## LEARNING ORGANIZATION: A CASE STUDY OF FOOD MANUFACTURING COMPANY



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### LEARNING ORGANIZATION: A CASE STUDY OF FOOD MANUFACTURING COMPANY

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M.M. (INNOVATION IN MANAGEMENT)

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#### ABSTRACT

The goal of this paper is to determine whether SK Foods is a Learning Organization (LO) or not and how closely it fit the concept then make recommendation about steps the company can take to become one. The scope of this study will be limited to things related to Learning Organization and only one company namely SK Foods. The paper use Marquadt's LO framework to make survey questionnaires of 27 questions to collect the information from 51 employees of the company. The findings indicate that SK Foods show characteristic of LO according to Marquardt's framework but it cannot be determine whether the company is LO or not due to that there is no consensus between scholars regarding the definitions of LO.

The company need to make improvement regarding double-loop learnings and IT systems that support learning such as multimedia, E-learning, and Electronic Performance Support System. Furthermore, issue about learning opportunity of the employees need to be investigate more in order to determine whether it is already at appropriate level for the company or not.

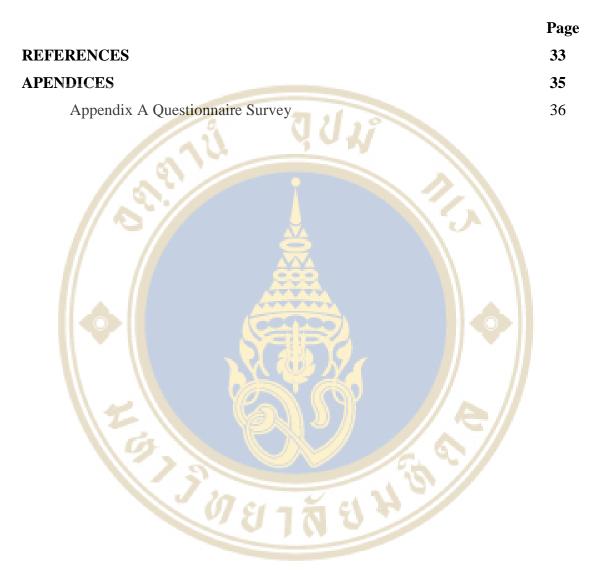
KEYWORDS: Learning Organization/ Knowledge Management /Manufacturing /Food /SMEs

46 Pages

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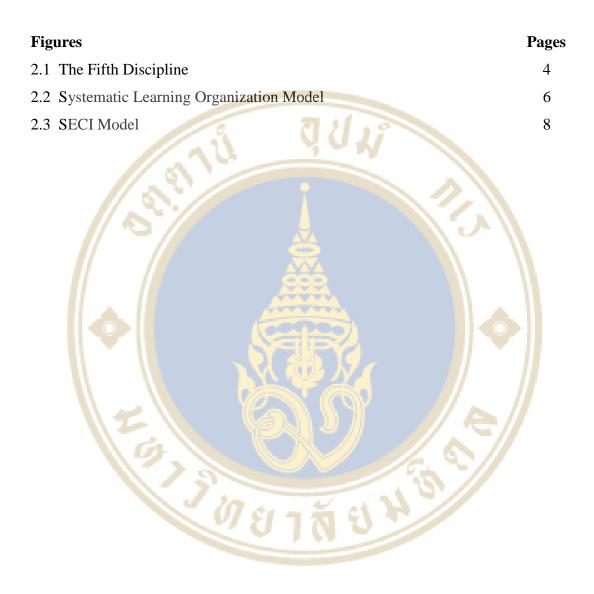
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## LIST OF ABBREVIATIONS

- Co. Company
- Learning Organization LO
- Q Question
- Yr.



# CHAPTER I INTRODUCTION

This paper will be about the concept of "Learning organization" and smaller organizations. It will attempt to apply the concept on SK foods public co. ltd., a Thai medium size seafood manufacturing company by determining whether the company is a learning organization or not then make recommendation accordingly.

Nowadays, the business environment is very dynamic. Competitions are fiercer than before due to globalization and internet enabling communication and information to travel very fast. Companies need to respond to this more rapidly changing environment in a much faster rate than in the past. One of the ways that leading companies are using is the concept of "Learning Organization".

Toyota had been one of the best examples of learning organization. As a result of its learning and adapting to competitive environment, it had created the world famous "Toyota's Way" that benefits not only its own organization, but also other organization that are willing to apply the concept as well.

But, how about smaller organizations? It would benefit the managers to know which factors they need to watch out for or utilize to support their effort to become the learning organization, creating benefits that may not only be good for themselves but also for all the stakeholders.

This paper will attempt to answer these questions by applying related concepts and frameworks and conducting in-depth semi structured interview of SK foods' employees.

### **1.1 Research Objectives**

- Identify whether currently SK Foods company is a Learning Organization or not.
- If it is, how closely it fits with the concept of Learning Organization?

- If it is not, what are obstacles that preventing it from becoming Learning Organization?
- Recommend steps and actions it can take to become or be a better Learning Organization.

### **1.2 Research scope**

- Limited to one company only which is the SK foods company.
- Limited to "Learning organization" topic

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- Not into deep details of components of Learning Organization.

## **1.3 Expected outcomes**

SK Foods is currently not a Learning Organization. Family business styled management, nature of the industry and low turnover of office employees would likely be factors hindering SK Foods' process of becoming a Learning Organization. The study is expected to lead to recommendations and insights for moving towards becoming a Learning Organization.

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# CHAPTER II LITERATURE REVIEW

#### 2.1 The Learning Organization: Theories & Frameworks

We will need to, firstly, define what a "Learning Organization" (which will be called LO from now on) is. One of the most prominent scholars in the field of LO is Peter Senge. His book "The Fifth Discipline" stated that LO is as following

"A learning organization discovers how to tap people's commitment and capacity to learn at all levels...where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free and where people are continually learning how to learn together." (Senge 1990, pg.3)

In summary, he identified several main characteristics of LO. First, people will be continually expand their capabilities. Second, the people in LO are purposeful regarding their work. Third, new ideas and thinking will be encouraged and valued. People's hope and expectations are revealed and shared. And, last, people will constantly shift the way they see and adapt to the environment together. He also offered a framework which can be used to determine whether the organization is LO as in Figure 2.1.

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## Fifth Discipline (Peter Senge)



## Learning Organization

Source: <u>http://www.comindwork.com/weekly/2014-03-17/productivity/fifth-</u> <u>disciplineby-peter-senge-is-systems-thinking</u>

Figure 2.1 The Fifth Discipline

According to Senge et al. (1999), Personal Mastery two main elements are, firstly, for each individual persons to have his/her own vision and, secondly, always keep clear picture of the current reality. The gap between this individual vision and reality will create "creative tension" which will work to lessen the gap. Mental model are individuals' internal picture of the world. Throughout our life we gain assumptions and framework that we use to make sense of the world. Often times these models may comprise of untested assumptions and not match with actual reality (1990, pg12). Thus, they must be managed effectively in order to have LO going on in the organization. Shared Vision should be the vision that is able to bind everyone in the organization to make effort both in good and bad times (1990, pg12). It is crucial for sustainable success of the organization. Team Learning is the process of everyone in the organization come together to learn to create desired results (1990,13). And lastly, System Thinking is the elements that hold all other four elements together in this framework (1990: 12). It is about seeing the "big picture" of how everything is related and effect each other instead of seeing things as being separated from each other.

Villardi & Leitão (2001) stated that LO is the place where humans are not considered as objects, but are considered as beings who can produce changes both individually and socially.

Since each organization comprises of individuals, Argyris and Schön (1978)'s theory of Single and Double-loop learning can also be used to help define LO.

The theory identified two kinds of learning: Single and Double-loop learning. The individual engaged in Single loop learning when he or she learn from the mistakes and use new methods or strategy to meet the goal. Double-loop learning is different from Single-loop learning in that the individual reviews and determines whether his or her goal is appropriate and adjusts accordingly to correct the mistakes. Thus, in this regard, LO can be defined as the organization where Double-loop learning is present.

Watkins and Marsick (1993) defined LO as an organization that learns continuously and is able to transform itself.

It "empowers the employees, encourages collaboration and team learning, promotes open dialogue, and acknowledges the interdependence of individuals, the organization, and the communities in which they reside."

In addition, they also stated that each organization is different in their learning styles, thus the nature of one LO might be different to another LO.

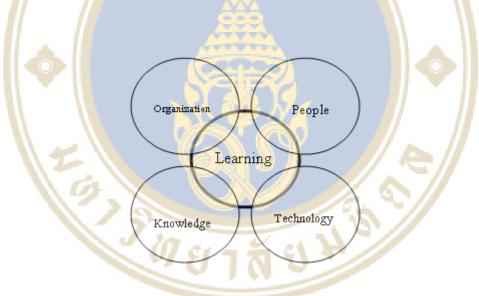
Pedler et. al.(1991) define LO as a vision of what might be possible and brought about by learning at all organization levels and continuously transforming of organization itself.

Sandra Kerka remarked in 1995 that 'there is not... a consensus on the definition of a learning organization'. Each of these definitions of LO are different but all have one thing in common: they all emphasize empowering people abilities and learning capacities. However, there are some details that are different for each scholar claims as well.

One of the debates is about from whom should the LO initiated from. Pedler et. al.(1991) stated that LO is a state that is brought about by top-down approach meaning it is initiated by top management downward. In contrast to that, Watkins and Marsick (1993) approach LO as something brought about by bottom-up approach meaning that it begins from the bottom level employees.

Another contrast point of the scholars is about the focusing on process or result of LO. Technical oriented paper focus on measuring learning curve by plotting historical data on production costs against the cumulative output of one product (Easterby-Smith and Araujo 1999: 8). These papers tend to measure results rather than process of the learning. The process focused papers emphasized social interaction and process of learning (Smith, M. K. 2001, 2007). The social view is more prevalent than technical view in the literatures (op. cit.).

Marquardt (1996) offered a systematic model for the LO comprising of five interrelated subsystems: learning, organization, people, knowledge, and technology. If any of the subsystems is not working or ineffective, the effectiveness of other subsystems are greatly reduced. The characteristics for each subsystems are as follows:



Source: https://www.l3nr.org/posts/99319

Figure 2.2 Systematic Learning Organization Model

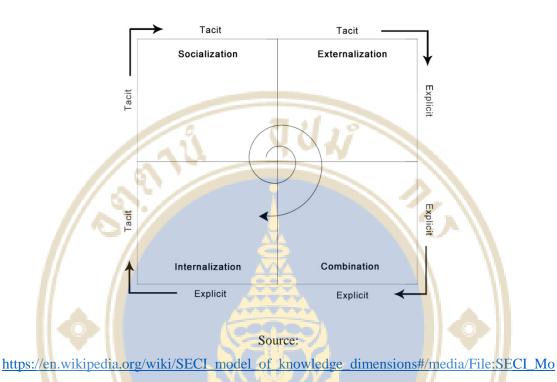
The learning subsystem is about the learning process that occurs in the organization. It occurs at three levels: individual, group, and organization. Marquardt (1996) refered this system on Senge (1990) suggested "Five Disciplines" that is already stated above. It is the subsystem that hold every other subsystems together.

Organization subsystem is about the physical organization itself as the place where learning occur. It has four dimensions: culture (Does the organization culture encourage learning, taking risks, and finding new approaches to do things?), vision (does organization's vision is to be LO?), and structure (departments and divisions).

People subsystem is about personnel that can contribute to organization learning process. They include employees, managers/leaders, customers, suppliers & vendors, alliance/partners and community groups. The employees should be empowered by sharing and discuss problems. Criticisms should be given in constructive way that offer solution or improvement that can be made. Opportunity for gaining more knowledge like attending seminar or classes should be encouraged. The managers/leaders should advocate learning. They should act like an architect or designer of learning of the organization and embody the spirit of learning themselves. The organization can also gain more knowledge and information from collaborating with external parties like partners, customers, suppliers, and community groups.

Knowledge subsystem is about management of acquired or created knowledge in the organization. It has four dimensions: acquire, create, storage & retrieval, and transfer & utilization. Acquiring is the process of acquiring knowledge from outside source whether through learning from other organization or hiring new staffs. Marquardt referred knowledge creation process on Nonaka, I. & Takeuchi, H. (1995)'s 4-stages SECI model. The model display relationship between two kinds of knowledge in creating new organization knowledge: tacit and explicit knowledge. Tacit knowledge is the knowledge that is difficult to pass to other with verbal or written means. It is the mental models, belief, and know-how that is very subjective and hard to share with others. Explicit knowledge is hard data, numbers or codified principles that can be easily shared with others. SECI model is divided into 4 parts: Socialization, Externalization, Internalization, and Combination. Socialization is new knowledge is created by people share experiences by simply interacting, observing, discussing, and spending time with each other. In this process, tacit knowledge is being shared and combine into new knowledge among people. Externalization is the process of knowledge crystallization. Tacit knowledge are made explicit by careful articulation resulting in models and concepts that could be shared more explicitly. Combination is when different explicit knowledge are combined, organized, and integrated to make new

knowledge. Internalization is when the explicit knowledge are converted into tacit knowledge by individuals applying the knowledge and practice them to perfection resulting them embodying the knowledge themselves.



del.jpg

#### Figure 2.3 SECI Model

Storage & retrieval process concerns about keeping information for late use and make it as easily accessible to people who need it. Lastly, transferring & utilization process is about the allocation of knowledge and its application.

Technology subsystem is about the integrated technological network that support, and enable learning and exchanging of information. It includes Information Technology (computer-based, help in knowledge transferring), Technological based learning (Multimedia, clips, etc.), and electronic performance support system (help in capturing, storing, and distributing knowledge) (Marquardt 1996).

### **2.2 Implication for the study**

Since there is no clear-cut definition of LO, this paper will not determine whether SK Foods company is a learning organization or not but, instead, will focus on determining how closely SK Foods fit the concept of LO and making practical recommendations that the company can takes to become one.

This paper will mainly use Marquardt's Systematic Learning Organization framework both in formulating survey questions and analyzing the collected data because it takes into account many related theories and combines them to create a complete picture of learning organization.

Argyris, & Schön, (1978)'s theory of Double-loop learning will also be used to supplement for formulating questions for the "Learning" subsystem.

In the field of knowledge management and Learning Organization, many aspects like individual's motivation, vision, mental model, thinking process, and learning styles etc., are hard to measure because it is intangible and internal aspects of individual. Thus, this study will only focus on tangible and measurable activities and people's opinions of the organization.



# CHAPTER III METHODOLOGY

#### **3.1** About the company and samples

SK foods or S.K. FOODS (THAILAND) PUBLIC COMPANY LIMITED has been manufacturing wholesome canned tuna and seafood products since 1978. It was founded by Mr.Somsak who was the CEO until the year 2000 (later changed the name to Mr. Thanaset) with the capital registered of Baht 25 million. The company mainly does OEM manufacturing for other brands and exports the goods abroad. Its main markets are Japan, USA, and Australia. S.K Foods ended the 2013 fiscal year with \$60,000,000 USD of revenue. The location of the company is divided into two sites: Bangkok office and Samutsakorn factory side.

The company's employees are divided into two kind: monthly paid employees and daily paid workers. There are nearly hundreds full time staffs who mostly work as managers, supervisors, and officers. Daily-paid workers who work in the production are approximately eight hundred in number. The majority of the dailypaid workers are Burmese with a few Cambodians, Laos, and Thais.

The company is a good sample because it could represent majority of small & medium size (SME) family owned businesses in Thailand. In 2013, SMEs business accounted for 98.5% of total business employing 11.8 million workforce or about 80% of workforce in Thailand (Chulavachana, T., 2013). It is also in food industry and manufacturing business that are two of the biggest segments of business in Thailand. According to Thailand economic factsheet of 2014, manufacturing sector in Thailand account for 38.1% of GDP in 2014 (Ministry of The Foreign Affairs of The Kingdom of Thailand, 2014). Thailand also is one of the leading food exporters of the world thus making this study's result applicable to many companies in Thailand.

To answer the research questions, quantitative method of doing survey will be used because it permit more coverage of many samples in the company than in-depth interview methods resulting in wider view and offer more privacy.

The sample will be consisting of 40 Thai employees that is being paid monthly of SK Foods co. who are willing to participate in the study because of language barriers of the daily-paid foreigner workers. To ensure anonymity of the respondents, the only personal data that will be collected in this survey will be age and amount of years spend working in the company. Since there are about 30% of employees in Bangkok office and 70% of employees in Samutsakorn factory, 30% of the samples (12 samples) will be collected in Bangkok and the rest will all be collected in the factory side to ensure evenly distributed data collection.

### **3.2 Questionnaires**

According to the initial testing, the survey could be completed in 15-20 minutes. The survey forms will be sent to the respondent to be completed by themselves without supervision of the study's conductor. The survey will be both distributed in online survey and paper forms because many employees in the operation site do not have access to internet.

The questions are divided into five sections according to Marquardt's framework: Learning, People, Knowledge, Organization, and Technology. The Learning section of questions also include double loop learning theory.

questions group					
	081	กัย ไ			
		Questions			
	Learning	Q1-7			
	People	Q8-16			
	Knowledge	Q17-19			
	Organization	Q20-23			
	Technology	Q24-27			

Table 3.1	The	questions	group
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Although all questions are designed with specific aspect to measure in mind, several questions can be used to measure aspects in more than one sections. (For example: one question may be interpreted in both People and Knowledge sections etc.) This will be explicitly stated in analysis chapter as well.

There are 27 main questions and 13 sub-questions. Most of the questions are to be answered with Likert Scale of 1-5 with 4 short answer open-ended questions. Only 13 questions are non-Likert scale questions. "1" is equal to the most negative answer or the least frequency (example: never, very bad, very disagree etc.) "5" is equal to the most positive answer or largest frequency (example: always, very good, strongly agree etc.) Instructions and all 27 questions of the surveys are available in Appendix A.

After the data are collected, they will be analyzed using descriptive statistics like mean, median, mode, and standard deviation by SPSS. Some correlation test will be run as well.



# CHAPTER IV RESULTS AND DATA ANALYSIS

## **4.1 Overall results**

The actual samples collected are 51 employees, 11 more than expected in the beginning. The processed results are as follows:

## Table 4.1 All results

	Mean	Median	Mode	Min	Max	SD
Age	34.176	32	27	23	56	8.833
Years working in company	5.247	3	2	0.5	29	5.671
Q1	0.920	5				0.274
Q2	4.109	4	4	3	5	0.640
Q3	4.235	4	4	2	5	0.737
Q4 5	4.118	4/	4	3	5	0.739
Q5	3.471	3	3	1	5	0.924
Q6					·//	
Q6.1				S.		
Q7	0.320	71 9				0.471
Q8	3.551	4	4	2	5	0.647
Q9	3.706	4	4	2	5	0.701
Q10	3.902	4	4	2	5	0.831
Q11	3.569	4	3	1	5	1.044
Q12	3.510	4	4	2	5	0.967
Q13	3.640	4	3	2	5	0.749

3

	Mean	Median	Mode	Min	Max	SD
Q14 [Peers]	4.240	4	4	3	5	0.797
Q14 [Managers/Boss]	4.078	4	4	3	5	0.659
Q14 [Customers]	2.620	3	3	1	5	0.805
Q14 [Suppliers]	2.451	3	3	1	4	0.808
Q14 [Alliance/Partners]	2.588	2	2	1	5	0.983
Q14 [Community]	2.667	3	3	1	4	0.792
Q15	4.167	4	4	2	5	0.753
Q16	4.021	4	4	2	5	0.921
Q17						
Q18						
Q18.1						
Q19						
Q19.1						
Q19.2	4.07 <mark>8</mark>	4	4	2	5	0.744
Q19.3	3.510	3	3	1	5	0.784
Q20	3.980	4	4	2	5	0.678
Q21	3.540	-4	4	1	5	0.788
Q22	3.667	064 V	4	2	5	0.712
Q23	3.740	4	4	2	5	0.723
Q24	0.863					0.348
Q24.1	3.070	3	3	1	5	0.799
Q25	0.180			2 6	-//	0.388
Q25.1	2.778	3	4		4	1.093
Q25.2	2.778	2	2	2	4	0.972
Q26	0.140					0.351
Q26.1	3.000	3	3	1	4	1.000
Q26.2	3.143	3	4	1	4	1.069
Q27	0.480					0.505
Q27.1	3.042	3	3	1	5	0.908
Q27.2	2.792	3	3	1	4	0.779
Mean of Overall data	0.829	0.576	0.576	0.571	0.403	0.139
Median of Overall data	3.510	4.000	4.000	2.000	5.000	0.788

Most data's standard deviation (SD) are quite low because the answer range is limited to scale of 1-5. For the Likert scale questions, each questions' mean and SD will be judged in relative to each other because people have tendency to answer "neutral" (3). Median of overall data's mean (3.51), median (4), mode (4), minimum (2), maximum (5) and SD (0.788) will be used as baseline for determining whether the SD for data is high or low because mean is not a good representation of center of the data. The answers of two category questions (Yes or No, Can or cannot etc.) were processed by using 1 to represent TRUE (Yes or Can or Know) and 0 to represent False (No or Cannot or Don't know). For questions that are open-end or True or False, some spaces are left blank because that statistic value is not applicable for that question.

As stated before in methodology chapter, the questions are divided into five sections according to Marquardt's framework: Learning, People, Knowledge, Organization, and Technology. The Learning section of questions also include double loop learning theory. Thus, the analysis will be done according to those sections as well. However, several questions can also measure aspects in more than one section. Those interpretation will be discussed in their respective sections. (example: Q19 results will be discussed in both Knowledge and Organization sections for its respective interpretation)

	Mean	Median	Mode	Min	Max	SD
Age	34.176	32	27	23	56	8.833
Years working in company	5.247	3	2	0.5	29	5.671
				1 - A - A - A - A - A - A - A - A - A -		

#### Table 4.3 Age groups

Age					
21-30	24	47%			
31-40	14	27%			
41-50	10	20%			
>51	3	6%			
Total	51	100%			

Years working in Company						
< 1-3 Yr.	3	6%				
1-3 Yr.	24	47%				
3-5 Yr.	5	10%				
6-10 Yr.	13	25%				
10-15 Yr.	3	6%				
15-20 Tr.	2	4%				
>20 Yr.	1	2%				
Total	51	100%				
~1 C	ļ U	N N				

 Table 4.4 Years working in company group

Firstly, it appears that range of the samples' ages are between 23-56 years old with the average age of 34. The average years of working in the company is about 5 years with minimum of 6 months (0.5) and maximum of 29 years. Very large standard deviation with both data means that there are wide variety of age group and differences in veterancy in the company. After dividing the data into different age ranges, we can see that 47% of respondent are at the age between 21-30 and/or had worked in the company for 1-3 years.

## 4.2 Learning (Q1-Q7)

	Mean	Median	Mode	Min	Max	SD
Q1	0.920	1.00	~	-		0.274
Q2	4.109	4	4	3	5	0.640
Q3	4.235	4	4	2	5	0.737
Q4	4.118	4	4	3	5	0.739
Q5	3.471	3	3	1	5	0.924
Q6						
Q6.1						
Q7	0.320					0.471
Median of Overall						
data	3.510	4.000	4.000	2.000	5.000	0.788

Table 4.5 Q1 - Q7

#### Table 4.6 Q1

Q1-Do you know company's vision?						
Don't know	4	8%				
Know	46	90%				
Blank	1	2%				
Total	51	100%				

#### Table 4.7 Q6.1 Q6.1-How do you resolve misunderstanding? Ask others to help 2 Explain more 6 Re-read work procedure again 1 Ask for more info 3 Total 12 Table 4.8 Q7 Q7- Have you ever questioned the goals or objectives in your approach of doing your job? Yes 16 31% 34 No 67% Blank 2% 1 Total 51 100%

According to Q1's results, it appears that most of the employees who did the survey know the company vision. Q2 has a mean that is higher than baseline, minimum that is higher than baseline, and SD that is lower than baseline which suggest that respondents think in the same direction that the company vision motivates them to work. This fulfilled the "Shared Vision" aspect in Senge's and Marquardt's framework.

Q3 and Q4 aimed to collect data regard System Thinking aspect of the framework. Q3 has mean that is higher than baseline and other values at or near baseline (mode, min, max, and SD) indicating that most employees think that their job is important to the company as a whole. Q4 has mean that is higher than baseline, min that

is higher than baseline and other values at or near baseline (mode, min, max, and SD) indicating that most employees think that understanding what others are doing is important. The results of these two questions imply that most of the respondents are seeing the importance of their work and are motivated to learn and try to see the big picture of the company.

Q5 and Q6 are about misunderstandings and how to resolve them. Q5 is about the frequency in which the respondent face misunderstanding. The result has very high SD, min that is lower than baseline but with mean that is almost equal to baseline. The SD imply that respondents have wider range of answer in this question than most other questions in this study.

Q6 is an open ended question that let the respondent explain what kind of misunderstanding they face and how to resolve them. 12 out of 51 (23.5%) respondents answered Q6. The problems that were written involve miscommunications, wrong assumption about ones' job and not understanding the big picture. Q6.1 asked for how the respondent resolved the misunderstanding. The written answers are: enlist others to help, resolve the misunderstanding (translators or managers/boss), read the working procedure document again, explain in more detail, and asking for more information. The preferred methods to solve misunderstandings seems to be "explain in more details". This help shape better Mental Model in Senge's framework.

Q7 is about double-loop learning. According to the results, only 31% of the respondents had ever questioned the goals or objectives of the way they perform their jobs. This might be because the current way of performing the job is "best practice" since the company had been in the business for more than 30 years. It might also be because the respondent is too new to think beyond the objective of their approach or too stuck in the old way of working that they do not see other better ways or approaches. It also can be that the company culture does not encourage questioning the goals since it would mean questioning the superior officers or the boss. This is important because questioning one's goal of doing things is the first step in double-loop learning. Since we have data regarding years spend working company of the respondents, we can run correlation analysis to see whether there is relationship between Q7 results and years worked in the company. Kendall and Spearman's tests are used because the data are

nonparametric. The results indicate no significant correlation between the two variables because p > 0.05. It is displayed in the following table.

Table 4.9 Years working in company. Vs Q7 Correlations

			Yr. working in	
			company	Q7
Spearman's	Year in	Correlation	1.000	.088
rho	co.	Coefficient	W N	
11.		Sig. (2-tailed)		.542
112		Ν	51	50
11.0	Q7	Correlation	.088	1.000
		Coefficient		
		Sig. (2-tailed)	.542	N.
		N	50	50
Kendall's	Year in	Correlation	1.000	.076
tau_b	со.	Coefficient		
T		Sig. (2-tailed)	) //e	.537
G		N	51	50
	Q7	Correlation	.076	1.000
		Coefficient	111	
	1	Sig. (2-tailed)	.537	
		Ν	50	50

There are several questions from other sections that also fit into this module. Q9&Q10 are also related to the "Team learning" and "Mental model" aspects in this module. Those two questions are about the frequency and effectiveness of meetings in solving problems. It is related to "Team learning" because people come together to learn to solve problem in the meeting. It also relates to "Mental model" because misunderstanding can be considered problems to be addressed by those meetings too.

Thus, the results also contribute to determining whether these two aspects are satisfied in the Learning module. Results of Q9&10 (will be discussed in details in next section) suggest the frequency of the meeting is slightly above average and those meetings contribute positively to the two aspects.

ole 4.10 Q8-Q16						
	Mean	Median	Mode	Min	Max	SD
Q8	3.551	<u>4</u>	4	2	5	0.647
Q9	3.706	4	4	2	5	0.701
Q10	3.902	4	4	2	5	0.831
Q11	3.569	4	3	1	5	1.044
Q12	3.510	4	4	2	5	0.967
Q13	3.640	4	3	2	5	0.749
Q14 [Peers]	4.120	42	4	3	5	0.742
Q14 [Managers/Boss]	4.078	4	4	3	5	0.659
Q14 [Customers]	2.620	3	3	1	5	0.805
Q14 [Suppliers]	2.451	3	3	1	4	0.808
Q14 [Alliance/Partners]	2.588	2	2	1	5	0.983
Q14 [Community]	2.667	3	3	1	4	0.792
Q15	4.167	4	4	2	5	0.753
Q16	4.021	4	4	2	5	0.921
Median of Overall data	3.510	4.000	4.000	2.000	5.000	0.788

## 4.3 People (Q8-Q16)

Q8 is about constructive criticism, an important component in empowering people. All values, except SD, are at or very close to baseline. SD that is lower than baseline tell us that the data is clumped close together in this questions. Compared to other questions, the result seemed to be in the neutral zone.

Q9's results indicate that frequency of meeting being conducted to solve the problem is being viewed as slightly above average. All values, except mean which is slightly above average, are at or very close to baseline. Results of Q10 indicate that the meetings are effective in solving the problems because the mean of the data is 3.9 which is nearly 4. However, Q10's SD is slightly higher than baseline thus indicating that there is wider range of opinions for this question than others.

Q11 and Q12 are about the opportunity of in-house and 3<sup>rd</sup> party organized training/seminar for employees. Both questions' results have baseline mean but SDs are much higher than baseline indicating that employees might have unequal opportunities in receiving training session and seminars. This might be because of different nature and necessities of the job (example: exporting department's employees vs. production line workers) or location of working (Bangkok vs. Samutsakorn). Managers/boss preference and company policy also influence this as well.

Q13's result indicating that employees' opinion regarding whether they get enough information to perform their work or not are in baseline range of min and max. Mean is slightly above baseline (3.64) indicating that overall employees somewhat feel that they get enough information for their work.

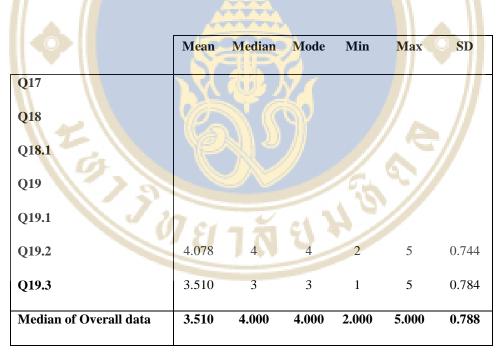
Q14 is about how much the employees learn from various parties. It appears that the employees learns from peers and managers/boss the most. The SD of [Peers] is slightly higher than baseline while SD of [Managers/boss] is lower than baseline indicating more concentration of answer to the mean. [Suppliers], [Customers], and [Community] have similar SD but [Customers] and [Community] has higher mean indicating that the employees learn slightly more from customers and community than suppliers. [Alliance/Partners]'s result has high SD. This means that there is quite a mixed opinion about this question. While mean of [Peers] and [Managers]'s results are in the baseline, means of [Customers], [Suppliers], and [Community] are lower than baseline. The significant difference between first two parties ([Peers] and [Managers/boss]) and later three parties ([Suppliers], [Customers], and [Community])

are to be expected due to difference in job positions and responsibilities making employees have unequal opportunities of contacting these three outside parties..

Q15 and Q16 is about whether organization's managers/leaders encourage learning and embody good examples of learning or not. From Q15's result of mean of 4.167 with bellow baseline SD, it seems that employees agree that their managers/leaders encourage learning. However, Q16's result of 4.02 with SD that is significantly higher than baseline tell us that there is very wide range of opinion regarding whether or not they are good example for learning.

# 4.4 Knowledge (Q17-Q19)

## Table 4.11 Q17-Q19



# Table 4.12 Q17

		% of
Q17-Activities in co	mpany	Respondents
Training	47	92%
Job rotation	14	27%
Task force	9	18%
Memo	17	33%
Report	8	16%
Briefing	8	16%
Mentors	10	20%
Benchmarking	2	4%

# Table 4.13 Q18

Q18-Collaboration in info/learning with o organizations	% of Respondents	
Gov. Organization	18	35%
Banks	28	5 <mark>5%</mark>
Suppliers	34	67%
Customers	11	22%
Universities	5	10%

# Table 4.14 Q19

Q19-Information being kept in	% of					
department?	Respondents					
Customers related	18	35%				
Suppliers related	12	24%				
HR related	13	25%				
Accounting/Finance related	9	18%				
Job description	42	82%				
<b>Operation records</b>	39	76%				
Work Procedures	38	75%				

Q17 is a multiple choice question where respondents can pick more than 1 answer. Its result revealed that employees are aware of [Training] activities the most, then [Memo] second, then [Job Rotation] third. [Benchmarking] has the lowest number of response with only 2 answers. There are several implications for Q17 in the "Knowledge module". Firstly, Nonaka & Takeuchi's SECI can be used to see analyzed the result in regarding to "Creation" aspect of the module. Employees' awareness of [Training] show that company do encourage the "Internalization" process in SECI model because the training activities usually aimed to facilitate more accurate embodiment of the knowledge amongst the employees. SECI model's "Socialization" process is facilitated in [Mentoring], [Job rotation] and [Task force]. In [Mentoring], junior employees learned the ropes by both formal and informal interacting with the mentor who is senior employee. In [Job rotation] and [Task force], employees are put in new environment to perform task that is different than their routine or previous jobs. [Report] and [Briefing] are the activities that is the result of SECI model's "Combination" process since the explicit knowledge are collected from both inside and outside company then combined to produce [Report] and [Briefing]. Secondly, in regarding to "Acquiring" aspect of the module, [Benchmarking] can be though as one way of "Acquiring" knowledge from outside organization because it use external information to gain insight of how the company is doing. Thirdly, [Memo] is a common form of written communications thus can be seen as an activity to facilitate "Transfer & utilize" aspect in this module because it help facilitate transferring of info throughout the company. The differences between numbers of respondents who answer [Training] and other choices are very large implying that other activities may only presence in certain area/department/group in the company. This may be because different nature of works and requirements in each department and positions.

Q18 is linked to "Acquiring" aspect of the Knowledge module and is also a multiple choice question where respondents can pick more than 1 answer. The result showed that employees are aware about collaboration with [Suppliers] the most then secondly the [Bank] then thirdly the [Government]. In Q14, the results showed that employees think they learn from [Customers] more than [Suppliers] however, Q18 indicate that employees are aware about collaboration with [Suppliers] more than [Customers]. It might imply that even though there are more collaboration with

[Suppliers], they learn from those collaboration less than from fewer collaborations with [Customers]. Or it might be that [Customers] shares more useful information to the employees and company.

Q19 is also a multiple choices question that can be picked more than 1 answer. Q19 and Q19.3 are linked to "Storage" aspect of the Knowledge module. Q19 aimed to explore what information are being stored. Q19.3 is aimed to determine ease of access of those information. Q19.2 is linked to "Transfer & utilize" aspect of the module and aimed to see whether those information is useful to the employees' work or not.

Q19 results indicate that [Job description], [Operation records], and [Work procedures] are known to be in most employees' department/sections. However, for specific information, [Customer related] seems to be in more parts of the company more than [Suppliers related], [HR related] or [Accounting/finance related]. This could come from nature of the business, company's policy, and many more. According to Q19.2 and Q19.3's result, employees are mostly agreed that those information are useful but neutral toward the ease of access of those info because Q19.3's is higher than baseline while Q19.2's is at the baseline.

Several other questions from other sections also have implication in Knowledge module. Firstly for the "Creation" aspect, Q10 are related to SECI model's "Socialization" process because it facilitate interaction between employees in order to learn together and from each other. For the "Acquiring" aspect, as discussed above, Q14 asked for the "quality" of learning from outside parties while Q18 asked for "quantity" of the corroborations with them.

## 4.5 Organization (Q20-Q23)

	Mean	Median	Mode	Min	Max	SD
Q20	3.980	4	4	2	5	0.678
Q21	3.540	4	4	1	5	0.788

Table 4.15 Q20-Q23

#### Table 4.15 Q20-Q23 (cont.)

	Mean	Median	Mode	Min	Max	SD
Q22	3.667	4	4	2	5	0.712
Q23	3.740	4	4	2	5	0.723
Median of Overall data	3.510	4.000	4.000	2.000	5.000	0.788

Q20 asked whether employees think that becoming LO is necessary in order to achieve company vision or not. They seems to be agreed that it is because the mean is significantly above baseline with SD that is lower than baseline. This is to test whether the vision aspect of the organization module is fulfilled or not.

Q21 and Q22 are about company culture in taking risk and finding new ways of doing things respectively. The result seems to imply that the employees think that the company culture only slightly encourage them to do so.

Q23 asked whether the employees agree that culture of the company encourage information sharing in companywide. From the result, they seems to agree that it is because the mean is above the baseline and SD is near baseline.

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# 4.6 Technology (Q24 – Q27)

Table 4.1	6 Q	24-(	227
-----------	-----	------	-----

	Mean	Median	Mode	Min	Max	SD
Q24	0.863					0.348
Q24.1	3.070	3	3	1	5	0.799
Q25	0.180					0.388
Q25.1	2.778	3	4	1	4	1.093
Q25.2	2.778	2	2	2	4	0.972
Q26	0.140					0.351
Q26.1	3.000	3	3	1	4	1.000

## Table 4.16 Q24-Q27 (cont.)

	Mean	Median	Mode	Min	Max	SD
Q26.2	3.143	3	4	1	4	1.069
Q27	0.480					0.505
Q27.1	3.042	3	3	1	5	0.908
Q27.2	2.792	3	3	1	4	0.779
Median of Overall data	3.510	4.000	4.000	2.000	5.000	0.788

# Table 4.17 Q24

Q24-Do you have access to a computer?				
Yes	44	86%		
No	7	14%		
Total	51	100%		

# Table 4.18 Q25

Q25-Is there e-learning in the company?						
Yes	9	18%				
No	41	80%				
Blank	4	2%				
Total	51	100%				
Total	51					

## Table 4.19 Q26

Q26-Is there e-learning system in the			
company?			
Yes	7	14%	
No	43	84%	
Blank	1	2%	
Total	51	100%	

#### Table 4.20 Q27

Q27-Is there EPSS in the company?			
Yes	24	47%	
No	26	51%	
Blank	1	2%	
Total	51	100%	

From the result of Q24, it seems that most employees have access to the computers. When asked to rate the company's IT system the mean result is significantly below baseline with near baseline SD.

Q25 result shows that most employees think that there is no multimedia based learning in the company. Only 9 respondent (18%) think that there is. Q25.1 results tell us that those who answered "yes" think that they use it at very low frequency of 0.8 lower than baseline. Q25.2's mean is the same as Q25.1's thus telling us that they think that the system is not good. However, SD for both Q25.1 and Q25.2 are much higher than baseline thus the range of the answer is larger than other questions.

Q26 also has only few respondent who answer that there is e-learning system. Q26.1 result tell us that they use it at low frequency because the mean is 0.5 lower than baseline. Q26.2 indicate that they think that the system is not good from the mean that is 0.5 lower than baseline. Compared to Q25, it seems that respondent use E-learning system more frequently and think that it is slightly better than multimedia based learning in the company. Like Q25, SD for both Q26.1 and Q26.2 are much higher than baseline thus the range of the answer is larger than other questions.

Q27's result is an interesting case. The respondent who answer Yes and No are almost equal with only 2 people difference. This imply that there are incredibly mixed understandings about whether the company has EPSS or not. From result of Q27.1, it seems that those who answer "Yes" use EPSS at low frequency from mean that is 0.5 lower than baseline. SD for Q27.1 is much higher than baseline, thus there is a wider range of answers than for other questions. Q27.2 result indicate that employees rate the EPSS system as "bad" because of the mean that is 0.7 lower than baseline.

# CHAPTER V CONCLUSIONS, RECOMMENDATIONS, AND FUTURE RESEARCH SUGGESTIONS

#### 5.1 Conclusion

From the analysis, although it cannot be determined whether SK Foods is a Learning Organization or not, we can say that the company does has several characteristics of LO because it show characteristics of LO according to Marquadlt's framework. However, it does not fit in all subsystems/modules of the framework. Aspects in each modules are being measured relative to each other as follows.

In the "Learning" module, for the "Shared vision" the results suggest that the employees know the company's vision and think that it motivates them to work. For "System thinking" aspect, most think that their jobs is important to the company and also agree that understanding what others co-worker is doing in the company is important to their work thus indicate good motivation to understand the big picture. Regarding "Double-loop learning", only 31% of the respondents answered that they had ever questioned the approach to do work and age or veterancy do not have significant correlation with the result, indicating that other factors might play more important role. For "Mental model" aspect, the frequency of misunderstanding is average but with wide range of opinions. The most preferred methods of solving misunderstanding is "Explain more". The frequency and effectiveness of the meeting also suggest positive contribution to "Mental model" aspect of the module.

In the "People" module, the amount of constructive criticisms and amount of information given for working are average. The meeting frequency is good and effective in solving the problems. Most employees learn from internal people the most, then customers and community the second most. However, the data from questions about opportunity for in-house and 3<sup>rd</sup> parties organized classes/seminars indicates a wide range of opinions which might suggest unequal opportunities. Most employees view

managers and leaders as encouraging learning. They also think that managers/leaders are good example of learning themselves, but there are some people who express negative opinion regarding this as well.

In the "Knowledge" module, for knowledge "Creation" aspect, "Internalization" is highly encouraged from the results of [Training] being the most well-known learning related activities in the company. "Socialization" is being facilitated from activities such as [Job rotation], [Task Force], [Mentor], and meetings. "Combination" is also present from the activities such as [Report] and [Briefing]. "Acquiring" aspect of the module is being facilitated by [Benchmark] activity and corroborations with outside parties notably customers and suppliers. Employees seems to be learning more from customers but have more corroborations with suppliers. For "Storage" aspect of the module, [Job description], [Operation records], and [Work procedure] are the information that being kept in company the most. The company seems to be inclined to store [Customers related] info more than other area specific info. The employees rated ease of access for those information as average compared to other aspect. For "Transfer & Utilize' aspect of the module, the data suggest that those data are useful to the employees.

For the "Organization" module, respondents agreed that becoming LO is necessary to achieve company's vision. Company's culture slightly encourage taking risks and finding new approach. Employees do agree that company encourage sharing information across the company.

Lastly, for the "Technology' module, most of the employees seems to have access to the computers however, the respondents rated the IT system bellow the baseline. The data suggest that most people do not know about the E-learning system and multimedia based learning in the company. Those who knows about the systems do not use them often and rate them as bad. There are very high standard deviations for those questions. For the question regarding electronic performance support system, employees' opinions are divided into nearly half-half for whether the company have the system or not. Those who think that there is EPSS do not use it frequently and rated the system bellow the baseline.

### 5.2 Recommendations

The 31% result for the double-loop learning question indicates that improvements need to be made in encouraging employees to explore deeper about what they are doing. It could be that they do not have enough knowledge or information to compare with the approach they use, or other factors which require further research.

The unequal learning opportunities should be investigated further to see whether that inequality is justified by different job positions' requirements or not, so that adjustments can be made in providing the opportunity accordingly because the company cannot provide lucrative opportunities for every production line worker.

E-learning system and multimedia based learning should be developed and encouraged more appropriately. Small and practical system is more preferable than big and sophisticated system because of the company's size. Regarding EPSS, the company should build more awareness of the system. The rating of the three systems is either due to the users or the systems. If it is the former reason, users should be examined whether they know how to operate the system properly and/or have other issues preventing them from utilizing the system. If the systems are bad then they need to be adjusted or discarded.

## 5.3 Future Research Suggestions

As stated in the beginning of the paper, this paper aimed to see the big picture of the company's situation and/or progress of becoming LO. It mainly aimed to determine whether SK Foods Company has these activities that relate to the characteristic of a LO or not, but not how effective these activities are.

Secondly, this study focus only on the visible activities but not the invisible elements of the learning organization such as people motivation, learning styles, thinking process etc.

Lastly, what the respondent think may not be what really is happening or what really is. People may think that they are already doing well without comparing with other people or vice versa.

Qualitative methods such as interview or focus group can help complement this paper to dig deeper into limitations mentioned above. Thus, we can say that this paper could serve as a starting point in gaining deeper insight about applying LO in SME.



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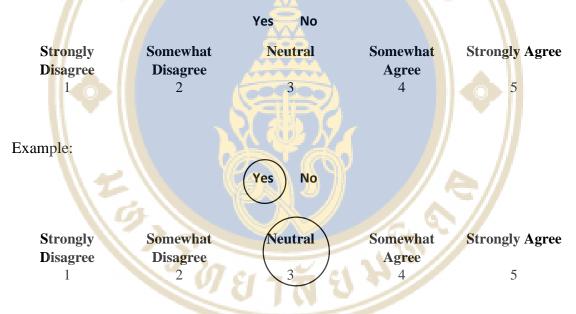
# **Appendix A: Learning Organization Survey Questionaire**

# **Introduction**

This questionnaire survey is conducted as a part of the Master Degree program at the College of Management, Mahidol University, for the student thematic research paper about "Learning Organization". The collected information will only be used for education purposes, and all responses will remain anonymous (employee name is not recorded). Your co-operation is much appreciated.

# **Instructions**

Please circle the one answer in this kind of questions



Please rate all rows in this kind of question

	Never	Little	Somewhat	Much	Great deal
Peers	1	2	3	4	5
Manager/Boss	1	2	3	4	5
Customers	1	2	3	4	5
Suppliers	1	2	3	4	5
Partners	1	2	3	4	5

Community	1	2	3	4	5
-----------	---	---	---	---	---

Example:

	Never	Little	Somewhat	Much	Great deal
Peers	1	2	3	4	5
Manager/Boss	1	2	3	4	5
Customers	1	2	3	4	5
Suppliers	1	2	3	4	5
Partners	1	2	3	4	5
Community	1	2	3	4	5
		Balk.			
When you see	, Please wri	te number	rs Exan	ple: 2 7	
When you see this kin	d of question	ns, you ma	ny choose mu	ltiple answers	
Benchmarking	; Training	lot	Rotation	Task for <mark>ce</mark>	Memo
Report	Briefing	<b>P</b> M	entoring	Coaching	None of these
Example	13			9 V	
Benchmarking	Training	ol B	b Rotation	Task force	Memo
Report	Briefing		entoring	Coaching	None of these

Please explain and write down an answer when you see

Example:

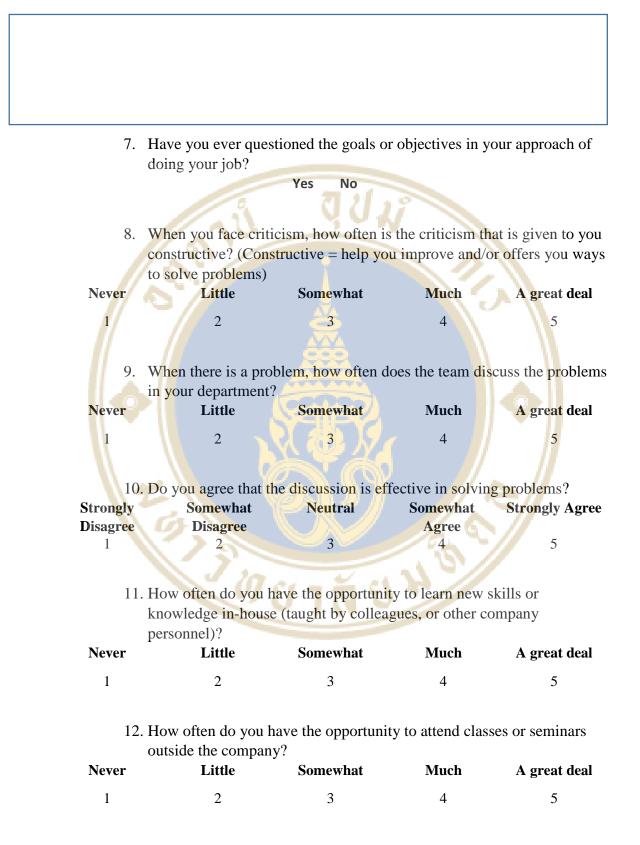


# **Questions**

<ul><li>Age (in yea</li><li>How long l</li></ul>	,	l here? (in years)			
1. Do you know what the company vision is? Yes No					
2. If y	ou know, do you	agree that the con	mpany vision m	otivates you?	
Strongly	Somewhat	Neutral	Somewhat	Strongly Agree	
Disagree	Disagree		Agree		
1	2	3,0,	4	5	
	er people/depart	w important is it for ments in the comp	any do?	understand what	
Unimportant	Of little	<b>Moderately</b>	Important	Very	
	important	important		Important	
	2 your opinion, how company as a w	w important are yo	4 our actions and v	5 vork results for	
Unimportant	Of little	Moderately	Important	Very	
	important	important		Important	
T	2	39	4	5	
	w often do you e npany?	xperience misunde	erstandings or p	roblems in the	
Never	Little	Somewhat	Much	A great deal	
1	2		4	5	

6. If possible, given one example of a misunderstanding or problem that you experienced:

### 6.1 How do you deal with a misunderstanding, or problem?



13. During your daily routine work, do you agree that you get sufficient
information related to your work?

Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
1	2	3	4	5

14. How much do you learn from each of the following parties: peers, manager/boss, customers, suppliers, partners, or community?

-	Never	Little	Somewhat	Much	Great deal
Peers	1.5	2 🕽	23	4	5
Manager/Boss	1	2	3	4	5
Customers	1	2	3	4	5
Suppliers	1	2	3	4	5
Partners	1	2	3	4	5
Community	1	2	3	4	5
		A A A A A	THE REAL PROPERTY AND INCOMENTAL PROPERTY AND INTENTE AND INTENTY AND INTENTE		A 11

15. In your opinion, do you agree that your managers/leaders encourage learning?

Strongly	Somewhat	Neutral	Somewhat	Strongly Agree
Disagree	Disagree		Agree	
11 12	2		4	5

16	. In your opinion, de	o you	agree tha	t your managers/l	eaders act as an
	example of good le	earne	rs?	1 1 4	
Strongly	Somewhat		Neutral	Somewhat	t Strongly Agree
Disagree	Disagree		1.00	Agree	
1	2	-	3	4	5

17. As far as you know, are there activities as follows in the organization? (Can choose more than one answer)

Benchmarking	Training	Job Rotation	Task force	Memo
Report	Briefing	Mentoring	Coaching	None of these

18. As far as you know, is there collaboration with following other organization for learning/info sharing? (Can choose more than one answer)

Government organization	Banks	Suppliers/vendors	Customers	University
Others	No collaboration			
18.1 If you	answer was "Oth	ers" in the last que	stion, please	specify.
S			×3	
	•	t kind of data or kn ment? (You can ch	-	-
Customer related info	Supplier related info		Procedu <mark>re</mark> related	Operation record
HR related	Finance/account related	Other		
19.1 If you	answer "Other" i	n the last question,	please specif	Ĵy.

19.2 Do you agree that those data/information is useful?

Strongly	Somewhat	Neutral	Somewhat	Strongly Agree
Disagree	Disagree		Agree	
1	2	3	4	5

Strongly Disagree 1	Somewhat Disagree 2	Neutral 3	Somewhat Agree 4	Strongly Agree	
20. In your opinion, do you agree that becoming a Learning Organization is necessary in order to achieve the company's vision? (Learning organization is the organization that can learn and adapt itself, everyone					
Strongly Disagree	in the organization is Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree	
1	2	3	4	5	
21. In your opinion, do you agree that the company culture encourages risk taking?					
Strongly Disagree	Somewhat Disagree	Neutral	Somewh <mark>at</mark> Agree	Strongly Agree	
lo			4		
22. In your opinion, do you agree that the company culture encourages experimentation to find new approaches?					
Strongly Disagree	Somewhat Disagree 2	Neutral	Somewhat Agree 4	<b>Strongly Agree</b> 5	
9					
23. In your opinion, do you agree that the company culture encourages information sharing across the company and departments?					
Strongly Disagree 1	Somewhat Disagree 2	Neutral 3	Somewhat Agree 4	Strongly Agree	
24. Do you have access to a computer in your work? Yes No					

19.3 Do you agree that those data/information can be easily accessed?

24.1 If you answer "Yes", please rate the IT system in the company (Please skip if you answered No in question 24)

Extremely bad	Bad	Average	Good	Extremely good
1	2	3	4	5

# 25. Is there multimedia based learning in the company? Yes No

25.1 If you answer "Yes", how often do you use it? (Please skip if you answered No in question 25)

	eu no in questio	, ii 25)			
Never	Little	Somewhat	Much	A great deal	
1	2	3	4	5	
25.2 If you answer "Yes", please rate the multimedia learning in the company. (Please skip if you answered No in question 25)					
Extremely bad	Bad	Average	Good	Extremely good	
	2	3	4	5	
26. Is th	<mark>tere</mark> E-Learning	system in the comp Yes No	oany?		
26.1 If you answer "Yes", how often do you use it? (Please skip if you answered No in question 26)					
Never	Little	Somewhat	Much	A gr <mark>eat</mark> deal	
		3 s", please rate the if you answered No			
Extremely bad	Bad	Average	Good	Extremely good	
1	2	8 73 9	4	5	
<ul> <li>27. Is there electronic performance support system (EPSS) in place? (EPSS = System that not only helps with the information sharing or learning, but also provides the user with tools to increase their work performance.)</li> <li>Yes No</li> <li>27.1 If you answer "Yes", how often do you use it? (Please skip if you</li> </ul>					
	you answer "Ye ed No in questio	•	ou use it? (Plea	se skip if you	

Never	Little	Somewhat	Much	A great deal
1	2	3	4	5

27.2 If you answer "Yes", please rate the electronic performance support system (EPSS) of the company. (Please skip if you answered No in question 27)

