CRITICAL FACTORS FOR THE CUSTOMER WEB APPLICATION (CWA)

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ABSTRACT

The objectives of this study is to analyze the critical factor that could drive the technology change successfully including how change readiness is helpful to reduce the detrimental effects on the work process change from manual to systematic. The research will also scope on the levels of acceptance from technical professional background employees toward transactional change regard to new system. The research methodology was applied by using structure interview together with conversational analysis to study the implementation process of Customer Web Application in utility industry.

The result was found that effective communication is the one of main critical factor because of the hierarchical organization structure including individual professional background. Therefore, it leads to increasing of an opportunity to resist to any change that may occur. To identifying the critical factors to accept change will be a useful guideline for the organization and change team in order to drive the change to accomplishment together with an improvement of effective communication.

KEY WORDS: Change and Change Management/ Managing change/ Communication, Hierarchical organization and structure/ Process Management

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CHAPTER I
INTRODUCTION

Nowadays, progression of technology and growing demands of customers as well as employees have influenced the organization to introduce fast response tool that providing beyond-expectation service. To meet these requirement, organizations are going to change their end-user operating systems. Most of the company wanted to implement new technology system since adapting to new technology change continuously to remain competitive in order to improve operation process. However, when implementing a new technology system, change agents often faces an unwanted attitude from potential users – for one reason or another and the success rate is low. Therefore, the implementation of new tool seemed to be a problematic in most of the organization.

The system implementation process often driven by several strategic considerations which are the need for an improvement in operational procedure including business efficiency. However, research should pay attention to dynamics of change process rather than point out only organization structure (Pieterse et al., 2012). For this reason, the studies will look at the reason why people resist the system implementation in difference group of people and thus contribute to the understanding of resistance, which is momentous to success rate of change. People from different professional groups that cooperate in a change process will obvious give different meanings to the implementation situation. They could interpret change differently and it will reflect the language they use and their behavior. From these differences including different understandings can lead to negative affections. The change agents or project initiator should proactively deal with the problems instead of reactively confronting it in order to avoid the problems that may occurs before, during and after the system implementation process.

Customer Web Application (CWA) designed to improve process efficiency by providing up-to-date data. The need of efficient flow of customer information within organization across departments (Nijher, 2016). CWA helps in data analysis and projecting a strategy in future in terms of selling utilities to industrial users. The CWA implementation would influence some departments that require customer information to their daily operation which are finance, asset management, power plant operations, business development, sales and marketing. The purpose of uses would also be different for example: finance team will use customer information to run return on investment while asset management use to generate reports. Even though it benefits to business efficiency and individual operation but the success rate in terms of people's usage is still low. Most people are unaware of system's capabilities and effectiveness. Moreover, this paper will shed light on the language that being used among each group of participants who has different professionals background together with theoretical that needs to be used when implementing change. Most of the time managers do not have incentives and ability to apply theoretical models in practice which could be one of the main obstacles to improved competitiveness (Fredriksson, 2016)

The data brings out from the interview between different groups of professionals and positions including discourse with technical people who are involved in the Customer Web Application implementation process which considered to be a group that very difficult to communicate with in terms of openness for feedback and explanation from others. This paper will firstly review the literature on aspects of change, communication, organization structure and project management in order to manage change successfully. Subsequently, the research methodology will be discussed and the results of the qualitative data collected will be analyzed in the finding. Following with the conclusion of this study including recommendation for further research as well as how to improve the success rate of CWA implementation.

CHAPTER II
LITERATURE REVIEW

2.1 Change

Change is like a journey; it takes long time to accomplish the goal. It is a shift from 'current state' where people experienced what they have known or done through a period of 'transition state' to reach at a new method of doing things or so called 'future state'. Change can happen gradually but require more than one-time announcement by management level or change agent. It cannot be succeeding through training or the new manual handout regard to new way of doing things. But change is something that organization and people should move along the change processes together so that they can come to the common understanding and also enhance knowledge and skilled to apply the new ways of doing things in life / organization (Hall and Hord, 2001). Individual cannot change according to their own wills. Therefore, it required a lot of time to be succeed since the process will take three to five years to be done.
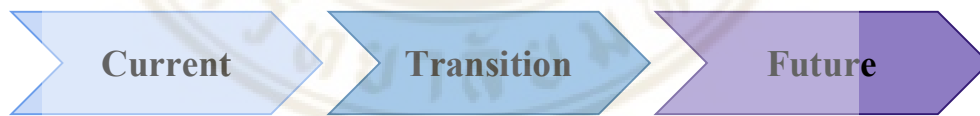
The Current State - called as known. It defines who we are as well as talking about how things are done today. For Transition State - it is a challenging state because it is an unpredictable state and disorganized. It is often related to emotionally of people and hard to control. Therefore, it is affecting the staff's productivity to declined. Lastly, the Future State or called as unknown state because it can worrisome or better that the Current state in

terms of performance. Sometimes personal and professional goals may not match so there is a chance that people may not be successful in the Future State.

2.2 Managing change

Managing change is about handle the complexities together with addressing the issue of its purpose including evaluate, plan and implement in both operational and strategical (Paton and McCalman, 2008). According to Robert and James (2008) says that change management is a combination for the best fit of business strategies integration which designed for result-oriented. To manage change successfully is not a choice for one party; technological, organizational or people but it required involvement of all parties. When change on developing or designing new system embarked, it has wider impact. Behavioral become a major challenge for successful implementation than technical part which make the set of challenges becomes even larger than usual.

Most leaders or innovator who can manage technical impacts can sharply decrease the behavioral resistance to change including to new technology that use to increase productivity. Most organizational change involves some threat and personal loss. It may vary from stability of a job and disruptive to a routine work (Riley, 2000). The Change management definition have been stimulated by Peter Drucker (Drucker, 1999) as to whether one could manage change by themselves or conduct the change, or support the change occurrence within an organization.

2.3 Communication

To achieve change goals, effective communication is a critical success factor. Change agent should provide different explanation that understandable in each groups because people decode message differently. Consequently, the project initiator should have

considered ways and forms of effective communication and approach communication strategies that match with those groups understanding. The project implementer should make sure that everyone understands the issues, challenges and benefits of the project completely and clearly from start until end process of the implementation. Moreover, keep in mind that employee willingness to change is depends on level of an awareness and acknowledgment in term of reasons and benefits for change (Sidikova, 2011). Most of the project implementation often failed because project implementer forgot to monitor the understanding of individual and capabilities to deal with change. It could reflect to the lack of continuity of communication between change agent and participants. The project teams should have precise understanding and prepare the communication strategies to match with individual background before begin the project so that the project will not stuck in the middle of the implementation (Cervone, 2014).

As already mentioned, different communication style will work differently with each groups. For example, what works for asset management team does not work for finance team because they have different background and ability to decode the message is dissimilar. Which mean the project implementer should not anticipate to collaborate with all stakeholders in the same way. The project implementer or so called change agent, should consider various techniques that will catch people attention and gain buy-in from various groups in an effective way (Robert et al., 2015).

2.4 Hierarchical organization and structure

There is various meaning of organizational structure but mainly organization structure is a format of work and how is the communications style among each other including the fundamental interaction across departments in an organization (Cyert and March, 2007). It defines the formality of reporting line which identifies scope of individual, managers and principals control (Daft, 1998). It can indicate that organization structure is the layer which defines individual roles and responsibilities including power, job status, the

degree a person has to access an information, rules and regulations. Hierarchical is often identified as a complexity, high formality, high power distance and centralization. This kind of organization can lead to lack of innovation.
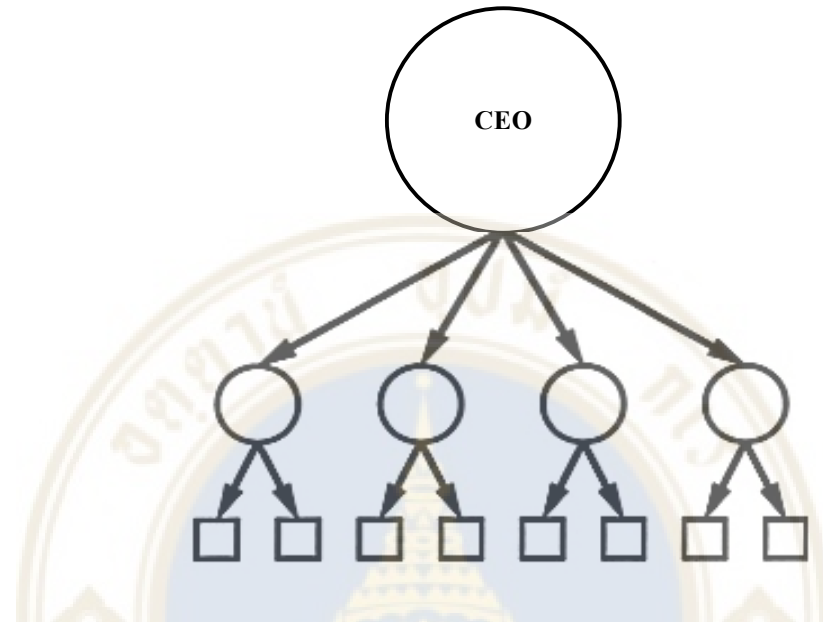

Figure 1: **Example of Classic Hierarchical Model**

According to the structure in Figures 1 shows that manager is mostly dependent on CEO or top executive's decision and organization' policy. In any project implementation, top management often have high effect on its success. A project initiator, implementer or change agent here will responsible for its outcome. However, they can expect support from others in the organization especially an involvement of senior managers. This means that the more involvement top management has can help project implementer to successfully complete the project (Besner and Hobbs, 2008). According to a studied of Ofer Zwikae (2008) about top management involvement mentioned that there is no one size fit all depends on different industries, cultures and level of project complexity. Therefore, different support style may be best used in different project situation. This paper will partly discuss about top management support and how it is important. However, the hierarchical structure has both

advantages and disadvantages for project implementation in which will be discussed in data analysis of this paper.

2.5 Process Management

Processes management turning to be very imperative in all modern organizations in every industry in order to improve organizational processes. In a literature review of Palmberg (2009) on process management point out that there are numerous process and process management definitions but most of them somewhat resemble. Although, the process management became very popular nowadays, many organizations continue concerned about the implementing issues and problems with maintaining the new process management as they have been experience problems during implementation. In a study of Hansson (2003) found that many companies think that working with process management are the problems for them.

In parallel, many organizational implementers seem to be frustrated with their senior management who lack of drawing attention on the process management. According to process management implementation, there are various objectives that have been found in the research of many researcher, for example; to remove obstacle between each functional groups (Jones, 1994; Llewellyn and Armistead, 2000); to improve the quality of group learning within the organization and its environment (Bawden and Skerritt, 2002); and to improve organizational effectiveness as well as enhance business performance (Jones, 1994, Elzinga et al, 1995; Armistead et al, 1999).

Therefore, to understand the whole implementation process and the fits with the organizational system; top management support, project initiator, and cooperation among interdepartmental (Ranganathan and Dhaliwal, 2001; Ariyachandra and Frolick, 2008, Bandara et al, 2005) are considered to be the critical success factors for process management. Since the new process implementation creates a change in overall - organizational system; starting from relationships between the functional organization,

workflows, tasks or even structure. For this reason, it is needed to develop an understanding of how the new business process is aligned with the overall organizational system.

2.6 Theoretical

The theoretical that will be discussed in this study are Lewin's Change Management Model and Kubler-Ross, Stages of Change

2.6.1 Lewin's Change Management Model

The framework is in Figure 2, which was developed by psychologist, Kurt Lewin in 1950s. This concept is still used till today. This theory mainly focused on the social behaviour since the author believed that individual behavior is reflects from a group (Bernard, 2004). People are changed not because of their inner forces but by external and environmental determinant. Inner factors represented instincts, drives and individual motivations (Grizzell, 2007). Therefore, major affected for individual behavior is the social environment so to start the change, one should focus on group behavior. As Lewin's primary interest is to solve social conflicts of behavioral changes. His model is simple; *Unfreeze - Change - Refreeze* framework is easy to understand and use to manage change.
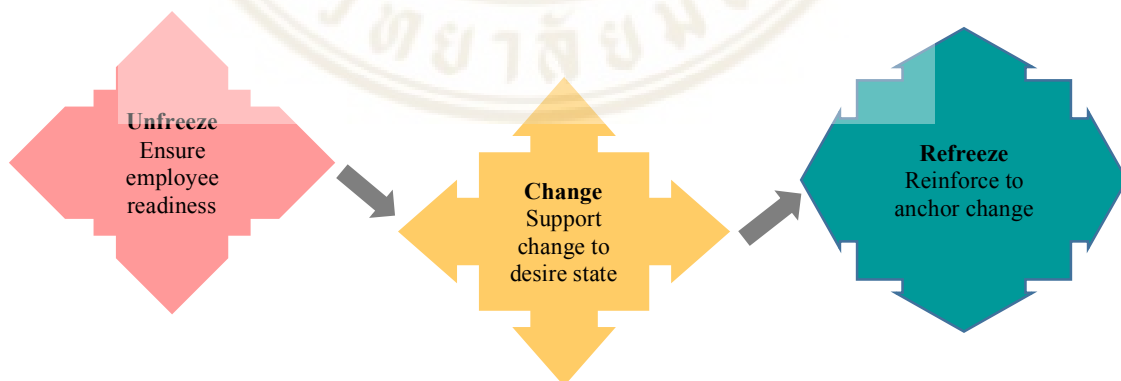

Figure 3*:* **The Lewin's Change Model**

Although the idea of change management is popular in most organizations and all industries but how each organization manage change as well as how successful it is depending on the nature of the business, the people who involved and mainly is the change itself. The author mentioned that majority of people tend to prefer work within their comfort zone. A significant point of the change implementation ancillary on people understanding and how they handle the change procedure. The web-based implementation is a transactional change that deals with group behavior who familiar with manual work process more than 10 years. However, most people tend to worried about the change whether there is more change or not so during the Refreezing stages would cause individual ineffective in terms of daily operation. For this reason, The Kubler-Ross, Stages of Change is needed to be used to support individual emotion since change is huge challenges for employees.

2.6.2 The Kubler-Ross, Stages of Change

The Kubler-Ross model in Figure 3 will be used to identify the stage of individual emotional since the change is the biggest challenges to corporate employees although it is a minor change. Arnold, 1995, stated that "attitude reflect personal inclination to think, behave or feel either positive or negative manner towards the object".
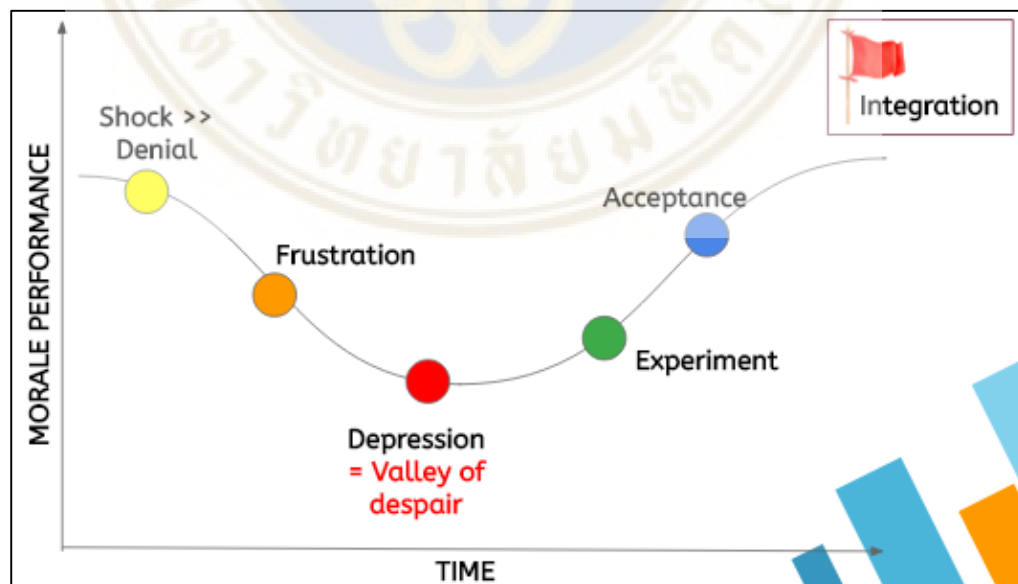
Figure 3: **Stage of Change**

Types of change in every organization do not matter because it impacts employee's emotional in all levels either in positive or negative way. This means project implementer should closely support individual in order to provide feedback and help through each emotional stages. As said *"greater understanding helps reduce uncertainty which inevitably accompanies change"* (Edwards and Walton, 2000). However, change can be received in various way either excitement, anger or fear. There is some individual difference variable such as personality type that differentiate individual response to change. The data analysis section of this paper aim at analyzing the different personality factors and attitudes towards organizational change.

CHAPTER III
METHODOLOGY

3.1 Data collection

To answer the research questions, a qualitative data collection methodology: structured interviews will be conducted with four groups of interviewees, namely Viewer, Owner, Management and Technical. This qualitative research aimed at explaining the effective communications with people in four different groups during an implementation process. The structure interview allows me to gain insights information from each one that could be difficult to obtain through the use of quantitative and survey data research design. The in depth interviews are used to explore and understand a person thoughts, ideas and behaviors. It is enable interviewees to express their own thinking and feeling freely. For this reason, a converse analysis could provide insights information in the cause of resistance to change. For qualitative interviews there are approximately 19 interviewees. The specific number of each group are defined as shown in the Table 3.1 below.

Table 3.1 Number and type of interviewee

Types of interviews	Viewer	Owner	Management	Technical
Number of interviewee	10	3	4	2

Notes: the end users consist of viewer and management from several professional backgrounds who need access to customer data. The key users are owner who responsible for system development and encourage end user to use the system.

The interviews will be conducted in Thai and English in both Bangkok and suburbs. A reason for chosen this methodology is it provided me with a rich-information in which different organizational levels interact and decode a message during the system implementation process. The interviews will take approximately 20 - 30 minutes in order to capture an important message about the Customer Web Application implementations. Furthermore, to make it easier for others who are not involved in this implementation, the words 'Customer Web-based Data implementations' might be used here and there. The reason for conducting in-depth interview will be explained to all participants in advance including a list of questions. Questions for structured interview are provided in Table 3.2.

Table 3.2 List of questions use in structured interview

Finding Factors	Interview Questions for Structured Interview
Hierarchical organization and structure	1. What could be the internal factors that impacts technology change in an organization?
Communication	2. What could be the integration that drive the technology change successfully?
Managing change Reason of Resistant	3. What are the main reason that make people resistant to change in your opinion?
Perception towards Customer Web-based Application	4. Do you think that the Customer Web-based Application is useful? and why (if not)?

The permission for interview will be asked via email and phone prior to the interview day. The interviewer will note down the main points and data will be used later to assist analysis. Open-ended questions will be asked regard to interviewees experience and perception towards the project implementation. It is to discuss their opinion on how

new technology affects their daily basis operation and also gather a preliminary perspective about technology changes in organization.

Table 3.3 Definition of each group

Role	Definition
Viewer	People in other department who wanted to access customer data and have limited view. They are able to view every information except price, discount and others confidential as well as unable to edit customer data.
Owner	Is a salesperson who responsible for particular customers. They can 'view and edit' their own customers information without interfering with the other salesperson data
Management	Person who are in Vice President position or above. They will be able to view all customer information including confidential such as discount and price.
Technical	Is a person who support the project implementation (customer web data), cooperate with supplier about team requirement as well as control the entire system or called system administration

According to theories of Lewin (1950) and Kubler Ross (1960) as mentioned in Literature review, there are certain things needed to be taken into account within changes. The steps of change from each model are necessary to be considered. And also the use of each model is different. Moreover, to study how to manage technological change in organization effectively, the studied from qualitative will be used to support data analysis as well as guidance for recommendation later in a conclusion of this study. However, it is

impossible to use steps of change to empowering organization broad-action and approaches the new organizational culture from this specific study. Since organization culture and structure is the transformational change. It related to organization strategies as well as the outcome is highly impacts to the organization performance.

CHAPTER IV
FINDING

After conducting the structure interview, the summary of data finding from 10 people who involved in the Customer Web-based Application (CWA) are analyzed. The areas that organization needed help with were to improve ways of communication, how to manage change effectively and troubleshooting regard to the new system. Moreover, hierarchical organizational structure seems to be one of the obstacle tem since it effecting people decision making. But as mentioned in data collection that it is impossible to approaches the new organizational culture since it is a transformational change. It is a biggest challenge for the company which required different change theory to analyze and overcome the problems that may occur during organizational change.

4.1 Individual perspective about internal factors that could impacts technology change in the organization

This questions point out the individual opinion of the internal factors whether they think it could impact to technology change or any new system implementation or not. From the interview with different groups of people found 3 main categories: organizational structure and behavior, participation and involvement of people following with knowledge and experience of people towards the technology and the system.

4.1.1 Organizational structure and behavior

It is about how people act within an organization. The way people react towards technology change depends on structure of organization, type of industry, size and majority of workers. Organization culture and internal integration process also reflected to behavior

of people. The company is functional structure with characterized of a top-down power, hierarchy of controls with centralized decision-making which affecting the implementation process.

The weakness of functional structure is lacking of collaboration across function. People focus only on their work and their goals without consideration of others. That means the project team could not make any decision by themselves regarding the Customer Web-based as well as the change target or end users have lack of opportunity to attend the implementation process.

The company is energy and utilities industry so most people are having technical professional background and average years of service around 5 years and above. It could lead to difficulty to change since they are used to manual work process. However, the languages that each one use to explain their expectancy and feeling can be linked to the specific background.

"*It is difficult to implement system in our organization because of hierarchical management style, there are too many layers and conservative which is a typical Thai organization*" (System administration)

"*...the power plant operation work should not be so difficult. They have to concentrate on operation part, not the administrative one. If it too complicated, then it will take too much time on unnecessary stuff…*" (Power plant manager)

"*I am ok with the CWA implementation but still doubting whether this new system is worth the investment and will everyone use it*" (Vice President project management)

"*...people are not willing to participate in any process but they will only when we send an email to their managers…*" (Project team / key user)

None of the staffs and management agree with the CWA system. Mostly, because they think it is unnecessary and will make work more complicated than the way it used to be. For this reason, if people really not understand the benefits and needs of the new system, it might create a big impact in near future.

4.1.2 Participation and involvement

The level of desire is varying depends on staff involvement and participation in the CWA project implementation. The system implementations often reduced control over a user's work. Therefore, every new system implemented often required "user participation and involvement" in order to be succeed. User's involvement directly related to staff's attitude toward the system. When there is an assistance provided through the implementer's experience, staffs will be more involved and participate in system implementation.

From the interviewed, it can interpret that enhancement of involvement can be accomplished when staffs have opportunity to make meaningful decision and suggestion during the system implementation and third parties support such as skillful implementer and top management. It can be separated into 2 groups which is owner or key user and viewer or end user.

4.1.2.1 Owner or Key user group

"...*old platform is outdated, we need a new platform that more convenient and paperless. However, the benefit of the system in term of work process is not clear...*"

"...*this system is useful for us (key user) but it is hard to trained technical people to use it since they are narrow-minded people and used to have an informal way of working but now there are too many procedures...*"

According to the statement above, shown an enthusiasm from key users regard to the new system and feeling of involvement, but the possibilities of Customer Web-based Application are not fully exploited. Technical people not tried to understand the benefit of it as yet. Key user group are involved in every process of the implementation. They understand the benefit of this project and clearly see the use of it. However, all of them struggle to explain to those technical professional people to understand the same things as they do.

4.1.2.2 End user group

From the interviewed with end user group, people from different background will looks at different angle. But most of them doubted the worthiness to implement CWA system. Perhaps, they are not involved in any system implementation process although they should have and also included lack of user-friendliness interface.

"*CWA is just like another company's system that required user familiarity. For me, it is convenient because I can access to customer data anytime even though it takes too much time than usual because of it complication. And sometimes, information was not accurate and not up-to-date*" (Power plant administration)

"*It is difficult for us to adjust to CWA system because of its complexity and lack of alignment in terms of customer information*" (Asset management coordinator).

"*We know very little about the CWA system; key user did not inform us everything. I think the old system doing fine and not so complicated. Why spend large amount of money and effort?*" (Vice President finance)

4.1.3 Knowledge and experience

The company have developed few new systems which required a lot of changes. Everyone needs to change the way they work. But will they accept the new system or not depending on how familiar are they and how often they are using the system through regardless of age and professional background.

People who have technical background, they are analytical, wanted to know the details and focused on actual work while administrative people look at general direction, have an eye for data collection and other administrative tasks. Admin people needed to use the system daily while technical people hardly use it. For this reason, those who have technical professional background have less willing to learn new technology unless it is related to their work.

"*…I do not have much time to learn new system since my job does not requires any interaction with those fancy systems…*" (Technical people)

While "*…There are too many updates files and versions so I confuse which is the latest for the old system so I like the new system more because I can track a person who keep changing customer information and people do not have to call me every day to ask for customer information…*" (Administrative people)

4.2 Critical factors that drive technology changed successfully

More than seventy percent of interviewees said that '*effective communication*' is the most critical success factor for technology change. Of course there are other factors but effective communication is the most challenging and difficult task in Customer Web-based Application (CWA) project. Since it involved many parties both external and internal. Internal people included managers of every power plants or branches which there are 19 branches so communication is the biggest obstacle.

Nowadays technology changing very fast so not every people can recognize the organization problems and identify which systems the organization needs to have in order to increase organizational capability. The effective communication is a key significant in creating the common understanding, and information sharing between the project team and end users. It is also to communicate results of each implementation stage. People should have common understanding of the needs and benefit of the system in order to avoid resistant.

Five people from viewer role and two people from management role said that they know about CWA when it almost finish developing and the less knows that CWA system existing when they requested for customer information. They were struggle to find it because of unfamiliarity with the system and lack of know-how even though they are the end users. For this reason, the communication should start early prior to the implementation as general information and announcement. Then continues inform, provide more -

information regard to implementation procedure including overview of the system and the reason for implementing in order to be consistent.

4.3 Main reason that make people resistant to change

There are many reasons that would make people resistance to change no matter what changes. But there is always main reason that most people in terms of key users and end users agreed on which is miscommunication while management level felt that lack of understanding is more critical and those who have technical background related to IT would say that lack of information technology knowledge and diverse needs is important. From these reason means that people in different group and/or education or experiences background would find the different reason that make people resist to change.

There is always two side of coins so when project implementer interviewed people in different level should carefully identify what each group value the most. Sometimes people might value the same things but what they think it is important might not be so important for the others. For example, management give significant answered on lack of understanding, it does not always mean that they value only particular answered. Management might also felt that miscommunication is important too but it comes after the understanding.

4.3.1 Miscommunication

Resistance to change typically occurs with both major and minor change. Key users and end users mentioned that *'miscommunication'* in terms of objectives, need, and benefit can interrupt the implementation process. When people did not understand the same message then the conflicts occur. For key user, they considered to be the project implementer, they feel that it is arduous to explain to technical professional of traditional power plant managers to understand because these people did not value the work process change but the results of work.

"*I don't know why they cannot understand what we are trying to says despite its usefulness to them, they just wanted to stick to the same old pattern of work. The old system might be useful for them but not useful for us*" said the project team.

Moreover, the technical people did not face any obstacle as those who work in administration role. Organizational that have most of their employees in a technical background will give importance on tasks rather than development which means the organization is not foster to change.

4.3.2 Lack of understanding

However, the management team level mentioned that the problem that make people resistant to change would be 'lack of understanding'. When management decided to invest in a new system, of course they wanted to gain as much as benefit as they could but when it is not aligning with the capability of the system then it could create a problem. "*I just wanted to gain greater benefits from implementing system so that we do not have to waste time implementing the next phase*" said management team.

The projects team felt that management team requires something inessential. Management looks at the angle of the investor but not from user point of view. While the key users or end users would also feel that management have lack of understanding on their needs but focus on own needs. Because management level value the amount of money they invested instead of employee's conveniences.

4.3.3 Lack of IT knowledge and diverse needs

For technical staffs who support the system mentioned that it could be the 'lack of IT knowledge' and 'diverse needs'. They are the middle person who transfers project team requirement to developer and vice versa. There are 5 members in project implementation team and each one of them have various requirement and understand things differently. All of them have very little knowledge in IT so when they explain things from developer side they will not understand much. So sometimes, it is hard to communicate

every requirement to the developer through email or phone call because when member of the team is not familiar with the interface of the system, they will not understand how it looks like.

"*…sometimes it quite hard to explain to project team to understand what develop says, they have so little knowledge about IT. I don't know how to make them see a clear picture of the system…*" said the system administration.

As human nature, people tend to prefer routines and lock themselves in comfort zone because it was more secure and predictable. Therefore, no matter what reasons people gives, it still related to poor communication. To enhance communication capability, the change team should understand nature of people. To communicate with people from different field of work and background would be one of the main obstacle but it will helps broaden your mind to open for new things and also view things in different angle if you learn to listen to them too not only being a speaker.

4.4 Customer web-based application usefulness

This question was asked in order to identify people perception from different position toward the CWA system. Staffs in viewer role or end users said it somewhat useful but they still cannot find the advantage of using the system because it is more complicated and they are not sure whether the customer information in the system is accurate and up to date or not. They still need to double check via sending an email to the person in charge. While key users mentioned that it useful for them in terms of time spending to answer people about customer information. They found that it is ridiculous to keep given customer information and the next day those people going to ask the same questions.

In order to prevent this problem, they granted them permission to access to customer information with condition of access depends on each person's role and position. On the other hand, it is time consuming to fill in and update customer information because of the system's limitation.

"*We have customer information in excel file but we cannot import it because of the system's limitation so we have to spent a great amount of time to fill in customer information*"

"*When we want to update the information we need to go in many pages in order to update particular information which is not convenient at all. I think this is the weak point of this system*"

For management levels, they are not fully agreed that the system could bring the advantages but they still see it convenient. Although, they did not access to customer information through online system as often as they should. They are used to send an email to ask questions or via call because it is faster than the system and also unfamiliar with the system's interface. However, they wanted to have more advance options in the system but it could lead to more complexity and people will not engage in using the Customer Web-Application as much as they expected.

Lastly is from Technical point of view, they think it is useful even though, they do not have to access to customer as much as the other parties. Because it can keep customer information on online platform which helps increase space capacity in server. They said customer data took almost 60 MB in the shared server which reduce capability and make it slow. However, there are problems with system's limitation and bugs which would leads to disengagement. Usually when people found the obstacle (or bugs) they will avoid it by go back to the same pattern of work then the system will not be successful.

CHAPTER V
RECOMMENDATION AND CONCLUDSION

Technology has become an imperative tool for the daily operations of organizations. But from the data analysis, people in the organization still not see the need of new technology. In order to find the critical factor for successful implementation, this study has diagnosed the root cause of resistance and difficulties in collaboration in an implementation project. By collecting primary data from in-depth interviews, it could identify that the most failures resulted came from one or more of the following reasons

- Lack of knowledge
- System complication
- Lack of user involvement
- Effective communication
  - Inadequate support and preparation for end users
  - Inadequate realization of end user necessity
- Organization culture issues with highly centralized structure

All of the above mentioned are somehow related, so to fix the problems the study would recommend to analyze the employee's readiness and external environment by using Lewin's Change management model first. Because environmental factor is the driven force that make people changed then analyze the individual emotion by using Kubler-Ross, Stages of change then make the necessary changes to the organization. In reality, often times an organization cannot successfully be implementing the new system without the support the change and reasonable analysis. Therefore, to make people shift their behavior from the current stage to the future stage, first thing is to understand the three stages of change management model following with stage of change in term of individual feeling.

5.1 Change management model

5.1.1 Unfreezing

Step one is to identify readiness for change in which considered to be a critical forerunner to the accomplishment and reflects the concept of unfreezing proposed by Lewin (1951). When people are not understanding the need for change, they will obviously resist because of it unnecessary in their perception. The CWA implementation is a small-scale of changes or operationalized changes in beliefs and routines. This type of project implementation or unfreezing involves limited department not the whole organization. So to implement this system will helps improve internal reliability but it not involves corporate strategy (Ali et al., 2007). However, there are various strategies that could be used to identify the readiness. But in this study we will use 'unfreezing' an existing mindset then creates motivation for change.

The Customer Web Application (CWA) would be successful if the company significantly emphasize individual readiness and focus on understanding the conditions conducive to individual readiness for project implementation instead of the traditional change concepts that focus on resistant to change. When motivation of people is increase, it will lead to a possibility that they will hear and see things from a new perception. If they are ready for change they will buy into the CWA project and willing to support the change in order to drive the change successful. The first thing management should do is to prepare organization culture to foster the change and empowering the project team. The change agent or project team should carefully plan strategies for change and anticipate potential problems. Try to make people not stick to their comfort zone.

As a project team, should make staffs understand the need for change by inform them about the project starting from objectives, benefit and outcome. Moreover, the project team should give them the clear picture that if they implement this system it will help develop their production, work process to be more productive and able to design their

routines in terms of time and information management. When staffs are well informed, it could help increase their understanding.

5.1.2 Change

Step two is changing stage where the project team 'creating a preferred scenario', once the change is initiated and people moves into change period which may last for some time. This stage requires a lot of teamwork, brainstorm and help each other develop alternative option for future in order to be success. The need that cause the change to happen should be clearly compelling. Because the change could occur in the organization in various ways. So it is important that the company should look for alternatives of change thoroughly. Nevertheless, the adequate communication, support and reassurance are highly important for this period to help the change to be successful.

Since staffs were mentioned that it lacks of support and communication so they found the difficulty to use the system. The change team or project implementer should closely provide consultation to staffs (end user). And also act as a role model for them so it could help encourage staffs to use the system. Find solution for the system error or problem during usage is very significant because once staffs struggle to use and found system error, it could cause them to stop or reluctant to use. Then they will surely return to the manual process of work and the CWA implementation will not be success. As a project implementation team may request support from the developer in order to support both staffs and the change team. By doing this could make the change move on to the next step.

5.1.3 Refreeze

The last step is to refreeze the new ways of work and behavior to keep the change as a norm. Since the change have been implemented and accepted from staffs, the project implementer should make the staffs get used to with it so that they will continue using the CWA system in their daily operation. Therefore, support, guidance including

communication are still the key role in this stage in order to achieve the users confident and use the system continuously without hesitation.

The CWA system will stable only if the project implementer helps staffs to integrate with the new behavior and attitude into their normal way of doing things. (Armstrong, 2006). Change can be discovered and better defined as 'learning', because we replace one thing with another and move from one role, position, or place to another. We implementing something new for our life and in order to be succeed we need to keep learning.

Change is not always easy no matter it is a transformational or transactional change. But a great mistake that project implementer or change agent made is to overpass one of these three stages of change. Once people do not know where they are going, why they need to change or how are they going to get there, they will surely resist. While we could make staffs buy-in and support the project by provide information as much as possible. Try to put yourself in their shoes so you will realize what they need to know. They will certainly buy in and join the change process to the end of the journey.

5.2 Stages of change

After analyzed the social behavior and external environment, the individual behavior and emotion is vary depending on their capability and level of understanding. The project implementer should use Kubler Ross (1960), stages of change to identify and predict how people will react towards change and also to understand the stages of personal transition. Other than that, the project implementer can use it to predict the individual performance and how each one likely to be affected by subsequent of new system implementation. There are seven stages of change curve which each stage illustrates differently; shock, denial, frustration, depression, experiment, acceptance and integration. However, the majority of each phase are somewhat similar in terms of basic emotions which often can grouped together into four district of transition stage.

5.2.1 Shock and Denial

Most people face this stage because once they receive an information about certain change it is like getting hits on their head. This stage is usually short but it could affect the result of productivity and performance to decline. The shock stage happens because of fear of losing power, bad comments, familiarity and unknown or unpredictable things. According to a nature of people so it is common for one to experience this feeling. In which mostly happens because of lack of knowledge, awareness and involvement including rumors which sometime staffs might heard the negative rumors from the others. Once staffs can get off the shock stage then they will be more likely to denial and not willing to accept the new system or change. But some staffs may jump to another feeling step depends on their attitude. Everybody need time to adjust to new thing even if the change has been well planned and need for change have been explained.

The common feeling in this stage is fear of failure and discomfort. It is considering to be the critical stage of communication so they project team should make sure that you communicate the change often enough but not overwhelm people with information. People many either move on and follow the change or may deny depends on how communication about the changes were made. The project implementer should keep in mind that most people need time to digest the information little at a time. Every people not only need information about the change but also the understanding individual needs and feeling so the effective communication and support are the key players in every stages. Moreover, how will staffs get help in order to make them feel more comfortable, we could say that support is also one of a significant role too. The change team should provide as much reassurance as possible in order to help to support individuals.

5.2.2 Frustration and depression

It is one of the danger zone where people feeling developed to self-doubt that 'why' do they need to change, anger, frustration and depress or called valley of despair. People will have sense of losses; loss of confident because they are lack of knowledge and

skills about the system, loss of structure in term of reporting line or subordinate to work under them, loss of control because they will not be able to control things, loss of uncertainty and attracted to certain thing. There are many losses that could occurs during the project implementation. From feeling of losses could lead to the frustration and depression where people get stuck, do not know what to do or which direction they should go and sometimes people cannot get off this stage because of their own negative attitude towards the new system.

Mostly people will belief that old working style is more practical and easy for them. What the project implementer should do is to deal with individual feeling and attitude. Do not judge people capability because it could lead to a lack of confident and people will not follow your guidance. Instead of doing so, the change team should increase people understanding and able to communicate the needs for change clearly and precisely. Make people look at the brighter side which is the benefit of the system. Communication play a significant role because people still lack of knowledge and they are confusing with what is going on.

5.2.3 Experiment and acceptance

Once staffs passed the bad emotions of first two stages, their mood will change to be more confident, optimistic and excited about the new system. Their willingness to learn new things will increase and to work with the project implementer rather than against them to drive the change successfully. At this stage, the acceptance of the change is understood and now people will start experiment new ways of work. They will feel relief and see the positive side of the change and thankful that the change has been implemented. People will start dealing with new reality by testing new skills through the Customer Web Application. Moreover, this stage is almost reach the goal of change so the project implementer should create some small event to celebrate to change as the encouragement, rewards and motivation for staffs but remember that there is one more step to move which

is integration. Therefore, support is very important in this phase in order to make the change stick into people behavior.

5.2.4 Integration

This phase is like changing norms of everyday life. This phase is looking for meaning and understanding the reasons for success. And also people will look for a new skill, attitudes and behaviors that become major in their life. Staffs will have so many new things to learn and know from the change. The project team can make sure that none of the group members feels loss and confused because they are willing to use the system in their everyday life. They will have no questions about the system which mean they are fully understand about the Customer Web Application and how to use it.

Although people do not have question about the change, they project team still need to communicate the change in order to make them aware of the change at all time. The project team should ask staffs who use the system for their feedback how things are going when they use the new web application. Make sure that you are always available for them when they need assistance or have problem with the system so that people will feel more confident to use the system. And also not forget to celebrate the change once again or give the rewards for those who used it often as an encouragement.

The Stage of change or change curve is a very useful tool when comes to managing individual emotions, feelings and attitudes. Since each one reaction towards change differently. Some people may move from one stage to another without hesitation but some people might stick to some certain stage for a long time. This mean, people no need to experience every stage of feeling depends on their speed of learning. As a change agent or project implementer, knowing individual emotion is very critical factor which will help direct you to give the right support the certain person. It will help you plan the right strategies to match with each person. And also know the right timing of when you need to communicate the information, in which level of support a person requires and when is the

best timing to implement final changes. Keep in mind that every stage required effective communication and support as the critical factors that drive the change successful.

5.3 Conclusion

The definition of the Customer Web Application implementation is a primary part of this paper. Since this study has not been conducted before in any paper. Although the change and transition were not fully successfully yet but the project team still see an improvement in a better outcome of both change and transition phase. It will help improve current situation where people still get used to old way of working, need to push and required a lot of training including the information about the change in term of the reason and benefit of change. Once the project implementer applies those two theories, it will definitely make people starts to use the CWA system more than newly implemented because they understand the convenience and do not have to wait for customer information from others. Users will see that CWA system is helpful in their daily operation and make their work more productivity for example, sales person request finance team to run return on investment of particular customer, the finance team would give a quicker result because they access to customer information through online platform instead of waste time waiting for information from sale person.

However, the project implementer should plan for communication strategies that used in each steps in order to increase an effectiveness and match with individually. Always remembered that communication and time to assist when needed is highly prioritize and critical factors in the company where there are a lot of people in technical professional background. The project implementer should immediately contact developer to clarify and fix the problems once found an error in the system in order to avoid resistant. The project implementer is a key user (owner) who responsible for customer information which mean the accuracy and up to date data are highly important. Always make sure that all new

customers are registered into the system by cross check the data before inform other departments.

By developing new Customer Web Application makes the company gain technological competitiveness. Since all information are kept confidential and limited access from outsider. Once people have been filled with knowledge and skills they are more willing to work and help increase their productivity. People have learnt a lot of new skills that are useful in their life and persuade them to move out of their comfort zone. People who are involved in the change tends to be more open minded and listen to others opinion. While those who have no chance to involve in the implementation process will be likely to avoid change. Therefore, change agent should be able to plan the right strategies, know who to communicate first, who is the social influencer and who is the management that could help support the project.

Lastly, just like the other research, there always have some limitations to the approaches and results. First thing is the group of people who this study has interviewed may have limited in depth information from the early process of CWA project because it has been initiated by particular team. More important is the amount people who participated in the interviewed process were too less to gain insight information. Since it required a lot more time if the study needed to interview more people. The project implementer has to use an appropriate mix of personalization and strategies to develop learning environment and measure individual readiness for change in organizations that will be beneficial for implementing a change successfully. To alter the people who have technical background of traditional working environment that focused on tasks and results rather than process change is one of the limitation of this study. Including bridging the gap between people who have different opinions with the change in technology could be more helpful to increase the success of the initiative, change management, and similarly increase the success of the intervention projects.

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