

INTERNAL COMMUNICATION
What makes it flow?

INDEX

| | |
|--------------------------------------------------------------------|----|
| 1.0 INTRODUCTION | 4 |
| 1.1 Research question:..... | 5 |
| 1.2 What you will find in this thesis: | 5 |
| 2.0 THEORY..... | 7 |
| 2.1 COMMUNICATION..... | 7 |
| 2.2 COMMUNICATION FLOW | 8 |
| 2.3 ORGANIZATIONAL COMMUNICATION | 11 |
| 2.3.1 The superior – subordinate relationship..... | 12 |
| 2.4 OPENNESS IN ORGANIZATIONAL COMMUNICATION | 13 |
| 2.5 OPEN TWO-WAY STRATEGY AND FEEDBACK | 14 |
| 2.6 LEAN THINKING | 16 |
| 2.6.1 VISUAL CONTROL..... | 17 |
| 2.6.2 DAILY ACCOUNTABILITY PROCESS..... | 19 |
| 3. METHOD | 21 |
| 3.1 Design | 21 |
| 3.2 Sample | 21 |
| 3.3 Data Collection | 22 |
| 3.3.1 Observations..... | 22 |
| 3.3.2 Interview..... | 23 |
| 3.4 Analysis and interpretation. | 24 |
| 3.5 The quality of the research..... | 25 |
| 3.6 Ethical considerations | 27 |
| 4.0 FINDINGS | 28 |
| 4.1 The X Company..... | 28 |
| 4.2 My informants | 30 |
| 4.2.1 John | 30 |
| 4.2.2 Bill | 30 |
| 4.2.3 Al..... | 31 |
| 4.3 System and hierarchal build up of a company | 31 |
| 4.4 Upward, downward, laterally and diagonally communication | 32 |
| 4.5 The superior/subordinate relationship | 33 |

| | |
|----------------------------------------------------------------------------------|----|
| 4.6 Lean thinking | 34 |
| 5.0 DISCUSSION | 36 |
| 5.1 The system and the hierarchy; communicating through the right channels | 36 |
| 5.2 The meeting; diagonal and lateral communication | 39 |
| 5.3 The situation; the superior/subordinate relationship..... | 42 |
| 5.4 Communication flow and openness in the X Company | 44 |
| 5.5 The Johari Window and the X Company | 48 |
| 6.0 CONCLUSIONS | 51 |
| 6.1 Limitations..... | 52 |
| 6.2 Future research | 53 |
| 7.0 REFERENCES | 55 |
| APPENDIX 1 | 58 |
| APPENDIX 2 | 59 |
| APPENDIX 3 | 60 |
| APPENDIX 4 | 61 |
| APPENDIX 5 | 62 |
| APPENDIX 6 | 63 |
| APPENDIX 7 | 64 |
| APPENDIX 8 | 65 |
| APPENDIX 9 | 66 |
| APPENDIX 10 | 67 |

1.0 INTRODUCTION

Recently I encountered an organizational philosophy I found really interesting, called lean thinking. This is a way to organize and increase the efficiency in a company, eliminate waste and create value and follow through in all levels of a company. Many organizations around the world are using this philosophy and it can be summarized in five principles; precisely specify value by specific product, identify the value stream for each product, make value flow without interruptions, let the customers pull value from the producer, and pursue perfection. In other words; lean is used to create wealth in a corporation and banish waste; any human activity which absorbs resources without creating value (Womack, 15). To get any of this done I believe there is a need for effective and empowering internal communication; communication that flows to all divisions and to every individual within the company (Ahmed et al., 2010).

Communicating is something we do every day, all the time. Not necessarily by words, but also by body language, behaviors and facial expressions. Everyone does it. But there is a difference as to where, who, how and what are communicated. In this thesis the focus will be on the flow of communication by speech, in the workplace of bigger organizations. Without communication there would be no leadership, no motivation, no decision-making, no negotiation, no power. There could be no productivity or collective action either, because people would have no notion of what to produce and do, or why in the absence of communication (Jensen, 2000). Communication is not a synonym for organizing, making decisions or having influence on others. Communication is, as I will use it throughout this thesis, a constructive process. A process of meaning development; development of social structures, perceptions, and affective responses. According to Jensen (2003/04) work communication provides the raw materials individuals need to make day-to-day choices and decisions that can lead to success.

According to a study done by Jensen (2000; 2003/04) where he asked people how they understand what they were supposed to do, how they decided to do it, what tools they used and how they helped others to know what to do 60%- 80% answered that they can't find or translate the information they need to perform in the workplace. The study reveals that three top factors as to why people in the workplace are confused, and don't know what to do has to do with integration of change, unclear goals and objectives *and how we communicate* (Jensen, 2000, p. 22).

There are many different kinds of communication. In this thesis I'm focusing on *internal, oral* communication. Shockley-Zalabak (2009) defines internal communication as planned, formalized communication that is circulated by communication professionals to internal organizational members (346-347). I think this definition is a little too narrow and easy. It fails to incorporate the company as a whole and the entire internal environment of the company. It is better then to view communication as “the intersection of our humanness and the structures we build around us. It provides both task/activity specifics and emotional meaning and clarity. It is how we understand all that is happening around us. And it is how we make all that is around us happen” (Jensen, 2003/04, p. 45).

According to Argenti (2003) a survey on market information companies showed that as much as 40% of workers feel disconnected from their employers; two out of three do not identify with or feel motivated to drive their employers business goals and objectives; and 25% are just “showing up to collect a paycheck”. Managers needs to recognize that if they provide information to employees and listen to them, those employees will probably get more excited about their work, connect to the company's vision and value and able to further the goals of the organization. According to Madlock (2008) supervisors' *communication competence* appears to have a greater influence on employee outcomes than does their *leadership style*. This suggests that supervisors who are communicatively competent are likely to be perceived as leaders by their subordinates, which in turn may result in positive employee and organizational outcomes. When focusing on strengthening communication efforts, companies will also encounter the challenge of ensuring employees believe in the sincerity of communications they are receiving (Argenti, 2003). Strong internal communications – fostering increased workforce loyalty and productivity – will thus continue to play a pivotal role in a company's employee retention and overall success (ibid).

1.1 Research question:

How do managers of X Company experience the workplace internal communication flow with their teams and the other managers, and do they experience lean principles, like daily accountability process, creating a change in that experience?

1.2 What you will find in this thesis:

Firstly I will present some theory and research on organizational communication and lean thinking. Then I will go through the method used in this thesis; the design, sample, data

collection, and analysis. In chapter 4 I present the company I did my research at, my informants and some of my findings from the research. I will then discuss these findings in chapter 5. My findings will be divided into sub chapters I found fitting, and the lean thinking will be built in to these. I chose to do that because the lean thinking is supposed to be built in to the everyday work life of the people at the X Company. In chapter 6 I will sum up and end it with a few closing comments.

2.0 THEORY

2.1 COMMUNICATION

"The single biggest problem in communication is the illusion that it has taken place." (G.B.Shaw, in Caroselli, 2000, p.71)

Communication relates to many different activities and takes many different forms. Because of that *communication* is not an easy concept to define. One definition, as mentioned in the introduction, and the one I will use here, is that communication is the seam between our humanness and the structures we build around us. It provides both task specifics and emotional meaning and clarity. It is how we understand, and how we make all that is around us happen. Communication in the context of organizational life should have one goal; improving performance (Jensen, 2003/04).

Here I will present three theories – humanistic, system oriented and critical theories to help put this definition in a theoretical frame: humanistic-, system-, and critical theories.

For people communicating to be adequate communicators, in a humanistic perspective, they need to be multi directional, direct and comprehensible. Listening skills are almost equally important to the talking skill in humanistic theory, and it is important to remember the person you are communicating to – he/she is not merely a carrier of information (Modaff et al., 2008). There are several reasons as to why listening is particularly important in communication. Lundsteen (1971) defined listening as "the process by which spoken language is converted to meaning in the mind"(in Devine, 1978, p. 297). While attending to spoken language, listeners predict topic development use a series of definable micro-listening-subskills relate what they hear to their personal stores of prior knowledge and creatively react to what speakers say (Murphy, 1991). Communicators within humanistic perspective care about their receivers' opinions, feelings and ideas. In humanistic oriented organizations the emphasis is primarily on the worker, secondarily on the task. The theories suggested by this movement put a greater emphasis on communication, cooperation and participation with the employee (Modaff et al., 2008).

In systems theory (ibid) communication can be seen as a "system binder" – a system that binds its parts together and binds the system to the environment. Communication mechanisms must be in place for the organizational system to exchange relevant information with its environment, and adaptive mechanism (Almaney, 1974, in Modaff et al., 2008).

Communication in systems theory is also seen as a way to provide information flow among subsystems (Modaff et al., 2008). The interrelated parts of the system that do the processing are, according to Modaff et al. (2008) the subsystems. Every system is part of a bigger system, a supersystem, consistent of other systems in the relevant environment important for the main systems survival. There are several types' subsystems, and they are all vital to the system and its attempts to promote negative entropy. In addition communication has a maintenance function, which is there to make sure information flows to everyone who needs it. It reduces misunderstandings, is relationship forming and relationship maintaining (ibid) – which can be argued to be the essence of organizational life.

Within the critical theory approach organizations attempts to uncover communication practices, both interpersonal, team-based and organization wide that uphold imbalance in the organization. Critical theory attempts to reveal how social and technological structures within organizations serve to oppress workers. Theorists within this perspective attempt to educate workers about these oppressive forces and provide means for workers to break free from them. For critical theorists insight to organizational functioning and problems is not enough; researcher must also engage in awareness- and consciousness-raising among members (Modaff et al, 2008). Consciousness-raising involves the recognition of social, political, economic and personal constraints on freedom and it provides the forum in which to take action to challenge those constraints (Henderson, 1995). The first step in any process of change is, according to Galpin (1996) raising awareness; the managers have to recognize that he/she can improve a particular behavior or acquire a needed skill.

2.2 COMMUNICATION FLOW

Research shows that organizational performance significantly improves when communication flows uninterrupted and employees are empowered, provided incentives, and given the necessary resources to perform at an optimal level (Ahmed et al. 2010). When talking about communication flow there are several things to have in mind. Firstly the word *flow* can be defined as the action or *fact* of moving along in a steady, continuous stream. Secondly; there are more than just up and down movement (between the top executives and the work force) of these streams within a company; there are also lateral and diagonal streams (see appendix 5 for a model on the different streams). Some researchers combine the last two to one; horizontal (Bell & Martin, 2008; Ahmed et al., 2010).

Hoffman (1989) claims that for improving internal communication one has to understand the prerequisites for it. When you understand the prerequisites you can communicate better up, down, diagonally and laterally. Some of these prerequisites are that the management team are cued in well before their subordinates are informed (prerequisite from the downward communication vector), supportive, non-punitive reactions to negative circumstances, and positive attitudes from the managers and supervisors towards their employees and each other (prerequisite from the upward communication vector), sensitivity as to how each unit impact, interdepend, and interact with the other groups and units (from the lateral vector), and the opportunity for managers to call upon staff for advice on problems within their authority (from the diagonal vector). This is also a process of taking action for strengthening the management team and their communication in whichever of these ways the organization falls short (ibid). "Improving internal communication is a process of taking action to strengthen your management team wherever your organization falls short of the required conditions for each communications vector" (ibid, p. 14). I will come back to these communication vectors and prerequisites. Bell and Martin (2008, p. 130) define managerial communication as "the downward, horizontal [lateral and diagonal], or upward exchange of information and transmission of meaning through informal or formal channels that enables managers to achieve their goals.

Hoffman (1989) claims that it is not enough to develop personal communication skills in managers and leaders to solve the difficulties in internal communication. If that had been the case, these problems and difficulties would have been extinct a long time ago. Today we have some of history's most well articulated people – at all levels we find people who are adept at face-to-face interaction, participative leadership of meetings, concise writing, and effective listening. Still studies, like the one done by Jensen (2003/04), shows that two of the top factors to why people are confused in their workplace is directly linked to unclear goals and objectives, and how we communicate.

Downward communication is timely and accurate downward flow of procedures, directions, reasons, philosophies, purpose, and politics. This way the right things happen when and where they should. For internal communications to work the people in the middle have to make it work; so all level managers have to be cued in well before the subordinates are informed. Managers are expected to be the primary communication source whenever possible – not just when it's convenient. Managers and supervisors often have a feel for employee attitudes and viewpoints and an ability to translate management messages and reasoning, and are therefore accountable for everyone understanding decisions, information,

and policies. For this to work all level managers must be kept up to date on the thought process of top management during deliberations of major decisions and new policies. All level managers plan how each level will be involved in communicating and interpreting each key message (Hoffman, 1989).

In upward communication free upward flow of facts (e.g. reports designed to give advance notice of crisis information in detail suitable only for decisions rightfully to be made at each level. Not for “review”, “control”, or “investigation”), emerging situations, probabilities and problems are the essentials. This way all levels of management are cued in on what is going on and what’s likely to happen, long before they need to take action (ibid). This gives them the opportunity to be proactive, which in turn seems to reduce the need for a defensive position among the employees (Galpin, 1996).

Managers and supervisors are held accountable for creating openness in subordinates; willingness to share feelings, hope, fears, and to admit mistakes or difficulties before the consequences become obvious. An upward flow of feelings, reactions and potential problems are coming through the chain-of-command, thus minimizing the need to create alternate routes to air views. Managers and supervisors often have a feel for employee attitudes and viewpoints and are able to forewarn upper management of likely consequences of decisions or policies under consideration (ibid).

Lateral communication is the lively interchange among peer levels of management. This means that coordination of processes and activities takes place at every necessary level, rather than “falling” upward to higher management. The management team is dedicated to optimization of overall goals, not to maximization of one’s own units’ narrow goals. Peer levels of management are accountable for resolving coordination problems within their own authority (Hoffman, 1989). Coordination is a lateral function, not a downward, diagonal one. People in each business unit impact, interpret, and interact with other groups. Managers are accountable for making certain there’s free flow among subordinate peer-levels regarding anticipated changes, variation in work load or new plans in advance of probable demands or impact (ibid).

The last stream of communication is the diagonal stream. This is an open and easy access between all levels of management and staff/advisory/specialist groups. Specialized expertise is then available to whoever needs it, while still preserving the accountability of line management and supervisors to run their own units. To improve this stream supervisors and middle managers must call on staff for advice on problems within their authority without going through channels. However, management and supervisors – not staff – are accountable

for decisions reached and actions taken. Staff specialists not only have professional expertise, but also an ability to provide managerial advice. Employees' advise managers on how to get done what they're trying to get done (ibid).

Decision-makers (executives, managers, supervisors, employees) are free to contact whomever they feel has the necessary information for rightful decisions, without regard for chain-of-command. Employees are free to network with whoever might have the insight or experience necessary (ibid).

For all this to work openness is required. If the top management and all level managers aren't able to accept critique or alternate viewpoints, the communication will not flow. They must be ready to ask, and be ready for the honest answers they'll get, even when it's from a subordinate (Eisenberg & Witten, 1987).

2.3 ORGANIZATIONAL COMMUNICATION

Organizational communication can be said to be the process through which the organization can create and shape events. Shocley-Zalaback (2009) presents three approaches for understanding this process. The Meaning-Centered approach asks what communication *is*. It is concerned with how organizational reality is generated through human interaction. The emerging perspectives view describes communication as a constructive process, and raises critique and challenge many of the basic assumption of the other two approaches, like message meaning and transfer, power and domination, and notions of rationality associated with hierarchical and patriarchal environments. As a constructive process, communication can be said to bring about self and social environments. Some of the emerging perspective in this notion is postmodernism, critical theory and feminist theories – but going into all of these is outside the frames of this thesis (ibid).

The Functional approach is an approach to communication to help us understand it by describing what messages do and how they move through organizations. Function and structure. This approach sees communication as a complex organizational process that serves organizing, relationship, and change functions: what messages do. The way they move is described by examining communication networks, channels, message directions, communication load, and distortion. The approach also suggests that communication transmits rules, regulations, and information throughout the organization. Communication establishes and defines human relationships, helps individuals identify with goals and opportunities, and is the process by which the organization generates and manages change

(ibid). This thesis will have both the functional approach and the emerging perspectives as its underlying basis.

2.3.1 The superior – subordinate relationship

As mentioned, supervisors' communication competence appears to have a greater influence on employee outcomes than does their leadership style. This suggests that supervisors who are communicatively competent are likely to be *perceived* as leaders by their subordinates, which in turn may result in positive employee and organizational outcomes (Madlock, 2008). When leaders communicate effectively, their followers experience greater levels of satisfaction, so the more skilled a leader is at communicating, the more satisfied the employees are with their jobs (ibid). Employees engage in communication interactions with coworkers and superiors to satisfy interpersonal needs of pleasure and inclusion. Thus, employee communication satisfaction appears to involve both the task *and* the relational dimension of communication. This seems to increase employee job- and communication satisfaction (ibid). Madlock (2008) also found that although supervisors' relational leadership style was found to be a predictor of subordinate communication satisfaction, task leadership style was not found to be a predictor of either subordinate job or communication satisfaction. This emphasizes the importance that communication has on leadership.

The superior-subordinate/employee relationship might be the most important relationship in the workplace, according to Modaff et al. (2008). If this relationship is functional, and efficient, it might mean success for both parties, and for the organization as a whole. There are inherent differences in this relationship though, and supervisors and subordinates readily express a feeling of separation caused by these differences (e.g. status, hierarchical level, power, resource access, age, sex, experience, commitment, values and technical experience), and the relationship is often fragile. And conflicts may arise. Both parties must exert energy to construct and maintain a functional relationship. In other words: this relationship is complicated and complex. According to Ahmed et al. (2010) beneficial relationships can be established through achieving organizational goals, providing performance feedback, and engaging in formal and informal communication networks

Organizational conflict can take the form of tension between coworkers. It has been defined by Van Slyke (1999) to be a “competition between interdependent parties who perceive that they have incompatible needs, goals, desires, or ideas. It is a situation in which people cannot agree or create harmony with one another” (p.5). As in personal relationship,

conflicts in the workplace can make employees miserable and less productive, or it can be the drive for creative change. According to Modaff et al (2008) our communication skills will make the difference between success and failure in work relationships, particularly when in a conflict.

It is evident that managers spend between 60% and 80% of their time communicating (Hargie & Tourish, 2009). Previous research shows that leadership is carried out through communication in such a way that it contains both a relational and task component (Madlock, 2008). According to Hargie and Tourish (2009) most communication between superior and subordinate is face to face, and most of it is task related, and not of relational context. They also claim that effective management requires a constant use of communication to create meaning, share visions and build a common focus for the organization. This depends on open communication, and requires an intrapersonal style characterized by warmth, supportiveness, and a commitment to dialogue rather than monologue (ibid).

2.4 OPENNESS IN ORGANIZATIONAL COMMUNICATION

Open and effective, or good, communication is not necessarily the same thing. Some writers (e.g. Eisenberg, 1987; Pfeffer, 1977) argue that many organizational members (managers and employees) are strategists who communicate effectively to achieve their goals for the organization, but the communication is not necessarily completely open. Krone (1985, in Eisenberg & Witten, 1987) claims that when subordinates are communicating with superiors, they are not completely open to protect self-interests; messages directed upward in organizations are therefore "largely edited, cautious, and inaccurate".

Open communication may also, by all means, have beneficial effects. Eisenberg and Witten (1987) see open communication between manager and employees as an integrating mechanism. Managers talk with the employees, have them disclose their feelings about their job and superiors, and with that relieve work related stress and allow management to discover untapped sources of worker motivation. This will, according to Eisenberg and Witten (1987) increase the frequency of contact between management and employees, and that will improve both morale and productivity.

Both downward and upward communication are important to increase this integration, and for the managers to show a sincere interest in the employees, and for employees to get a closer relationship, and with that become more open in the way they communicate. Likert (1967, in Eisenberg & Witten, 1987) emphasized that managers and employees have a mutual

responsibility “to create "supportive relationships" through open communication” (p. 419). Open relationships have been defined as relationships where both parties perceive the other to be a receptive and willing listener. From this perspective, supportive, empathic, participative and thrust worthy managerial climate is ideal (Eisenberg & Witten, 1987).

According to Eisenberg and Witten (1987) there are different definitions of openness; openness as disclosure of personal information, disclosure of non-personal information (e.g. work plans or objectives), and the linguistic choices associated with being more or less open (this overlaps the first two). Most work relationships are non-interpersonal, because there is little "intrinsic commitment" and little private psychological-level information is exchanged. Close relationships that do result from mutual disclosure can complicate rather than simplify employees' work lives (Eisenberg and Witten, 1987).

2.5 OPEN TWO-WAY STRATEGY AND FEEDBACK

Effective internal communication is a two-way process (Modaff et al., 2008; Hargie & Tourish, 2009; Galpin, 1996). When their opinions are asked for and they take the time to share feedback, employees expect management to listen and act upon it. Non-supervisory employees are the face of modern organizations; therefore, involving them in the decision making process is one form of empowerment that is both motivating and inclusive (Ahmed et al., 2010). Today’s employees are increasingly demanding participation in conversations driving organizational change. This participation is vital to keeping employees at all levels of the organization tapped in, fostering a more genuine sense of community in the company. In companies where senior managers and leaders does not involve lower-level employees in most decisions, tends to make these employees feel alienated and unwilling to accept changes in the company (Argenti, 2003).

According to Galpin (1996) companies have to ensure an open two-way communication strategy to ensure that the “grapevine” does not take over in a company (so you don’t have to hear from Carl in the coffee room that there will be layoffs, or from Linda over lunch that the company is being sold). Memos or an announcement are not sufficient.

In 1984 Luft and Ingham developed a model of interpersonal communication in groups, The Johari Window, which can easily be transferred to an organizational context. This “window” essentially allow individuals to assess both how they present themselves, and how they absorb the information necessary to create effective interpersonal relationships (see appendix 6 for model) (Galpin, 1996).

The first square is the *arena*. This encompasses shared information. Information is mutually held, and productivity and effectiveness in individual relationships increases is one of the underlying concepts of this window. This arena is known by oneself and by others, and is the most productive area to operate in. The larger this square is the more effective, productive and mutually beneficial a relationship becomes (Johnson & Johnson, 2008).

The second square, the *blindspot*, represents information that others have, but you don't know yourself. This square is considered a handicap when it is unlikely that we will understand the reactions and perceptions others have if we don't know the information these reactions and perceptions are based on. Whilst others have an advantage over us because they know what is causing their reactions and perceptions while we remain unaware (ibid).

The third square, the *façade*, is the area that prevents interpersonal effectiveness, because exchange of information favors oneself. You protect yourself from someone or something, by hiding information (ibid).

The last square, the *unknown*, is the area where information that is unknown both by ourselves and by others lies. The most creativity could potentially be generated here if both parties involved are willing to explore together to find this unknown information (ibid).

The underlying concept of the Johari Window is that open, two-way communication enhances interpersonal effectiveness. If that concept is applied in an organization or company as a whole, it can provide an understanding for how organizational effectiveness can be improved through an open two-way communication process (Galpin, 1996).

By expanding the *arena* interpersonal relationships will enhance. This can be applied to organizational effectiveness. When transferred from interpersonal to organizational relationships, the Johari Window has key implications for improved communications. By pushing the feedback axis further over the blindspot and the unknown, and the exposure axis down over the façade and the unknown, so the arena becomes as open and big as possible, and the unknown as little as possible(see appendix 6), creates the possibilities for more effective interpersonal interactions and with that more effective organizational communication. This can be done by increasing exposure by providing more information to others, and by receiving and assimilating more feedback (Galpin, 1996; Modaff et al., 2008).

In 1948 Norbert Wiener introduced the feedback-concept in the communication discipline, and later defined it as “a method of controlling a system”. Since then, feedback has been applied to the general communication model, the public-speaking context, interpersonal relationships, system approaches and in organizational context, particularly in context with superior-subordinate communication (Modaff et al., 2008).

Feedback is a prime mechanism for addressing misunderstandings (it can also create misunderstandings), and for giving praise and recognition. It can be any form of communication between members of an organization who implicitly or explicitly provides task guidance, personal evaluation or other forms of guidance. And can contain both task elements and personal elements (ibid).

Giving negative feedback can be difficult. It can be about many things, but typically it involves matters as poor performance, denied requests and broken rules (Modaff et al., 2008). According to a study done by Wagoner and Waldron (1999, in Modaff et al., 2008) supervisors regularly avoid confronting their subordinates with negative feedback or bad news to preserve their relationships and keep a good atmosphere in the workplace.

Giving positive feedback on the other hand, raises morale among peers, and helps ensure the type of feedback and support you would like to receive in return. It is important for a supervisor to balance the type of feedback (negative or positive) with the appropriate phrasing at the right time, with the goals and needs of the subordinate, and a whole host of other concerns when they provide feedback, especially negative (Modaff et al., 2008).

I understand feedback to be an important part of the open two-way strategy that is important to implement into a company for the communication and information flow to be productive and effective.

2.6 LEAN THINKING

Lean thinking is a concept from leadership theory that came into use in the 1990's. The method focuses on reducing and eliminating waste – specifically any human activity which absorbs resources but creates no value. It sees customer satisfaction as more important than the actual cost that led to the satisfaction. The underlying goal is to improve the profitability of the business, and create more value with fewer resources. The primary incentive for working in a lean system is that the work itself provides positive feedback and a psychological sense of flow. According to Womack and Jones (2003) lean thinking provides a way to make work more satisfying by providing *immediate* feedback on efforts to convert waste to value.

The point is that when waste is eliminated, the product quality improves and the production time and production cost is reduced. Womack and Jones (2003) claim that things work better when focusing on the product and its needs, rather than the organization or the equipment. So that all the activities needed to design, order and provide a product occur in continuous flow. The basic problem with flow thinking is that it is counterintuitive; for most

people it seems obvious that work should be organized by departments in batches. Then you get departments and specialized equipment for making batches at high speed. Employees career aspirations within departments and the calculations of the corporate accountant work powerfully against switching over to flow. The lean alternative to this is to redefine the work functions, departments and firms so they can make a positive contribution at every point along the stream. That way it will be in their interest to improve dialogue with costumers and improve the internal communication and immediate feedback to make value flow. Asking and providing feedback about whether a specific activity really creates any value for the customer and the business becomes key in lean management.

Who does this redefining? A big part of the lean thinking model is to get everyone involved. That means that the top management does the redefining. The middle managers and the supervisors do the redefining. The employees and general staff do the redefining. Everyone is involved. How this process is done has a huge impact on how well such changes get implemented. The more people are involved, the more they all work together as a team, the more they will feel a sense of ownership to it, and the more they will contribute to making the redefining work (ibid).

According to Mann (2010) lean management is a closed loop system which produces process focus and process improvement. Mann (2010) points to four principal elements which combined form the system, and make the company as a whole move forwards. The first element is leader standard work. The idea is that when the leader follows his/her standard work effectively, the rest of the lean management system has a good chance of operating effectively, powered by the engine of leader standard work. The second element is visual control. The visuals translate performance of every process – throughout production and management - into expected versus actual. This visual is to give leaders the ability to quickly spot and take action where actual performance hasn't met what was expected. The third element is the daily accountability process. This daily accountability process is a way for the leader to steer, set direction for improvement where that is needed. And the fourth is leadership discipline (ibid). In this thesis the focus will be on element two and three; visual control and daily accountability process.

2.6.1 VISUAL CONTROL

Performance tracking tools – such as the daily accountability board – which ensures daily management process (DMP) where the manager or supervisor of a team gathers the team and

go through yesterday's production and the goals for the day (the board helps this become visual. It is there at all times, so if someone comes in late or forget something they can go over to the board at any time and have a look) - or a hour-by-hour production-tracking charts, are among the most commonly seen visual process monitoring tools in lean production areas. Advanced Manufacturing Audit (AMA) is also a commonly used visual tool – but this tool is for the leaders to become more visible for the employees. When these tools are implemented as a part of a process that includes mechanisms to sustain them, such as leader standard work, the tracking tools have a good chance of being used effectively. The visual controls give an immediate sense of how the work is processing (Mann, 2010; Womack & Jones, 2003).

Visuals are an important enabler for disciplined focus on and adherence to lean processes. This focus on process is absolutely essential for enabling and maintaining a lean management system. Visual control only amount to wallpaper without the discipline to insist they are taken seriously and used as a basis for action. Without disciplined follow-up by leaders, visuals are destined to take their dust-covered places behind equipment and under staircases along the other boards and banners of past failed programs. They are common in North American factories where leaders did not have the discipline to stay with programs they launched (Mann, 2010)

The purpose for visual controls in lean management is to focus on the process and make it easy to compare expected versus actual performance. Daily Management Process, DMP, boards is one type of visual control. This takes form as a large white board (see appendix 8) easily visible to everyone in the company, on which the status of an activity is displayed so every employee can see it and take appropriate action accordingly. It is important that managers and leaders understand why they track performance and that they commit to action in response to performance data and follow through. This way action assignments turn into improvements.

The AMA is another form of visual control. As mentioned this is a way for the leaders to become more visible with the employees. The AMA is a way for the leaders to engage employees in information exchange, and raise awareness about key manufacturing elements, through communication and interaction(see appendix 9 for the questions involved in an AMA) (Buckley, 2009).

When visual monitoring tools are implemented as a part of a process that includes mechanisms to sustain them, such as leader standard work, the tracking tools have a good chance of being used effectively, according to Mann (2010). Visual monitoring tools, such as the DMP board are part of a new way of managing an operation. Most production leaders are

pragmatic people. If a tool works for them they are likely to sustain it. But without a process that defines how the tools are used and sustained their use, the tools are likely to fall by the wayside. Overall, visual controls will not only heighten focus on process and accountability for that focus, it will also provide a foundation for a far greater level of employee involvement than could any other reporting system, Mann (2010) claims in his book *Creating a Lean Culture*. For lean production to truly be a process improvement system, that kind of involvement is essential.

Visual controls in lean means the immediate, accessible, flexible, inexpensive and responsive nature of visual controls that makes these simpler solutions the preferred ones for most applications in lean operations.

2.6.2 DAILY ACCOUNTABILITY PROCESS

In a “lean world” (the world of the companies following the lean principle) the focus is on maintaining and improving the process. To be able to do follow-up in a lean world – both of production and people – one has to understand the causes of yesterday’s problems and then eliminate them. A lean management structured process deals with daily accountability for making process improvements to eliminate the causes of shortage; where and how the problem occurred, and how and who are able to resolve it (Womack & Jones, 2003).

Companies using the lean management principles keep focus on the process. How to stabilize it, standardize it, and improve it by first exposing the possible problems, and then eliminating them. And then repeat that cycle over and over again. Visual control makes it easier to evaluate the status of process and problems. Therefore it is important that it becomes a part of the leaders’ standardized work, and a part of the daily accountability process (ibid).

Daily accountability is a way for leaders and managers to control the pace; how fast the improvement will happen, how quickly it is to be finished, and how many resources to assign to this task. The basic for daily accountability process is to involve a daily 15 minute meeting at the beginning of each workday, this is where the production team leader meets the team members and is briefed about yesterday’s production and the goals for today (this is where the DMP boards – mentioned above - is being used), 20 minute production meetings every other day, where the supervisors and managers meet twice a week to discuss progress and the road ahead (here called production meetings) (Womack & Jones, 2003; Mann, 2010).

At these production meetings the focus is on *running* the business and *improving* the business. They typically include status of key process and equipment as well as week- or month-to-date summary performance data on safety, quality, delivery and cost. The initial

items on the meeting agenda are similar to those from the DMP meetings: noteworthy items from yesterday and upcoming issues for today. Then the focus shifts to production tracking (Mann, 2010).

These meetings, along with the DMP meetings will be one focus point in the discussion chapter of this thesis.

3. METHOD

3.1 Design

The theme, research question, and the sample control the strategy you choose for conducting your research. I have chosen to use qualitative research method because it provides a foundation for understanding social phenomenon through data about people and situations from a phenomenological-hermeneutical understanding (Thagaard, 2004). This involves among other things, closeness in time and space, and observations of few objects in a given context. In qualitative research the informants meaning, self understanding, intentions and attitudes are central (Ringdal, 2007; Postholm, 2010). Through qualitative interviews I will get an insight into the supervisors and managers experience, attitudes and meanings in accordance with my research question.

I have chosen case design to study the communication flow in a large corporation. Case studies are important because they can contribute to development in a field. The results from these kind of studies can help individuals and corporations achieve a better quality in their communication, and a better work life. The focus is on a holistic perspective. That means to observe a phenomenon in a context to see how people and environment affect each other. The design is well suited for the use of several methods for collecting data material, and getting different perspectives – triangulation (Yin, 2009; Postholm, 2010). I have chosen to use both observations and interviews to collect data. This is to strengthen the reliability, and make sure to achieve dependable and credible data and conclusions (Yin, 2009). With a small sample I was able to study the persons in their natural work environment to catch the entirety and see the depth of what I wanted to study; communication flow

When one works so closely in time and space with the informants as I did in this study, some ethical challenges and dilemmas might occur. Some of these are shed light upon in the section in "3.5 The quality of the research" and in "3.6 Ethical consideration".

3.2 Sample

In the fall of 2010 I was talking to an acquaintance of mine about the theme of my thesis; communication in organizations. He, David, the R&D (research and development) manager of his company, told me that as in most big corporations they had several challenges with communication as well. We talked about it for a while and decided I should do my thesis there. They were all I wanted; I wanted a big, international corporation that is built up of

several subsystems to be a supersystem. They had many employees; leaders, supervisors, managers (of several levels), and industry employees, and they were willing to let me look at how communication flow in their company I then had a meeting with the plant manager in the Norwegian plant. He offered me an office space, introduced me to the people he imagined I would work closer with, and arranged for me to start in the beginning of the new year.

When I first came there I chose not to decide on whom to interview or follow more closely just yet – I wanted it to happen naturally as I got to know them. That turned out to be a good way for me to work. I got to know people, their positions within the company, and what they did on a normal days work, and decided thereafter to ask three of them - each at different levels in the hierarchy that is the X Company - to be interviewed, and they were all more than happy to do it. The informants in this study are one supervisor and three managers, all in charge of several other people and tasks.

3.3 Data Collection

3.3.1 Observations

The observations were used to get a better understanding of the information that would appear in the interviews. I conducted the observations myself, and kept close field notes (appendix 4). To keep my focus I had in advance reflected a good deal over what I wanted to observe. My points of focus were face-to-face communication and interaction in general, and particularly between superior/subordinate and diagonal/lateral communication. I was looking at how things were said, where and how they were said; tone of voice, body language and the content of the messages, information and communication. I sat in on production meetings to get a good understanding of the diagonal/lateral communication, I participated at some DMP – morning meetings, and I was around the office building observing as I went along. I was there for 12 weeks, from 8 am to 4 pm (when attending the DMP morning meetings I were there from 7 am to 3 pm, and attended the meetings from approximately 0655 to 0705). Every Tuesday and Thursday I attended production meetings from approximately 1205 to 1230. The rest of the time I sat at my desk in the office space, or I wandered around observing. This was good time to get acquainted with the run of things, how they worked and communicated with each other, and god time to pick my informants for the interviews.

3.3.2 Interview

“An interview is literally an inter view, an exchange of view points between two people who converse over a subject of common interest” (Kvale, 2004: 28, my translation).

An interview can be said to be a conversation with a certain structure and purpose. The goal of an interview is to get full and rich information about experiences the managers and supervisors have in communicating with each other up, down, laterally and diagonally. I wanted to interview someone who was engaged in the communication at the workplace, who worked for improving it, and who had people reporting to them. It could have been interesting to interview more than one person at the time, that way I could have gotten more and supplementary stories and information, but as they had to take time out of their otherwise busy schedule to make the interview, they were not able to do group interviews. Each interview were expected to last for one hour. They were conducted in offices in week 5 and 7, and one in a conference room in week 4. By then I had started to get an idea of how the internal communication was happening, and we knew each other to some extent, which might have contributed to us being more secure with each other and being able to talk more freely during the interviews. Still I asked the informants about their background and their role in the company without endangering their anonymity. This was a way to start harmless and “safe”. A typical qualitative interview has little structure and can be viewed as a *conversation* between researcher and participant, with only the main themes determined on beforehand (Kvale, 2004; Postholm, 2010). I asked my informants for a *conversation*, not an interview. I think this might lower the interviewees guard, make it less scary, and not so formal.

I conducted a semi structured interview (Dalen, 2004) with an open interview guide shaped by lean thinking (see appendix 3). This made my informants able to talk freely around the themes I wanted to talk about, and I was able to ask follow up questions where necessary and natural. Therefore the interviews turned out quite differently. The interviews were focused around the same themes as my observations. And at some occasions I was able to ask if what I had observed was common or not. The informants used their own praxis and experience as basis. The interviews were recorded, and later transcribed. I wrote down what both parties said, without noting body language or mimic. If there were clear pauses it was noted.

The interviews were conducted in Norwegian, so the English translations of the quotes in this report are freely translated by me.

3.4 Analysis and interpretation.

There is no standardized way to analyze a text in qualitative research, according to Kvale (2004), but the analysis will often be parallel with the data collection, which makes qualitative research characterized by flexibility (Postholm, 2010). I chose a hermeneutical approach to the data material and categorized the material after the different and reoccurring themes from the interviews and the observations. This involved interpretations of people's acts and the knowledge that phenomena can be interpreted on different levels (Thagaard, 2004). The meaning can be understood in light of the context in which it appears. My experience has naturally effected both the collection and interpretations of the data, and the follow-up research. According to Johnsen (2007) the researcher brings with him his own experiences into the understanding and that contributes to create the context in which it is understood. In this study the experience and perceptions of the informants are central.

According to Kvale (2004) the main features of the analysis contributes to develop the researcher's understanding. Therefore I chose a combination of inductive and deductive approach. This means that I will bring in themes the informants talked about, and reflect on these (inductive). When I got an overview over the material I was able to interpret the "findings" in light of the research question. I used terms connected to my theoretical background and reflected over the themes that make out the vantage point for this thesis (deductive approach). Examples of mentioned themes are, among others, "communication flow", "personal communication", and "formal communication". These themes are all used in the interview guide. My understanding of the different themes was challenged from what the informants told me and I reflected around that. A fluctuation between these approaches meant that I switched between collecting data and developing ideas from the theoretical perspectives (Thagaard, 2004).

The analysis of the data happened with an interpretation of the information I had collected and later formulated into text. The interviews were first read to get a holistic picture of what the informant had been talking about. I also reread all my field notes to get a more holistic picture and eliminating false memory and refresh what really happened. I continued with meaning making by interpreting all the material and then categorizing. The categories were chosen after what the informants had put weight on in the interviews, interpreted from my understanding and theoretical background, and together with the observations, this contributed to the different themes. Examples of themes are formal vs. informal communication, superior/subordinate relationship, diagonally/laterally communication, and

communication flow. The categories give important information and overview. This gives an overview of central themes in the material, and in this report.

3.5 The quality of the research

When using a small sample you get restricted information. Statistical generalizations demands large samples and is rarely used in qualitative research. But the findings can still be said to have a general validity. Dalen (2004) claims that reliability in qualitative research is closely connected with being precise in the descriptions of the different parts of the research process. The researcher must present good and sufficient information so the reader can get a good enough picture of the study. If the reader recognizes and finds the results interesting and useful for his/her work, it can be said to have had some sort of generalization; or continuation (Thagaard, 2004). Kvale (2004) calls this *reader generalization*. The findings in this study will not be possible to generalize to the population, but it might be useful knowledge on a small, corporate field. Any concrete and definite conclusions cannot be drawn, but it is possible to see some tendencies in the material. The results that will be summed up from this study will be the tendencies I have observed in my samples; in the context in which they happened.

In qualitative research it is important that the researcher, the process and the results are reliable and trustworthy. Trust can be achieved by showing the informants respect and attentiveness. I was welcomed in the company at once, and I felt the people there were not affected by me observing them. They communicated and went on with their daily business in a way that seemed natural to them.

To make this study reliable I have made it clear how I have gathered the data, and how I have worked with it. I have tried to present the information I have in a constructive way in accordance to my interpretations. Reliability can be challenged in many ways, amongst others by bad preparations, an untrained interviewer and observer, poor sample, and not sufficient work on the categories and analysis (Postholm, 2010). Throughout the process, and in the interpretation there had to be made some reflecting choices to hinder subjective comprehensions and express strong, but weakly founded opinions. Good and right information about what would happen in the process was necessary for the informants to feel secure that the information they gave would be treated fairly and confidential. If a researcher displays trust and professionalism the informants will be able to trust the researcher's ability

to analyze and interpret data. Still there can be sources of error and bias (Kvale, 2004; Postholm, 2010).

Interviewing is demanding and there must be done serious preparations before you start. One must be critical to the way the interview is conducted, to contribute to quality. When you personally carry out the research it is important to arrange for a good relationship to the people involved so this does not affect the results. I am not a trained interviewer or observer, but I have done it a few times before, and I felt I was much better at it now than the last time. I did manage to create an informal situation – I have to credit my informants as well on that, who were laid back and easy going – and I think that made the situation more comfortable both for me and the informants. They took their time to answer my questions fully and well reflected, and did not stress the time. I was a bit disturbed from the noises and life outside the office, but the informants did not seem to take any notice of it, so that made me relax a little more. The first interview I stressed the time a little, because I was afraid it would take more time than scheduled, but when I realized they did not stress about it, I stopped as well.

I used a variety of questions to secure a common meaning on what was talked about. When I use different questions around the same theme the reliability gets stronger, because the informants answers sheds light upon the theme from different angles, and a common meaning is built (Kvale, 2004). I felt the informants had good knowledge of and strong meanings around the theme of communication within their own company.

Because of my inexperience with big corporations I did not have any particular preconceptions on what to find and on how things were in the X Company and that can contribute to strengthen the reliability of the research. Unfortunately it could also pose as a danger for the reliability when my focus was not fixed on anything in particular. That is why I wanted to observe for a few weeks before I did the interviews, so I could sharpen my focus and be more centered around what I really wanted to find out. I have gone critically through the background and the interpretations of what I have gathered of information. I used member-checking (Postholm, 2010) where the informants read the interviews and the analysis with interpretations to see if they agreed with what I said. I used this member-checking technique to increase the reliability. I got no feedback on wrong interpretations.

In retrospect I see it as an advantage to use different methods and triangulations with interview and observations. Early in the process I was unsure of the importance of using both, because I got so much information that I would not use. I chose both to strengthen the research reliability. Because of my mentioned lack of preconceptions I chose observations to

be able to ask relevant questions. In retrospect I can say that the observations gave me a better holistic understanding for the focus of the informants. It also gave me much information about communication and interaction that I could elaborate on in the interviews.

3.6 Ethical considerations

When talking to the NSD for approval for this thesis it was made clear that I did not need their approval in writing since I was not going to use personal information and all of my informants were over 18 years of age. It is important to attend to the informants in form of confidentiality and depersonalization. The whole company got an email from me telling them who I was and what I was going to do and why. It is important that the informants know what they are agreeing to. In the consent forms for the interview it was specified that they could withdraw from the interview at any time and that they could withdraw their statements at any time. The consent form and the letter of information is in appendix 1 and 2.

Another important ethical issue is protecting the informants' identities (NESH, 2006). I have given each of my informants a pseudonym name, so their anonymity is attended to. That is also why age, company and anything personal that can tie them to recognizable traits are left out of this thesis.

4.0 FINDINGS

In this chapter I will present the data from my research. The goal is to give you as the reader insight into the data I have collected for you to get the opportunity to follow the process towards the discussions and conclusions.

The data was collected in the spring of 2011. I was at the X Company nearly every weekday from 0800 to 1600 during January, February and March. I used the first weeks just to observe and get to know the people there. That way I managed to focus my thesis and research question and I was able to decide who to interview. The people I decided on were people who seemed interested and engaged in the communication at the X Company, and not afraid to share their opinions.

The data will mainly be presented as quotations from my informants and quotations from some of the casual conversations I have had around the office, and my views from my observations. This will be supplemented with my interpretations of the quotations and observed praxis. My comments are meant as a function to keep the red thread throughout the presentation, and to shed light on and draw lines between the quotes.

4.1 The X Company

The X Company is a worldwide company with a branch in Norway. Here they are a project based plant. With all hands on deck they are approximately 150 people working there. Worldwide there are several thousand employees, and plants in more than 20 different countries.

The company' overall goals and objectives are an incident and injury free workplace, with no harm to people while protecting the environment.

X Company is committed to complete customer satisfaction and to providing quality products and services.

- *Responsibility for quality and customer satisfaction rests with all employees*
- *Implementation of industry leading quality management and measurement systems*
- *Identification and documentation of customer requirements*
- *Conformance to customer requirements and compliance with applicable standards*
- *Elimination of non-conformances*
- *Commitment to flawless execution*
- *Continual improvement of quality performance*

In addition are the management and supervisory personnel at each division and location held accountable and responsible for implementing and maintaining a rigorous quality management system to sustain this policy, and lean principles. Regular audits – like Advanced Manufacturing Audit (AMA) are completed to determine conformance to the quality management system. The AMA can also be seen as a tool to improve the superior/subordinate relationship, by having the leaders move around and get to know the workers better, show that they care about who they are and what they do, and that they appreciate the work that is done (Buckley, 2009).

Lean principles and lean thinking is important to the X Company, though it is laid on them and expected to be followed through from top management. One and a half months before I came there they'd just started implementing a new project; DMP. Mainly two of the managers were using it full time in the beginning, but in February the administration and offices got their own version of the board. Visual monitoring tools, such as the DMP board are part of a new way of managing an operation in lean thinking. Most production leaders are pragmatic people, so, as mentioned; if a tool works for them they are likely to sustain it. But without a process that defines how the tools are used and sustained their use, the tools are likely to fall by the wayside (Mann, 2010).

According to the lean thinking model the X Company also held regular managers meetings – production meetings, where all managers for all the different teams, processes, and projects are supposed to be represented and they go through their business, and take up problems, potential problems, or other things they feel the need to say. This they do twice a week; every Tuesday and Thursday from 1205, and it takes between 15 to 30 minutes, depending on topic, or if there is something special.

Monthly they keep zone meetings; the production line has theirs, and the offices have theirs. This is the time and place to say anything that doesn't fit in any other forum. In every meeting, both the zone meetings and the production meetings, there is kept an attendance record and a meeting report. The AMA, DMP, Production meetings and the zone meetings are all a part of the Lean principles implementation.

There is an open office space in the office area. Only the leaders and managers that might have meetings or important phone calls have four walls and a door around them. The doors are always open unless there is a meeting or a call going on. There are two big meeting rooms with projectors and comfortable chairs. In the middle of all the offices is the lunch area, with a small kitchen. They have lunch together every day, and you can get food there. There is a big table in the middle filled with bread, spreads and fruit, coffee and tea.

Safety at The Company is very important. Safety first is a slogan here (“*Though that’s not always the case*” as one of the managers told me). Everyone there has to watch a safety video, and get all the necessary equipment if they are going out in the production site – that being a hard hat, goggles, protective shoes, and a red jacket and red pants both with reflectors. There is a direct door from the offices to the production site. Everyone having an errand in or out goes through here.

The company is also an approved apprentice company, and regularly has apprentices in the production area.

As mentioned is the X Company implementing Lean principles in their everyday work life. To a large degree they follow Buckley’s message on leadership (2009), and his unpublished company documents on how to lead, how to treat people and how to grow as a company. He has taken the lean principles and adapted it to fit big companies, among others the X Company.

4.2 My informants

4.2.1 John

“... to gather everyone in the morning for five minutes, and say good morning to everybody, and see that everyone is up and about... just the psychology around that I think is a positive thing”

John is a supervisor with genuine concern for his subordinates. He was the first of my informants to be interviewed. In the X Company he is Supervisor. The main factory is divided in two and he has responsibility for one half. He is usually the supervisor of eight to twenty five people. At times with a lot of production and many projects there has been at the most fifty. He is also supervisor and responsible for the apprentices. In the X Company he is located in the rear end of the open offices, near The Discussion Wall (see appendix 10 for office layout)

4.2.2 Bill

“We have examples of people going directly to the different parties and asking. That way all parties knows less. It won’t go through the whole line. And that contributes to people not getting all the information they need, at the same time as everyone is involved in everything. Maybe that makes things more hidden in the communication circle”.

Bill is the Operational Manager at the X Company, and misses more formal communication, and is afraid that too much informal communication might ruin a good company, when it makes sure not everyone getting all the information they need at the right time from the right person. He is the direct leader of six – amongst others John. He has a lot of experience from

working in several large businesses before he came here. He has been at the X Company for four years. He has his own office near the open offices (see appendix 10). He used to be on the other end of the building, but asked to be moved there, so he was closer with the people he is directly supervising and managing.

4.2.3 Al

“... There’s no point in documenting everything in the entire world! [...] I like the more informal communication, if not it becomes more like herding a flock of sheep...”

Al is the HSE (Health, security and environment)-coordinator at the X Company. He has been at the company for fifteen years and has good knowledge of the run of things, and he knows everyone in the company; both in the offices and in the main factory. On one hand he sees the need for formal communication, but on the other he misses more informal communication with the opportunity to sit down and have a personal conversation about different subjects; both personal and not.

4.3 System and hierarchal build up of a company

One of the first things that hit me was the emphasis on the hierarchical build up of the company. *“The hierarchical build up of companies are important, so people get the right information at the right time from the right people. That way you avoid confusion”* – David. The general tendency in the interviews and from most of what I heard and saw while I was at the X Company the hierarchical build up is important. It is important to have clear guidelines and have a system that makes sure everyone gets the information they need, but it should not be too rigid. There should still be room for the personal conversations, the small talk and the opportunity to solve problems at the level it is a problem; and not involve many unnecessary people.

“The negative thing [about the hierarchical build up] is that so many quickly will get involved in matters that could be handled on a lower level [...] It’s important that people get the opportunity to fix trivial matters by themselves. We need to be able to adjust between what we think we can do on our own, and what needs documenting and handling higher up” – Al.

“We have a large degree of openness between us and a low threshold for discussing different matters, but the formal bit must be present. The informal communication cannot get the upper hand. Then we won’t have control on what’s happening. One must have that formal structure” - Bill

It also seems to be of a common understanding that the focus of the hierarchy – particularly when you get out of the Norwegian plant and move on to the headquarters; the focus is on the wrong thing. They feel it is too much focus on statistical matters; how many

times a manager has attended the morning meetings, how many audits they have performed, how many "request for action" forms have been handed in. They miss focusing on the production and the well being of the employees.

"I don't think they've focused on the important stuff – like the productions and error productions [...] there is a lot of focus on quantitative matters – numbers and the like – that becomes a bit obscure for my part" – Al

The hierarchical build up of the whole company seems not to be of the satisfaction for the Norwegian workers, but they do have an explanation for that too. All three of the interviewees mentioned it to some degree, but when I talked to David, the R&D manager, about it, he put it like this:

"I have worked for this company in the states, in London and in some of the Asian plants, but I think it is the Norwegian model of team work, and the common understanding that we all can think on our own. Here it is common for the boss to be among the employees, team work is more common – with the boss involved, and it's natural to have a relationship with all the employees no matter where they are in the hierarchy".

4.4 Upward, downward, laterally and diagonally communication

"It's natural for us to communicate up and down in the system" – Al

But also here the cultural differences plays its part; *"you don't have to go further than Scotland to see that everything is turned upside down, and you almost have to schedule an appointment with your boss to get a word with him" – Al*

There seems to be a consensus that the communication flow is good among everyone in the office, and everyone at the Norwegian plant; from what I observed in the production site, the communication seemed to have a good flow there too, though it was naturally obscured by the noise from the machines and the need to wear hearing protectors: *"There is a lot of communication in there on the floor, but the level of noise is high, and we need to wear hearing protectors. So it isn't exactly the place for the good conversations, the messages gets pretty short and concise" – John.*

Though the communication flows nicely and somewhat uninterrupted in the Norwegian plant, the workers there seem to share a view that the up and down communication is not good when they try to communicate with people higher up in the big hierarchy. There is a lot of downward communication there, but not as much upward; *"we get*

a lot of things forced down the top of our heads – and we really can't say or do anything about it” – John

“[the main company] *thinks it is very important with two-way communication – on the outside – but every time you try to take something up with them, they reject you right away” - Al*

There seems to be a common understanding that on the outside the main company has a two-way communication model as their main goal, and that is what the Norwegian plant has adopted, made their own, and made work – and the general conception of why that works so well there is because of the Norwegian work-model – but when all comes to all there is no upward communication – only downward.

Only when it is talk about the lean principles, the internal communication flow also seems to stop before it reaches the top. On the question of how the lean-implementation had effected Al's workday, he answered *“It hasn't been explained sufficiently enough so that I know what it is. so I don't know what it is. None of us do. Like that board [DMP] that has come from the top and down”*. Onwards he explains to me how that affects his motivation to work with that then; *“I think like: Sorry pal, but this I'm not a damn bit motivated for”* – it has to come the other way. According to Bill, the positive thing about it is the structure it imposes; *“it is a good measure. There are a lot of good measures. It is structure from the top”*. Everyone I talked to agreed that as long as they get to adapt the measures to the way they work, and the way they do things, the directions and the measures they have to do are all right. *“We do it our way. It's all about adjusting it to our self”- Bill*

4.5 The superior/subordinate relationship

The superior/subordinate relationship seems to be something everyone in the company had something to say something about. According to John *“as a supervisor it is my job to see that everyone is able to do their job”* that means everything from taking the personal and the uncomfortable conversations and to go into battle for his crew with his boss, and the other people above him again. *“He fights for us in there”* was one of the answers I got from one of the crew members when asking about John as a leader.

The superior/subordinate relationship is, in my opinion after observing the company for months, not very rigid and set. The managers and supervisors talk to each other and give each other advice independently of the chain of command – if you have a good advice, or a meaning about something you share it. It seems like an open environment where everyone can talk to everyone. That was also confirmed to me by several of the people I talked to.

There is also a low threshold for talking to others at the X Company about personal matters, particularly, I think, about psychological illnesses. John, Bill and Al all talked about it, and Al put it like this:

“It surprises me that they are so open about [psychological issues], and come to me with it, but I do think it is great that they do [...] to listen to people and talk to them I feel is a benefit I have in my job [...] we talk, and together we find a solution. And when they leave I get the feeling that I’ve helped someone, and that is a good feeling. I just hope they feel that way too”

When it comes to these personal and informal, but necessary conversations a problem with the open office solution has also been expressed:

“[the open offices] causes the communication flow, at least with the people I have under me, to die. Or at least slow down to a minimum” – John. The general thought here is that it is harder to come to your superior and talk about something personal – whether it is a work related problem or not – when your superior does not have the opportunity to close the door and have a confidential conversation without everyone else nearby listening in, that is also recognized by the people in an office with a door.

However, the communication between superior and subordinate is not always rosy read. There are conflicts at the X Company as well. One big conflict stand out in my observations from the X Company, that I will discuss more later on as an example of the kind of conflict that may arise in a workplace like this. It was a blow out and a loud discussion between John (subordinate) and Bill (superior). John had had cutbacks on his crew in the production area - for the company to save money - and, in his words: *"when I then was asked why we took so long to get things done, it just became too much for me and I snapped"*.

4.6 Lean thinking

Ever since the X Company was bought up by the big company, approximately ten years ago, the lean thinking has been an established policy. But it is in the last few months they really have started to work on it. Implementing several visual control tools, like the DMP board out in the factory and a somewhat similar, but more extensive board in the meeting room (aimed at the managers and supervisors). But there seem to me to be a general problem that the people at the X Company are not quite aware what lean thinking is, and because of that do not have a feeling of ownership towards any of the tools they try and implement, or motivation to work on it.

“We should have more training in lean thinking in the factory, and lean thinking for offices and administration as well. We should have carried out some sort of course in it. Because there is a lot of ineffective and unnecessary work around the offices as well” – Bill

“It hasn’t been explained properly. So I don’t really know what it [lean thinking and principles] is. We don’t know what it’s all about. The same goes for the board. It’s come from the top and down. And it tells us that we should do so and so and this and that. I’m not motivated for that. It must come the other way. This way it feels too forced” –Al

But it is not all negative. The people in the factory, including John are the ones that have been working with the DMP board the longest, and he sees some good qualities in it:

“And that is the whole point with the DMP board [that everyone works together like a team] at least for me. That way everyone gets an understanding of what needs to be delivered and done” – John

When talking to the employees on the factory floor, the general conception of the DMP board was that it was nice to look at and probably worth using to some extent, but they all thought it would not last much longer than a couple of months – half a year at tops. One of them explained it to me like this:

“It’s fun in the beginning, but then we all lose interest. Then we’ll hang a rug over it and forget it ever existed”

5.0 DISCUSSION

In this chapter I will discuss the results from my interviews and my observations against the theory I presented in chapter 2. Quotes from the interviews and more casual conversations are marked by italics, and are there to underline a point, or to help the discussion go on. The lean principles and thinking is not in a chapter of its own, but are implemented in the other chapters, because it is supposed to be implemented in the everyday work life of everyone in the X Company.

I think of the X Company as a small triangle among many (see appendix 7 for model), as subsystems, inside a large triangle that is the big, main cooperation, the supersystem. The subsystem that is the X Company is important for the survival of the supersystem; the production they do here, is unique and specialized. In this thesis I will focus on the internal communication flow of the X Company. There is, from the interviews and the observations, a lot of talk about how the larger company - the supersystem - communicates downwards to the X Company. The communication within the supersystem as well as within the subsystem - the X Company - will be presented here. Though I point out that this is all from the view of the people within the subsystem - the X Company.

5.1 The system and the hierarchy; communicating through the right channels

“I think we have to adjust between what we feel like doing on our own, and what needs to be documented and done higher up [in the hierarchy]” – Al.

As in all big corporations, information and messages goes through the right channels; they follow the hierarchical build up. *“It is important to have a hierarchical structure and follow that, I think. That makes sure everyone gets the messages they are supposed to get”*- David told me, and that seems to be more or less the general understanding of the buildup of the company; both locally – for the subsystems – and globally – for the supersystem. This might indicate that they have the lean thinking somewhat incorporated in their understanding of their daily work. If this is conscious or not is another question; as both Al and John pointed out in their interviews: *“I don’t even know what lean thinking is.”*

Bill, the operational manager of the X Company was particularly preoccupied with this thought:

“We do have people here who shoot from their hip, and go directly to the different people involved and ask. That way all parties knows less, because they think all the people who should have a piece of information has gotten that piece of information, when, in fact, they haven’t. Only one has got it. Then you lose the overall perspective, and won’t be part of the decision making. So we need the formal communication! If you have 90 percent structure, you can easily handle 10 percent unstructured, but if it is the other way around... well... Then you won’t get anything done”.

The importance of everyone getting all the information they need at the same time seems to be a reoccurring subject. Also John, the production supervisor said: *“Just being able to gather everyone and bringing them messages at the same time, no matter how trivial, has a value in itself”.* Though not everyone is a big fan of all the documents and forms they have to fill out for everything. I have heard it being called *“rule of red tape”*, and in a project-meeting, one of the women exclaimed about a document *“it’s just a load of rubbish sending these out every time”.*

To a large degree this hierarchical thinking consists of upward and downward communication (I will come back to laterally and diagonally communication in chapter 5.3 *The situation: the superior/subordinate relationship*). Upward communication is important to maintain the two-way flow and the openness necessary for companies to perform optimally (Hoffmann, 1989; Galpin, 1996; Argenti, 2003, Modaff et al., 2008). One of the main prerequisites here is to keep every manager up to date on thought processes, decisions, challenges and changes of the company. Managers and supervisors often have, according to Hoffman (1989) a feel for their employee’s attitudes and viewpoints, and therefore the ability to translate management messages and reasoning for the employees. Because of this they are also often held accountable for everyone understanding the decisions being made, the information provided and the policies the company chooses to follow. This is to keep all employees, no matter what level or title, in the loop at all times. It seems to be a common understanding at the X Company that this flow of communication is good and sufficient. At least in the big picture; people feel they know the policies that are followed and what is going to happen at least some time in the future. When it comes to the smaller things however, like implementing a DMP board; *“they just come in, assemble it on the wall, and then expect us to be motivated and ready to use it”* – Al.

This is also some of the reason I cannot help but get the feeling that the kind of "understanding" they seek is somewhat beyond the means they use. They - top management and middle managers - claim they seek a deeper and common understanding of the decisions being made, the policy being followed and the actions taken, but it does not always seem to be done an effort for this to be actually understood by everyone. Someone comes in and holds a meeting, or a lecture, or one or two people are sent on a seminar, and that is it. Sometimes things are not even talked about before it is a reality - like the DMP boards. The problem then is that none of the workers get a sense of ownership to the things they are supposed to do – and then “*we all lose interest. Then we’ll hang a rug over it and forget it ever existed*” – factory worker.

It sounds like the communication that often is conducted in the X Company is superficial communication - not a deeper dialogue to create that common understanding below the surface of assumptions that they claim they seek. The lower level managers, supervisors and employees also claim they want and seek a common and deeper understanding of everything that is going on in the X Company - but it does not seem to me like they are actively pursuing that understanding. When things happen they let it happen with what little information they have already got - no one seems to demand anything more. "*It is all about adapting*" as Bill said. But should that adapting go at the expense of that deeper understanding? Sometimes it seems to me that is the case. This might also indicate lean thinking in the workers everyday work life. They adapt to what they are given of information and instructions to be able to contribute to the company’s profitability and be of value – not of waste, and with that in danger of being eliminated.

However; downward communication is not enough. There is also a need for upward communication for all the managers and leaders to know what is going on in their own company. That way they are cued in and know what is likely to happen and can prepare before they need to take action (Hoffmann, 1989). It is being proactive. And this is a big part of creating openness in the company. When feelings, reactions and potential problems from the employees, in accordance with the decisions, policies and information from the leaders, flows to the top, through the chain of command, so they can act accordingly, minimizes the need to create alternate routes to air views (Hoffmann, 1989; Galpin, 1996). And I will point to the fact that leaders need to be able to recognize other, lower level employee’s views as legitimate and important views. This is also a big part of making the employees a part of the team – not working for the team. That way alienation and unwillingness to accept changes are eliminated (Argenti, 2003; Galpin, 1996).

This upward flow of communication is something the big company is proudly presenting every time they come to visit the X Company (one to two times a year). But not everyone agrees that this is what they are actually practicing;

“[The main company] *thinks it is very important with two-way communication – on the outside – but every time you try to take something up with them, they reject you right away. [...] there’s hardly any upward communication. They just give the impression that that’s the case – they write down things you say, and then they go home and just forget all about it. Nothing gets done about anything. I don’t expect them to do something about everything we suggest, but I do expect an okay feedback on why they won’t do anything about it, instead of just not hearing anything*” – Al.

It is important though, not to get *stuck* in the hierarchy. As I understand it the openness in the communicative environment will cease to exist if one get stuck and fixed in the hierarchy. As Galpin (1996) points out: top management and all level managers must be able to take criticism and see other people’s views and perspectives as recognizable views, otherwise the communication will cease to flow. According to Hoffmann (1989) the people that make the decisions are free to contact whomever they want and feel necessary for information to be able to make the right decisions, without regard for the chain-of-command. And for all that to work openness is required. This, as mentioned, might serve as an integrating mechanism. This will increase the frequency of management/employee contact, which in turn will improve both morale and productivity (Eisenberg & Witten, 1987). For this to be an effective open two-way, or more, strategy; feedback is necessary. I will come back to that in chapter 6.3 *The situation: the superior/subordinate relationship*.

5.2 The meeting; diagonal and lateral communication

As mentioned earlier research shows that organizational performance significantly improves when communication flows uninterrupted and employees are empowered, provided incentives, and given the necessary resources to perform at an optimal level (Ahmed et al. 2010; Jensen, 2003/04). For the information and communication to have a continuous flow throughout a company all four streams must be in place; upward, downward, lateral and diagonal flow. In my opinion the X Company seem to be developing and improving their laterally and diagonally stream of communication when they use the production meetings to call upon staff, colleagues and other employees for advice on problems, procedures and progress of the firm and each department. As previously mentioned Hoffman (1989) claims that to improve these streams one must call upon staff for advice within their authority

without going through channels. Because many employees do have the professional expertise needed to give sufficient advice on matters regarding their area of expertise (Hoffmann, 1989), and that again might increase the communication flow and the openness within it. Eisenberg and Witten (1987) view open communication between manager and employees as an integrating mechanism.

However it is important to have in mind that managers and supervisors are the ones accountable for the decisions that are being reached and the actions taken (Hoffmann, 1989). In the lateral communication flow the coordination of processes and activities takes place at every necessary level. This was very clear at the X Company for several reasons. One is the production meetings every other day, where all managers and supervisors having anything to do with the production meet to give status rapport and inform on and coordinate the process as it continues. At these meetings the report is written as the meeting is happening on a computer, directly linked to a projector on the wall, so everyone can watch, contribute and come with suggestions along the way. In this report-document the overall goals for each team and the company as a whole are displayed. I think it was quite clear that the management team was dedicated to reach and optimize the overall goals, not just maximize their own team goals. They seem particularly determined to the goal of continual improvement of quality performance, and the goal of an injury free workplace.

At one meeting at the start of the new year they had some complications with one of the other companies they often are collaborating with. They had done damage to some of the X Company's equipment several times and now it was both a safety hazard and it was not quite clear if it would perform optimally in the production anymore; "*It can't continue like this, we need to see improvement*". They were not communicating well with this other firm; there were no "standard operational procedure" (SOP) to follow, there had been little communication on how and who could operate the machinery. So to link it to Jensen's research (2000; 2003/04); there was not sufficient information, and the little that they had were too little to be interpreted; which is one of the top three factors why people are confused, and are not able to do their work optimally. According to Jensen (2003/04) the end goal of any communication should be improving performance. Modaff et al., (2008) claims that communication has a maintenance function, which is there to make sure information flows to everyone who needs it. According to the Functional approach to communication, communication is supposed to transmit rules, regulations and information. Neither of these goals or functions was obtained here. And according to the functional approach, the communication in this instance had failed.

This dispute was not the first one with the other firm. To me it sounded like the communication with the other firm never had been particularly good. In my opinion they should start a real dialogue with them. The right people should talk to the right people, at the right time, about the right and important things. Like operating procedures, and need for certain certificates for operating the machinery. As Ahmed et al. (2010) says: the necessary resources must be given for optimal performance. The X Company had not provided the necessary resources – in form of information and SOP's – for the other company to be able to perform at optimal levels.

This can be seen as an example of lack of formal communication in forms of procedures and documents.

“We need to have the right documents and procedures in place, written down, so everyone can see, so we are able to make the right decisions and control what is going on. That has to do with the way we organize things around here” – Bill

Again this seems to be indicating the use of lean thinking in their everyday work life. After this meeting they did go into dialogue with the other firm, and held a course in the operating procedures of the machinery. As claimed by Almaney (1974, in Modaff et al., 2008) communication mechanisms – like an SOP – must be in place for the organization system to exchange relevant information with its environment, and adaptive mechanism, and to provide information flow among and along subsystems (Modaff et al., 2008). This had not been the case here. Had the systems theory of communication failed? Was this subsystem not able to communicate with the other system? There can have been several reasons for this though. It might have been forgotten, or taken for granted that the other firm knew what they were doing, and how they were to operate the machinery they loaned. It might have been an unwillingness to inform them. It might have been not communicated clearly enough for the others to understand. It might have been an unwillingness from the other firm to listen and do things their own way. It might even have been that some of the important communication skills, like listening, were not sufficient. As Lundsteen (1971) defines listening as the process where the spoken language is converted into meaning in the mind – it might have been converted wrongly or people might not have been listening at all, and that way not been able to create that meaning. When asked they claimed they had provided the information, but then maybe the stream had branched out so much, that not enough came through to the end; the operator.

The reasons might be many. But one thing that is quite clear to me is that somewhere along the line the communication flow stopped and/or was insufficient. Somewhere along the line something in the communication between these two firms stopped, and things got out of hand, causing a work hazard and bitterness between them. I believe that had they, at least one of the sides in the matter, been aware of this lacking communication this would have been resolved a lot earlier, before any danger to the safety of the employees were presented. And it is a case that could, and should have been solved without so many people involved on a simple level.

5.3 The situation; the superior/subordinate relationship

As stated in chapter 2.3.1: *the superior/subordinate relationship* is one of the most important relationships in the workplace (Modaff et al., 2008). But because of the inherent differences, it is a fragile relationship, and conflicts may arise. To illustrate this I will now retell a situation of upward flow of feelings, reactions and potential problems that happened in the second month I was at the X Company:

At 13:30 on a Wednesday there was a very loud and heated discussion between Bill (superior) and John (subordinate), you might even call it a fight. They were inside Bill's office, but the door was open for everyone to hear. John claimed he had too few men to do all the work that needed to be done, and the ones he had were tired because of 24 hour shifts earlier that week. Overtime and staff shortage was a whole new situation for everyone at the X Company. The situation cooled for a few minutes, but then it heated up again. They were at it for about 15 minutes. I was mainly able to hear John's voice, and it seemed that Bill was just sitting there listening to what he had to say. John then left for the industry area again. This was a situation in which people could not agree or create harmony with one another, as is the definition of a conflict mentioned earlier (Van Slyke, 1999).

When I went into Bill's office to talk to him after John had left, he was a little frustrated because he thought John should have mentioned this in the nine o'clock meeting that morning – which is a forum for those kinds of issues. But he did not mention it in a single word. *“But it is okay. There will always be confrontations of this sort, and that we can handle“* Bill said. He continued by saying that he believed it to be necessary for people to blow off steam, and that it was good that John came in there and took it out on Bill instead of other “innocent” people, and that *“it is good for him [John] to have his blow outs his own way, directed towards the right person”*.

This is a situation that I can relate to Buckley's message on leadership (2009); that the team leaders – John is leader for his team, while Bill is his leader again – needs to build strong teams, and they have to go through the process required to make that happen. This, I think, is an excellent example of this kind of developmental process. There had been changes in the workforce, which put more pressure and responsibility on the people left in the production. John saw this, and he saw his team weakened by it. The fight with his boss can be seen as a required process to try and stabilize and strengthen his team. According to Modaff et al. (2008) this can be the drive for creative change, and, as Galpin (1996) points out; peer levels of management are accountable for resolving coordination problems within their own authority. Bill claimed he saw an opportunity to make long needed standardizations for each workplace, and maybe hire someone, or get into a dialogue with the client to see if the time limit could be stretched out after his fight with John.

As previously mentioned, when in a conflict, our communication skills can make the difference between success and failure in work relationships. As time went on this fight didn't seem to have had any negative or positive effect on the relationship between the two men. Maybe that is a good thing; it might be a sign of a good and strong work-relationship between a subordinate and his superior. But I think it also may point to the fact that the conflict might not really have been resolved; John had his needed blow out with Bill, and Bill listened and claimed he saw opportunities for improvement. But that was really that. They just kept going in the same routine as before.

I do believe Bill understood what John was saying; I even believed he had sympathy for him, so the listening skills were there. They both converted what the other was saying into meaning. But where was the affirmative action afterwards? The part where you take the meaning you have created and turn it in to something productive, something physical, that you can see and touch. So the communication is more than information and words. According to the definition I have used throughout this thesis; that communication is how we build the structures around us, how we understand, and make things around us happen, with the goal of improving performance. My understanding of this is that something concrete has to come out of the communication for it at all to be defined as communication. If not it is just words. So the question I really am asking here is whether the fight between John and Bill was communication or *just* a blow out and exchange of words?

Bill talked about communication needing to be consciousness rising for it to have any effect: "*that [motivate people and "getting thing into their heads"] is communication too, you know; become aware of one's role*". He talked onward about how becoming aware of one's

role gives the opportunity to go through the right channels, get the right messages and information, and the possibility to do the right job at the right time in the right place. And as operational manager, a part of his role is to make sure his subordinates (like John, and his subordinates again) have the opportunity to do the job they are being paid to do. But if the fight does not result in any change, does that mean Bill is not as conscious about his role in the company as he would like? But again; this is a big company, and as Bill says: “*it doesn't go in right away [...] things take time in a company like this*”, so maybe things happened after I was gone. Because it does seem like he was aware and conscious about his role – at least to some degree – when it comes to talking to subordinates and accommodating them. But when asking John about it he answered: “*I've heard nothing about any changes since this happened*”

It does seem that quite a few of the people I have been following and talking to are very aware of their role, and that is how, according to Galpin (1996), improvements can happen. If we follow Henderson's (1995) definition of consciousness raising it involves the recognition of economic, political, social and personal constraints on freedom that will provide a forum in which to take action and challenge the constraints. So when people see, like both John and Bill did in the fight, the constraints that customers or the company as a whole (or just the top management) have on them – that keeps them from working optimally (that might result in the quality of the product and work morale being reduced, which comes in conflict with one of the main goals of the company) – they then have the ability to do something about it.

5.4 Communication flow and openness in the X Company

All communication, I think, comes down to that managers and supervisors have to have a feel for employee attitudes and viewpoints, and the ability to translate management messages and reasoning. In other words: downward communication flow. Here I also recognize the hierarchy. According to Hoffmann (1989) downward communication is timely and accurate flow of procedures, directions, and politics, so that the right things happen when and where they are supposed to happen. But, as mentioned, this is not enough; it also has to do with the upward communication flow. Here emerging situations, probabilities and problems are essential. John tells Bill about the problem at hand, and Bill, though frustrated about not being informed about this problem earlier, now has the opportunity to go to higher management with this problem, so they can be aware of it before they might have to take

action. But to me it also sounds like it might be too late to for the *good* upward communication here. This is regarding a project in the making, and something they have to deal with right now. According to John they have to do something with the staff shortage now; when the project is done it will be too late. A part of the upward flow Hoffmann (1989) is talking about is that managers and supervisors often have a feel for employee attitudes and viewpoints, and thereby are able to forewarn upper management of likely consequences of decisions and policies. This was obviously not done satisfactory in the X Company this time. Had that been the case, there would not have been a staff shortage. So maybe that is something that the X Company has to work on; a better feel of their employees so they have the ability to forewarn about decisions being made, so this won't be a problem in the future.

“We have become better in taking care of our own people – but I guess we could always get better at it” - Bill

For that to happen, there also has to be an assured downward flow of communication. If the managers and supervisors are not informed and are not aware of the policies and decisions being made, they have no opportunity to be cued in on what is happening. So it is all closely connected.

To ensure good upward communication flow managers and supervisors also have to ensure openness in their subordinates; a willingness to share feelings and fears, and to admit mistakes and difficulties before the consequences become obvious (Hoffmann, 1989) (I will get back to openness). This is in line with the X Company's overall goals of quality of products and the commitment to flawless execution of their work. The upward flow has to be sufficient for this to happen as well.

I think there is much behind a goal of flawless execution; many factors have to be in place and play together to make sure this goal is completed. Factors like working morale, well-being, security, joy, teamwork, tools, and techniques, and probably a lot more; like a good work environment, having enough information to get the job done. Having the right tools and the right people doing the right things at the right time. In other words the communication needs to have a continuous uninterrupted flow to it for their work - no matter what - to be executed flawlessly.

As Hoffmann (1989) claims it is not enough to develop personal communication skills in managers and leaders to solve the difficulties in internal communication, and it is not enough to have sufficient up- and downward communication. There also needs to be good lateral and diagonal flow. This I believe to be directly linked to what people rate as the top

three factors why they are confused in their workplace. This is the lack of clear goals and objectives, and how we communicate (Jensen, 2000; 2003/04).

Both the lateral (which is interchange among peer levels of management, and the coordination of processes and activities at every necessary level) and diagonal (which is an open and easy access between all levels of management and staff; where staff are called upon to assist managers in problems they encounter without the need to go through channels¹) are very visible in the X Company. Both through the production meetings and the office space is, in my understanding, a witness to this. *“The communication flow between the departments is victorious”* was Johns’ answer when asked about the open office space, and Bill – who are the superior of most of the people in the open office area - talks about a closeness in time and space; *“There are short distances between us. There are a lot of fights, and when I sit here I get the opportunity to be a part of that. We need confrontations from time to time, to get things done”*. As Madlock (2008) claims that employees engage in communicative interactions with coworkers and superiors to satisfy interpersonal needs of pleasure and inclusion. This I believe to be easier when there are no walls around them and they do not have to knock on a door to interact with each other. A group of three to five people start their day earlier than the rest. They start the day by sitting at The Discussion Wall and talk about personal issues and news. I have heard them discuss diets, cars and vacation trips, and everything in between. Employee communication involves both a task and relational dimension, and according to Madlock (2008) the relational dimension seems to increase employee satisfaction. And in the light of my observations, the employee satisfaction seems to be quite high at the X Company on a general basis.

The open offices can also be seen as a way to create more openness in the organization. This might help the open communication along. Although I believe it also might inhibit it to some exchange. If we follow what Eisenberg and Witten (1987) has written about open communication; the main thing about it is for managers to talk with their employees, and have them disclose their feelings about their job and their superiors. People might not feel comfortable talking about their feelings about anything in front of everyone, because though they are not listening it is somewhat impossible not to hear when you sit in an open office space. Like Finn – the man I shared an office with, said: *“you always listen with half an ear in case there is something interesting going on. If it gets too exiting I go over and join the*

¹ This might sound contradicting in relation to the hierarchical buildup they have at the X Company, and it might be, but it is also necessary not to get a rigid and stuck workplace

conversation". And what if one of the people sitting in the office space is your supervisor? You might not want to talk about your feelings towards him/her unless they are good.

In the study by Wagnor and Waldron (1999) it became apparent that supervisor avoids confronting their subordinates with negative feedback or bad news to preserve their relationship and keep a good atmosphere in the workplace. Since the people in the strongest position of the fragile superior/subordinate relationship regularly avoid giving their subordinates negative feedback, I would imagine it even harder for the one in the fragile position to do just that. The fragile relationship might become even more fragile. I encountered this when talking to Johns' subordinates about John. They would not say anything before I ensured them that I was not going to show him what anyone answered, and I would not mention names. I did not even ask them their names to ensure them I was not able to tell anyone else who said what. This implied to me that they had negative or critical things to say, but to me it actually sounded positive. At least in the positive direction; "*He is much better now. He's calmed down after his kids were born*" - Worker 1. "*He's much better now - he might not be a part of the team - but at least he fights for us in there*" - Worker 2.

According to Eisenberg and Witten (1987) there are other definitions of openness than openness as disclosure of personal information. There is also openness as disclosure of non-personal information. If the feedback towards a leader or manager is not regarding personal issues it might be easier to talk about them with them listening. And there are linguistic choices associated with being more or less open. If there is open communication and a wish for everyone to disclose both personal and non-personal information, you have to be able to talk openly without stepping on anyone's toes unintentionally.

Eisenberg and Witten (1987) also concluded with the fact that close relationships that do result from mutual disclosure can complicate rather than simplify employees' work lives. In a survey the X Company had their employees complete (n=71) five months before I came there, one of the questions were if they had a best friend at work. The results show that on a scale from 1 to 5 (1 being the lowest/absolutely not, and 5 being the highest/absolutely) the mean turned out to be 3,01. More than half the people who answered the survey had a very good friend or a best friend at work. Then if Eisenberg and Witten's assumptions are correct, then more than half of the employees at the X Company have a complicated work life. Though in light of my observations that does not seem to be the case. But it might be a difference of definitions about "best friend at work". If you define it as you have a best friend at work; you talk, you eat, you laugh etc. together at work, and maybe go out and do something outside of the workplace sometimes. Or if you define it as you have a best friend,

and that person also happen to work with you. You do everything together, both at work and outside. When using the first definition it is not so surprising that so many have a best friend at work and the work relationships still are uncomplicated. But if you define it as the last one, it might be that the relationships are more complicated than they appeared to me. *“Not among the leaders, no, I don’t think so. Because work and free time is two separate things. We can be friends, sure, but not best friends...”* - Bill

All this two-way, or rather; multiple-way communication is vital to keeping employees at all levels of the organization tapped in, and to foster a more genuine sense of community in the company. The X Company seems to be using several ways to communicate, and they communicate up and down, but particularly good laterally and diagonally. This also seems to create a better sense of belongingness, and a feeling that your contribution is important. This, again, seems to create motivation, and it has actually decreased the turnover in the X Company.

5.5 The Johari Window and the X Company

As mentioned before, the underlying concept of the Johari Window is that open, two-way communication enhances interpersonal effectiveness. And according to Galpin (1996) this concept can be applied in an organization or company as a whole, and with that provide an understanding for organizational effectiveness (or ineffectiveness) – and how effectiveness can be improved through an open two-way communication process.

As noted above by expanding the arena, interpersonal relationships will enhance (Galpin, 1996). The larger the square, the more effective and productive relationships become (Johnson & Johnson, 2008), and the lean principles, that are so important in the X Company, say that one should do all one can to banish waste – or convert into value - in the production, and improve effectiveness, which again will increase profitability. And, as mentioned, lean thinking is supposed to provide a way to make work more satisfying by providing immediate feedback. Both DMP and AMA are good examples of immediate feedback. But how immediate can it be when it is written down and processed? Because it is very important to follow the formal procedures when it comes to lean – so everything can be monitored, so one is able to find the waste and convert it to value. I must admit that this sounds to me like a way to compensate for people not having sufficient competence, or sufficient development of cognitive capacity - or that the top management lack a belief in the workers cognitive capacity and/or competence. But then I wonder; what is immediate feedback? Is it something that

happens straight away, or is it that you have the opportunity to report something straight away- so something can be done about it later?

No matter how you get or give the feedback the arena needs to be as big and open as possible, if I understand Galpin correctly, for the company to be as effective as possible. So, as I understand it, good downward communication might be the key to open up the arena and the key to implement lean principles. Upward communication is equally important though, so that the top management knows what kind of information and communication that needs to go downward. As mentioned, there seems to be a general contentment when it comes to the downward communication. But maybe not as much when it comes to the upward communication. So that might be another reason to make sure the upward and downward communication flows smoothly through the company – also across boarder lines.

The blindspot is also important here. As said; this is the part of the “window” that the bigger it gets, the more of a handicap it will become. This is important for companies when it comes to the competition in the market – others are able to see what you lack (which you cannot see) and they use that to capture the clients. The problem is that you do not know what is happening. This might reduce profitability if the competition in the market gets big enough. Opening the arena reduces the size of the blindspot. Again I will claim that it is important with sufficient upward and downward communication, so that the blindspot might get reduced that way. Here the diagonal and lateral flow also becomes important. If communication has good flow in every direction, the chance that the blindspot reduces in size increases.

Of course, the façade, where a company protects itself by withholding or hiding information, is also a big part of reducing effectiveness, and profitability. If this part is big, the communication flow probably stopped somewhere along the upward and/or the downward stream. And the last square that is the unknown will probably get smaller as well if the communication flows sufficiently all ways, and that it is a general willingness to explore this part of the window. This I think the X Company is very willing to do, among other things based on the fact that they wanted me there to do this thesis, and when asked AI answered “*We usually have a very relaxed and comfortable relationship with our customers. Probably because we are open and honest with them. That way they are also open and honest with us*”. And they seem generally interested in the opinions of customers and others that are in contact with them on how they are perceived, how they can improve. They chase information, and have a great focus on the research and developmental part of the company.

As I understand it, it all comes down to expanding the arena. Making as much as possible open and known for both oneself and for the companies around providing

competition and customers. In my opinion this is why Galpin (1996) sees that the Johari Window has key implications for improved communications. This is also an improvement area for most companies, I think – the arena can always become bigger, and the other squares always smaller, but they probably will never be completely gone. By giving and receiving feedback from all sources – customers, competitors, employees – the arena becomes bigger and bigger (see appendix 6) this creates possibilities for more effective interpersonal interactions and with that more effective organizational communication. This again can contribute to an increase in profit and effectiveness (Galpin, 1996; Johnson & Johnson, 2008; Modaff, 2008).

6.0 CONCLUSIONS

As mentioned in the introduction communication is a constructive process. It is a process where we develop social structures, perceptions and affective responses. In a work environment this provides the raw material for people to make choices and decisions that can lead to success (Jensen, 2003/04), and as claimed by Hargie and Tourish (2009) effective management requires a constant use of communication, and a constant development of social structures and meaning. This helps create shared visions and build a common focus for the organization. As I have tried to show throughout this thesis; downward and upward communication is essential in this meaning creation and focus building. The big company seems to have this as a goal; at least outwardly. But in reality it might seem to be a general dissatisfaction in the X Company with the way they practice communication - particularly the downward communication. And this can point back to Argenti's research which shows that 40% of workers feel disconnected from their employers. I suspect that there is some feeling of disconnection between the employees/supervisors/managers and the top management. Managers needs to recognize that if they provide information to employees and listen to them, those employees will probably get more excited about their work, connect to the company's vision and value and able to further the goals of the organization.

As I have tried to show through this thesis, upward and downward communication flow, along with diagonal and lateral flow, is all important and necessary for improving a company's efficiency and profitability, contentment among workers and give them a satisfactory work life; and with that increase profitability for the company.

As an answer to the first part of my research question "*How do managers of X Company experience the workplace internal communication flow with their teams and the other managers*" – I will say that this has to do with the lateral and diagonal communication flow in the company that seems to be very well perceived. As both John and Al said; that communication flow between the middle managers are excellent in the X Company. And this might be because of the lean principles they have implemented – like the production meetings, the zone meetings, the DMP and the open offices. Or it might actually be in despite of these things, and instead be because of the company culture, people's attitudes, the Norwegian culture etc. It is the communication upward, particularly, that seems to be of some problematic nature.

The second part of the question: *do they experience lean principles, like daily accountability process, creating a change in that experience?* I would like to say yes, but maybe without them being too aware of just that themselves. Because I see the lean thinking and principles all over the X Company at all times. In almost everything they do there is a trace of lean thinking. But the managers, the supervisors, and the employees that have not been educated in the lean thinking (only three people at the Norwegian plant have had extensive education in lean thinking), so they do not know that this is in fact what they are doing all day long. And I do believe that the lean thinking is a big part of reason why the diagonal and lateral communication flow is as good as it is at the X Company. This may also be one of the reasons as to why there is so much openness among the employees – the reason why they can run into their bosses’ office and yell at them without it having too much of a consequence relationship wise. Because that kind of communication I believe to be one of the reasons why there can be so good relationships in a workplace like the X Company.

In essence I am saying that they did these things naturally, and so the implementation of the program - and the different program parts - is not necessarily a casual factor, but simply something aligned with their existing attitudes and practices.

When focusing on strengthening communication efforts, companies will also encounter the challenge of ensuring employees believe in the sincerity of communications they are receiving (Argenti, 2003). Strong internal communications – fostering increased workforce loyalty and productivity – will thus continue to play a pivotal role in a company’s employee retention and overall success (ibid).

6.1 Limitations

The first limitation that springs to mind is the fact that it is not possible to say something in general from a case study research. According to Yin (2009) generalization of results, from case designs, is made to theory and not to populations. Multiple cases strengthen the results by replicating the pattern-matching, thus increasing confidence in the robustness of the study and the theory. In this thesis there is only one case which reduces the robustness of the study and the theory. Though several interviews were conducted and several people in the case was observed – so the robustness within the case and within the research are high, but it is the transferability from the research that might be questioned.

The robustness, or the reliability of the research might also have been reduced somewhat by the fact that I, the researcher, am not an experienced interviewer or observer. To cope with that I used a long time on the observations, and I think I got a better grasp on it as

time went by. I also felt my skills as an interviewer grew with each interview. There were probably a lot of follow up questions I could have asked, and probably a lot of interview techniques I could have used to get better interviews, and get even further below the surface than I got. Because I do feel there is more to this company, and the way they communicate – both internally and externally – that I did not quite get.

The length of this thesis also presents a limitation. Much material had to be left aside. I do feel I got the main tendencies implemented in this thesis, but I did have more material on things like the AMA, the DMP, there were a few more fights, I had more material on the meeting culture and the way they communicate in meetings. But I hope this does not prove to be too big a limitation.

It might also pose as a limitation that I was there the whole time. On the plus side, the people there got to know me, which might have reduced the need to tread lightly. They knew my intentions, and I built a relationship to them, with a very friendly tone, which made it easier to talk to them informally. This might also serve as a limitation. They might become too comfortable having me around, and not take the research seriously.

6.2 Future research

I find this line of research very interesting, and there are a lot of things I would have liked to look at if I had more time and resources. One of the things that could be interesting to look at in future research is the development of the people involved in this thesis. It would be interesting to have the opportunity to coach the people involved on the way they communicate and see if they could develop and be able to reach that deeper meaning that they claim they seek, but that I did not see them accomplish.

It would be interesting for future research to look at more people and maybe have a different interview guide to try and get deeper under the surface of the people involved and the company as a whole. It could be interesting to have a survey done on everyone in the X Company around the subject of communication, both internally and externally, to get a quantitative perspective on the communication patterns.

Another type of research that could be interesting to look at in the future could be from the top management point of view. And maybe also here be able to coach them on communication, and see if there could be any development. For then to go to the managers and supervisors and employees and see if they noticed any change in the communication patterns of the whole company.

All in all I have genuinely enjoyed the process of working on this thesis. Aside from all I have learned about communication and aside from the unique and interesting insight I have gotten to how communication works in big companies, I have learned that although you do not have everything in place from the start – this kind of work is a process. Everything within a process like this has its own maturation process, and when you work with it, and adapt it throughout the process it will eventually come out as something you can use. I have learned to use the time I have, and not stress things. I still think this is a very interesting subject that I would love to do more research on. More cases, more time, more space would have been wonderful. But I am happy about how this thesis turned out. And if just one other person find the results and the discussion interesting, and maybe even helpful in some regard, I am happy.

7.0 REFERENCES

Ahmed, Z., Shields, F., White, R. & Wilbert, J. (2010). Managerial communication: The link between frontline leadership and organizational performance. *Journal of organizational culture, communications and conflict*, 14 (1), 107-120.

Argenti, P.A. (2003). *Corporate communication*. 4th ed. Boston: McGraw-Hill.

Bell, R.L., & Martin, J. (2008). The promise of managerial communication as a field of research. *International Journal of Business and Public Administration*, 5(2), 125-142.

Buckley, B. (2009). *Bill Buckley's message on Leadership*. Unpublished manuscript.

Caroselli, M. (2000). *Leadership skills for managers*. McGraw-Hill.

Dalen, M. (2004). *Intervju som forskningsmetode. En kvalitativ tilnærming*. Oslo: Universitetsforlaget.

Devine, T.G. (1978). Listening: What Do We Know after Fifty Years of Research and Theorizing? *Journal of Reading*, 21 (4), 296-304.

Eisenberg, E. M. (1984). Ambiguity as strategy in organizational communication. *Communication Monographs*, 51, 227-242.

Eisenberg, E.M. & Witten, M. G. (1987). Reconsidering Openness in Organizational Communication. *The Academy of Management Review*, 12 (3), 418-426.

Galpin, T. J. (1996). *The human side of change. A practical guide to organization redesign*. San Francisco: Jossey-Bass.

Hargie, O. & Tourish, D. (2009). *Auditing organizational communication. A handbook of research, theory and practice*. New York: Routledge.

Henderson, D.J. (1995). Consciousness raising in participatory research: method and methodology for emancipator nursing inquiry. *Advances in nursing - Theory-Oriented Practice*, 17 (3), 58-69.

Hoffmann, F. O. (1989). Improving internal communication. *Leadership Excellence*; 6 (9), 13-14.

Jensen, B. (2000). *Simplicity. The new competitive advantage in a world of more, better, faster*. New York: HarperCollins Publishers.

Jensen, B. (2003/04). *Changing How We Work. The Search for a Simpler Way*. The Jensen Group and Northern Illinois University, College of Business. Retrieved February 2nd 2011, from <http://www.simplerwork.com/store/pub/.fkgnfvlxuolxxk/StudyPowerUserFull.pdf>

Johnsen, G. (2007). Intervjuet – en forskningsamtale I møtet mellom mennesker, I K. Fuglseth & K. Skogen (Red.), *Masteroppgaven i pedagogikk og spesialpedagogikk* (pp. 118-131). Oslo: Cappelen Akademiske forlag.

Johnson, D. W. & Johnson, F. P. (2008). *Joining Together: Group Theory and Group Skills*. 10th ed. Boston: Pearson.

Kvale, S. (2004). *Det kvalitative forskningsintervju*. Oslo: Gyldendal. Located on <http://www.nb.no/utlevering/nb/0704df877ebc3f46ca5e8e140545169b#&struct=DIV240>

Madlock, P. E. (2008). The Link Between Leadership Style, Communicator Competence, and Employee Satisfaction. *Journal of Business Communication*, 45 (1), 61-78.

Mann, D. (2010). *Creating a lean culture. Tools to sustain lean conversations*. New York: Productivity Press.

Modaff, D.P., DeWine, S. & Butler, J. (2008). *Organizational communication. Foundations, challenges and misunderstandings*. 2nd ed. Boston: Pearson Education.

Murphy, J. M. (1991). Oral Communication in TESOL: Integrating Speaking, Listening, and Pronunciation. *Tesol Quarterly*, 25 (1), 51-75.

Pfeffer, J. (1977). The Ambiguity of Leadership. *The Academy of Management Review*, 2 (1), 104-112.

Postholm, M.B. (2010). *Kvalitativ metode. En innføring med fokus på fenomenologi, etnografi og kasusstudier*. Oslo: Universitetsforlaget.

Ringdal, K. (2007). *Enhet og mangfold: samfunnsvitenskapelig forskning og kvantitativ metode*. Bergen: Fagbokforlaget.

Shockley-Zalabak, P.S. (2009). *Fundamentals of organizational communication. Knowledge, sensitivity, skills, values*. 7th ed. Boston: Pearson Education.

Thagaard, T. (2004). *Systematikk og innlevelse. En innføring i kvalitativ metode*. Bergen; Fagbokforlaget.

Van Slyke, E.J. (1999). *Listening to conflict: finding constructive solutions to workplace disputes*. New York: AMACOM.

Womack, J.P. & Jones, D.T. (2003). *Lean thinking. Banish waste and create wealth in your corporation*. London: Simon&Schultser.

Yin, R. K. (2009). *Case Study Research. Design and methods*. 4th ed. California: SAGER Publications, inc.

APPENDIX 1

Informed consent

INFORMERT SAMTYKKE

Forskning: Intern kommunikasjonsflyt i større bedrifter

Forsker: Linn-Cecilie Felle

Før du samtykker til dette intervjuet er det viktig at du leser dette:

Denne forskningen er et case design for å se på intern kommunikasjon i store bedrifter i Norge. Jeg, Linn-Cecilie Felle, er her for å observere kommunikasjons mønstre og kommunikasjonsflyt på møter og deres generelle arbeidshverdag på forskjellige nivåer. Kommunikasjon kan måles og undersøkes på flere måter, men jeg er interessert i dette intervjuet er jeg interessert i din opplevelse av kommunikasjonen. Dette intervjuet er ett av fire intervjuer med fire forskjellige personer, angående lederstil, implementeringen av DMP- prosjektet, Q12 spørreskjemaet, og generell kommunikasjon i bedriften.

Dette intervjuet er frivillig og helt anonymt – hverken navn eller bedrift vil avsløres. Du har mulighet til å senere komme tilbake til meg å trekke deg helt fra undersøkelsen, eller trekke eventuelle uttalelser. Linn-Cecilie har også anledning til å komme tilbake til deg å stille deg oppfølgings og oppklarings spørsmål om det skulle være nødvendig, men også dette innehar du retten til å si nei til ved eventuell forespørsel. Intervjuet vil bli tatt opp på opptaker, så ikke skriving og notering kommer i veien for samtalen, og heller kan transkriberes senere. Du har rett til å lese gjennom transkriberingen når den er gjort.

Om noen av spørsmålene er ubehagelige eller at du ikke ønsker å svare på dem, må du si i fra om dette og det skal respekteres.

Som de andre som er med på denne undersøkelsen har du muligheten til å lese gjennom hele den endelige rapporten om du ønsker det.

Dato:

Navn (Fornavn og etternavn):

APPENDIX 2

Letter of information to everyone at the X Company

Hei.

Mitt navn er Linn-Cecilie Felle; jeg er 24 år og holder på med min mastergrad i Rådgivning ved NTNU. I den anledning har jeg vært så heldig å komme i kontakt med X Company, og fått muligheten til å se nærmere på hvordan ledere (managers) opplever at deres lederskapsstil og deres forhold til ansatte utvikles ved å bli mer synlige og ha mer daglig kontakt med sine ansatte gjennom Daily Management Process (DMP). Muligens også se på hvordan de ansatte opplever dette.

Dette ønsker jeg å jobbe med gjennom observasjoner og dybdeintervjuer med 3-4 stykker etter observasjonene er ferdige. Nøyaktig hvor lenge dette vil pågå er på dette tidspunkt litt uklart, men jeg ser for meg en plass mellom 4 og 8 uker – og jeg håper dere er villige til å hjelpe meg med dette; la meg fotfølge noen av dere og snakke med dere.

Det endelige målet med dette er å levere inn en knakende god, ferdig masteroppgave. I tillegg til å få kunnskap og innsikt i LEAN-tenkning, og få erfaring både med forskerrollen og med det indre liv på større bedrifter.

APPENDIX 3

Interview guide; subjects to talk about during the interviews.

- Who are you in the workplace/what is your role?
- Can you tell me about the communication flow in the workplace?
 - (general/your) Formal communication – positive/negative - examples
 - (general/your) Informal communication – positive/negative - examples
 - (general/your) Personal communication – positive/negative – examples
 - Open office space
 - Your listening skills?
 - Others listening skills?
- Can you tell me how lean affects you in the workplace?
- What do you think of the DMP (SMS) board?
 - How does it affect your workday?
 - Positive or negative? Change in the communication form?
- Anything else you want to mention?

APPENDIX 4

OBSERVATIONS: What I will look for (developed from January 15th 2011)

Communication:

Who talks to whom? (Use own models for meetings)

What is talked about? Personally related issues or work related issues?

Where are the people when they talk?

What is their body language?

What is their tone of voice?

Do they use sarcasm? Irony? Humor?

Is feedback given? From who? To Who? Positive? Negative?

Is the environment organized for communication?

Interaction roles:

Which of the parties starts the conversation? Who answers? Who maintain it?

Who takes the initiative for communication?

Who ends a conversation?

How do leaders communicate with other leaders?

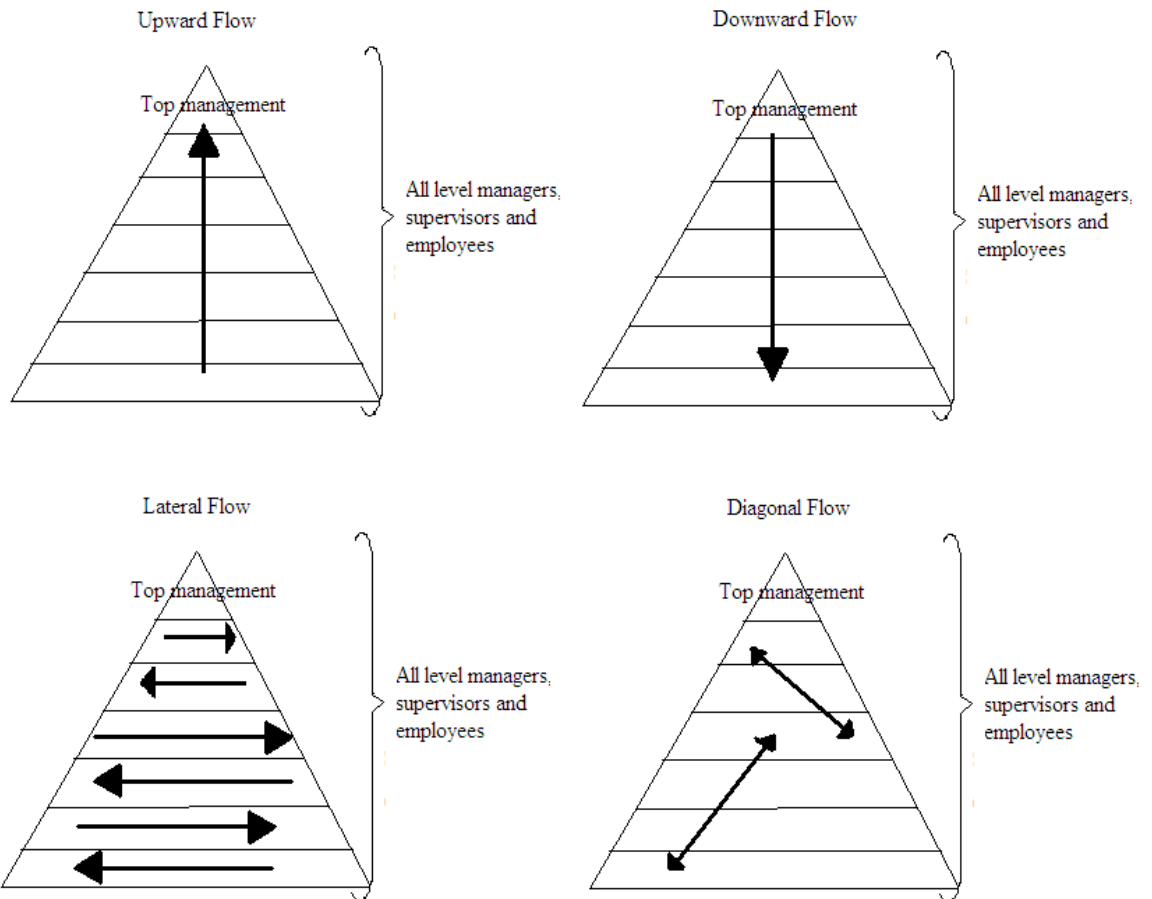
How do leaders communicate with their employees?

How do employees communicate with their leaders?

How do employees communicate with the other employees?

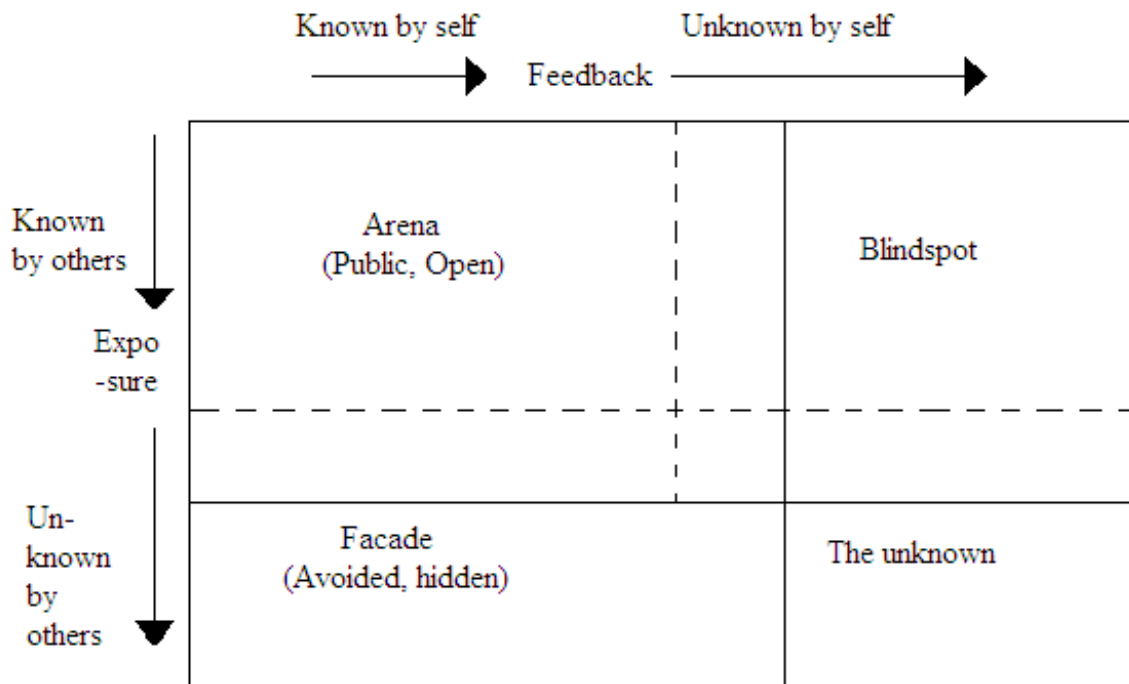
APPENDIX 5

FLOW CHART



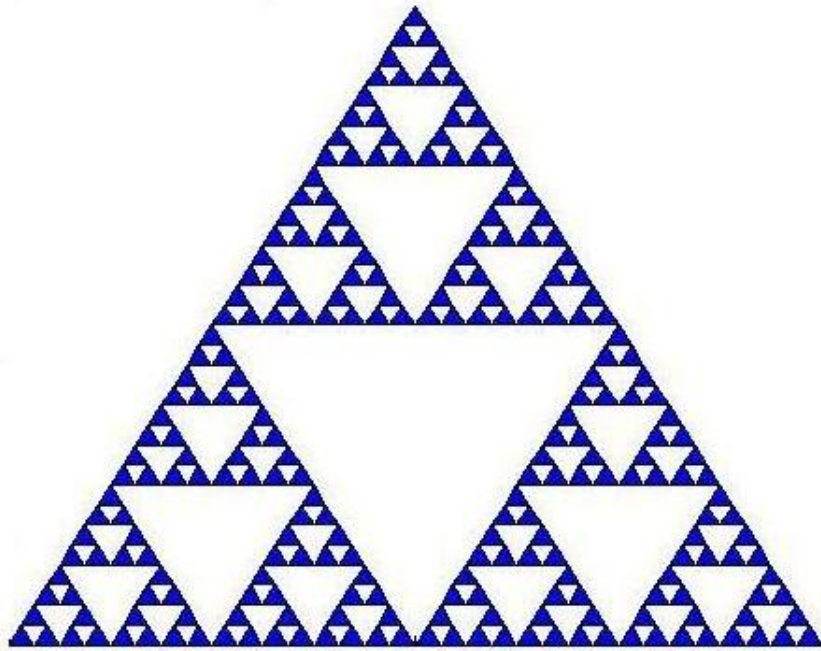
APPENDIX 6

The Johari Window (Luft & Ingham, 1984)

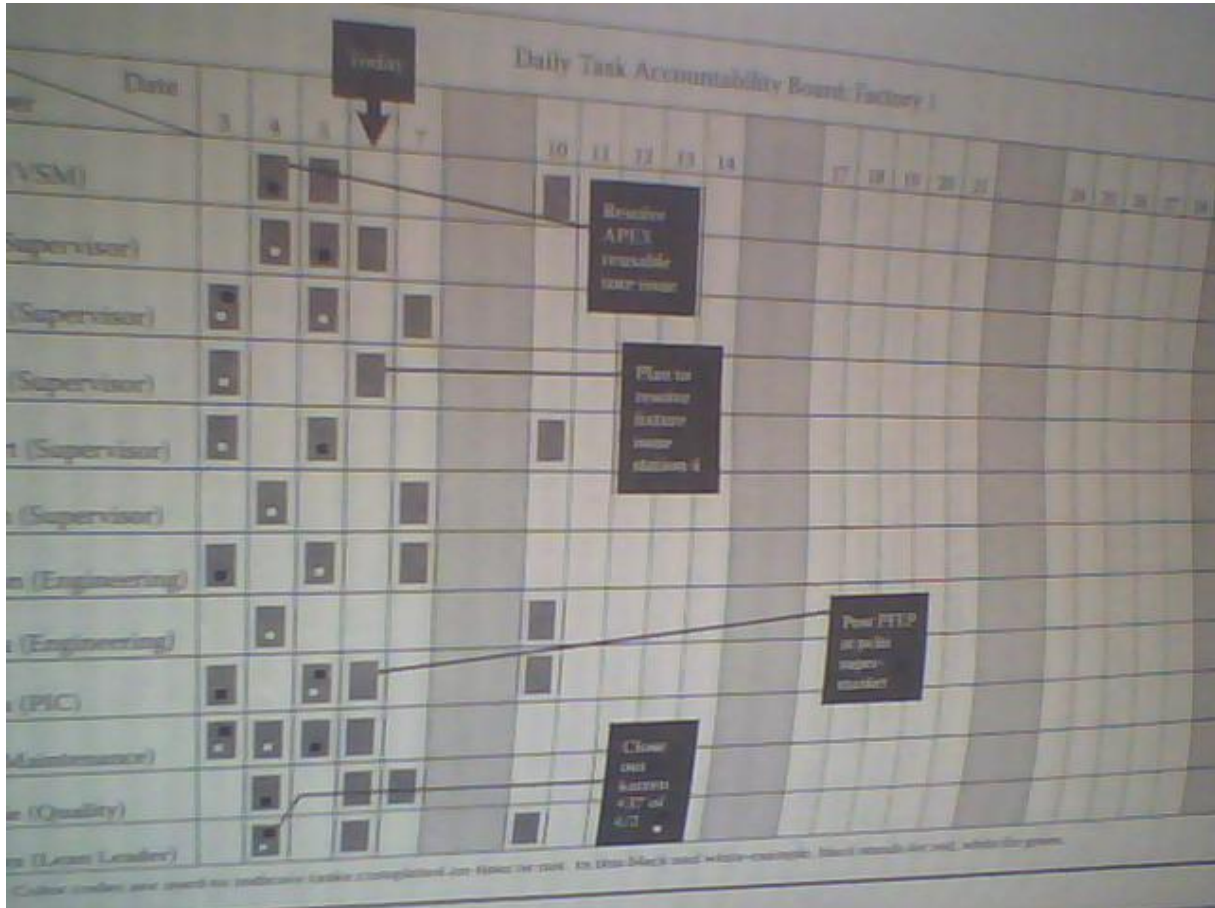


APPENDIX 7

THE HIERARCICAL BUILDUP



APPENDIX 8



This is one example of how a DMP board can look like. At the X Company – instead of names in the rows in the first column, they had categories like “production”, “quality” and “security” – making it a visual control tool for how much they produced every day, if the quality was good, bad or maybe (indicated by a green, red and blue line), and if they had any injuries or accidents.

APPENDIX 9

Advanced Manufacturing Audit

Objective

To engage employees in information exchange, and raise awareness about key manufacturing elements, through communication and interaction. Please communicate by asking the following questions.

- Please check box to indicate a satisfactory answer.

Standardized Work

- What are the steps that you take to do your job?
- What are the settings for this machine?
- Does everyone set it in the same way?
- Do you have Standardized Operating Procedure?
- When/why do you use the SOP?
- Is there anything about the SOP that needs improvement?
- Anything missing that should be there?

Quality Of Our Products

- What kind of quality problems do you encounter in your job? How do you know?
- How does work at this station (your work) affect the quality of the product?
- What action do you (should you) take if quality is compromised?
- How do you know what action to take?

On Time Delivery

- What products are you making today? How do you know?
- How many xxx are you supposed to process every hour? How do you know?
- What action is (can be) taken if the Plant is behind on the production schedule?

Cost Of Products

- Do you have any thoughts/ideas on how we (the Plant) can reduce costs in the operation?
- Are there any specific actions that you personally can take to reduce costs?

Attendance

- What impact does it have if one of your team, members is absent?
- What can be done to improve attendance?

APPENDIX 10

Layout of the offices

