.858
	0.848	F2 – Willingness to share knowledge	0.846
		F3 – Supportive data system	0.642
Employee characteristics	0.907	F1 – Employee proficiency	0.889
	0.809	F2 – Human resource emphasis	0.840
Performance upgrading	0.853	F1 – Improvement outcome	0.796
	0.798	F2 – Performance driving	0.753
Organizational readiness-to-change	0.948	F1 – Leader's role in change	0.956
	0.800	F2 – Change understanding	0.884
	0.865	F3 – Company position	0.732
α – Cronbach Alpha Coefficient	0.649	F4 – Company position	

Table 2: Correlation matrix of LO characteristics and organizational readiness-to-change

LO characteristics		Organizational readiness-to-change	
		Company A	Company B
Cultural values	Pearson correlation	.661*	.640*
	Sig. (1-tailed)	.000	.000
	N	247	160
Leadership commitment and empowerment	Pearson correlation	.721*	.735*
	Sig. (1-tailed)	.000	.000
	N	246	153
Communication	Pearson correlation	.647*	.723*
	Sig. (1-tailed)	.000	.000
	N	253	164
Knowledge transfer	Pearson correlation	.695*	.674*
	Sig. (1-tailed)	.000	.000
	N	254	160
Employee characteristics	Pearson correlation	.750*	.608*
	Sig. (1-tailed)	.000	.000
	N	248	161
Performance upgrading	Pearson correlation	.683*	.642*
	Sig. (1-tailed)	.000	.000
	N	252	163

* Correlation is significant at the 0.01 level (1-tailed)

and performance upgrading. As can be seen in Table 1, the Cronbach alpha coefficient of each factor represented reliability of its measure under each construct of cultural values, leadership commitment and empowerment, communication, knowledge transfer, employee characteristics and performance upgrading. Existing tools to measure the organizational readiness-to-change are used to assess the relationship between readiness-to-change and organizations with LO characteristics. The two major mobile phone service providers in Thailand are applied to examine the hypothesis. The correlation between LO characteristics and organizational readiness-to-change is depicted to verify the hypothesis that if an organization possesses strong LO characteristics, it should also have acquired a high level of organizational readiness-to-change.

The paper summarizes the results of the factor analysis of LO characteristics, finding that these factor are vital measurements of LO characteristics. The respondents of both companies ‘mildly agree’ with the questions asked; meaning that LO characteristics have been found in the mobile phone service providers in Thailand.

Moreover, this paper also verifies the relationship between LO characteristics and the company's readiness-to-change. The correlation matrix indicated that at company A, there is moderate correlation between LO characteristics and organizational readiness-to-change in some constructs of cultural value, communication, knowledge transfer and performance upgrading; while, there is high correlation between LO characteristics of leadership commitment and empowerment and employee characteristics and organizational readiness-to-change. As a result, the drawback here is a substantial and marked relationship between these variables.

At company B, there is high correlation between LO characteristics of leadership commitment and empowerment and organizational readiness-to-change and communication; while, moderate correlation is shown at cultural values, knowledge transfer, employee characteristics, and performance upgrading. Either at company A or B all of the correlation coefficient's are significant at the level of 0.01 (1-tailed), 99.9% confident. Therefore, it can be concluded that there is a substantial relationship between these variables of LO characteristics and of organizational readiness-to-change.

It is clear from the study of the companies A and B that there is a moderate to high correlation between LO characteristics and organizational readiness-to-change in the positive direction, as well as a substantial and marked relationship between the relevant variables. Accordingly, the evidence supports the hypothesis that if an organization possesses a high level of LO characteristics, then it should also have a high level of organizational readiness-to-change. Therefore, to cope with change, LO is one of tools to survive and grow in a rapidly changing business environment. The extent to which organizations can succeed depends on their emphasis on developing specific LO characteristics. This study has contributed to the development of 'the inventory of LO characteristics' as a measurement tool for practice and further research.

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