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APPLYING ICTs APPROACHES IN MANAGING COMMUNICATION PROCESS DURING ORGANIZATIONAL CHANGES

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Abstrak

Tujuan dari tulisan ini adalah untuk menganalisis proses komunikasi selama terjadinya perubahan organisasi pada organisasi studi kasus yang dipilih. Metode riset kualitatif dengan memakai kerangka kerja model komunikasi dan kerangka kerja analisis kesenjangan. Temuan/hasil Penulis menyimpulkan bahwa implementasi Teknologi, Informasi dan Komunikasi (TIK) belumlah cukup untuk memperbaiki proses komunikasi dan kinerja perusahaan. Untuk itu dibutuhkan kerangka komunikasi tingkat tinggi atau pendekatan teknologi komunikasi tingkat rendah yang mencakup program loka karya, pelatihan dan edukasi serta pelaksanaan boundary spanners. Penelitian ini hanya dilakukan pada satu perusahaan studi kasus. Penelitian lanjutan dibutuhkan untuk memahami dan mengembangkan model dari pandangan kerangka kerja proses komunikasi. Studi tentang penerapan TIK telah banyak dilakukan di negara-negara maju, untuk itu riset ini berkontribusi kepada tinjauan pustaka dengan menguraikan isu tersebut di negara yang sedang berkembang yang memiliki perbedaan kondisi dan lingkungan dibandingkan dengan kondisi di negara maju.

Katakunci: kerangka kerja komunikasi Eunson, analisis kesenjangan, perubahan organisasi, pendekatan TIK, *boundary spanners*.

Abstract

The purpose of this paper is to analyze communication process during organizational changes within the organization's case study. Qualitative research method is using the communication framework model and a gap analysis framework. The author concludes that implementing Information, Communication and Technologies (ICTs) approaches were not enough to improve the company's communication and performance processes, especially during organizational disruptions. It needs more high-context communication framework or low-tech communication approaches including workshops, training and education programs as well as implementing boundary spanners programs. The research only conducted in a one company's case study. Further research is needed to understand and expand the model from a communication framework process perspective. Studies on the ICTs implementation in the organization have many conducted in the developed countries; therefore this research contributes to the literature by examining such an issue in a developing country that has a different environment from that of developed countries.

Keywords: Eunson communication framework, gap analysis, organizational changes, ICTs approaches, boundary spanners.

Introduction

An organization's long-term survival may best be judged by its ability to manage change rather than by its current balance sheet; because, the only thing constant within organizations is the continual change of these organizations. At the same time, managing a communication process is a paramount for running the organization to achieve its best performance, especially during organizational change within the company.

The relationship between communication and organizational change has attracted

increased attention from scholars and practitioners during the last decade (Johanson and Heide, 2008). To prove that, from the last decade, many scholars in the developed economies have conducted researches and believe that implementing the Information, Communication and Technologies (ICTs) tools have had impacted to improve communication process and the organization's performance (Wojtecki and Peters, 2000; Vilaseca, Torrent and Diaz, 2002; Gera and Gu, 2004; Kelly, 2004; Browning et al, 2005; Ocen, 2007; Zhang and Chulkov, 2008). A summarize of research findings can be seen in the following table:

Table 1. Researches on Implementing ICTs approaches in organization

Research Scholars	Findings/Results
Wojtecki and Peters (2000)	Applying ICT innovations such as e-mail and intranets have had effect to organizational communication performance, however it was not fully enough, because human resources need more low-tech communication especially during organizational change.
Vilaseca, Torrent, & Diaz (2002)	ICTs could transform the production function of firms, but there was not enough supporting evidence of what was happening within organizations.
Gera and Gu (2004)	A combination between ICT and organizational change have a significant effect to the firm productivity improvement and have had high rates of innovation.
Kelly (2004)	ICTs and groupware use within organization could be useful if the organization develop and establish cultivating networks of relationships based on interpersonal interaction and reciprocity. The organization should enhance a conducive communal practice and establish personal relationships within organization's members.
Browning et al (2005)	Proposed a reflexive model of ICT used in organization, namely: communication structures, satisfaction environmental agents and channels.
Ocen (2007)	Proposed Technology Adoption Model (TAM) in applying ICTs within organization which involve people, organizational structure and technology that could not be separated.
Zhang and Chulkov (2008)	Proposed three important factors in applying ICT hosting decision within organization to improve organization communication performance, namely: the organizational situation and business demands; ICT governance and strategy; cost-benefit analysis of each ICT services.

This paper aims to analyze communication management process during the major organizational changes and its effect on organization's performance in the developing country like Indonesia through applying the ICTs approaches within the organization's case study. A communication framework model that proposed by Eunson (2007) and a gap analysis

framework that summarized by Cawsey and Gene (2007) in the change management process are applied. By implementing the ICTs approaches, the author assumes that such application could enhance the organization communication process and improve its performance during organizational changes.

Literature Review

Organizational Communication and Organizational Change Theories

In the New Handbook of Organizational Communication that edited by Jablin and Putnam (2000), Stanley Deetz explained the important concept of organizational communication for today's organizations. He pointed out why organizational communication is paramount, because it is not only focuses on communication as a phenomenon that exists in organizations but at the same time a communication is viewed as a way to describe and explain organizations. Therefore, he (2002: 5) proclaimed that "....communication theory can be used to explain the production of social structures, psychological states, member categories, knowledge and so forth rather than being conceptualized as simply one phenomenon among these others in organization".

As argued by Clampitt and Berk (1996), an organization's long-term survival may best be judged by its ability to manage change rather than by its current balance sheet; because as warned by Elving (2005: 129) that "the only thing constant within organizations is the continual change of these organizations".

From the last five decades, many organizational change theories have been developed, from classical theory such as Kurt Lewin's "Unfreeze-Move-Refreeze" model to the contemporary theories such as Nadler and Tushman's congruence systems diagnostic model, Stace and Dunphy's contingency approach model and Burke and Litwin's organizational causal model (Graetz, Rimmer, Lawrence and Smith, 2006).

The idea of Unfreezing - Moving - Refreezing which is part of field theory was initially introduced by Kurt Lewin in 1947 in organizational change (Graetz, et. al, 2006). According to Lewin, an organization is never in a steady level, but it is in a changing process. He recommended three phases to succeed in organizational change, as follows: (1) Unfreezing, means an organization needs to break a well established organizational cultures and behaviors which can be achieved through team building or other forms of management development; (2) Moving, means an organization move toward implementation of need for change through developing new norms and behaviors around the change process; (3) Refreezing, means an organization needs to ensure that people do not return back to their old cultures. In other words they have to maintain a new equilibrium in the organization.

However, many critics from the practitioners aimed to this model. One of them stated that Lewin's model based upon only linear and static conceptions which view the organizations as "ice cube" rather than a "complicated organism". In fact, they insisted that the organizations are never static, but "fluid entities with many personalities" (Palmer and Hardy, 2000: 171). Graetz et. al. (2006) supported this idea who mentioned that today's organizations are promoted to thrive on turbulence and continuous change to accomplish their goals.

The Burke-Litwin organizational change theory is the most useful model to explain the changing process within organization, because it can provides adequately understanding of current organizational dynamics and can help (management) to steer change to improve the whole organization performance (Burke, 2002). In other word, this model can be applied directly into real-life situations.

As noticed by Burke (2002: 199) "....the model conforms to the open system ways of thinking, in which the external environment box serves as the input dimension and the individual and organizational performance box serve as the output dimension". The model has 12 boxes

of organizational changing factors that are divided into two dimensions, i.e. transformational dimensions in the top half and transactional dimensions in the bottom half.

The transformational dimension consists of four changing factors, namely, external environment; mission and strategy; leadership; and organizational culture's factors; whilst the transactional dimension consists of eight factors, namely, organization structure; management practice; systems; work unit climate; motivation; task requirements; individual needs and values; and individual and organizational performance (Burke, 2002). The transformational factors concern more about the long term of organization's operations, meanwhile the transactional factors concern more of the day-to-day operations of the organization.

Interestingly enough, the transformational dimension's factors have more 'weight' than the transactional dimensions' factors. It means, a change in any of these factors can affect the entire organization's systems and operations. In other words, the changes in these dimensions most likely have much more influence to the whole transactional dimension factors underneath and the form of change is discontinuous and radicals in nature. In contrast, changes in the transactional dimension factors are not necessarily can influence to the whole organization's operations. Therefore, changes in these dimensions have continuous improvement, incremental, evolutionary and selective in nature (Burke, 2002).

Nevertheless, not every organization succeeds in its changing program. As stated by Daly and Kitchen (2003), around 70 percent of organizational change programs fail due to poor internal communication process amongst members of the organization. Other statement said that more than half of the entire organizational change programs fail, not only because related to the internal communication factors, but also corresponded to the

organizational culture, time level of the change effort and the role of change agents (Elving, 2005). Another common problem that is caused by applying only one way internal communication process such as top-down communication rather than a two-ways communication process. In other words, many senior managers simply do not involve lower level employees in most decision during organizational change process. As a result, the employees feel alienated and unwilling to accept changes within the company (Argenti, 1998).

A Gap Analysis Concept

The objective of those organizational change theories is to reach the desired goals of organization to be better in the future from the current conditions. As coined by Cawsey and Descza (2007) every single organization should understand the gap analysis framework to succeed in its organizational change process. According to Ritchey (2013: 1), a gap analysis is defined as:

"a method used to assess the difference (or "distance") between two states of an organization, an activity or a knowledge base. Most commonly, it is used to compare a current state of something with a desired or potential future state. The difference is the disparity of between what is and what is sought, or ought to be. Gap-analysis can be applied to performance, knowledge, skills, market strength or any other measurable and comparable aspect of organizational life. It is used in order to better understand the requirements for change or development within the context of some organizational goal. A gapanalysis in itself does not identify or prescribe any particular implementation for change or improvement, it can be a valuable guide for such in strategic planning, competitive actions, organizational

change, and any other actions needed to renew, redirect or otherwise develop an organization or enterprise." As summarized by Kulvisaechana (2001) and Cawsey & Descza (2007) a gap analysis framework can be depicted as follows:

Describing the Current State or Understanding where we are (Present)

A Gap Analysis or Bridging the gap mechanism Defining the desired Future State or Understanding where we head for (Future)

Figure 1 . A Gap Analysis Framework

According to Scarborough (2012), conducting a gap analysis within organization has some advantages, including: (1) identifies an organization's starting point, (2) clarifies which part of IT Infrastructures Library should come first; (3) identifies what an organization does well, (4) identifies hidden capabilities, (5) communicate the vision, and (6) decomposes a vision into objectives.

Communication Concept and Major Barriers in the Communication Process

In his books of "Communicating in the 21st Century", Eunson (2007) argued that communication is the study of the transfer of meaning. However, long time before in the 1960s, David Berlo as communication scholar once reminded that communication does not consist of the transmission of meaning, because of meanings are not transferable. Therefore, only messages are transmittable (Hamilton, 2010).

A more accurate definition of communication can be found by looking at its original meaning. The Oxford English Dictionary (1989) lists the Latin root of communicate as *communicate*, which means to make common

to many, and share. Based on this definition, when people communicate, they express their ideas and feelings in a way that is understandable (common) to each it. In addition, Hamilton (2010) concluded that communication is the process of people sharing thoughts, ideas, and feelings with each other in commonly understandable ways.

According to Hayward (1998), communication process occurred if there is exchange message between a sender and a receiver. Furthermore, Eunson (2007) notified, every communication process need sender and receiver as well as messages which is defined as an information conveyed by any means from one person or group to another person or group to communicate. A good communication process needs decoding and encoding combined with properly channels to transfer and receive message as well as to reduce and/or "noise" remove which hinder communication process. Encoding is defined as transformation or masking a message in some ways, whilst decoding is defined as converting a message from a coded form into a plain form. A model of communication framework which adapted from Eunson (2007) can be seen in Figure 2 below.

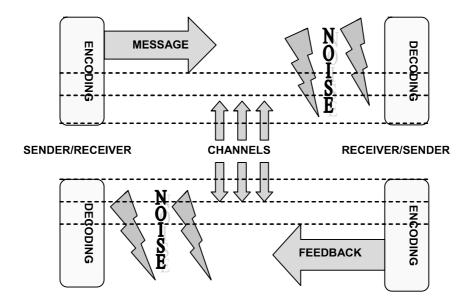


Figure 2. A Communication Framework

(adapted from Eunson, 2007)

Nolan (1999) defined a successful communication as the ability to get what we want from others in a manner that maintains the relationship on terms acceptable to both sides. In the same way, Hayward (1998) noticed that an effective communication relies on both sender and receiver to aid the communication process. Hence, good communication depends on good senders and good receivers which are able to convert ideas into a clear and wellorganized message as well as to giving promptly feedback. These arguments were supported by Wood et.al. (2004) who's agreed that effective communication is communication in which the intended meaning of the source and the perceived meaning of the receiver are one and the same. Moreover, to succeed in the communication process Grosse (2002) suggested several factors, including: communicate continuously; use active listening; keep simple and clear; use different technologies; build relationships and trust; show respect for other cultures; and be sensitive to cultural differences.

However, many barriers which are called "noises" occurred in the communication process. Eunson (2007) defined noise as anything that distorts the message or creates barriers to communication, such as incomplete

message transfer, message interpretation and misperception of situations and people.

In addition, Lunenburg (2010) examined four major barriers to effective communication process, they are: process barriers, physical barriers, semantic barriers and psychosocial barriers. Process barriers related to all communication factors barriers in the communication framework such as sender/ receiver barriers, encoding/decoding barriers, message, and feedback barriers. Meanwhile, physical barriers connected to any number of physical distractions including geographical and distance people problems. Furthermore, semantic barriers associated to the words and languages are being used or the meanings of the words/languages are used; because as argued by Lunenburg (2010) the same word may mean different things to different people. Finally, psychosocial barriers linked to psychological and social barriers, such as people's background, perceptions, culture, values, needs, and expectations.

To cope with those communication barriers, Eunson (1994) recommended using different communication channels. In addition, Edward Hall (1976) has suggested applying a high and low context communication framework for different cultures. Communication in high-

context cultures (eg. Asian cultures) employs a far wider range of expression than is usual in Anglo cultures (Western countries). Other solutions such as maintaining content and message as well as making relationships between senders and receivers should be considered.

Internal Communication Channels

There are two ways corresponding in the internal communication process, formal and informal communication's channels. Formal communication can be described as an all written communication channels that is being kept in the organization, such as internal memorandums and company's procedures and policies; whilst an informal communication often related to the direct oral or spoken communication between two or more people in the organization, such as command, request and speech (Davidmann, 1998).

Other communication expert uses a traditional and modern communication notion to differentiate internal communication channels in today's organization (Holtz, 2004). Traditional communication tools including a face-to-face communication, an employee magazine and newsletter, periodicals and other irregular publications; meanwhile modern communication tools related to applying the Information Communication Technologies (ICTs) devices within organization, such as intranet, electronic mail (e-mail) and web logs/blogs (Holtz, 2005).

However, Holtz (2004) warned that whatever communication channels are being used, the most important is how effective the message can be sent and received by speakers or hearers and understand the message clearly. As warned by Argenti (1998), to succeed in the internal communication process it should be used both tools, and pay more attention to the company's grapevine amongst the members, because it is estimated that around 70 percent of communication process within organization occurs at the grapevine level.

Communication Process Development and ICTs approaches

Based on Ihator (2004) statement, communication between and within organization today has been changing and substantially improving due to a changing society, corporate values and information technology. Consequently, to succeed in communication process, present company should more transparent in its business, understand industry trend and issues and open to learn, develop new skills and grow (Cummins, 2003). Similarly, Huang and Kleiner (2005) supported Ihator statement that in today's business environment, effective corporate communication is becoming important due to the highly diversified workforce and rapidly changing technologies. Therefore, he suggested using multi channel communication is more common today to achieve company's goal. In addition, Firoz, Taghi and Souckova (2006) clearly agreed that information technology as integral part of today's business infrastructures.

In line with those notions, Denton (2006) suggested that using the Information, Communication and Technologies (ICTs) tools such as intranet and email have many advantages to improve communication process in today's organization. He insists that implementing the ICTs approaches are able to help management and group members obtain a clear picture of what is really going on within organization. In addition, the ICTs are used to provide instant access to information deemed important or relevant to various sections or individual within a company. Furthermore, Corso, Martini, Pellergini, Massa and Testa (2006) pointed out that the ICTs enable to overcome geographical, time and organizational barriers to communicate and transfer knowledge in disperse networks. As argued by Bouwman, van den Hooff, van de Wijngaert, and van Dijk (2005) that the use of the ICTs in organization requires knowledge regarding both organizations and technology. Therefore, they recommended four factors are needed to succeed adopting ICTs within organization, namely: the organizational; technological; economic; and user perspectives.

Many information technology experts have admitted the benefits of using the ICTs systems such as the Enterprise Resource Planning (ERP) in the organization. Based on Shtub (2001) findings, the Enterprise Resource Planning (ERP) software systems are able to support comprehensive management organization's aspects including finance, operation, marketing and human resource development within organization. He believed by utilizing this capability the Management can obtain and maintain their organization in good conditions. Similarly, Kasper-Fuehrer and Ashkanasy (2001) supported the notion that the ICTs can be enhancing communication process in the organization, because of the ICTs acts as the medium for communication and coordinating process among the collaborative parties within the organization. Furthermore, Boonstra and de Vries (2005) supported that the ICTs based web systems are able to share information and could conduct business across organizational boundaries.

Nevertheless, some experts argued that beside make a company stronger, using the ICTSs such as ERP systems also have some limitations. Gupta and Kohly (2004) pointed out that using the ERP systems have potentials to destroy a company if the organization failed to improve internal operations and increasing efficiency within organization. In addition, Hua, Sher and Peng (2005) noticed that using the ICTs can reduced receivers ability to establish good relationship within the group members as well as unable to respond the message immediately. Another notion comes from Pepper and Larson (2006) who insisted that using the ICTs have more limitations than benefits such as can not adapt cultural differences among the organization members and can lead to a lack of trust between the employees and the Management.

To succeed implementing the ICTs in the communication process within organization, Grosse (2002) proposed at least four factors

should be considered by the organization, namely: (1) understand the advantages and limitations of technology; (2) offer training and technical support; (3) build relationships with team members; and (4) keep the human touch.

Aside from that, based on Eunson (2007) point of view, the futures organization is signed of emerging virtual organization which is defined as an organization comprising a network of geographically dispersed workers connected to one another, and sometimes to a central workplace via computer, phone, video and other links.

However, Hertel, Kondrat & Orlikowski (2004) admitted that it is difficult to maintain of virtual teams because of reducing of face-to-face interaction during communication process. In the same way, as argued by Conrad and Poole (2005) beside have many advantages, the implementation of the ICTs in the organization could harm employees' privacy and security because of using such the ICTs may threatens to erode workers' private time, even further.

Boundary Spanners Programs

To cope with the ICTs implementation problems as mention above, Ekkerink (2008) proposed a boundary spanning activity within organization. He pointed out two levels of boundary spanning activity: at micro and macro level. At the micro level (personal level) the boundary spanner can be seen as one of the key persons within the organization integrated in external and internal networks (boundary spanning through the eyes of the person dedicated to boundary spanning activity). At macro-level (organizational level) boundary spanning can be seen as the interrelationship between the organization and the environment (boundary spanning from the organization's perspective). Furthermore, Ekkerink (2008) explained the boundary spanners key role activities, including: creating internal and external networks, issue identification, translating knowledge back into the organizational culture, influencing and

educating internal and external stakeholders, creating buy-in support, and identifying internal senior-level champions.

According to Eunson (2007), a boundary spanner is described as an employee of the organization who routinely moves between the organization and the external environment. There are some advantages by applying boundary spanners program in the organization. The major benefits, including: the ability to sharing and transfer knowledge and experience directly to other workers; increasing face-to-face communication approach; increasing the interpersonal relationships; increasing cross-functional teams work; more active listening skills amongst the employees; more understand about other different cultures workers; and can obtain directly knowledge and experience from co-workers whose act as boundary spanners (de Vries, van den Hoof and de Ridder, 2006; Eunson, 2007; Keffeler, 1991; Peters and Fletcher, 2004; and Shtub, 2001).

Besides have the advantages, boundary spanners program had some limitations, including: it takes a long time period to improve the process; only a few target/employees can be reached; and sometimes have personnel resistance from the related employees due to the nature of the program (Eunson, 2007). To cope with these limitations, appreciation reward systems such as increasing position in the organization if the program succeeds could become one of the alternative solutions.

Method

This study was primarily descriptive as it tries to analyze and explain the use of ICTs in managing communication process during organization undergoing change. In addition, this study also aims to develop suggestive ideas as how can communication barriers to change be overcome. According to Zikmund (2003), a descriptive research portrays an

accurate event or situation. It is an extension of a piece of exploratory research that is used when there is little research on a topic, but with already existing theories and information about the problem area. Therefore, this research will be discussed from a qualitative perspective. Since this study's aim is to understand and not measure the concept of resistance to change, this perspective is most appropriate. The type of method used in the study also depends on what kind of information has to be collected. Having the research questions proposed in mind a qualitative method suits the best this study.

The author chooses a single-case study method in this research since the author empirical research will be based on examining one company. The chosen case study was a PT XXX is the one of major and old plantation company in Indonesia where the author has worked during the period of organizational changes in 2003 - 2005. Zikmund (2003) stated that the case study method is to obtain information from one or a few situations that are similar to the researcher's problem situation. A case study is a strategy for doing research that involves empirical investigation of a particular contemporary phenomenon within the real life context.

The author used both primary and secondary data collected from interviews, surveys and documentation. The secondary data and information were collected from the company's internal and published information including annual reports, internal magazine and reports.

The research framework used in this study was a combination between communication framework model that proposed by Eunson (2007) and a gap analysis framework that summarized by Cawsey and Gene (2007). The combination framework can be depicted as follows:

Table 2. A Research Framework Study

Current Communication Conditions	Gap Analysis Communication Problems	Future Desired Communication Objectives
Communication Process = 4-6 months delay on Reporting System	Finding and Analyzing: Communication Barriers/Noises	On-time Communication Reporting System
	Applying Communication Channels (ICTs approaches)	

Finding and Discussion

History and Background of the Organization's Case Study

Based on its Annual Reports (2003, 2004 and 2005), PT XXX is a well known as one of the biggest plantation company in Indonesia which has been operated since 1906. In 2005, the Company managed 40 different plantation estates locations which operated in seven provinces and 14 kabupaten in the four major Indonesian islands, namely Sumatra, Java, Kalimantan and Sulawesi. Relating to the products sold, the Company has variety of products from seeds to palm oil, cocoa, rubber, tea and coffee which are exported to the worldwide. At the end of 2005, the Company employed around thirteen thousands workers across the country and most of them have been served the Company for more than twenty to thirty years.

Traditionally, as a conventional plantation company, PT XXX has had very hierarchical structure organization and operated in separated different estates locations across Indonesia. The Company has used traditional communication channels such as mailing post, telex and handy talkie during its operations. Therefore, reporting systems and logistic operations between estates, head office and customers often delayed until four to six months. As a result, the Company's management could not take a business decision

promptly and on-time manner (Annual Report, 2003).

In the beginning 2003, due to changing its majority ownerships and facing a new challenge in a global market as well as to improve the Company's operation performance in the future, the Management has conducted the organization structure overhaul by integrating People-Culture-Structure-Strategy in the whole organization systems. Furthermore, to improve its performance, the Management has objective to develop its communicating reporting system from four to six months delay (current conditions) to on-time reporting systems (the future desired objectives). As mentioned by PT XXX's President Director in the Annual Report (2004: 12) that, ".....PT XXX is [now] gradually transforming from a 'traditional plantation operations of a hundred years, into a 'corporatized' agro-industrial business of a modern corporation. Thus, PT XXX is being introduced to new ways of doing business..."

Major Problems in the Communication Process

Based on the Company's communication consultant report (Pacific Gehana, 2004), it found there were three major communication problems in PT XXX during the transformational process, namely: (1) problems which occurred due to relating to the scattered business unit locations; (2)

problems which emerged due to differences cultural ethnics among the employees; and (3) problems which related to the generation gap differences between employees. As mentioned by Lunenburg (2010), for this case there were two major communication barriers/noises occurred of the organizational case study which related to the physical barriers i.e geographical dispersion problems and the psychosocial barriers such as cultural differences and a wider generation gap between and among employees.

Geographical Dispersion Problems (Physical Barriers)

In 2005 PT XXX operated in the four major island of Indonesia and manages more than 81 thousand hectares and forty estates in different locations (Annual Report, 2005). It was significant increasing by 25 percent in terms of plantation area and 1.4 times in terms of estates numbers compared to 2004. As can be viewed from the Figure 4 below, due to the expansion

and organizational change program, in 2005 South Sumatra Province became the major contributor of plantation sites belong to the company which contributed by around 45 percent (in 2004, it only contributed by 41 percent), followed by North Sumatra Province 30 percent and Kalimantan/Sulawesi Province by 20 percent, respectively.

Nevertheless, some estates located in the remote areas, especially in the South Sumatra Province have had lacked-of supporting infrastructures such as electricity/power energy and poor road conditions. As a result communication process between the estates and the head office can only use the traditional communication channels and it is difficult to obtain report promptly. As argue by Cheney and Christensen (2001) that maintaining communication process in disperses geographically organization is increasingly difficult. It needs more energy and more capital support to succeed in maintaining business in the scattered locations.

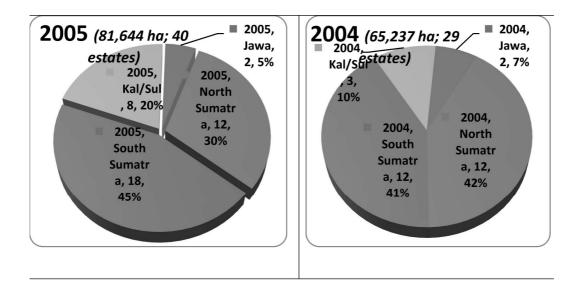


Figure 3. Estate Dispersion Locations in 2005 and 2004

Different Cultural of Sub-Ethnics Problems (Psychosocial Barriers)

According to Pitaloka (2004), Indonesia has had more than three hundreds different subethnics across the nation as well as has different cultures and languages.

Due to a wide operation across the major Indonesia islands, PT XXX has had variety of different sub-ethnics among its employees. Based on the monthly Company's magazine, most workers in Sumatra Island come from Bataknese and Palembangnese sub-ethnics

which are known as tough people and have temperamentally characters. However, they have open communication behaviors and able to learn a new technology faster than others. Similarly, workers in Sulawesi and Kalimantan islands have known as a brave and a tough people, and they have known as best and loyal workers. On the contrary, workers in Java Island are dominated by Javanese and Sundanese subethnics which have soft and diligent characters. Nevertheless, they have not ready to absorb a new technology as good as their peers in Sumatra island (Pitaloka, 2004).

According to Mounter (2003: 265), "....it required sensitive listening skills and a strategic understanding of the organization's needs to communicate with people from different cultures". Therefore, "communicating across

cultures using technology can be a difficult task, because of it needs understanding the advantages and limitations of technology and how to build relationships via technology" (Grosse, 2002: 22).

Generation Gap or Demographic Problems (Psychosocial Barriers)

According to Zemke, Raine and Filipczak (2000) and Community Banker (2002), today's organization consists of at least four level of generation workers, namely the veterans/senior (people who were born between 1940s-1950s); the baby boomers (people who were born between 1950s-1960s); the generation X (people who were born between1960s-1980s); and the generation Y (people who were born in 1980s-today).

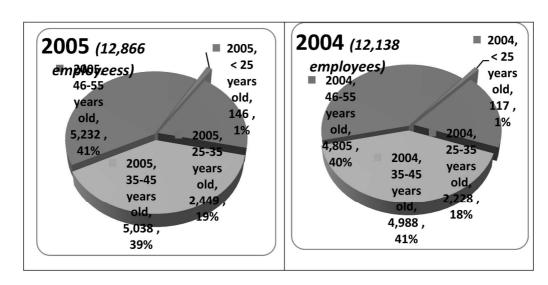


Figure 4. Employees by Ages Classification in 2005 and 2004

In line with that, most of PT XXX employees have been working for more than 20 years and the major of them come from the baby boomers generation (Annual Report, 2004). As can bee seen from the Figure 5, more than 40 percent of its workers were above 46 years old, both in 2004 and 2005; and less than 20 percent were below 35 years old. In other words, in terms of its employees, the organization's case study was in aging workers.

The communication problems often emerged among the difference generation gap level. For example, it is quite difficult to ask some workers from the older generation such as the baby boomers to do something which related to the working conditions if the requests come from the younger generations (generation X or Y), although they have higher position in the organization.

These conditions are supported by Fong and Chuang (2004) who found that in the most

Asian cultures, getting on in the senior age is viewed as positive behaves. Therefore, the Asian always and should give respect to elderly people. Those who failed to consider these circumstances are called "the cross taboo-ers" or the "wrongdoers".

Company Interventions , Implementing the ICTs Approaches

To overcome those communication barriers, the Management has believed to implement the ICTs approaches across its plantation sites, namely the Enterprise Resources Planning (ERP) and the Networking Support Systems. It is aimed to improve and fasten communication network between estates and the head office, and it hopes to increase its communication system become on-time reporting.

The Enterprise Resource Planning (ERP) Systems

As mentioned by Company's Chief of Information System (Annual Report, 2004) that ERP provides not only financial and accounting information, but also covers logistics and supply chain information; and, its system can link and used in all estate operations. In addition, the Company constructed the voice-and-data communication infrastructure network through a Wide Area Network (WAN) configuration combined with wireless network technology, the Very Small Aperture Terminal (VSAT) and leased lines systems. The Company believes by implementing such the ICT's approaches, communicating process as well as reporting systems and logistic operations can be obtained on-time and promptly.

The Hardware Networking Support Systems and Power Supply Energy

The company also provided the availability of supporting infrastructures systems to smooth the ERP process in its estates locations, namely the Hardware Networking Support System and the Power

Supply Energy. As pointed out by Bouwman et.al. (2005), to succeed implementing the ICTs within organization needs supporting technology systems as well as un-interrupted power supply energy such as electricity. Some benefits by providing networking computer systems and continuity of power supply energy, including: avoiding obsolesce technological traps and can maintaining easily the compatibility of supporting hardware systems as well as increasing efficiency by implementing the same technologies.

The company realized that providing new hardware network supporting systems and supplying continuous power energy in every business unit locations need huge financial capital support and take long time period. Therefore, by implementing the hub-network system and integrated sharing power supply energy between the adjacent business unit locations could give the best solutions to improve the communication process within organization (Pepper and Larson, 2006).

Nevertheless, after one and half year implementing those systems, some major communication problems still have been occurred. It seems both company's interventions only to cope with the geographical problems, and could not be directly improved the communication process problems within the organization. In other words, such interventions only are able to deal with the "communication hardware problems" (physical communication barriers), and could not manage the "communication soft problems" (psychosocial communication barriers) amongst the employees which were occurred i.e.: differences in sub-ethnics cultural and generation gap communication problems. As a result, reporting communication systems and logistic operations mechanism within the organization still have delayed for two up to three consecutive months.

Figure 6 below summarizes the finding and implementation stages of the organization's case study from current conditions to the future

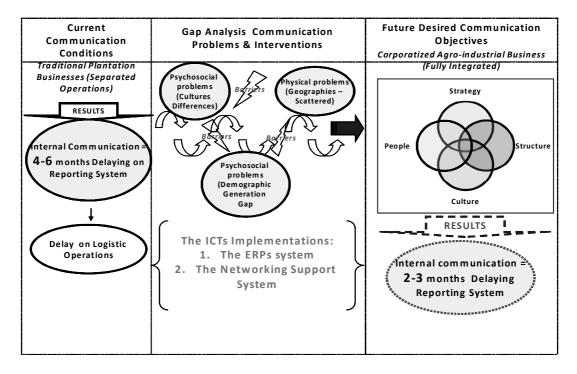


Figure 5. Summarize of the Organization Communication Process Framework and the ICTs Implementation

desired objectives during the organizational change.

Conclusion

Managing communication in the changing organization is not as easy as theoretically said. It needs more and long understanding about the natures, actors (senders and receivers) and the message which related to the organization's structures and locations where the communication process is occurred. Besides physical communication barriers such as disperse geographical location should be considered, the psychosocial communication barriers including cultural differences and demographics factors could be the key majors to succeed in managing communication process within the organization. Therefore, applying the ICTs through the ERP system and the Networking Support Systems at PT XXX during the organizational change could only have a little impact to improve the organization's communication and performance processes, because those systems only improve the physical communication barriers.

As recommended by Edward Hall, to cope with the psychosocial communication barriers, especially for the Asian or Eastern cultural background, it is useful to implement the high-context communication framework or low-tech communication approaches such as applying training and education program as well as boundary spanners program within the organization that promotes more a face-to-face communication model and knowledge sharing by involving many group employees from all levels.

Reference

Annual Report. 2003. *PT XXX.* Jakarta: MaxiMarka.

Annual Report. 2004. *PT XXX.* Jakarta: MaxiMarka.

Annual Report. 2005. *PT XXX.* Jakarta: MaxiMarka.

Argenti, P.A. 1998. *Corporate Communication*. 2nd Ed. Singapore: Irwin/McGraw-Hill.

Berlo, David K. 1960. *The process of Communication*. In Hamilton, C. 2010.

- Communicating for results (9th ed.). Belmont, CA: Thomson Wadsworth.
- Boonstra, Albert. & Jan de Vries. 2005. Analyzing Inter-organizational Systems from a Power and Interest Perspective. International Journal of Information Management. 25(6) p. 485-501.
- Bouwman, Harry, Bart van den Hoof, Lidwien van de Wijngaert, & Jan van Dijk. 2005. Information and Communication Technology in Organizations. London: SAGE Publications.
- Burke, W. 2002. *Organization Change: Theory and Practice*. Thousand Oaks, Calif.: Sage.
- Browning, L. Davis, Jan-Oddvar Sornes, A. Steinar Saetre, & K. Keilberg Stephens. 2005. *A Reflexive model of ICT practices in organizations*. Informing Science Journal. 8(2005) p. 123-142.
- Cawsey, Tupper, and Gene Deszca. 2007. *Toolkit* for Organizational Change. Thousand Oaks, CA.: Sage Publications
- Cheney, George, and Lars Thoger Christensen. 2001. Organizational Identity: Linkages between Internal and External Communication. In Jablin, F.M. Putnam L. L. (Eds.). The New Handbook of Organizational Communication. Thousand Oaks, Calif.: SAGE.
- Clampitt, Phillip, and Laurey Berk. 1996.

 Strategically Communicating

 Organisational Change. p. 1-21.
- Community Banker. 2002. How to Bridge the Generation Gap at Work. Community Banker. Jul p. 48-49.
- Conrad, Charles, and Marshall Scott Poole. 2005. *Strategic Organizational Communication in a Global Economy.* 6th Eds. Belmont, CA: Thomson Wadsworth.
- Corso, Mariano, Antonella Martini, , Luisa Pellegrini, S. Massa, and S. Testa. 2006. Managing Dispersed Workers: the New Challenge in Knowledge Management. Technovation. 26 p. 583-594.

- Cummins, L. M. 2003. Successful Communications. Vital Speeches of the Day. 69(23) p. 729-731.
- Daly, F., Teague, P. & Kitchen, P. 2003. Exploring the Role of Internal Communication During Organizational Change. Corporate Communication. 8(3) p. 153-162.
- Davidmann, M. 1998. Using Words to Communicate Effectively. http://www.solbaram.org/articles/words.html accessed on17th oct 2006.
- De Vries, Reinout E., Bart van den Hooff, and Jan A. de Ridder. 2006. Explaining Knowledge Sharing: the Role of Team Communication Styles, Job Satisfaction, and Performance Beliefs. Communication Research. 33(2) p. 115-135.
- Deetz, Stanley. 2000. Conceptual Foundation.
 In Fredric Jablin, and Linda Putnam.
 2000. The New Handbook of
 Organizational Communicati, Advances
 in Theory, Research and Methods.
 Thousand Oaks, London: Sage
 Publications Inc.
- Denton, Keith. 2006. Strategic Intranets: the Next Big Thing? Corporate Communications: An International Journal. 11(1) p. 5-12.
- Ekkerink, Ralph. 2008. Boundary Spanning Activity: Does Environmental Uncertainty Make a Difference? Instituto de Análisis Industrial y Financiero. Thesis Master.
- Elving, W.J.L. 2005. *The Role of Communication in Organizational Change*. Corporate Communication. 10(2) p. 129-136.
- Eunson, Baden. 1994. *Communicating for Team Building*. Milton, Qld: John Wiley & Sons.
- ______. 2007. Communicating in the 21st Century. Milton, Qld: John Wiley & Sons.
- Firoz, Nadeem M., Ramin Taghi, and Jitka Souckova. 2006. *E-mails in the Workplace:* the Electronic Equivalent of 'DNA' evidence. The Journal of American Academy of Business. 8 (2) p. 71-78.

- Fong, Mary, and Rueyling Chuang. (Eds.). 2004. Communicating Ethnic and Cultural Identity. Lanhan, MD: Rowman and Litlefield.
- Gera, Surendra, and Wulong Gu. 2004. The effect of Organization Innovation and Information Technology on Firm Performance. International Productivity Monitor. 9(Fall, 2004) p. 1-48.
- Graetz, F., M. Rimmer, A. Lawrence, and A. Smith. 2006. *Managing Organizational Change*. 2nd Ed. Australia: John Wiley and Sons.
- Grosse, Christine Uber. 2002. Managing Communication within Virtual Intercultural Teams. Business Communication Quarterly, 65(4) p. 22-38.
- Gupta, Mahesh, and Amarpreet Kohli. 2006. Enterprise Resource Planning Systems and Its implications. Technovation. 26 p. 687-696.
- Hall, Edward. 1976. Beyond Culture. In Mead, Richard & Andrews, Tim. 2009. International Management: Culture and Beyond. 4th Eds. Sussex, England: John Wiley and Sons.
- Hamilton, Cheryl. 2010. *Communicating for Results*. 9th ed. Belmont, CA: Thomson Wadsworth.
- Hayward, S. 1998. *Communication in the Work Team.* Victoria: Eastern House.
- Hertel, Guido, Udo Konradt, and Borris Orlikowski. 2004. Managing Distance by Interdependence: Goal setting, Task Interdependence, and Team-based Rewards in Virtual Teams. European Journal of Work and Organizational Psychology, 13(1) p. 1-28.
- Holtz, S. 2004. Corporate Conversations: A Guide to Crafting Effective and Appropriate Internal Communications. AMACOM: New York.
- Hua, Goh Choon, Willy Sher, and Low Sui Pheng. 2005. Factors Affecting Effective Communication between

- Building Clients and Maintenance Contractors. Corporate Communications: An International Journal. 10(3) p. 240-251.
- Huang, Nan, and Brian H. Kleiner. 2005. New Developments Concerning Corporate Communications. Management Research News. 28(10) p. 57-64.
- Ihator, Augustine S. 2004. *Corporate Communication: Reflections on Twentieth Century Change*. Corporate Communications. 9(3) p. 243-253.
- Johanson, Catrin, and Matts Heide. 2008.

 Speaking of Change: Three
 Communication Approaches in Studies
 of Organizational Change. Corporate
 Communications: an International
 Journal. 13(3) p. 288-305.
- Kasper-Fuehrer, Eva C., and Neal M. Ashkanasy. 2001. Communicating Trustworthiness and Building Trust in Interorganizational Virtual Organizations. Journal of Management. 27(2001) p. 235-254.
- Keffeler, Jean B. 1991. *Managing Changing Organizations*. Vital Speeches of The Day. Sep p. 92-96.
- Kelly, S. Breandan. 2004. ICT and Social/ Organizational Change: A Praxiological Perspective on Groupware Innovation. PhD Thesis (unpublished). UK: University of Cambridge.
- Kulvisaechana, Somboon. 2001. The Role of Communication Strategies in Change Management Process: a Case study of Consignia Brand and Business Status Introduction. Master Thesis. UK: University of Cambridge.
- Lunenbrug, Fred. 2010. *Communication: The Process, Barriers, and Improving Effectiveness.* Schooling. 1(1) p. 1-11
- Mounter, Pamela. 2003. *Global Internal Communication: A model.* Journal of Communication Management. 7(3) p. 265-268.

- Nolan, Riall W. 1999. *Communicating and Adapting Across Cultures*. Westport, CT: Bergin & Garvey.
- Ocen, Geoffrey. 2007. Organisational Implementation of ICT: Findings from NGOs in the United Kingdom and Lessons for Developing Countries. In Advances in Systems Modeling and ICT Applications p. 230-242.
- Oxford. 2nd Eds. 1989. *English Dictionary*. http://dictionary.oed.com, diakses 12 Mei 2006.
- Pacific Gehana, PT. 2004. PT XXX's Communication Progress Report. Unpublished presentation report. Jakarta.
- Palmer, I., and C. Hardy. 2000. *Managing Change*. Chap. 7. In I. Palmer and C. Hardy. Thinking about Management. Sage. MGTS 7080 Course Reading Pack.
- Pepper, G.L., and G.S. Larson. 2006.

 Overcoming Information Communication
 Technology Problems in a Postacquisition Organization. Organizational
 Dynamics. 35(2) p. 160-169.
- Peters, Linda D., and Keith P. Fletcher. 2004. Communication Strategies and Marketing Performance: An application of the Mohr and Nevin Framework to Intra-Organizational Cross-Functional Teams. Journal of Marketing Management, 20 p. 741-770.
- Pitaloka, A. 2004. *Kontak dalam Masyarakat Multikultur.* http://www.e-psikologi.com/sosial/030904.htm, diakses 15 Mei 2006.
- Ritchey, Tom. 2013. *Morphological Gap-Analysis*. Acta Morphologica Generalis. 2(2) p. 1-14

- Scarborough, Michael. 2012. Mind the Gap: What is an ITIL Gap Analysis? Global Knowledge Training LLC.
- Shtub, Avraham. 2001. A framework for Teaching and Training in the Enterprise Resource Planning (ERP) Era. International Journal of Production Research. 39(3) p. 567-576.
- Vilaseca, Jordi, Joan Torrent, and Angel Diaz. 2002. ICTs and Strategic and Organizational Changes in Catalan Business. IN3-UOC: Working Paper. WP02-001 p. 1-131.
- Wojtecki, Joseph G., and Richard G. Peters. 2000. Communicating Organizational Change: Information Technology Meets the Carbon-based Employee Unit. San Fransisco, CA: Jossey-Bass/Pfeiffer.
- Wood, J., J. Chapman, M. Fromholtz, V. Morrison, J. Wallace, R.M. Zeffane, J.R. Schermerhorn, J.G. Hunt, and R.N. Osborn. 2004. *Organizational Behaviour: A global Perspective*. 3rd ed. Milton, Qld: John Wiley & Sons Australia Ltd.
- Zhang, Yishan, and Nikolay Chulkov. 2008.

 Review of Information and
 Communication Technology (ICT) Hosting
 Services in the United Nations Systems
 Organizations.Geneva: United Nations.
- Zemke, R., C. Raine, C., and B. Filipczak. 2000. Bridge the Workplace Generation Gap. OfficePRO. Feb p. 32.
- Zikmund, William. 2003. *Business Research Methods*. 7th Ed. USA: Thomson Learning.