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How to Uncover Virtual Earplugs for Knowledge Sharing

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Abstract

Many organizations have developed knowledge sharing programs, such as mentoring, and knowledge transfer from retired employees, in order to articulate and maintain valuable knowledge. Knowledge sharing leads to the spreading of innovative ideas and best practices. It consists of two important processes: knowledge contribution and knowledge reception. However, knowledge reception can be failed with several reasons. This research metaphorically terms the factors obstructing knowledge reception as the virtual earplug. The research tried to identify the earplug, and studies how to turn them to be the potential factors for successful reception. In fact, these factors can originate from recipients themselves and the surrounding environment. While knowledge holders determine further advantages they will receive from the sharing of knowledge, such as monetary reward or reputation, advanced benefits may not be the major rationale for the reception. Researchers utilized the focus group (FG) methodology by engaging workers who had experience as knowledge recipients in their organizations. The FGs revealed possible factors causing people to believe or ignore incoming knowledge. The factors can be categorized into four groups based on the originator of the factors, which are, recipients themselves, senders, knowledge, and environmental factors. The recipients themselves can engender successful reception through factors such as their capacity to absorb the incoming knowledge, or their attitude towards senders. Senders' readiness and characteristics are also important. This research also suggested solutions that develop or enhance the effective reception environment in an organization. Management support is a crucial success factor. The support consists of 1) nurturing of collaborative culture in an organization, 2) provision of useful tools, spaces and infrastructure, 3) provision of adequate training for employees, and 4) provision of practice session.

Keywords: Knowledge reception, Knowledge sharing, Influential factors

Introduction

Knowledge reception is one of the major components in the knowledge sharing process as successful sharing is measured by the complete tacit knowledge developed in the recipient's mind. The reception augments an individual's knowledge and, in turn, returns value to an organization as a whole, and retains this intellectual asset within an organization (Hall, 2001). Generally, effective reception is determined by many factors, including the availability of effective sources or knowledge senders, appropriateness of transferred knowledge, and

readiness of recipients. Prior research has indicated the impact of these factors in effective knowledge sharing, especially the knowledge sending. The sending or knowledge contribution is very significant as knowledge generally conveys power to persons who own it. Thus, many knowledgeable persons intertwine their valuable knowledge with bargaining power and tend to hoard their knowledge.

However, even though the senders are willing to share their knowledge, it is not guaranteed that the knowledge sharing will be successful. The effective reception of new knowledge is subjective. Difficulties in a communication between knowledge sharing parties can impede efforts to both share and receive knowledge (Barki & Hartwick, 2001; Markus & Benjamin 1997). The communication factor includes a sender's credibility and communication competence. A sender's credibility concerns the receivers' perception of the source's professionalism (Dholakia & Sternthal, 1977; Grewal, Gotlieb, & Marmorstein, 1994). Communication competence is the ability of senders to transfer knowledge in order to achieve goals (Monge, Bachman, Dillard, & Eisenberg, 1982). The method to extract knowledge from individuals and codify it in any tangible form that can be used by other people is challenging(Hansen, Nohria, & Tierney, 1999).Moreover, a recipient can inhibit the sharing due to insufficient absorptive capacity (Cohen & Levinthal, 1990) and lack of motivation (Gupta & Govindarajan, 2000).

Knowledge itself could be the cause of incomplete reception. Regarding knowledge self-influence, receivers often determine the quality of knowledge content. This quality concern encompasses the precision as well as the conciseness of the transferred knowledge. Inaccurate knowledge remembrance could result in incorrect outcomes or wrong decision making. It also destroys the image of persons who perform the tasks. In addition, lengthy messages could result in boredom of receivers, even though the message is very useful.

In this study, we conducted five focus groups (FGs) to explore factors that possibly impact workers receiving shared knowledge from others. The FGs consisted of participants from several professions e.g. engineers, business analysts, managers, and teachers. Each of the FGs discussed the situations they had experienced and shared their opinions about the factors influencing and inhibiting the knowledge reception. The results from the discussions were categorized into four groups based on the originators of the factors; i.e. sender, receiver, knowledge and environment. The FGs also suggested solutions to enhance an effective reception environment in an organization. The next section associates prior literature that relates to this research. Then, the methodology is described. The findings and suggested solutions are presented at the end.

Literature Review

Knowledge is a crucial tool to define strategies and goals, make decisions, and perform operational tasks. Consequently, it provides its owner with power, pride and self-confidence. Knowledge sharing increases not only values and competitive advantage to the receiver, but also recognition and self-efficacy to a sender. Reid (2003) compares knowledge sharing to merchandising where the knowledge owner is viewed as a seller, the receiver as a buyer, and knowledge is equivalent to the merchandise. Figure 1 illustrates the knowledge sharing process encompassing the three components related to each other sequentially. Knowledge is

initiated and shared by a sender to a receiver through the knowledge transmission channel. This action occurs within the surrounding environment so firm that both parties are working. This environment affects knowledge sharing in two aspects - implicitly and explicitly. The example of implicit effect is an organizational competitive culture leading to hindrance to the collaboration and knowledge sharing among co-workers, while working in an open environment in which peers can freely share their opinions and advices is an explicit effect.

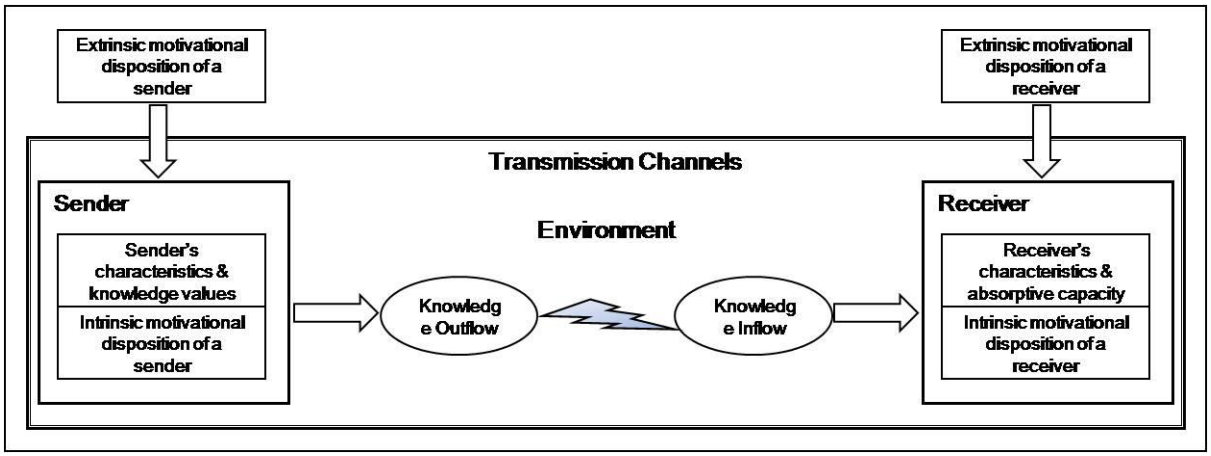

Figure 1. Process View of Knowledge Sharing Mechanism

The motivational influences for a sender's knowledge contributing and a recipient's receiving can be both extrinsic and intrinsic. Extrinsic factors can be monetary form such as increased salary and performance bonus, and non-monetary form such as recognition awards from the company or recognition from top management. Intrinsic motivations are various for instance enjoyment of sharing knowledge, self-esteem, etc.

Because of the dictum that "Knowledge is power", people tend to hoard their knowledge and reluctant to share. Therefore, studies about knowledge sending side aim to understand driving factors to knowledge stickiness and cognitive factors to motivate the sharing. People share their knowledge with those they trust. Trust reflects the way one person behaves with the other (Cook & Wall, 1980), including transfer of knowledge (Awad & Ghaziri, 2004). The appropriate amount of mutual trust between a sender and a recipient increases the level of their shared knowledge (Nelson & Cooprider, 1996). Consequently, knowledge sharing behaviour is increased and overall task performance is optimised. Trust can be made or broken if the two parties have differences in language, culture, or status. A subordinate's lack of trust in his/her supervisor can hinder upward communication (Roberts and O'Reilly, 1974). Trust also plays an important role in the receiving of new knowledge. Recipients have to trust in a sender's goodwill and intention to contribute knowledge (Krogh, 1998). Also, knowledge may be unsuccessfully shared if participants are in an inappropriate location or unsuitable time (Awad & Ghaziri, 2004). Recipients might refuse the transfer if they are busy with a heavy workload, or in an inconvenient place e.g. while enjoying watching a movie.

Typically, successful knowledge sharing is measured by the right information articulated to, and new tacit knowledge created in a recipient. Hence, the reception of knowledge is very important. Although a sender is sharing voluntarily, the reception could fail for several

reasons. In fact, a recipient could hinder the transfer for two reasons: insufficient absorptive capacity (Cohen & Levinthal, 1990) and lack of motivation (Gupta & Govindarajan, 2000). Absorptive capacity refers to an ability to absorb knowledge from external sources, assimilate it internally, and apply it (Cohen & Levinthal, 1990). Ko, Kirsch, & King (2005) studied the relationship between an arduous relationship and an absorptive capacity as predictive variables to the transfer of knowledge from consulting companies to their clients. Their result concluded that an arduous relationship has a negative impact on the knowledge transfer while the absorptive capacity has a positive one (Ko et al., 2005). Lin, Geng, & Whinston (2005) argue that, although a sender has a complete set of information or knowledge to be shared, a receiver may be unable to absorb it. Worse, neither of them have the complete set of information.

In terms of the deficit motivation, many factors such as proximity with a sender (Slaughter & Kirsch, 2006), organizational norms (Bock, Kankanhalli, & Sharma 2006), or incentive (Orlikowski, 1993; Gupta & Govindarajan, 2000) are determinants of their impact on knowledge reception. The proximity can be thought of in terms of task interdependency (Cross Rice & Parker 2001), a shared language (Chiu, Hsu, & Wang 2006), or a shared vision between the two parties (Tsai & Ghoshal, 1998; Chiu, et al. 2006). Organizational norms can also motivate people to adopt knowledge. An organization with high competitive culture has few collaborative norms, thus knowledge transfer among its members is inhibited (Orlikowski, 1993). Regarding incentives, some incentives such as bonus may influence knowledge reception. Gupta & Govindarajan (2000) manifest that the bonus paid to a subsidiary's president can ease the knowledge receiving from a parent organization in MNCs. However, receivers who are too concerned about future pay back will neglect the use of electronic knowledge repositories (Bock, *et al.* 2006). This paper pursues the focus group (FG) methodology to uncover the possible factors that motivate workers intent to receive knowledge from other people in the organization.

Research Methodology

The Focus Group (FG) is a formal and structured group that brings together individuals to discuss a specific topic in a defined time (Marczyk, DeMatteo, & Festinger 2005). In FG, the participants feel comfortable in sharing their experience, perceptions and ideaswith the other participants (Blackburn & Stokes, 2000). In this study, five mutually exclusive FGs were established. The participants worked in a variety of businesses at the time of participation in these FGs. They are in different professions e.g. engineers, business analysts, managers, and teachers. Each FG consists of seven to nine participants, which is the appropriate number of participants for the discussion. One of the participants was assigned as the moderator, one as the recorder, and the others were the members. During the discussions, both audio and video recordings were made. The discussion format was the same for each of the groups. The meetings commenced with a pre-group briefing by the moderator in order that all participants could understand the objectives of the meeting. In turn, participants were asked to introduce themselves briefly in terms of their positions in their organizations and their work experience. Then, they were asked to share their experience as a knowledge receiver in their

organizations. The facilitator initially asked them to recall real situations where they had acted as the knowledge receivers. They had to recognize the knowledge sender, whether the sharing was completed, and what factor(s) engendered the successful sharing. If the sharing failed, they explained why they avoided the reception. They were also asked about their opinions of additional factors they perceived as the inhibitive factors to knowledge reception. When the discussion was completed, the groups were asked to conclude their findings and their views on the FG questions in the group report.

Findings and Suggested Solutions

The FG members discussed about possible factors that influence people to receive knowledge from other peers. From these factors, we suggested solutions that potentially develop or enhance the effective reception environment in an organization. These topics will be described in sequence below

Factors Influencing the Knowledge Reception

There are several factors stimulating the reception behaviour or impeding willingness to receive new knowledge. This research classifies the factors into four categories based on the originators of the factors, which are:

1. The sender-driven factors
2. The knowledge-driven factors
3. The environment-driven factors
4. The receiver-driven factors

Sender-Driven Factors

Sender's Level of Expertise

The FGs consented that sender's level of expertise is one of the major factors that recipients consider during the reception. If they find that senders deliver an unqualified message, or are not confident in the shared information, they will neglect their listening. The level of expertise promotes belief in words the sender delivers (Moorman, Zaltman & Deshpande1992). Skilful senders can not only motivate audiences to listen, but also stimulate them to further apply the knowledge. For example, Sweeney, Soutar, & Mazzarol (2008) disclosed from their FGs' study that sender's expertise can increase a receiver's acceptance of word-of-mouth. It is anticipated that people will attempt to adopt knowledge from those perceive as experts in their areas of interest (Awad & Ghaziri, 2004).

"Sender of excellent is like this. If you want to go to the musical school, you just go to top three musical schools in Thailand."[Participant 11]

Sender's Ability to Share Knowledge

Although the sender is an expert in the shared content, he/she might be poor in communicating the message. The FGs indicated that a sender could not communicate efficiently due to language barrier, and lack of effective technique to present his/her ideas. The language barrier normally occurs when the sender and the receiver are of different nationality. Prior literatures (e.g. Chiu, *et al.* 2006) also indicated direct relationship between

knowledge sharing practice and language barrier. If the sender has to articulate the message by language in which he/she is not proficient, he/she could speak ambiguously, or distort recipient's understanding. Some recipients might ignore the message from this kind of sender.

"Sometimes, my company is English, also some documents are English. I explained English to the staff. I asked them to listen. After finished, I found some parts were miscommunication." [Participant 21]

The language problem also includes articulating with technical words in which recipients cannot understand. The FGs described that dealing with unfamiliar technical terms can cause the misinterpretation.

"Sometime there is a problem between you as a sender of the question, and a receiver of the question. He does not understand you because you don't choose the correct language, the different words, and you don't get it because it's technical or it's totally not linked to your question." [Participant 31]

"I deal with the customers in the factory that produces the glass, and they purchases glasses only 2 colours. They tell me that one of the colours is like brown glass, and the other one is clear glass. When I deal with the suppliers which are not in the city, they just call the things in the way that they are looked like. They call the brown glass as red glass, and the clear, glass as white glass. So, when I ask for brown and clear glass, they refuse that they don't have them." [Participant 36]

"From my experience, experts usually use the technical words or some jargon words. I usually ask my peers or another expert to explain or describe about these." [Participant 55]

The FG members also mentioned that an instructor's enthusiasm and ability to convey knowledge in an interesting and engaging manner can develop students' interest and even a thirst for more knowledge on the topic.

"If some professionals who come to train us about something, and they don't know how to train us. They speak in a boring way, so the receiver may not have the interest about that." [Participant 15]

Additionally, lack of effective presentation technique could cause recipient to become bored. The FGs described how some techniques such as using signs or symbols to illustrate the implication of messages can clarify the difficult meanings to a receiver. Moreover, the sender can engage recipients' attention by storytelling or providing an experiment.

"The first one (factor) is person...The person that can't speak clearly, and I don't understand what they said." [Participant 13]

Sender's Credibility

The FGs opined that a sender's credibility could lead to trust and confidence in a recipient, and consequently, the appropriate amount of mutual trust between a sender and a recipient increases the level of their shared knowledge (Nelson & Cooprider, 1996). They explained that the credibility was not related to a sender's organizational role, but was the collection of positive actions that the sender had previously performed. The trustworthy, pleasant, and unassuming looks of the sender can increase the receiver's confidence in the sender's knowledge.

"Even though it's number one, but you don't like it, it's not the number one anyway."

[Participant 15]

"Just trust. You trust the person. If you don't trust the person, you probably revoke." [Participant 25]

Knowledge-Driven Factors

Quality of knowledge

FGs expressed the knowledge quality in two dimensions. Firstly, they concerned on the conciseness of the content. If the articulated knowledge is too lengthy, it is potentially ignored by recipients.

"When you receive information from people, which information are you more likely to receive? Something's short and simple or a very long detailed message. I am sure you like the simple more." [Participant 25]

Secondly, the message should be correct. FGs remarked that if recipients discover that the incoming knowledge contains inaccurate information, they will not rely on that knowledge, and abandon the reception.

"Last year and every year, we have to create some files, and write everything we did to organizing the events because it's the way to transmit the knowledge. I organized two different events last year and I saw their differences between the first and the second ones. The first one, I have a lot of information in the database of the company and the formal trainee wrote a lot of things and how to contact people, how to bargain and how to organize an event…It is easier for me to understand…The second one, it was blurred. Maybe no saved information in the database… It wasn't right, in fact. After the trainee wrote the database, it's fine. Nobody checked the information or helped me check if it's the right information." [Participant 35]

"In the case in which you're receiving knowledge from the other person, you might have to check the validity of it because it could be unreliable. You may cross check from multiple sources." [Participant 41]

"I think there are two different kinds of wrong information. One is on purpose, i.e. the sender wants to misguide you; and the other one is that there is noise and the knowledge was wrong." [Participant 56]

Knowledge relevance

Despite qualified knowledge, FGs mentioned the irrelevance of knowledge as the other cause of failure. The relevance means that the context of shared knowledge is in the recipients' interest. Recipients will abandon the sharing if they realize that the incoming knowledge is not what they are looking for or not relevant to their jobs.

"As a receiver, I want to know how the knowledge that I am learning benefits me. If I think that it's important to me or to my work, I will pay attention to it" [Participant 34]

"For example, it's interesting to learn more about the financial work, but it's not the area I want to learn about. It may be interesting for my general control, for example, but I won't work for the treasury area. I will see this knowledge it's very important. Maybe I'll be interested in it one day. But now I don't think I gonna use it again…it worth for roles in the finance or economic, but for my job I don't think so" [Participant 35]

"The reliability and relevance are two different things. Some information might be reliable, but it is not relevant to your situation. So, you need to analyse and apply with your situation." [Participant 52]

Communication Channel

The way that a sender articulates a message to a receiver is important in determining the received knowledge. The advanced of IT technologies lead to convenient ways to articulate knowledge. Prior research has studied knowledge sharing in different channel types e.g. computer-aided system (Goodman & Darr, 1998), electronic knowledge repositories (Kankanhalli, Tan, & Wei, 2005, Watson & Hewett, 2006), electronic communities of practices (Wasko & Faraj, 2005), weblog (Yu, Lu & Liu, 2010), and social media platform (Vuori & Okkonen, 2012). Although, communication via IT tools is comfortable, the FGs argued that the face-to-face communication is more effective than such remote ways. This is due to the face that a receiver can notice other contents such as a sender's emotion and attention through action and countenance.

"If you talk face-to-face, you receive more than voice. You can receive their emotion and acting, and you know and understand. But if you use the other tools such as telephone or the internet call, there is a lacking of communication tool such as noise or body language." [Participant 43]

Environment-Driven Factors

Environmental factors consist of explicit and implicit conditions. The explicit condition means physical surroundings having an impact on the knowledge reception determination, while the implicit ones are hidden factors in the environment that can influence the recipient's acceptance of the new knowledge, e.g. organizational or national culture.

Physical Conditions

The success of sharing knowledge can be influenced by the surrounding conditions. These conditions mostly include places where the sharing is conducted. The FGs described that uncomfortable meeting rooms could interfere with recipients' intention to receive knowledge. Thus, conducting the meeting in less pressured places leads to a relaxing atmosphere, and consequently supports the reception of new knowledge.

Culture

The culture that impacts knowledge reception behaviour can be either national or organizational. The national culture concerns mainly relate to differences between a sender's and a recipient's culture. If there is much difference, it is likely that the transfer of knowledge can fail. One of the examples from the FGs is the "always Yes" answer. Thai recipients always say "yes" although they don't totally understand information but are afraid to ask for more clarification. The western sender may misinterpret this as meaning that those Thai people understand the message clearly.

The organizational culture concern is another facet of the cultural issue. If an organization encourages a competitive culture among its employees, instead of cultivating collaborative

one, people will be more likely to hoard their knowledge. The collaborative culture should be engaged in management's consideration. The manager's support can be reflected in many ways such as organizational principle or town hall section. Managemer should listen openly to staff feedback and suggestions as an example of launching a knowledge-sharing environment in the organization.

"The culture of that organization may influence them to have love about to be independent from others and work independently." [Participant 15]

"Especially in Thai, with this position, you cannot debate with top manager." [Participant 22]

"We developed the knowledge sharing session team. My team consists of many levels which are senior, middle, and junior levels. When I presented, sometime the seniors tried to challenge…It's Thai culture that the senior people don't trust the junior ones." [Participant 57]

Situation

The receiving of knowledge can occur any time. Some FGs argued that the decision to receive knowledge when confronting with crisis is harder than being in the normal circumstances. In an emergent situation, people are worrying about safety of their lives as well as security of their assets; therefore, they pay less attention to knowledge that is not related to these concerns.

"When there's a flooding in Thailand, sometimes people were panic. When they fear, they will hardly receive anything because they think about their houses and their families.' [Participant 35]

Receiver-Driven Factors

Recipient's Appropriate Level of Absorption

The recipient's appropriate level of absorption refers to the comparative level of recipient's prior knowledge against the difficulty level of the coming knowledge. Prior knowledge that a recipient collects in his/her asset stock defines his/her absorptive capacity in knowledge learning (Dierickx & Cool, 1989). If new knowledge is much more difficult for a recipient, the absorption will incline to fail. However, the too easy knowledge could make a recipient boring and neglect to learn. In this facet, sufficiency of a recipient's prior knowledge is mandatory to develop absorptive capacity. FGs explained that a gap between prior knowledge and the complexity level of coming knowledge leads to learning failure.

"And the third is the level of information that you want to accept. For example like if you want to learn English, then you have to test first and then you will know OK you are in level one, two, or three. If you are in the level one and you want to study in level three, you don't know anything because it's too hard. But if you are in level three and you are studying level one, you know what you've known. You don't want to know." [Participant 13]

"I think it may be about knowledge background of this person. I used to have problems about the internet system. When I have to make a purchasing transaction, I have to put the data in the internet based system of the commercial department. When I called her [IT expert] to ask about the problems that I got and she was the one who knows well about the technical

parts and internet system. Something she said, I cannot understand and she thinks that I should understand. It takes long time for me to solve this problem." [Participant 32]

"As I work in the customer service department, I have to know about the product of the company. When the engineer teaches us about the product, other staffs understand easily. It's different from me because I don't have background knowledge about the network or LAN network or the computer. Although I take more time to learn about the product, I cannot understand." [Participant 36]

Foreseen Advanced Benefits

The advanced benefits are varied. FGs manifested that extrinsic motivations were the popular tools used in organizations. KPI is one example of these motivations. The shared topic can also be a good motivation. The starting point of motivation is the recipient's interest in the topic.

"The attraction may be important. Sometimes, I received the knowledge personally by searching in the Internet or You tube. I found the way to apply the guitar to build something new because it's just attractive, so I spent time on it." [Participant 23]

If recipients believe that the topic can improve their status or be beneficial for them in accomplishing their existing tasks, they will pay attention to the reception.

"If I'm in a marketing department, and there is a meeting about the procurement, I don't have any involvement in that department, so I don't want to know, it's not my business. So, lack of motivation, lack of benefit."[Participant 15]

"In the company, your boss will promote you or you will get more monetary reward, if you attend that class and get the certificate." [Participant 45]

Recipient's Attitude towards Sender

This factor ascribes the recipient's personal likes in one person and not another. He/she will consciously adopt the incoming knowledge from the liked one, and will refuse the other's knowledge. The effect of this factor significantly conceals the sender-driven factors. Although the sender is an expert in the shared topic, has effective communication skill, or has shown good performance records, the recipient will refuse the sender's shared knowledge if he/she negatively feels towards the sender. This factor is sensitive, and hardly manageable.

"…the second one is that I hate them. If someone that you hate tries to talk about something, you don't accept anyway because you hate him, right?... Yes, it depends on that bias also." [Participant 13]

Personal Relationship with the Sender

Personal relationship is one of the determinants for successful knowledge exchange (Szulanski, 1996). It can be ascribed in terms of social interaction among members in a network. Generally, the social interaction allows participants to access the other's resources without the formal organizational boundary (Tsai & Ghoshal, 1998). Therefore, a recipient can easily adopt meaningful knowledge from a proximate sender in a different work through this personal relationship scheme (Tsai, 2002). Despite knowing the same context, the individual is more likely to consult with friends or known peers than unfamiliar ones

(Goodman & Darr, 1998). From their experiences, many FG members agreed that good relationship between a sender and a recipient influences the successful reception, while arduous relationship can impede the recipient to accept the shared knowledge.

"Maybe the key factor for the knowledge sharing is the relationship between the sender and the receiver. If the relationship does not exist, there is no knowledge sharing. That's why that is the more important thing." [Participant 33]

Recipient's Readiness during the Sharing Time

This factor includes both physical and mental readiness. The physical readiness refers to a recipient's sufficient time and energy for the reception. FGs mentioned that many of the planned knowledge sharing activities failed because recipients were interrupted by workloads, and paid less attention to reception. Tiredness or sickness also cause unsuccessful sharing sessions. Lack of mental readiness could impede the effective sharing exercise. Recipients who are in a bad mood concentrate nothing from the transferred message.

"…second point depends on your mood. If you are already upset with something, you're broken heart, so you don't want to accept anything." [Participant 13]

"If I am working on one difficult work, and have to attend the seminar, I won't understand because I always think about my work." [Participant 21]

Recipient's Generation

Advanced technologies speed up contemporary message transmission, and ease the way younger generation consumes information. These people have seldom or never understood traditional data preparation and analysis methods in which more time is required for earning results. Typically, older generation recipients are believed to be more patient than the younger ones. Reige (2005) reveals that age difference is one of the potential barriers to the knowledge sharing. One participant described that Gen-Y people had shorter attention spans than earlier generations; therefore, they are better in listening to shorter bursts of information rather than longer meetings.

"Studies now are showing that younger people can really only understand information sensibility in a block of time. Anything wider than that may not be interesting. So, ensure that the receivers in this generation receive in short, simple, block, while the high generation can sit up for a long time." [Participant 25]

"I have to meet one guy working for a long time and he's 66… It's very difficult because 66 and 25 is a huge generation gap. It's interesting as he told me to do it this way, this way, and this way, and I thought that I should do it in the different way." [Participant 56]

"I knew" Attitude

FGs described receiver's ego as one of the key factors that obstruct incoming knowledge and cause the failed dissemination. They termed such ego as an "I knew" attitude in which a receiver believes that he/she has known well on that knowledge, and abandon to listen or receive knowledge.

"The common problem that always found is the ego. When you come from the different field of knowledge, you believe that you know the knowledge well. And when you try to listen

another person talking about that knowledge, you reject." [Participant 43]

"Some people are like the glass with full water. When you fill it, it will overwhelm. You have to be an empty glass." [Participant 52]

4.2 *Suggested Solutions*

Management support is a crucial success factor in uncovering the virtual earplug. Without consensus and engagement from top level people, knowledge sharing would encounter difficulties. Management support to share knowledge can be organized in four approaches. First is nurturing collaborative culture in an organization. The free sharing of knowledge should be embedded as an organizational tenet and principle, and should be part of everybody's work objectives. However, this mission will fail if it is not manifestly made. Managers should lead by example in order that employees can absorb collaborative behaviours continuously. Additionally, management can encourage employees to think holistically. In general, people cognitively determine related benefits and effects. If they are encouraged to view further to coaxial goals, they will be more likely to participate and exchange their hoarded knowledge. The FGs exemplified such instances as the decrease in sales volume causing a lower increase in employees' salary [Participant 24]. Moreover, the company should allow its staff from different departments to work together in order to find the interrelation of their work [Participant 25] and to develop organizational knowledge together.

The second approach of management support is provision of useful tools, spaces and infrastructure. The provision of meeting rooms and working areas alone is insufficient. The effective space for sharing knowledge is usually an informal place, as people feel relaxed when they are talking in such places. The FGs suggested such places as a coffee room, restroom, or outside rally. The meeting room format is also one of the significant success factors. Small or untidy rooms psychologically cause participants to feel uncomfortable and abandon a discussed topic. Supportive IT tools such as teleconference equipment and laptops facilitate employees to share knowledge easier. The third approach is provision of adequate training for employees. Training improves employees' productivity and enhances operational efficiency (Bogardus, 2009). Many of the inhibiting factors found in this study are resulted from lack of understanding and work skills. For example, lack of awareness of generation Y recipients' nature could cause boredom in meetings. Training such as workforce diversity and positive thinking can help people to understand other people's comfort zone and adapt themselves to interact with each other more efficiently. It also alleviates the "I knew" attitude and let people open their mind. Training in presentation skill helps senders to prepare themselves before the knowledge sharing session and reduce mistakes in recipients' eyes. Positive thinking lessons can diminish the effect of bad attitude towards disliked knowledge contributors. In addition to this soft skill training, job specific training can enhance the senders' level of knowledge, and increase his/her credibility in recipients' view. It can increase necessary knowledge to recipients before they receive the complex knowledge from senders.

And the last, but not least, is an opportunity to practice. An organization should provide opportunities for its employees to practice what they learn. These practice sessions can be

either simulated situations in which employees participate and obtain feedback for their improvement, or real situations where experienced colleagues can monitor and mentor the newer or less experienced ones through the actual work assignment. The practice sessions are beneficial in ensuring that learners understand lessons they have learned and can apply them to real situations. Some organizations allow trainees in the same classroom to meet frequently after they complete the session in order to exchange their experiences of adapting the learned lessons in their real work. The participants can share their successes and obstacles they have encountered in their real work with each other. They are also able to advise solutions to the others who are facing difficulties. The rigorous management support to these four solutions will uncover a virtual earplug and promote relaxed knowledge sharing atmosphere.

Conclusion

This research studied the potential earplug-like elements that can block the absorption of knowledge in knowledge sharing process. These elements can be easily observed or embedded in the related substances. These substances are categorized into four groups based on the origin of virtual earplug: sender, knowledge, environment, and receiver. This study conducted focus groups (FGs) to identify these elements and discussed effective solutions to reduce them. The FGs consist of participants experiencing in receiving knowledge in their work. The sender-driven group manifested three sender characteristics that could impede recipient's decision to learn. These characteristics are level of expertise in the shared knowledge, ability to share knowledge, and the sender's credibility. The second group referred to knowledge itself. The quality of shared knowledge is crucial. The concise and correct knowledge is more reliable and easily to be believed. Moreover, the shared knowledge should be relevant to a recipient's interest and is laid on appropriate communication channels. The third group contained environment driven factors. The environmental factors consist of explicit factors such as the condition of the meeting room, and implicit factors such as organizational culture. Moreover, FGs concentrated on the effect of irregular situations on the decision to receive knowledge. In the emergent situation such as flash flood, personal decision to receive knowledge is harder than being in normal circumstances.

The last group was recipient driven factors. People potentially ignore new knowledge if it is beyond their prior knowledge or ability to absorb it. These facts manifest the importance of recipient's appropriate level of absorption. Moreover, if a recipient foresees any of gained extrinsic motivations from the learning, he/she will easily uncover their earplug to the knowledge. Recipient can be induced to refuse the learning if his/her attitude towards a sender is negative. The personal relationship between both parties is also significant. The next factor is recipient's readiness during the sharing time. Physical or mental distractions during the sharing time distort the understanding in shared knowledge. FGs claimed a wide gap between both parties' generations, and a recipient's "I knew" attitude as obstacles for the knowledge sharing as well. Finally, the research proposes management support as a primary success factor to alleviate the issues. The support consists of nurturing of collaborative culture in an organization; provision of useful tools, spaces and infrastructure; provision of adequate training for employees; and provision of practice session.

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