

**LEARNING ORGANIZATION AND
TOYOTA MOTOR THAILAND**



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LEARNING ORGANIZATION AND TOYOTA MOTOR THAILAND

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ABSTRACT

This paper examines the organization learning characteristic based on “The Fifth Discipline” of Peter Senge (1990) and compare with the case of Toyota Motor Thailand in order to find out what characteristics Toyota practices and to investigate whether Toyota provides additional practices from the theory.

The qualitative research method was used to collect the data from the sample group. An interview was conducted with 7 people, who are Toyota employees and management, to explore its linkage with learning organization. Interview results were compared to the five characteristics proposed by Senge. Research findings were shown along with concrete and practical examples applied in Toyota organization.

As the paper contains some limitations including limited number of interviewees and little benchmarking with other leading organizations in Thailand, therefore, further research and investigation are suggested to build on the findings of this study in order to explore more details in the area of learning organization in Thailand.

KEY WORDS: Learning organization / Toyota Motor Thailand / Team learning

26 pages

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CHAPTER I

INTRODUCTION

Nowadays, the “Learning Organization” concept is commonly known and utilized in many renowned organizations as it brings many benefits and advantages to the company in the fast-changing business world. Learning organization also helps the business to develop its own competitive advantage because it contributes to the success of surviving in the globalization world.

Currently, it is very difficult for an organization to be successful in the business if its employees lack of innovation and self-development trait. Learning organization concept could be used in these organizations to enable their employees to help each other to learn, share company knowledge, cooperate working progress, lead working team and participate in organizational learning activities. All these actions are truly important and contribute to the building of learning organization.

In learning organization, employees are expected to show willingness to embrace change and being open to share information. Everyone in the organization must demonstrate a strong commitment to continuously change as it encourages the ongoing learning cycle in the company.

The reason why this paper aims to focus on the content of learning organization is because it is one of the key success factors that provide benefits to the company to be able to compete in the competitive market.

However, it is not easy for any organizations to achieve or sustain the learning organization state since it needs to meet with many requirements including clear company direction, long-term vision of management, fast and effective communication and ultimate commitment from all stakeholders. If an organization lack of any of these requirements, it will lose an opportunity to be the learning organization in some ways, which will eventually lead to the profit loss and slow growth of the company in the future. Therefore, learning organization application is

crucially important for the companies that want to survive in the current market industry.

As learning organization theory is applied to use in many leading organizations, this paper aims to study and investigate the learning organization issue in one of the most well-known organizations in Thailand, which is Toyota Motor Thailand. Toyota Motor Thailand is the subsidiary company of Toyota Motor Corporation from Japan. It has been known for its company knowledge that proves to be practical and beneficial to the market. The knowledge includes Toyota Production System (TPS), Toyota Way (TW) and Total Quality Management (TQM). All this knowledge is not only practical for car manufacturing industry. However, many companies also utilize or apply the knowledge in their own operations as well.

Even though it is evident that Toyota company knowledge is being applied in several organizations, it is not a guarantee that Toyota Motor Thailand is the learning organization. It still needs further investigation to measure and evaluate other criteria of learning organization as well.

Therefore, this paper aims to discuss the linkage between the term “Learning Organization” and Toyota Motor Thailand in order to explore the facts and evidences that prove whether Toyota is the learning organization or not. The paper examines the learning organization concept of Toyota Motor Thailand compared with the renowned theory regarding learning organization called “The Fifth Discipline” by Peter Senge.

Toyota Motor Thailand will be evaluated based on five criteria of Peter Senge in order to find out the examples that Toyota company practices for each criteria. Moreover, the research could investigate if the company has other additional practices that it follows other than the five criteria according to Senge’s theory.

The structure of the paper is detailed as following. It begins with the literature review where previous studies relating to learning organization are reviewed and summarized. Then, the research methodology is explained regarding the approach that will be used to explore the research questions. Next is the data analysis that demonstrates the research findings and examples. The last chapter is conclusion, which is the summarization of the findings including the recommendations to apply if further research is required.

CHAPTER II

LITERATURE REVIEW

This paper aims to study the linkage between Learning Organization model and Toyota Motor Thailand, which is regarded as one of the biggest and well-known organizations in Thailand. Therefore, first we need to gain knowledge about the term “learning organization” and “knowledge management” in terms of the definition and the concept so that we could study on the type of knowledge that requires to be retained in the organization and the characteristic of Learning Organization.

The opinion towards the concept of learning organization is varied according to several scholars. Peter Senge defined the learning organization as “a place that people continuously enhance their ability of developing outputs and thoughts are widened and where people continuously learn together”.

There is also another viewpoint towards the term learning organization stated in the article by Villardi (2001) that “a place with relationships where people are not considered as an object but instead they are considered as the ones who are capable and able to create changes”.

Another idea of definition about the learning organization is from Cummings and Worley (1993) that “a learning organization is the place where people possess the capability to learn, adapt and change. It is where the process of learning are developed to contribute to organization goals”.

The first two theories provide the same concept that the stakeholders involve in the learning organization must be empowered to obtain freedom so that the learning capability is limitless. However, the last comment of Cummings and Worley seem to focus more on the process of learning. It highlights the required processes that need to be done to achieve the goal but not mentioned about the people that would drive the success to happen.

The major and huge factor, which contributes to the success of the learning organization, is the Knowledge Management. Knowledge Management is “the knowledge that are passed on in organization including the organization culture, procedures, practices, methods and papers, as well as human resources” (Alavi and Leidner, 2001).

It states in the article by Goldet *al.*,2001 that in order to realize the full potential of Knowledge Management System, the firm must “have the ability to use previous knowledge and learn to apply in order to create new knowledge through the action of combining and exchanging”.

The KM process can be distinguished into numerous processes as details in the table (Khalifa and Shen, 2010).

Classifications	Knowledge Processes
Alavi and Leidner(2001)	Creation – storage – transfer – application
Gold et al. (Gold, et al., 2001)	Acquisition – conversion – application – protection
Ernst & Young (1999)	Generate – Represent – Codify – Apply
Holsapple et al. (1997)	Acquire – Select – Internalize – Use – Generate – Externalize
Young (1999)	Acquire – Develop – Retain – Share
Wiig (1998)	Leverage existing knowledge – Create – Capture and Store – Organize and Transform – Deploy
Liebowitz (2000)	Transform – Identify and Verify – Capture and Secure – Organize – Retrieve and Apply – Combine – Learn – Create – Distribute/Sell
Liebowitz et al. (1998)	Identify – Capture – Select – Store – Share –Apply – Create – Sell
Saint-Onge (1998)	Gather – Learn – Transfer – Act
Van der Spek et al. (1997)	Develop – Secure – Distribute – Combine

Source: <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1308&context=dubaipapers>

Figure 2.1: Knowledge process classification

The important factor that needs to be considered in the Knowledge Management is the knowledge itself. According to Nonaka and Takeuchi (1991), there are two types of knowledge: tacit and explicit. Tacit knowledge is subjective and based on the experience. This kind of knowledge is difficult to formalize and communicate to others.

Whereas, the explicit knowledge is defined as formal and systematic that can be expressed in words, sentences, numbers or formulas. Therefore, it can be easily communicated and shared (Nanoka and Takeuchi, 1991).

This paper aims to focus on the theory of Alavi and Leidner (2001) that the knowledge process can be categorized into four main processes.



Figure 2.2: Knowledge management process

According to Alavi and Leidner (2001), the first process, the creation, includes adding, replacing or converting the company's tacit and explicit knowledge. The activities could be done through social interactions or experience sharing among members in order to create, share, merge or enlarge the knowledge.

The second process, which is the knowledge storage, refers to keeping knowledge in many forms including written documents, information stored in electronic databases, company procedures and standard of operations. This also links with the unstructured documents, such as memos, meeting minutes or notes.

The next process is the transfer process, which is the action of transferring the knowledge to the area where it is needed and can be used. The channel of knowledge transfer could be either formal or informal. Informal method could refer to the informal meeting or conversation during coffee break, whereas, formal method could be training classroom or job rotation.

The last process is the application. This occurs when there is an integration of organization members' specific and functional knowledge to produce value via conversion of inputs or outputs in the pattern organizational products and

services. The knowledge application refers to the actual use of knowledge that has already been captured or created.

According to Giesecke and McNeil (2004), The knowledge application closely links with the organization learning, as companies need to be agile and flexible in order to survive in the competitive and continuously changing world. The company must build an environment that cultivates learning, experimenting and taking risks. They need to be able to proactively and quickly respond to changes.

Therefore, its employees are required to possess the personality of welcoming change, willing to take challenges, accepting to enhance new skills and devoting to organization's mission and vision. Moreover, the company staff will become more flexible since they are able to obtain new knowledge and move around the organization. Creativity in the organization will now arise since organization members are motivated to challenge and try new things.

Furthermore, another benefit of knowledge application in learning organization is that the problems and issues in the organization will be met and taken care of more quickly since the staff's ability and capability are now enhanced.

Moreover, in the learning organization, there is an information exchange between employees in order to originate new ideas and thoughts, which lead to the action of continuous improvement in the organization. This results in people having the ability of applying the knowledge to enhance job outputs and products, which contribute to the success of the organization.

In this paper, we aim to study on the characteristic of learning organization and investigate deeply into what kind of knowledge that an organization must retain in order to become sustainable learning organization by using the case study of Toyota Motor Thailand to be as an example for an effective learning organization.

One of the renowned and well-known theories of learning organization was defined by Peter Senge. Senge wrote the book "The Fifth discipline" in 1990, which explained the five disciplines that are the major foundations for building the learning organization. The five disciplines are personal mastery, mental models, shared vision, team learning and system thinking.

The first one is the personal mastery. According to Senge, personal

mastery is the discipline of continually clarifying and deepening our personal vision, of focusing our energies, of developing patience, and of seeing reality objectively (1990, p.7). The people who have personal mastery are the ones who understand the tension between the reality and the vision of the organization.

Moreover, they need to understand the linkage between individual learning and organizational learning including the commitment that is greatly required in order to contribute to the organization success. These people need to continuously learn new skills and able to apply the skills to drive the company to move forward. Therefore, this group of people will never stop learning. Instead, they will strive and drive the growth and development of the organization.

This concept is also agreed by Pedler et al. (1991). They identify a learning organization as “an organization that assists in facilitating the learning of the members to continuously transforms itself”. Moreover, according to Pedler et al. (1991), learning organization refers to continuous learning and the development of everyone who work with the company as well as self-development, which contribute to the integration of individual learning and company learning together.

The second one is mental models. According to Senge, it is the assumptions and generalizations that influence how one understands and interprets the organization (Senge, 1990a, p. 8).

Normally, people act based on their subconscious by not aware of their own mental models or the assumptions that are beneath our actions. However, in the mental models concept, we need to learn to investigate the assumptions that guide our actions and start to think freely about our viewpoint towards the organization. Therefore, people will not be limited and restricted by previous assumptions and practices and able to address more innovative ways to identify problems and locate solutions. In this way, employees would be able to share different viewpoints and have shared understanding to work as a team and drive the organization to the success.

The third is the shared vision that makes it possible for members of the organization to understand the future its leaders want to create (Senge, 1990a, p. 9). This is very important because the vision is developed from many people in the organization, which means that every people must understand, and work together towards the vision. Therefore, the shared vision must be meaningful and significant to

the employees' individual visions so that they will be willing to contribute towards the goals.

Moreover, the shared vision also brings the benefit of creating a guideline for everyone to follow, which points all staff to have the same focus on the direction of the organization. This makes everyone in the organization to work collaboratively and complementally with each other to achieve the organization goal.

The shared vision concept of Senge also matches with the theory of Watkins and Marsick (1993) that learning organization should possess the ability of empowering people to a collective vision. This is to allow the employees to realize and aware of the company vision in order for everyone to work towards the same direction together.

The fourth one is the team learning, which is another key component of the learning organization because teams are the fundamental learning unit (Senge, 1990a, p. 10). This is very important that the organization must provide the open environment for discussion. Everyone must work together to drive the output since a team can produce better result than an individual does. Therefore, it is very critical that team needs to promote continuous learning in order to achieve the desired outcome.

Moreover, According to Kolb's (1984), learning organization consists of a process where knowledge is developed and created from the transformation of team experience. Therefore, it reflects that learning organization is about the group of people that share knowledge and learn from others in order to contribute to the success of the learning organization.

The fifth and final discipline, which brings the concepts of the learning organization together, is systems thinking (Senge, 1990a, p. 6). Systems thinking means the ability to see and understand the relationship of the system and to see beyond the ordinary process into more complex and continuous processes. Systems thinking encourages an organization to see that previous routine solutions will not be able to solve the problems and small changes can lead to big results. Therefore, systems thinking helps to bring the other four principles together in order to build a learning organization.

According to Watkins and Marsick (1993), learning organization should

establish systems to capture and share learning. So, this suggests that system thinking is needed in the learning organization as it helps employees to be aware of organization processes, activities and actions in order to be able to share knowledge with others and work together to achieve organization goals.

These five disciplines are claimed to be the factors that an organization needs to follow if it wants to become a learning organization. So, this paper will study and investigate if these specified factors match with the success of being learning organization of Toyota Motor Thailand or if Toyota Motor Thailand offers more success factors other than these five disciplines that contribute to the learning organization achievement.



Source: <http://www.comindwork.com/weekly/2012-04-16/productivity/fifth-discipline-by-peter-senge-is-systems-thinking>

Figure 2.3: Learning organization framework of Peter Senge

CHAPTER III

RESEARCH METHODOLOGY

This chapter introduces the research methodology used for this study and how it has guided data collection and data analysis. In order to answer the research questions that in what ways Toyota follow and utilize the learning organization practice developed by Senge (1990) and what are the examples and practices that prove that Toyota is a learning organization, the qualitative research is used.

The qualitative research helps to provide descriptions of people's experience, knowledge and opinion based on the given research issue. Moreover, the qualitative research aims to seek answers to a question, collect evidence and produce findings that are applicable to the topic.

Furthermore, the in-depth interview technique is adopted as the data collection approaches because the interview technique provides the benefit that enables the interviewer to explore the views, opinions, knowledge and insights of individual on the required matters. The interview technique is the method that offers more detailed information and data than other techniques because the interviewer can ask questions directly to get the results and insights of the interviewee.

For the interview technique, the open-ended questions are used because the open-ended questions allow an unlimited number of possible answers, as the interviewees are able to freely express their opinions towards the issue because there is no limitation of choices to force them. Therefore, their viewpoints and opinions will be shared freely and spontaneously.

Moreover, the open-ended questions permit the respondents to be able to answer the questions in detail and clarify the responses. The open-ended questions result in the unlimited number of possible answers, which lead to creativity and freedom of speech.

The list of open-ended questions is developed based on the necessity of finding out about learning organization issue in Toyota Motor Thailand organization.

The developed questions enable the interviewer to be prepared when asking questions with the interviewee. It is also a benefit for the interviewer in term of controlling the direction of the questions to gain the most effective results from the interviewee and have efficient time management control.

The questions used in the interview are provided as following.

- What do you think is the definition of learning organization?
- Do you think Toyota is the learning organization?
- In your opinion, what are the factors that contribute Toyota to be the learning organization?
- What are the examples that prove that Toyota is the learning organization?
- What are the learning organization factors that Toyota has but other organizations do not have?
- What are the learning tools that help Toyota to be the learning organization?
- What kind of knowledge do Toyota retain in the organization?
- What type of knowledge that Toyota needs to keep retaining if it wants to achieve the sustainable continuous improvement organization state?

Moreover, in order to ensure the validity of the data, the probing technique is adopted. The probing question is a question that is asked following the primary question in order to try to find out more information concerning the question. Therefore, the probing question cannot stand alone as it helps an interviewee to think more and deeply about the specific issue. The probing questions include “why do you say that”, “what are the examples” or “how can you verify the assumption”.

The sample for the interview consists of 7 people who are currently working or used to work with Toyota Motor Thailand. With this group of people, I could ask and investigate about the linkage between the company and learning organization issue for data analysis in the next chapter.

CHAPTER IV

DATA ANALYSIS

In this chapter, the results of data analysis are presented. The data were collected and processed in response to the question of linkage between Learning Organization and Toyota Motor Thailand. The findings presented in this chapter illustrate the key indicators that demonstrate that Toyota Motor Thailand is the learning organization.

The interview was conducted with 7 people who are or were Toyota employees and management. The interview session took approximately half an hour to one hour per person. The average age of the interviewees is 37 years of age. The interviewees consist of 4 male and 3 female. The average year of working experience is 9.71 years. The details of job positions are 1 Deputy General Manager, 1 Manager, 2 Assistant Managers, 2 Senior Supervisors and 1 Chief Engineer.

Based on the findings from the interview, all interviewees agree that the practice of Toyota Motor Thailand responds to the concept of Learning Organization in many ways. Therefore, this chapter will show and demonstrate the facts and examples that prove Toyota Motor Thailand is the Learning Organization.

The first characteristic of Learning Organization according to Senge (1990) is Personal Mastery. All interviewees express their opinions that Toyota employees possess this quality as they have the ability to adjust quickly to changes and are willing to study new things.



Figure 4.1: Toyota way principle

The example of Personal Mastery can be clearly shown in “Toyota Way” which is the shared value that all employees are expected to follow and perform. “Toyota Way” is also called the DNA of Toyota people.

The Toyota Way consists of 2 main pillars, Continuous improvement and Respect for people, and 5 values, Challenge, Kaizen, Genchi Genbutsu, Respect and Teamwork.

Personal Mastery closely links with the second value, Kaizen, which means Continuous improvement. Toyota encourages its employees to never be satisfied with the current situation and to keep improving responsible jobs or work processes to continue the ongoing learning cycle.

This can be seen from the activity called “Idea Suggestion”, which is the activity that stimulates the employees to propose useful ideas that are beneficial to the company in term of cost reduction, efficiency enhancement, safety and environment conscious or quality improvement. The proposed idea will be evaluated by the committees and money reward will be given to the staff based on the criteria of problem awareness, creativity, idea usefulness and possible application. In one year, the company spends around 40 million Baht on idea suggestion reward to employees. This clearly reflects how importance the company values its employees.

Figure 4.2: Idea suggestion form

Moreover, Toyota also encourages the concept of Yokoten, which means knowledge sharing across the company to level employees’ knowledge on a specific issue. This is truly important in the learning organization because all employees must have the same level of understanding on every subject in order to stimulate the learning cycle in the organization. Furthermore, the employees can also share their received knowledge to others as well in order to embed “Personal Mastery” characteristic in all staff.

The example of the yokoten activity is shown in the Safety Yokoten e-mail sent to all staff in the organization. This type of mail is commonly known by all Toyota employees since the Safety and Environment Promotion Office frequently send this type of e-mail to “yokoten” the accidents, both fatal and non-fatal, that occur in the company, suppliers and dealers to share and acknowledge the cause of accident and key safety points to prevent the reoccurrence of the accident.

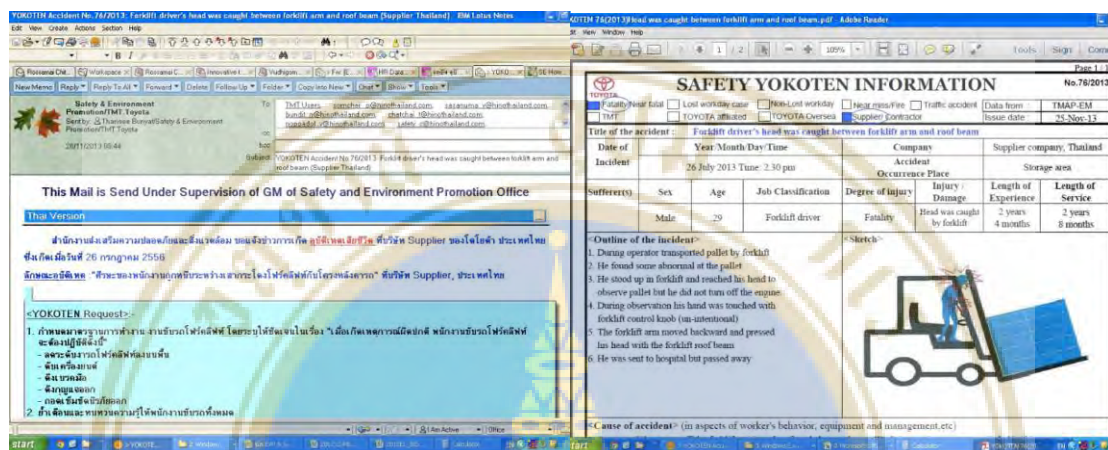


Figure 4.3: Safety yokoten e-mail

Moreover, another system that enhances the Personal Mastery characteristic is the Job rotation system. In Toyota, job rotation system is implemented across the organization as HR department set the policy that people who work in the same department for more than 5 years are required to rotate to other department in order to encourage knowledge and skill sharing company-wide. Furthermore, one of the job promotion criteria for management level is to have experience of job transfer in at least 2 departments before they can be promoted to the upper level.

The second characteristic is mental model, which refers to the thought and perception towards own acts and consequences and the ability to adjust own self to respond to the change of the world.

Based on the findings from the interview, the mental model concept matches with the first value of Toyota Way that is “Challenge”. Challenge refers to the long-term vision and the ability to strive to win new challenges with courage and creativity to realize the ultimate goal.

The interviewees express their opinions that the Challenge value of Toyota Way encourages the employees to not stay in the comfort zone and do things the way they usually do. However, they need to go beyond the normal practice because following the same routine actions yield the similar results every time. New discovery and innovation will never be exposed unless we change the way we do things.

Therefore, Challenging mind plays an important role since it empowers people to be determined and to try their hardest to outperform their last results. This would stimulate them to break through the ordinary routine and to explore into another new world and experience. This leads to the acceptance towards change in employees' minds since they are willing to face with new challenges and experiments. So, the mental model is reflected through the Toyota Way value of "Challenge".

The third characteristic is the shared vision. Shared vision refers to the ability of a group to form and have a common picture of a desired future. According to Senge (1990), a shared vision is "a vision that many people are truly committed to, because it reflects their own personal vision. Shared vision is vital for learning organizations because it provides the focus and energy for learning."

For the shared vision, Interviewees share their opinions that Toyota has established a system of Hoshin, which is the policy management. There are 5 levels of Hoshin, which indicates the policy direction for each level. All Hoshin are aligned together. The highest level of Hoshin is Corporate Hoshin. This is the ultimate goal and direction of the company in a specific year. This level of Hoshin will be set first indicating the big picture of what goals the company needs to achieve this year.

The next level is the Division Hoshin. At Toyota Motor Thailand, there are 5 divisions, Administration, Corporate Strategic Planning, Marketing, Quality Assurance & Manufacturing support and Manufacturing.

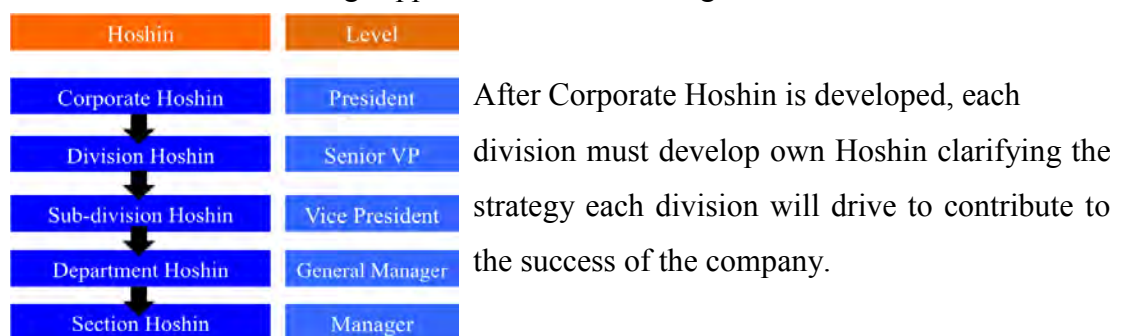


Figure 4.4: Hoshin alignment diagram

company situation as well as the future direction that the company will focus on, so everyone would equally be aware of the current position.

The next value is the Team Learning. This is the one that proves to be the strength of Toyota according to the interviewees. The example of team learning can also be found in “Toyota Way” that teamwork is included as the last value. Toyota values teamwork, as they believe that a group of people will be able to perform work better than only one person. Moreover, Toyota Way also indicates that teamwork helps to stimulate personal and team growth as it encourages the knowledge sharing among individual and team development.

The example of Teamwork in Toyota can be seen from the activity of Quality Control Circle or QCC. QCC is the team activity that encourages the employees to find the problems in responsible work process and develop countermeasure and take actions to eliminate the obstacles and improve job quality. QCC steps include exploring the current situation, analyzing root cause of the problem, taking first countermeasure, improving countermeasure then implementing final countermeasure.

QCC group activity consists of 7-10 members. The presentation round ranges from the department round, division round then the company round with 10 final teams will be presenting on the stage and will be judged by QCC committee that consists of company Top Executives. The winning QCC team will have the opportunity to go to present in Japan in front of Toyota Motor Corporation (TMC) Top Executives.



Figure 4.6: QCC form

Moreover, the company also shows great support in encouraging the employees to participate in team learning activity by setting up QCC hour for 2 hours per week to provide the opportunity for employees to do QCC activity solely, especially for Production staff who will not be able to do QCC activity in ordinary working hours since they are required to position at the production line all the time. As the company sees the importance of team learning through QCC activity, they allow the staff to take 2 hours off per week to do QCC activity

Furthermore, in the production line, there is weekly plant visit where Top Management will observe and visit production plant to check abnormality and give comments for improvement to the staff. This is also the opportunity to stimulate team learning, as employees will be able to learn new knowledge from the experienced executives to apply and improve own jobs.



Figure 4.7: Plant observation and visit

This is also the good opportunity for staff in lower level to meet and learn from Top Management. It also demonstrates that the company pays attention to the staff no matter what positions they are in. This encourages the staff to be proud and have ownership in their responsible jobs since they know that the Top Management shows interest and are aware of their contribution.

The fifth and final characteristic is the system thinking. This characteristic supports the fact that Toyota is the learning organization through the utilization of TBP tool. TBP or Toyota Business Practices is the common tool that is used across all companies in Global Toyota network to improve own work. TBP consists of 8 steps based on PDCA cycle.

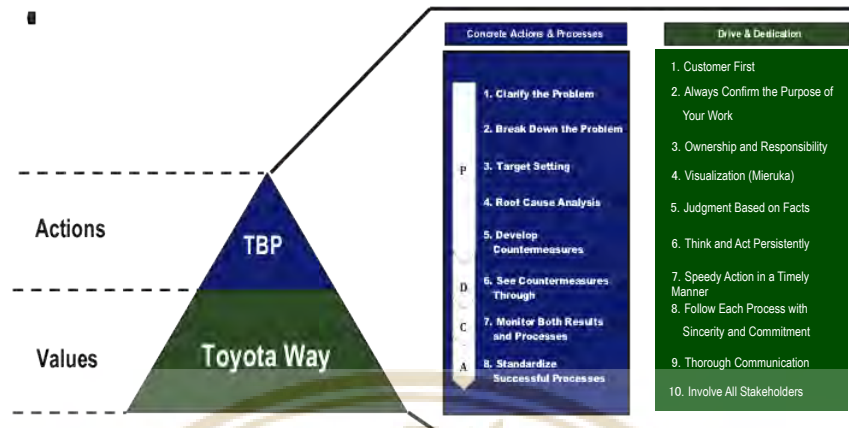


Figure 4.8: Toyota Business Practices framework

Every employee is required to use TBP steps and format when they make proposal to propose new project, request budget approval or present new product development. TBP steps include Clarify the problem, Break down the problem, Target setting, Root cause analysis, Develop countermeasures, See countermeasures through, Monitor both results and processes and Standardize successful processes.

TBP encourages system thinking, as it requires the employees to demonstrate logical thinking in analyzing the problem and its root cause in order to develop efficient and rational countermeasures to eliminate the problem.

Moreover, TBP is currently used as one criterion for job promotion where all promotion candidates need to develop one project using TBP format for 3 months, then present to Top Management. The Top Management will evaluate candidates' TBP and decide who should be promoted based on their logical thinking and potential performance via TBP.

Furthermore, every employee in Toyota is required to develop one TBP per person per year to compete in the activity called "TBP Forum", which has been conducting consecutively for four years. TBP Forum is the activity that selects representative ranging from department round, sub division round and division round to present on stage and receive individual reward and also gain recognition from Top Management.

Moreover, the TBP paper of division representatives will also be posted on company KM to allow every employee to access and learn from the Best Practices to apply when they develop their own TBP. This also encourages the learning cycle in

the organization. Therefore, based on the results from the interview, all agree that TBP is the tool that strengthens Toyota employees' logical and system thinking.



Figure 4.9: TBP Forum event atmosphere

So, these all are the interview results that I interview with 7 Toyota employees and Managements. Based on the interview, everyone agree that Toyota is a learning organization according to the Fifth Discipline of Senge (1990). The table below demonstrates a summary of learning organization theory and Toyota Motor Thailand practices and examples.

The Fifth Discipline (Senge,1990)	Toyota Motor Thailand practices and examples
1. Personal Mastery	<ul style="list-style-type: none"> • Toyota Way principle (Kaizen value) • Idea suggestion activity • Safety yokoten e-mail
2. Mental Model	<ul style="list-style-type: none"> • Toyota Way principle (Challenge value)
3. Shared Vision	<ul style="list-style-type: none"> • Hoshin(Corporate, Division, Sub division, Department, Section) • President's message
4. Team Learning	<ul style="list-style-type: none"> • Quality Control Circle activity (QCC) • Plant observation and visit
5. System Thinking	<ul style="list-style-type: none"> • Toyota Business Practices (TBP)

CHAPTER V

CONCLUSION

In this chapter, the main findings with regard to the research questions are summarized and general conclusions based on the findings of the studies are described. Furthermore, the strengths and limitations of this thesis are considered and suggestions for further research are presented.

Based on the interview with the interviewee, the most strong point of Toyota Motor Thailand of the five characteristics of learning organization is the Team Learning. One of the main reasons is that teamwork is included in Toyota Way, which is the DNA of Toyota that all employees are required to follow. This reflects that teamwork is highly valued in the organization and is utilized in many activities.

At Toyota, we have a quote from Kiichiro Toyoda, the founder of Toyota Motor Corporation, that “Each person fulfilling his or her duties to the utmost can generate great power when gathered together; and the chain of such power can generate a ring of power”. This signifies the importance of teamwork at Toyota.

Moreover, since Toyota is a car manufacturing company, therefore, the culture of the production company relates to the fact that its workers are required to work as a team as the working styles include many processes that need teamwork to accomplish and pass on to the next process. Therefore, team learning plays an important role in driving the organization to be the learning organization.

On the other hand, the results from the interview demonstrate that the less evident of learning organization factor of Toyota is the “mental model”. The reason why the mental model is recognized as the least evident characteristic among the five is because it is difficult to demonstrate a concrete example that Toyota practices, which matches to mental model while other characteristics are clearly reflected through many documents and activities.

Furthermore, one finding that can be observed from the analysis is Personal Mastery is the characteristic that needs the most encouragement and support from the company. This connects with the fact that the stereotype and characteristic of

Thai people are often perceived as shy and “Sabai Sabai”. Thais do not like to argue or voice opinions in the public.

Therefore, in order to encourage Personal Mastery trait in the company, Toyota invents several learning tools, which assist in developing this specified characteristic. One of the efficient tools is the idea suggestion form that intends to stimulate employees’ participation towards idea suggestion activity. Moreover, this form also helps to reduce the difficulty of proposing new original ideas by simplifying the form to make employees feel free to write the ideas easily.

Referring to the research questions on what kind of knowledge that Toyota needs to retain if it wants to achieve the sustainable state of learning organization, the interview results reflect some insights on this issue.

In order to accomplish the stage of being sustainable learning organization, the first knowledge that the company is required to preserve is the standard operating procedure or SOP. In Toyota, SOP is needed to be developed in every work and job processes. SOP is necessary for learning organization since it demonstrates step-by-step of instructions that allow anyone to perform the task in the same standard and manner.

Moreover, the SOP also acts as a written procedure that helps employees to easily perform the jobs as the guidelines and directions are documented. The SOP can also be used as the measurement to assess employees’ performance. Furthermore, the benefit of SOP is that it leads to the consistent results in the operation that will enable the company to produce high quality products and services because the work standard is set and measured continuously.

The next knowledge that needs to be retained in the learning organization is the vision and direction of company. For Toyota, this refers to Hoshin or policy management that is already mentioned in the previous chapter as it indicates the company annual goal and direction. The company vision and direction are needed to share to all employees to enable everyone to know and understand the direction of the organization so that they will be able to perform and drive their work to contribute to the company vision.

If the employees do not know the direction of the company, their motivation would be low and the confusion and bewilderment would arise. This

causes the low productivity and slow growth of the company, which ultimately act as the barrier to achieve the learning organization state.

Another knowledge that is required to keep in the learning organization is the specific knowledge that the company possesses and is different from other companies. This refers to the knowledge that is unique and can be found only at the company. For Toyota, this is the Toyota Production System, Toyota Way and Toyota Business Practices. This knowledge is referred to as the DNA of Toyota and is used only in Toyota network.

This type of knowledge is truly and significantly important because they are the knowledge that is the roots of the organization. Therefore, this kind of knowledge is necessarily needed to be specially retained in the organization because if the knowledge is not preserved and lost to other companies, it would cause the huge damage and setback to the company since the company would lose one of its Core Competencies that is the core knowledge of the company.

However, there are also some limitations found in this case study. The first limitation is the number of interviewees that it involves only 7 people who do the interview. Moreover, when developing interview selection plan, the interviewees should be selected based on diverse profiles and backgrounds in order to provide the different opinions and thoughts towards the debated issue. Therefore, the number of interviewees could be increased and interviewees should be selected based on different backgrounds in order to gain more diverse insights if further research is needed.

Another limitation is that this case study purely focuses on learning organization characteristics of Toyota. However, in order to develop more analysis towards the learning organization factor, other companies are also needed to be investigated regarding this issue as well.

Since this case study only emphasizes on Toyota company, the reflection and conclusion involve only the examples and case studies of a specific company. If further research is required, the comparison of best practices regarding learning organization characteristic between Toyota and other leading companies should be discussed.

In that case, more concrete ideas and concepts would be provided towards the current state of learning organization that Toyota achieves compared to other

leading companies. Moreover, it would indicate the suggestions and recommendations that Toyota should follow in the future in order to sustain the leading position of learning organization in Thailand.

In conclusion, based on “The fifth discipline” theory of Senge, Toyota Motor Thailand is the learning organization because its common practices match with the characteristic of learning organization as the mentioned examples. However, the company also needs to benchmark itself with other leading companies as well since it would be a good opportunity for the company to realize and improve its position of learning organization in Thailand.



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