



Utilization of Media in Internal Communication

Case: Konecranes Heavy Lifting Ltd, Electrics Factory



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Information distribution is an important part of internal communication. The media used to distribute information is as vital as the information itself. Effective internal communication is essential in order to increase awareness and trust between a company's management and its employees, and thus reflect to the company's results.

The object of this thesis was to understand the benefits of different media used in information distribution; to identify and benchmark the best practices in different communicational settings; and to utilize these findings in order to improve internal communication within the Electric Factory of Konecranes Heavy Lifting Ltd.

The theoretical framework of the thesis was built around internal communication, the utilization of different media in internal communication and the significance of target group analysis. Focus was placed on the division of communication into direct and mediated information distribution and the importance of media richness. In order to receive information about the target group in the Electric Factory, a mainly quantitative survey was conducted. The survey was distributed to 82 of the 101 personnel currently working in the case company. The response rate of the survey was 89 percent (73 percent of all personnel), and therefore the results could be classed as applicable. The survey results were analyzed statistically using Microsoft Excel.

The survey results revealed that most of the target group place e-mail, face-to-face communication and information screens as their preferred communication media. Less people were found to use bulletin boards and the intranet in order to search for information. Among the people without access to the company's e-mail, the preferred media were still verbal communication and information screens; however bulletin boards were also among the preferred media. Although e-mail and information screens were generally placed among the most preferred media, their main problem was found to be excess information. In order to ensure effective internal communication within the case company, all communication media should be utilized. However, information screens and e-mail should be used to provide short informative bulletins, while bulletin boards and the intranet should only be used to provide background information for these bulletins. Face-to-face communication should be used whenever necessary, but at least when communicating complex messages with high levels of importance.

Key words: Internal communication, Information distribution, Communications media

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1 Introduction

“To effectively communicate, we must realize that we are all different in the way we perceive the world and use this understanding as a guide to our communication with others” - Anthony Robbins (American advisor to leaders).

Internal communication has always created controversial opinions about its effectiveness. People often either feel there to be too much information available, or that the received information is not sufficient enough.

As technology develops, the way in which people communicate develops as well. The advancing technological world also provides more means to communicate. New media are needed as the business world becomes more global with geographical distances between different business units and personnel growing longer. These global changes also force communication to follow a new path of revolutionizing the way people interact with each other. Information transfer is required to be faster, and people around the world need to be able to work together seamlessly. This can only be achieved with the aid of technology and media, which incorporates real-time interaction through video conferencing, e-mail, etc. Although the advance in technology creates more possibilities for the development of communication, it also generates new problems. Technical difficulties, such as connection errors or power cuts, have a negative effect on the efficiency of communication.

In order to be effective, internal communication therefore requires understanding of what is being communicated and to whom, and in what circumstances. Internal communication can therefore be compared to a product or a service: in order to be successful, an extensive market research is required. In other words, the target group and its consumer habits - i.e. the utilization of media - need to be known. As products and services are constantly competing with those of a rival company's, internal communication is constantly competing with other sources of information. In order to satisfy the target market, internal communication must answer to the needs and wants of the target group. To be able to do so, internal communication must study and analyze the target group, and fill all of the personnel's communicational requirements.

This report has been conducted in order to improve internal communication in the Electrics Factory of Konecranes Heavy Lifting Ltd. in Hyvinkää, Finland. This has been achieved with a study of the target group's information requirements and information search process. The object of the thesis has therefore been to provide understanding on how the personnel search

for information, what their preferences and interests are, and how accessible and easy-to-use the available communication channels are.

2 The case company

Konecranes Plc is an international, multimillion-dollar, crane manufacturing and servicing company, which has divided its business areas into three parts: Service, Standard Lifting and Heavy Lifting. Service, which in 2007 covered approximately 34% of the total sales, concentrates on servicing and maintaining not only Konecranes manufactured equipment, but also the lifting equipment manufactured by its competitors. Although approximately two thirds of the lifting equipment is maintained by the customer itself, it has become more popular to outsource this maintenance and service to a third party in order to cut costs. Therefore, the service industry is on the rise also when considering different lifting equipment. (Konecranes Annual Review 2007, p.16-17)

Standard Lifting, which in 2007 covered approximately 36% of the total sales, concentrates on the lighter lifting equipment often used in manufacturing industries, such as car manufacturing industry as well as paper and pulp industry. The Standard Lifting department offers lifting equipment from 100 kilograms up to 100 tons. (Konecranes Annual Review 2007, p.18-19)

Heavy Lifting, which in 2007 covered approximately 30% of the total sales, concentrates on heavy duty cranes for process industries and shipyards. Konecranes Heavy Lifting Ltd. is also a significant global supplier of cranes used in ports and intermodal terminals, and its cranes are largely used in waste-to-energy plants, metal industries, power plants, general manufacturing, paper mills and the petrochemical industry. For ports and intermodal terminals, Konecranes Heavy Lifting Ltd. offers container-handling equipment from ship-to-shore cranes, which unload the containers from a ship, to rail-mounted and rubber-tired gantries, which move the containers for example from the unloading area to storage areas. Konecranes Plc also manufactures heavy-duty lift trucks to be used in other container-handling situations. (Konecranes Annual Review 2007, p.20-21)

At the end of 2007, the number of personnel at the Heavy Lifting department was 1272 (Konecranes Financial Review 2007, p.33) and at the end of 2008, the number of personnel had risen to 1439 (Konecranes Financial Statements Bulletin 2008, p.11).

2.1 Electrics Factory

The Electrics Factory in Hyvinkää, Finland, is one part of the Konecranes Heavy Lifting Ltd. Its task is to provide electrical components for the heavy lifting equipment manufactured by Konecranes Heavy Lifting Ltd. At the time of the thesis, the Electrics Factory employed 101 people: including managers, officials, workers and subcontractors.

The factory has been divided into eight separate units according to their operational tasks. Those units are: office, support activities, plate and cubicle assembly, cabin assembly, test drive, RTG (Rubber Tyred Gantry) assembly, inverter assembly, and after sales. Some of these units are located far from the main activities due to a lack of space (as seen in appendix 1). This arrangement creates some communicational problems and affects the overall co-operational atmosphere of the entire factory.

3 Characteristics of communication

The term communication (according to the Oxford Popular English Dictionary) denotes sharing or imparting information. Hartley on the other hand explains it as “interaction by means of mutually recognized signals” (2002, 32). These signals include talking; reactions; as well as responding with facial expressions, gestures and words (Lohtaja & Kaihovirta-Rapo 2007, 11). Communication does not simply indicate transmitting of information. Instead, it indicates transmitting of messages, the amount and type of information of which vary. Communication can therefore be understood as a process of exchange. (Åberg 1999, 27-28)

Although every living creature from microbes to humans communicates, only social animals such as people use communication to organize their society (Horton 1995, 1). However, only humans can be distinguished from other living things by the ability to talk, analyze thoughts, as well as exchange knowledge and experiences (Juholin 1999, 20). Modern humans have a strong urge to communicate already from the moment they are born (Dr. Whitfield & Dr. Greenfield 1997, 272). People have a highly developed grammar as well as tens of thousands of words to describe things and thoughts, which distinguish them from animal communication (1997, 258).

Approximately 90 percent of communication between humans is non-verbal: about 55 percent is through apparent body language and approximately 35 percent through a tone of voice (Pedro 2006). Verbal communication, on the other hand, includes both spoken and written messages. However, to produce speech, a human being needs a voice, which is part of the non-verbal communication. As well as voice, people communicate non-verbally through facial

expressions; gestures; movements; postures; and with the use of space and distance. With help of non-verbal communication, people send each other messages both consciously and subconsciously. (Lohtaja & Kaihovirta-Rapo 2007, 11)

In an organization communication is an entity, in which the content, channels and regulations are set in advance. Internal communication consequently is a pre-organized activity, whose goal is to reach certain results. (Juholin 1999, 25) This organizational communication can also be compared to company values. Although a company had not defined its communicational principles, they still direct its actions: people communicate and interact whether or not communicational guidelines exist. This is because communication creates unwritten regulations that in time develop into accustomed habits and even a communication culture. (1999, 30)

Communication should not be seen as a separate operation or even a series of operations. Instead, it should be regarded as an organic part of an organization's every activity. Communication is so vital to a company's operations that it can even be described as the blood circulation or the breathing of an organization. (Juholin 2008, 64)

3.1 Interaction

Communication is interaction because it is always a process with two parties: a sender and a receiver, both of which can consist of one or more people. In interactive communication the roles of sender and receiver vary: the sender becomes the receiver and vice versa. (Lohtaja & Kaihovirta-Rapo 2007, 12) Interaction is one of the fundamental characters of human behaviour: innovativeness requires inter-person conversations, contemplation and exchange of thoughts. Interaction is stimulating because it requires one to listen, talk and discuss. It also helps to question matters, and specify on unclear points. (Juholin 2008, 61)

Harris sees interaction as "the process of transacting meaning between individuals" (1993, 283). Furthermore, Harris explains communication and relationships, which are the fundamental social units of an organization, to be a key part of organizational behaviour and vital to an organization's success.

Communication and interaction change: how people talk, negotiate, discuss, or mail changes lifestyle as much as the creation of the railroad network and the telephone did in the 19th century. Since the launch of the internet in the late 20th century, communication has progressed in double-speed. All of the sudden people have become part of the World Wide Web - the global information society. (Juholin 2008, 23)

3.2 Information exchange and information flow

While communication is an interactive two-way process, information is a simple one-way process (Lohtaja & Kaihoviirta-Rapo 2007, 13). Information can therefore be understood as a neutral matter, which is transferred from one place to another - i.e. from a sender to a receiver - through communication (Juholin 2008, 58).

Information is seen as an important resource in all communities. It is even regarded as important as are people, money, machinery and equipment. A community would simply not work without the exchange of information. However, the pure existence of information is not enough, as in order to reach the target group, a message needs to be distributed from a sender to a receiver. This requires information exchange - i.e. interaction between the members of a society - and is a feature of modern communication. (Ikävalko 1996, 9)

In order for communication to be successful, simply the transfer of information is simply not enough as raw information does not always open up to the receiver as it is intended. Communication consequently requires a form of information interpretation and analysis in order for the receiver to understand the meaning behind a message. (Juholin 2008, 98) Information therefore needs to always be acknowledged: someone must think about its meaning, draw conclusions about it and act upon it. Successful communication requires feedback in order to ensure that a message has reached the target group and that it has been understood. (2008, 90)

The flow of information is often seen as one of the central difficulties in most organizations. This is due to the fact that information is often seen as a question of power: what matters are communicated and to whom are important decisions usually made by the management or by people in higher positions. This question of power creates uncertainty among the personnel, especially in situations where decisions concerning the entire organization are made behind closed doors. (Murto 1995, 54-61) However, managing information flow is vital for the success of communication. When the flow is not smooth, consequences might be regrettable, if not catastrophic. Especially excess information can be a real burden for the smoothness of information flow. (Juholin 2008, 85)

4 Internal communication

“Internal communication refers to the exchange of information and ideas within an organization. Communication among the members of an organization is essential for effective functioning.” (Thill & Bovée 2001, 7)

Internal communication consists of communication between the members of an organization. It is needed in informing and motivating the personnel, creating and maintaining a good atmosphere, and developing business operations. Internal communication supports business operations and helps to reach corporate goals. (Lohtaja & Kaihovirta-Rapo 2007, 13-14) Internal communication is also described as an essential part of the management of an organization. It has a strong impact on the community image, which in turn has a direct effect on the community's existence and success. (Juholin 1999, 13)

The term ‘internal communication’ not only involves operative communication - i.e. sending, receiving and handling of information - but also an organization's strategic goals. Internal communication is the organization's internal PR, which the management uses to create and maintain trusted relationships with the personnel. It helps in bringing the organization's mission, business idea, values and PR-related principles to the personnel's knowledge. It also assists in building a positive organizational identity and strengthening positive values related to work and operational effectiveness. Internal communication also helps to maintain personnel relationships through preventing and dealing with conflicts, thus developing and strengthening a positive work atmosphere. (Pohjanoksa, Kuokkanen & Raaska 2007, 43)

The focus of internal communication has changed from people and events to sharing of corporate goals. It helps employees of an organization to understand what is expected of them. (Smith & Mounter 2005, 14) Internal communication occurs constantly everywhere in an organization: as texts or speech, personally or via communication media, and in formal and informal networks. Communication connects the organization's personnel and individual operations together into an entity. (Kortetjärvi-Nurmi, Kuronen & Ollikainen 2008, 7)

The objectives of internal communication can be divided into three main groups: influencing, informing and entertaining (Lohtaja & Kaihovirta-Rapo 2007, 41-42). Informing is one-way communication, which is usually required in organizational communication. Although informing is a one-way process, it generally generates discussion. (2007, 45-46) Another essential objective for internal communication is to generate and maintain open interaction within the organization. This in turn enhances the ‘we’ spirit and willingness to work, as well as encour-

ages people to develop their own work and the work community. (Kortetjärvi-Nurmi et al. 2008, 106)

4.1 Management communication

Management and communication are almost inseparable concepts. Many people believe that these are in fact two perspectives of the same factor. However, the difference between management and communication is that while communication aims to create an understanding of corporate operations and goals, management aims to influence the personnel to work for those goals. (Juholin 1999, 85-86)

Communication is seen as an important part of management competence. Interaction and influence, information transfer, exchange of information, internal atmosphere, motivation, commitment, and building corporate image are all seen as significant parts of management communication. At the same time, they are all subcategories of internal communication. (Juholin 1999, 16)

4.2 Communication satisfaction

The evaluation of internal communication is often linked with the term 'communication satisfaction'. This includes the overall satisfaction of received information, as well as opportunities to be heard and the possibility to have an effect on one's own work community. Communication satisfaction, therefore, is a tool for measuring communicational success of an organization on a general level. (Juholin 2006, 146)

Communication satisfaction varies greatly between different organizations, and it is not always connected to work satisfaction. It has, however, been seen to have a clear connection to the management's leadership manners and the overall work atmosphere. (Ikävalko 1996, 49) Communication satisfaction is also connected with the communicational content including the plans and goals of an organization. Management style and communicational content therefore are the most important factors when building both communication and work satisfaction. (Juholin 1999, 82)

Although communication satisfaction is not always connected to work satisfaction, they are close concepts. In a large number of researches these two have been discovered to be dependent on each other. In other words, when personnel are satisfied with the organization's internal communication, they are also satisfied with their work community - and vice versa.

(Juholin 1999, 17-18) Thus receiving required information makes people satisfied and causes them to operate in a desired way (2008, 58).

5 Communication barriers

One character of communication is that information is transferred from place A to place B. In an organizational context, this generally means a flow of information from the top management down through different organizational levels. On every level, a part of the information disappears or changes significantly. Therefore the information reaching the bottom of the line may be entirely different from what is started at the top. (Juholin 1999, 17) In addition, as messages conducted by the top management are often created in academic language and use management jargon, information in them is easily misunderstood by the employees (2008, 65).

Because the sender and the receiver are both human, there will always be some communication barriers. These barriers can be divided into internal and external barriers, depending on whether the distraction is created by the human mind, or whether it is independent from the receiver's characteristics. People may misunderstand a message if for example the speaker's voice is too quiet (external barrier) or if the message is in an unfamiliar language (internal barrier). (Lohtaja & Kaihovirta-Rapo 2007, 12) As the sender can never be entirely sure in what kind of situation his or her message will reach the receiver, he or she cannot be certain whether the message gets across technically, and whether the receiver understands the message as intended (Ikävalko 1996, 11).

Communication barriers can further be divided into subgroups, which are obstacles, noise, loss and distortion. An obstacle is an external disturbance, which prevents the entire message to be received. Noise is also an external disturbance, which occurs when a message is mixed with other messages or disturbances. Loss is an internal disturbance, which occurs when a message is received, but not entirely due to other internal disturbances such as bad eye sight, hearing problems, tiredness, hangover, etc. Distortion, another internal disturbance, takes place when a message reaches the receiver, but is misinterpreted or misunderstood. (Åberg 1999, 28-29)

Communication barriers are most often physical distractions. They can be caused by bad connections, poor acoustics or an unreadable copy. A receiver might also be distracted by an uncomfortable seat, bad lighting, personal health problems or some other irritating circumstance. The longer a communication chain is, the more vulnerable it is, as every link in the chain is open to error. (Thill & Bovée 2001, 13)

Communication barriers can never be entirely eliminated as situations where communication occurs cannot be isolated into laboratory conditions, and people's past experiences cannot be completely wiped off. The disturbances can, however, be reduced through communication planning and by finding a situation in which messages have the best opportunity to reach the receivers. (Ikävalko 1996, 13)

5.1 Amount of information

As mentioned before, information flow management is one of the biggest challenges in the 21st century. When only a hundred years ago information simply was not available or accessible, the current situation is entirely different. Information floods in from every direction so excessively that it is impossible to receive or process. (Juholin 2006, 29) The vast amount of information also makes it very difficult to influence, as an astonishing number of messages, suggestions and persuasions compete of the receiver's attention (1999, 214).

This constantly increasing amount of information has already exceeded many people's tolerance levels. Researches conducted in the 21st century show that in a work community, the oversupply of information has become a problem that used not to exist. Too much information exhausts and confuses people, and ultimately makes communication ineffective. (Juholin 2006, 147) On the other hand, some people believe that the amount of information is not sufficient. However, this belief rises from the contents of information rather than the actual amount of it, when people feel that their informational requirements are not fulfilled. (Kortetjärvi-Nurmi et al. 2008, 106)

5.2 Listening and reading

Poor listening is another common communication barrier. People let their minds wander from time to time especially when having to listen to information that is difficult to understand or that has little significance to their lives. More so people tend to lose interest faster if they are tired or concerned about other matters. (Thill & Bovée 2001, 13)

People listen only at approximately 25 percent of their full potential. This means that 75 percent of what is heard is missed, ignored, forgotten, distorted or misunderstood. Looking at these statistics it is easy to see why communication breaks down so quickly, as the receiver is only responding to 25 percent of the sender's message. As people's minds think approximately at 1,000 words per minute; they can listen and understand at approximately 400

words per minute; and speak at approximately 130 words per minute, it is easy to see why people's minds tend to wander. (Pedro 2006)

Not many studies have been done comparing reading and listening as modalities of accumulating information. However, reading has its benefits over an audio or video signal as it can be roughly four or five times faster. (Hargie 1997, 250)

6 The target group

As receivers, people are different. A crucial factor is how interested or motivated people are to receive information about different subjects. (Juholin 1999, 214) Personnel are not only a group of people but also a group of individuals with different interests. They all belong to different groups and organizational units. In addition to this, they can be divided into smaller groups according to their gender, age, occupation, hobbies etc. These unifying factors create both official and unofficial networks between different individuals. (1999, 11)

Every individual's understanding is limited by their surrounding environment as well as the level of knowledge about the society both before and during the person's life (Horton 1995, 1). Every individual also has a different personality - emotion, behaviour and perception (Dr. Whitfield & Dr. Greenfield 1997, 278).

6.1 Cultural influence

Culture combines people by forming shared meanings and common understanding. Culture is a collection values and symbols, of which people have different perceptions. (Kortetjärvi-Nurmi et al. 2008, 12)

Although people from different cultural backgrounds understand emotions in a different way; happiness, fear, anger, sadness and disgust are universal. These core emotions are linked with facial or vocal expressions that are understandable worldwide. Emotions such as surprise and guilt, however, vary between different cultures, as do the expressions associated with them. (Dr. Whitfield & Dr. Greenfield 1997, 276)

7 Communication channels and media

A communication channel is a stabilized connection for communication. People have many personal information channels - in other words trusted sources of information. A communication medium, on the other hand, is a technological tool for information transportation. Although slightly different in terminology, both of these are a part of the communication chain, where information is transferred from a sender to a receiver. This makes them vulnerable and exposed to disturbances. (Åberg 1999, 28)

Large organizations have a myriad of information channels. People often believe that the more technologically advanced communication channels are available, the better the communication is. However, this quite often is a misconception. (Juholin 1999, 35-36) If an organization makes a wrong decision about its distribution media, it might encounter problems in reaching the target group. Also the message may be distorted in the process. (Lohtaja & Kaihovirta-Rapo 2007, 20)

As all organizations have multiple communication channels in use at the same time, reaching the target group is easier as the same message can be sent through a selection of different media (Lohtaja & Kaihovirta-Rapo 2007, 19-20). It is good to remember that different communication media are ultimately each others' complements - not alternatives (Ikävalko 1996, 26). It is also believed that the richness of communication channels strengthens communication and increases communication satisfaction, as finding information easily is a value in itself. However, many communication channels may create information overflow, thus making the information search unreasonably lengthy. (Juholin 2006, 161) It is therefore important to find the balance in the use of different media in order to reach the target group and yet avoid excess information distribution.

The media's capacities to carry information differ significantly, as do their audiences. People are surrounded by different media, and the media have become integral components of people's existence. People are almost always in contact with one or more communication channel. Therefore it is vital for the development of successful communication to recognise and understand the strengths and weaknesses of each medium. (Selnow & Crano 1987, 77)

7.1 Media richness

Media richness is a measure used to describe the value of a single medium in a particular communicational situation. The richness depends on the medium's ability to communicate a

message using more than one informational sign: either visual, verbal or vocal. The richness also depends on the medium's ability to smooth the process of giving and receiving feedback, as well as the ability to establish personal focus. (Thill & Bovée 2001, 80-81) The division of media richness is shown in figure 1.

The richest medium - face-to-face communication - should be chosen for non-routine and complex messages. Rich media may also be used to gain employee commitment. Simple and routine messages, however, should be communicated through leaner media in order to save company resources. A simple rule is that the more personal a message is, the richer its distribution channel should be. (Thill & Bovée 2001, 80-81)

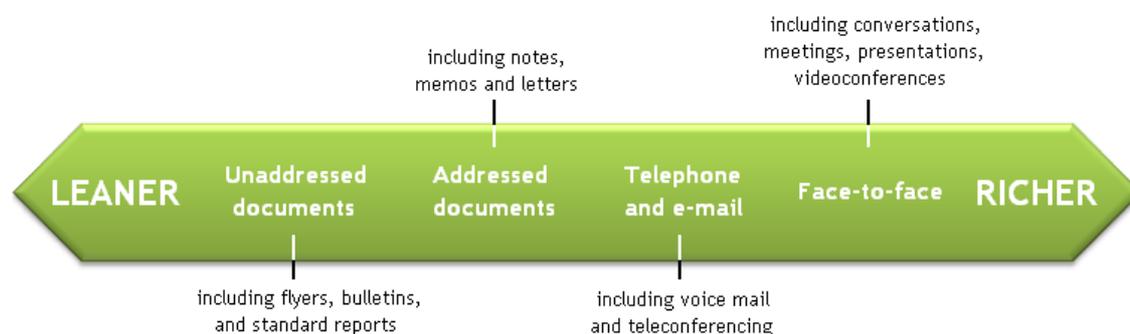


Figure 1 - Media richness

7.2 Division of communication channels

Communication channels can be divided into mediated and direct communication according to their distribution method. Mediated communication always uses some form of media for information distribution, while direct communication is based on verbal face-to-face communication. (Lohtaja & Kaihovirta-Rapo 2007, 16) Mediated communication can further be divided into printed distribution channels and electronic distribution channels, which include e-mail, internet, phone, TV and radio (Juholin 1999, 35-36). Direct communication on the other hand can be divided into personal face-to-face communication, work briefing and shared meals; as well as events such as meetings and conferences, speech and presentation situations, theme events, workshops and seminars (1999, 139-141).

Communication channels may also be divided into formal and informal channels depending on the type of information being distributed, and the style in which it has been formulated. Informal channels include discussions by the coffee machine, at the smoking area or in e-mail. When an employee receives information through formal information channels such as bulletin boards or the intranet, the task for informal communication is simply to complement and analyze the information. However, problems occur if formal channels do not provide enough in-

formation for the employees. In this case informal communication has to fill in the gaps left by formal communication. This often occurs as rumours, which may distort the original message significantly. When successful, communication will utilize both formal and informal distribution channels. (Lohtaja & Kaihovirta-Rapo 2007, 53)

7.2.1 Direct communication

Direct communication consists of situations where different parties communicate in person. The benefit of direct communication is immediate feedback, which can exist verbally or non-verbally. On the other hand, a disadvantage of direct communication is that it may be very expensive and time-consuming. (Lohtaja & Kahovirta 2007, 17)

Direct communication includes face-to-face conversation, telephone calls, speeches, presentations and meetings (Thill & Bovée 2001, 82). It is most often used when interviewing for a job, learning about specific tasks, operating on a daily basis, managing others, or participating in company-sponsored social events (Harris 1993, 283).

7.2.1.1 Face-to-face communication

Personal conversation is the most effective and the most valued information channel (Kortetjärvi-Nurmi et al. 2008, 109). It is the most efficient communication method with direct influence from one person to another (Ikävalko 1996, 13). Personal conversation is also the most common direct communication medium (Timms 2007).

Face-to-face communication is the richest medium due to its personal approach into information distribution. It provides immediate feedback both verbally and non-verbally, and it expresses emotions behind the message. Face-to-face communication is also one of the most restricted, as it requires the message's receivers - i.e. the target group - to be in the same place and at the same time as the sender. (Thill & Bovée 2001, 81)

Large meetings are also a part of face-to-face communication. They are, however, less appreciated these days due to the time used in planning, preparing and finally having the meeting. Large meetings also bear the risk of timing. Some people might not be able to attend the meeting and therefore they will be left out on the important information, and especially the meanings behind this information. One of the risks related with large meetings is that misunderstandings are not realized and corrected, in which case they will spread after the actual

event. However, large meetings do have the advantage of distributing information to a large audience and include conversation and opinion sharing. (Juholin 1999, 141-142)

Face-to-face communication has been able to show its strength even with the technological development. Although network communication enables two or more people to interact simultaneously, it does not replace a situation where people meet in person. (Juholin 2006, 164) Sometimes even a simple act such as walking to another person in order to discuss a matter there and then is the most effective means of communication (2008, 91).

7.2.2 Mediated and electronic communication

Mediated communication most often consists of written messages: bulletins, memos or personnel magazines, as well as messages sent via e-mail, intranet or as a text message. The benefits of mediated communication are the message's permanency and accuracy. Mediated communication does, however, lack inter-personal interaction and can be relatively slow to distribute. (Lohtaja & Kaihovirta-Rapo 2007, 16)

Written messages can take many forms: from scribbled notes to elaborate, formal reports with high graphic quality. Written messages let one plan and control the message, which is considered as one of their advantages. (Thill & Bovée 2001, 83) Printed communication is also thorough: it can explain already happened events in detail from the target group's point of view (Ikävalko 1996, 25).

Mediated communication develops with the advances in technology. The advancing communication, however, requires competence to use different equipment and computer programs. When used correctly, technology is a good servant. However, it can fail in a crucial situation and thus jeopardize the entire project. (Ikävalko 1996, 24) The development of technology also brings new and better communicational tools to the workplace. This increases the speed and frequency of communication and allows people around the world to work together seamlessly. (Thill & Bovée 2001, 3)

The importance of electronic communication is constantly increasing. Speed and geographical independency are its biggest benefits: it does not matter whether the receiver is in the next room or on the other side of the world; the message will be delivered to both locations at the time of it being sent. Electronic communication does, however, have disadvantages as different technical problems from power cuts to data protection risks threaten the connections. (Lohtaja & Kaihovirta-Rapo 2007, 16-17)

Electronic forms of communication can be seen in both oral and written communication. Electronic oral communication includes for example voice mail, audio and video tape, teleconferencing and videoconferencing, as well as closed-circuit television. Written electronic communication on the other hand includes e-mail, faxing, computer conferencing, and web sites. (Thill & Bovée 2001, 83)

Online communication has a central role in any organization's communication structure (Pohjanoksa et al. 2007, 11). This network communication is especially efficient when required a channel, which is independent from time and place, and which is interactively flexible (Juholin 2006, 265).

Network communication changes the traditional communication habits by requiring a new way of writing. When writing for an electronic distribution channel, the text must be compact and informative. Online texts are also able to utilize the possibility of links, which can change the text for every reader by creating a possibility to follow a link for additional information. Ultimately, however, it is the writer's responsibility to acknowledge this possibility and to use it appropriately. (Juholin 1999, 154-155)

The structure of communication has changed radically due to electronic communication - especially due to e-mail and intranet. Printed publications, bulletins and bulletin boards are more frequently replaced by an online version. The spreading popularity of electronic communication has also had an effect on face-to-face communication, which in some communities has been seen to diminish. (Juholin 1999, 152-153)

7.2.2.1 Bulletins and bulletin boards

A traditional printed bulletin is still a basic internal communication tool in many organizations. It can only be completely replaced by electronic equivalents when all of the members of the organization have frequent access to the shared intranet. A bulletin's strengths are its speed and inexpensiveness. However, when a message is required to be passed on quickly, the clarity of the message may be compromised and the management's rough versions can spread inside the organization creating confusion. (Juholin 1999, 149)

As a bulletin is classed as the basic tool of communication, the skill of compiling it is classed as one of the basic communication competences. The basic requirement of a bulletin is that it is first of all informative. It will aim to explain matters as clearly and understandably as possible. The form of a bulletin changes according to who its receivers are and how it is transmitted to them. (Juholin 2006, 180-181)

The style of a bulletin corresponds to that of a piece of news. It explains in short what has happened, what is happening or what will happen in the near future. A bulletin does not explain something that is already known. It is simply a neutral communication tool, whose job is to explain matters as they are. (Ikävalko 1996, 51-52) A bulletin may be used by itself, as long as the message is unambiguous and as long as it can be assumed that the receivers will understand it the way it was intended to be understood. When composed correctly, a bulletin is an effective communication channel. (Juholin 1999, 149)

An internal bulletin should first of all be compact. In a paper version its length should not exceed one page, while in an online version half of that is sufficient. (2006, 181) The most important parts of a bulletin are its title and its ingress, the opening. This part of the bulletin should contain all of the most significant pieces of information. An electronic bulletin, in contrast to a printed bulletin, should only contain a title and an ingress containing only the most vital information. Regardless of the bulletin being printed or electronic, the most important information should always be placed in the beginning of the text, followed by less important although relevant matters. A bulletin must never include information that is too detailed or unnecessary. (Juholin 1999, 149)

Wall-mounted bulletin boards have lost their foothold in internal communication. Even before the birth of intranet, bulletin boards received contradicting opinions about their ability as an information channel. In some organizations, the updating and maintenance of bulletin boards is given to a specific person, whereas in some organizations such person in charge has not been chosen, and anyone has the power to post on the bulletin boards. This, incidentally, has led to a total chaos. (Juholin 1999, 151)

The importance of bulletin boards has diminished fundamentally with the development of online communication. Bulletin boards have, however, managed to keep up with the developing electronic world with the aid of the intranet. They have become electronic, continuously updated news departments. However, the importance of traditional bulletin boards is still considerable in organizations where everyone does not have access to the intranet. (Juholin 2006, 180)

Although bulletin boards still exist in many organizations, their role has changed significantly. They usually contain basic and operational information or 'nice to know' material that can be easily found when required. This kind of information includes emergency action plans, menus, or copies of published articles. (Juholin 1999, 151-152)

7.2.2.2 Personnel magazines

A personnel magazine is printed, magazine-like publication, which is generally distributed two to twelve times per year. It still has a clear place in internal communication, even in the expanding world of electronic communication. (Kortetjärvi-Nurmi et al. 2008, 116) According to a study made by Inforviestintä in 1998, personnel magazines are thought to be reliable, easy to read, versatile, yet do not excessively resemble news (Juholin 1999, 150).

Personnel magazines often receive good feedback from their readers, and they have not yet been superseded by electronic communication. The role of a personnel magazine is to provide background information on events and bring out interesting people and phenomena within the organization. As an infrequently published information channel, a personnel magazine can never be the primary source of information. Therefore it should not be given a high responsibility in an organization's communication system. (Juholin 2006, 183)

7.2.2.3 Intranet

The history of intranet is not long. The first intranet's begun to emerge only in the late 1990's primarily as information storage. The early intranets were mainly electronic bulletin boards, whose standards and purpose varied significantly. (Juholin 2006, 266-267)

Intranet is an organization's own information network, which utilizes the same technology as the internet (Juholin 1999, 152). However, it is limited to be used only by the personnel of an organization, and it can contain any information for a company's processes, tools and other cooperation areas to be used in everyday work. Intranet is primarily a tool, but at the same time it creates an entirely new communication culture inside an organization. Intranet can be seen as both an information channel and an environment in which to operate. (Juholin 2006, 266)

The intranet's main functions are to distribute and to receive information. At the same time it creates electronic interaction. (Juholin 1999, 154) It enables the same information to be simultaneously available for all personnel, regardless of the organizational hierarchy or geographical location (1999, 152). Therefore the benefit of intranet is that everyone is able to access the same, up-to-date information (Kortetjärvi-Nurmi et al. 2008, 113).

As technology has developed, intranet has become more common and a significant part of internal communication. However, attitudes towards the intranet vary considerably. While some people visit the intranet on a daily basis, some find it a frustrating experience if finding

information is slow and difficult. (Juholin 2008, 77-78) Nonetheless, intranet has been said to revolutionize a company's internal communication infrastructure, as long as it is correctly formulated from the user's point of view. In order for the intranet to achieve this, the user must feel that it is the user's own personal tool that will bend according to the user's will. Only then it will effectively perform its given tasks in everyday working life. (2006, 265)

Intranet often functions as an information warehouse; a centre of preserving and distributing material. This is especially true in organizations where information is created in large quantities. Due to the vast scale of information available on the intranet, different search functions have been created for easier information recovery. These search functions have become an important tool on the intranet, where information is often divided into myriad of different categories. (Pohjanoksa et al. 2007, 46)

In an increasing amount of organizations, intranet has at least partly replaced or decreased the use of e-mail in situations related to routine matters (Juholin 2008, 77). It should not, however, become a dumping ground for vast amounts of information thus making it more difficult to find essential information. Intranet should be a forum for deepening background information, which is available when needed. (1999, 154) When planned and implemented well, intranet is an outstanding internal communication channel. It will support the realization and understanding of organizational culture in every employee's life. (Pohjanoksa et al. 2007, 45)

7.2.2.4 E-mail

Electronic mail - or e-mail as it is more commonly known - is a system, which allows people to interact through written communication via electronic networks - usually the internet (Friedman 2007). E-mail can transfer almost all electronic text types and files from a sender to a receiver. E-mails can take different forms from published messages to a discussion resembling a phone conversation. It is fast and easy to use, which are important benefits in the globalizing world. However, the speed and simplicity of e-mail can also cause problems: e-mail is so fast and easy to use that the sender may not always deliberate enough of what is being sent. (Kortetjärvi-Nurmi et al. 2008, 98)

E-mail is an effective medium and an excellent interaction channel as long as it is available for everyone and as long as everyone knows how to use it. However, in many organizations e-mail usage has long passed a normal level of tolerance. People receive so many e-mails every day, that reading and analyzing them would take an enormous amount of time. Messages are also - just in case - sent to people who they do not actually concern. This causes information overload and frustration. (Juholin 1999, 155) The explosion of e-mail utilization topped with

spam e-mails has led to information floods. People simply cannot read dozens or hundreds of e-mails every day, and thus the effectiveness of e-mail as a communication channel suffers. (2008, 77)

E-mails can be divided into three groups according to their purpose and style. Those groups are bulletins, mail carrier messages, and dialogue conversations. The language used in an e-mail message varies significantly depending on the type of the message. Dialogue-type messages are very informal in language, whereas bulletins can be very formal. (Juholin 2008, 77) The language used in e-mail often resembles that between a phone call and a letter. E-mail messages also tend to be short and concise, and they usually are less formal than printed text. This informality is often a conscious choice when deciding on a communication channel. (Kortetjärvi-Nurmi et al. 2008, 95)

E-mail gives the personnel an opportunity to expand their ways to communicate. It also changes the process of communication, as diversified communication allows messages to travel across even formal organizational borders with ease. Although e-mail is very easy and quick to use, it should not entirely replace face-to-face discussion between a manager and an employee (Kortetjärvi-Nurmi et al. 2008, 97-98). Neither should it be used when communicating complicated personnel management matters or negative matters (2008, 95).

As the use of e-mail messages grow, the competition of attention between different messages increases. Therefore it is crucial to consider the receiver's point of view when writing an e-mail message, and especially the subject line of that message. When a receiver opens the list of received e-mails, there might be dozens or even hundreds of messages waiting to be read. Because of this, few people start to read their messages in order. Instead, many scan through the subject lines in order to find the most essential messages from the list at the time of reading. Therefore it is vital to consider what type of a subject draws the receiver's attention first and what types of subjects stand out. (Kortetjärvi-Nurmi et al. 2008, 99)

7.2.2.5 Information screens

Television has experienced a reincarnation as an internal communication channel in the form of an information screen. Screens that are placed along walking routes or other visible sites and that play short, few-word-long messages, are complementary to all the other internal communication channels. (Kortetjärvi-Nurmi et al. 2008, 111)

In the last few years, the popularity of information screens has grown significantly due to the development of technology and the decreasing costs of screen systems. Information screens

are slowly becoming a part of the comprehensive communication infrastructure. Therefore it is important that the content does not need to be created again especially for the information screens with special editor programs, but familiar content creating tools such as Microsoft PowerPoint, Microsoft Excel, video, www-pages and jpeg-files can be used. Information screens may also be set up to work automatically by taking updated content from databases of the internet. This possibility further increases the efficiency of internal communication. (Norlund 2008, 26-27)

In corporate and organizational communication information screen systems focus mainly on the informative side of communication. The content used is the user's own material, which requires the process of creating content to be as easy and efficient as possible. (Norlund 2008, 26) New easy-to-use programs for content creation do not require any special competence. These programs are also compatible with the organization's other communication tools as a part of a multi-channel communication, which includes intranet and internet as well as mobile communication. (2008, 28)

The popularity of information screens has been estimated to increase further in the near future due to the development of LCD-screens, decreasing prices and possible new user techniques (Norlund 2008, 28).

8 Successful communication

In order to be successful, communication firstly has to grab the target group's attention and secondly influence the target group in a way which the sender has intended. This not only requires knowledge and understanding of the target group but also knowledge of how communication influences people. (Högström 2002, 9) Successful communication also always requires co-operation between the sender and the receiver. That is why it is also important to know what type of people the receivers are: what interests they have, what matters they are already familiar with and what motivates them. Internal communication needs to reach different types of people and thus it needs to attract different people's attention. (Lohtaja & Kaihovirta-Rapo 2007, 33)

Defining the structure of communication helps to understand the logic behind people's information search process. In other words, to learn what source of information or what communication channel people use when they look for information. The better an organization can respond to the required communication arrangements, the more effective its communication will be. A survey is a good tool when aiming to understand the target group's information search process. (Juholin 2006, 160)

In order to be efficient, communication requires some level of competence. This communicational competence can be divided into four segments as shown in figure 2. Each of these segments is emphasized differently in different communicational situations. However, all of these are needed in order to communicate effectively. (Juholin 2008, 30-31)

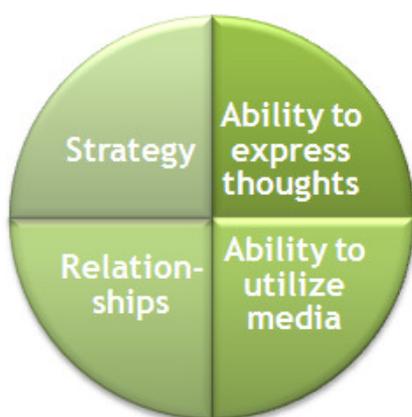


Figure 2 - Division of communicational competence

The first communicational competence is an ability to express thoughts through language. This is required in order for messages to be comprehensive. The second competence is an ability to utilize media in information distribution. This competence requires knowledge of how the target group searches for information, and what media is best to be used in a particular situation in order to serve the company's operations and goals. The third communicational competence consists of the sender's relationships to other people, organizations and networks. The final competence is strategy, which is required in order to determine how people use the previous segments in different situations with different partners. (Juholin 2008, 30-31)

In internal communication it is not solely important what the message is, but how the matter is expressed. The information distributor must choose a style that is best suited for a particular situation and media. While colloquial language is suitable in casual e-mails and text messages as well as most discussions, fact style or literary language should be used in formal corporate messages. (Lohtaja & Kaihovirta-Rapo 2007, 8)

Successful and effective internal communication requires a solid foundation on which it is built. This foundation consists of six factors, which can be seen in figure 3. The first basic factor in building strong internal communication is that real-time information is available at all times. This means that information is updated frequently, and that it is distributed

through media, which is accessible for everyone. The second factor of the foundation is that participation and influencing is available for everyone regardless of the matter's importance. The third factor is that important matters are always handled and distributed interactively and that different opinions are valued. (Juholin 2008, 63)



Figure 3 - The foundation of internal communication

Another part of the foundation of internal communication is that the work atmosphere is relaxed and free-form. This means that everyone has the courage to speak up and present his or her views and experiences. Interactive community also embraces active learning and sharing of knowledge, which supports both the individuals and the entire organization. The last factor of the foundation is the understanding that the employer's reputation is part of everyone's work: everyone within the organization produces reputation and reflects it to the environment. At the same time the organization's reputation reflects back on the individual's self image. (Juholin 2008, 63)

8.1 Planning a message

A good message comes from good planning. It is easier for the readers to understand the text when its logical structure is carefully formulated. Planning should start by understanding the goal and the target group for the message, as well as by defining the core idea of the message. When a message proceeds logically, it is easier to follow. (Lohtaja & Kaihovirta-Rapo 2007, 54)

The goal of a message affects the layout of its contents. An informative message should proceed in the order of importance, with the most important point placed already in the heading or the subject line, and followed by less important factors. On the other hand a text, whose goal is to influence its readers, may start with explanations followed by suggestions - or vice versa. An influencing text often follows an AIDA-model, which consists of four consecutive steps: grabbing the readers' attention, raising the readers' interest, awaking the readers' desire to act, and finally suggesting an action. (Lohtaja & Kaihovirta-Rapo 2007, 56)

The choice of communication channel also influences the style of text. Whether the message is distributed through the intranet or through a printed publication affects the length of text and the expressions used. (Lohtaja & Kaihovirta-Rapo 2007, 54)

Timing is also a crucial matter in information distribution. Especially in internal communication, speed is success. Formal communication must exceed the informal 'bush radio' in order to have a positive effect on communication satisfaction. (Kortetjärvi-Nurmi et al. 2008, 108) As timing is a crucial factor in information distribution, thorough planning is required. At the same time, everyone in the organization is equally responsible of distributing essential information to those it concerns. (Juholin 2008, 97-98)

8.2 Understanding the target group

Although there is no clear rule as for how to communicate successfully, the chances for successful communication increase with the knowledge of the target group (Ikävalko 1996, 11). In order for the communication to fulfil the tasks it has been given and to correspond to the target group's needs, it is vital to know what the different target groups are and what interests they have (Juholin 1999, 111). Therefore, in order to understand to whom to target a message, one must already in the planning stage find out the target group members' age and gender, as well as their cultural and educational background (Lohtaja & Kaihovirta-Rapo 2007, 35).

The age of the receivers affects on how they will understand the message, as the ability of abstract thinking develops with age. Life experiences of the receivers also provide different readiness to understand various matters. Although it does have some effect on how people see the world, receivers' gender does not need to affect message content as much in the 21st century as it did before. Equality has provided everyone - men and women - with the opportunity for equal education and the opportunity to work in the same line of business. Free time activities have also had the same impact: people visit gyms, ski centres and cinemas regardless of their gender. Therefore it may even be harmful to assume that gender connects people, and thus it is wise to avoid using gender-related stereotypes in communication. (Lohtaja & Kaihovirta-Rapo 2007, 36)

General education level may affect the receivers' ability and interest to handle a subject practically or theoretically. In other words, general education level affects the receivers' ability to understand the terms used and the matters discussed. It is important to recognise the receivers' knowledge and understanding of the subject, as unfamiliarity of the matter may result in misunderstanding of the message. General knowledge on the matter may how-

ever be ensured by explaining the concepts in the beginning of the message. (Lohtaja & Kaihovirta-Rapo 2007, 36) In written communication this inequality of the receivers' understanding does not matter in a great deal. While people with knowledge on the subject will read the text quickly, people less familiar of the matters are able to read the text slower and more than once if necessary. (Jay 2004, 45)

A reader only needs to encounter a couple of difficult words before starting to feel that the entire text is difficult to read, and therefore losing interest in it completely (Lohtaja & Kaihovirta-Rapo 2007, 59). Therefore the text should always be in clear, understandable language (Kortetjärvi-Nurmi et al. 2008, 30). This can be achieved by avoiding the use of business terms and spoken language, as these may be difficult for some readers to understand (Lohtaja & Kaihovirta-Rapo 2007, 81).

8.3 Writing a message

Although many people speak clearly, some write in a very complicated manner. In order for the readers to firstly be able to read a text and secondly to understand the message, the text should be formulated as clearly and accurately as possible. In other words, the text should be short but comprehensible. (Lohtaja & Kaihovirta-Rapo 2007, 83-84) Also short sentences are easier to read and understand than long ones (2007, 81).

The requirement for the shortness of a text can be explained with the fact that most readers are so-called glancers, who will decide in just a few seconds whether the text is worth reading or whether it is best to move on to other things. Shortness of a text, as well as snappy subject-describing headings, clear layout and simple typographical effects make it easier for a glancer to understand the concept of the message. (Lohtaja & Kaihovirta-Rapo 2007, 82)

Choice of a font is also important when creating a readable document. Different fonts can be divided into Roman or Grotesque depending on their physical appearance. Roman letters, such as Times New Roman or Garamond (see figure 4) - have small end lines, which tie the letters together thus making it easier to read. In Arial, Tahoma and other Grotesque fonts these end lines are missing, which makes them more suitable fonts for electronic texts, such as those used online or in PowerPoint presentations. (Lohtaja & Kaihovirta-Rapo 2007, 87)



Figure 4 - Examples of Roman and Grotesque fonts

When writing an electronic text, it is important to remember that its structural solution and paragraph division should be that of a piece of news: the most important matters are explained and emphasized in the beginning while less important, although essential matters follow (Kortetjärvi-Nurmi et al. 2008, 94). It has been studied that people read approximately 25 percent slower from a computer screen than from paper. Therefore it is vital to acknowledge this slower reading speed and plan the text so that it is suitable for glancers to read. This is why electronic text should also be easier to understand than printed text. (Lohtaja & Kaihovirta-Rapo 2007, 80)

8.3.1 Adding visual elements

A glancer pays attention to pictures and picture headings as well as subject headings, indents and typographical effects. However, visual effects such as pictures or graphs should only be added if they will create extra value to the reader. To serve a glancer, texts should be formulated so that the core message can be understood in just a few seconds. (Lohtaja & Kaihovirta-Rapo 2007, 87-88)

In order for the text to serve a glancer, visual elements, such as pictures and charts, need to be understandable on their own. This is because glancers might only familiarize themselves with them instead of the text itself, and thus it is vital that the visual element's heading explains the idea behind the figure or graph. (Lohtaja & Kaihovirta-Rapo 2007, 66-67)

Bar and line charts, as shown in figure 5, express development and are easy to read as long as three-dimensional impression is avoided. Bar charts generally only use five bars or columns, while line charts can be used to express many years' or decades' development. A pie chart, on the other hand, expresses the entity (100 %) and its components. When creating a pie chart, the segments should be placed in order starting clockwise from 12 o'clock. (Lohtaja & Kaihovirta-Rapo 2007, 66-67)

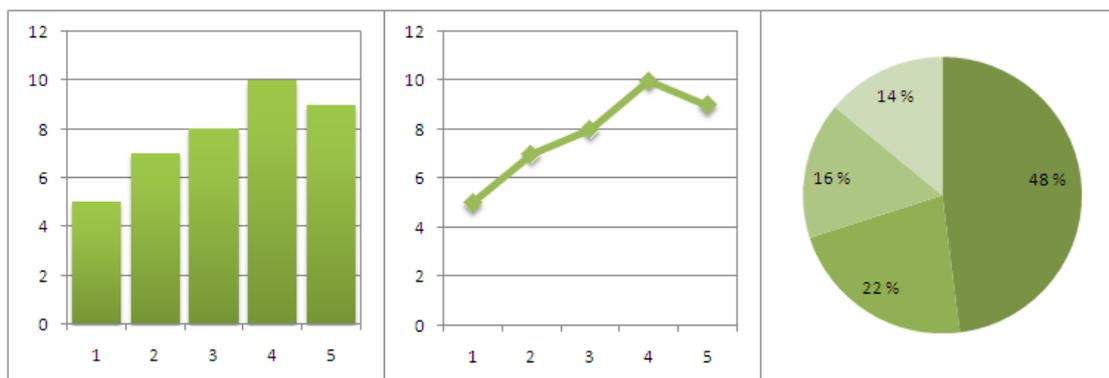


Figure 5 - Examples of bar, line and pie charts

In PowerPoint presentations, such as those displayed on electronic information screens, visual elements should be carefully added only when they are required. Slides should be simple in visual terms and elaborative slides should always be avoided. (Jay 2004, 53-54)

8.4 Distributing a message

The better an organization succeeds in choosing the right communication channels for a particular target group and a particular message, the more successful the organization's communication is. If a wrong communication channel is chosen, the message will not reach the target group. (Lohtaja & Kaihovirta-Rapo 2007, 50) Choice of media also affects on how quickly and surely a message will reach the receiver. As the importance of speed in internal communication has increased, electronic media have surpassed or replaced traditional printed material. (Ikävalko 1996, 12)

As face-to-face communication is the richest and therefore the strongest and most influential communication channel, it should be used to distribute the most important and vulnerable information. Indirect channels, such as printed or electronic media, do not create prerequisites for interaction and can therefore be used in distributing routine or background matters. (Juholin 1999, 35-36)

Selecting the correct channel for a message can draw a line between effective and ineffective communication. Each channel should be considered in order to choose the best possible media, as the choice of a distribution channel also affects the tone and style of the message being distributed. (Thill & Bovée 2001, 80)

9 The survey

In order to study the target group and its communication needs in the Electrics Factory of Konecranes Heavy Lifting Ltd., a survey was conducted. Prior to the survey distribution, however, a pilot survey was conducted to a few individuals in order to examine the validity of questions as well as receive comments about the questionnaire design, its layout and comprehensibility. Few changes were made into the pilot survey according to the comments received from the pilot respondents.

The actual survey, as seen in appendix 2, consisted of 13 multiple-choice questions, the first six of which examined the respondent's physical attributes such as age, gender, unit of work, position etc. This information was later cross-referenced to the answers in the latter part of the questionnaire, in order to detect similarities and dissimilarities between different groups. The questionnaire was distributed to 82 of the 101 personnel working within the Electrics Factory at the time of distribution. 73 of the 82 personnel answered the questionnaire, making the level of response as high as 89 percent (72 percent out of all personnel within the Electrics Factory).

The questionnaire also enabled respondents to leave comments on all of the main information channels examined, as well as general comments at the end of the questionnaire. Those comments were collected into one document (see appendix 3) and analysed later along with the statistical data collected.

9.1 Respondents

Out of the 73 respondents, 86 percent were male and only 14 percent were female. Most of the respondents were under 40 years old, and approximately half of the respondents had worked in the company for up to five years. Within the group of respondents, however, were a few over 60-year-old veterans, and some who had been with the company for over 30 years. Out of the respondents, 60 percent were workers, 22 percent officials, ten percent subcontractors and eight percent superiors. 77 percent had the use of Konecranes e-mail, whilst only 23 percent did not.

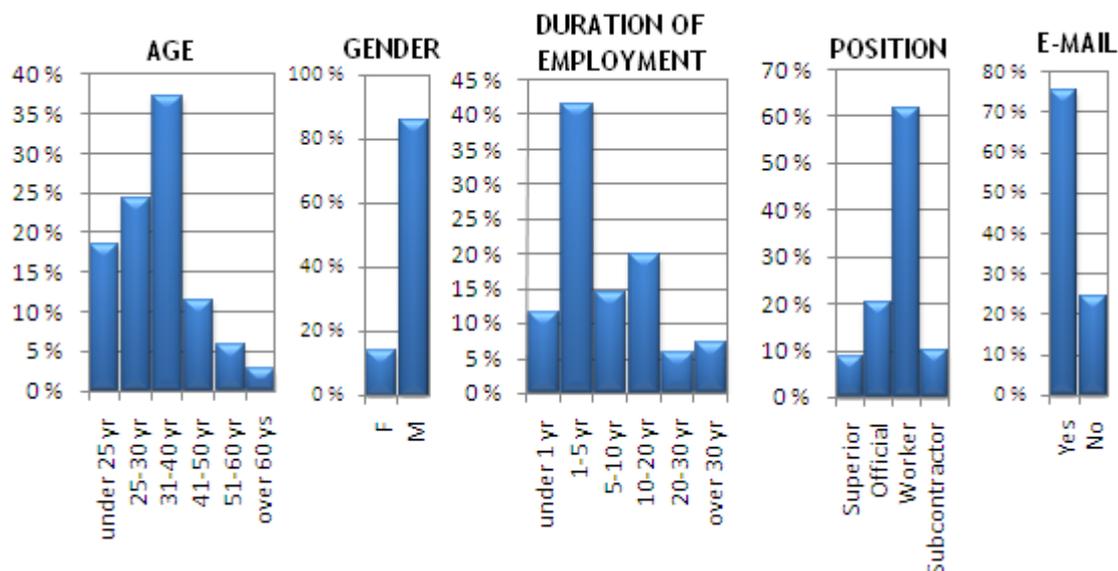


Figure 6 - Respondent distribution

9.2 Utilization of communications media

The most used communication medium seemed to be e-mail, which 60 percent of the respondents said to use daily. The second most used medium was, not surprisingly, verbal communication, which was used daily by approximately half (53%) of the respondents, and more than twice a week by another quarter (24%) of the respondents. Information screens were also a widely used medium with 46 percent of the respondents being daily users and 27 percent using more than twice a week. Intranet had the most varied user range. Although almost a quarter (24%) of the respondents said to use the intranet daily, over a quarter (27%) said to only use it once a week. Even more staggering finding was that as many as 14 percent of the respondents admitted to use the intranet less than once a month. This might mean that around 10 percent of the respondents never use the intranet, and thus the information distributed only via the intranet would never reach a tenth of the target group.

When examining the non-intranet users more closely, it could be seen that they all are workers or subcontractors, who only have access to a shared computer. Most of them do not have their own company-provided e-mail address and therefore rely mostly on verbal communication and information screens as the source of information.

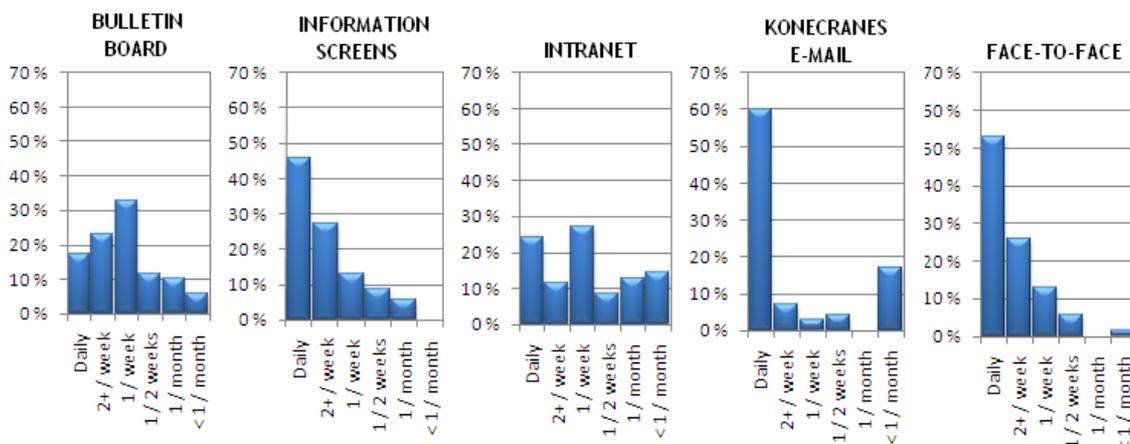


Figure 7 - Utilization of communication media

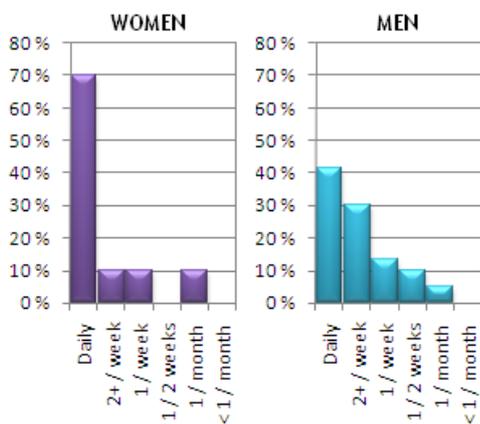


Figure 8 - Use of information screens by gender

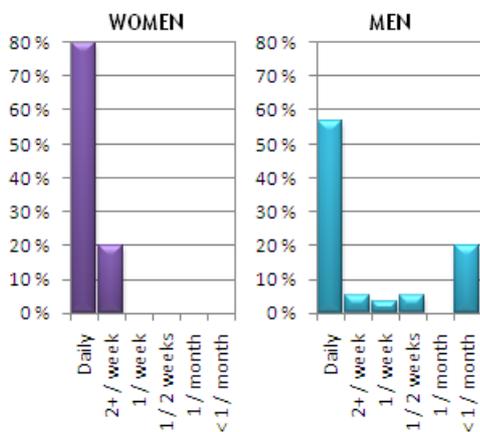


Figure 9 - Use of e-mail by gender

9.3 Interests

In order to study the interests of the target group, the respondents were given ten choices of common information topics currently used in Konecranes Heavy Lifting Ltd. Those topics were sport activities, cultural activities, health services, appointments within the company, financial situation of the company, menu, current topics and changes. The respondents were also given a choice to add more topics of interest, although only one of the respondents used this opportunity to add 'visitors' as an interest. Because this was the only occurrence, it was excluded from the final review of interests, as its use would have given unclear results. Should this addition have become known already in the pilot survey, it could have been added to the list of interests and therefore been able to examine along with the other options.

Out of all the answered interests, current affairs stood out as the most interesting topic with nearly everyone choosing it as one of their interests. Culture, on the other hand only received a vote from ten percent of the respondents as an interesting topic. Of those who did pick cultural activities as one of their interests, most were officials or superiors, the so-called 'white-collar'. Perhaps more surprisingly, most of the respondents interested in cultural activities were male and aged 25-40.

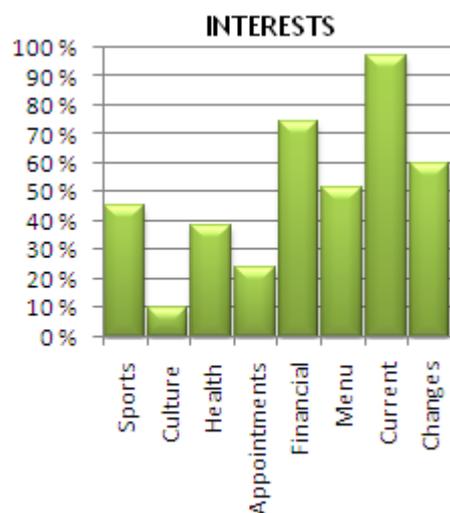


Figure 10 - Interests

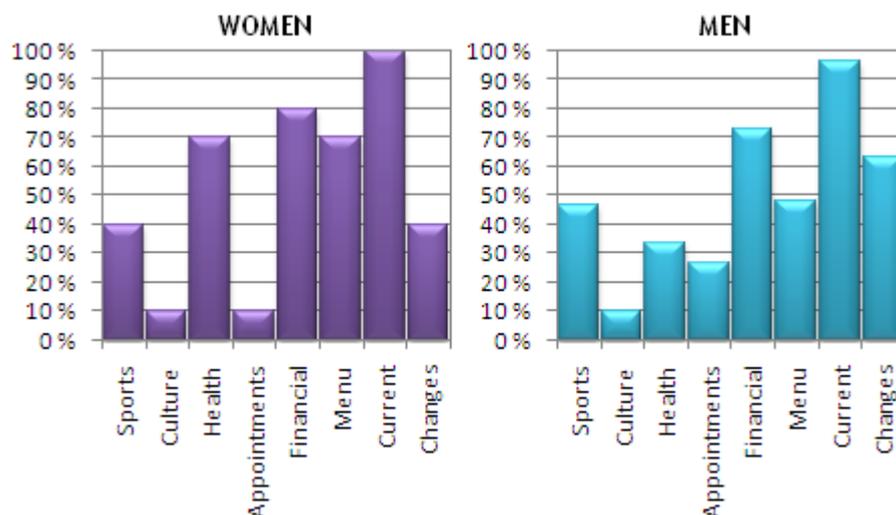


Figure 11 - Interests by gender

9.4 Preferences

The respondents were asked to place different communication channels in their preferred order, marking the given media from 1 to 5, where 1 was the most preferred and 5 the least preferred communication channel. The result averages show that the overall most preferred communication channels respectively were e-mail, verbal communication and information screen, and the least preferred (respectively) were bulletin boards and the intranet. Some differences could however be seen within different groups of personnel. For example, personnel in superior position placed verbal communication as the clear favourite, with bulletin board as the least preferred with an average score of 4.8 (scores 1 to 5). Officials, on the other hand clearly preferred e-mail to any other communication channel with an average score of 1.43 (scores 1 to 5). Workers and subcontractors, 66 percent of which has the use of a Konecranes e-mail address and less frequent access to a computer, had relatively little difference between different communication channels. Both groups, however, placed intranet as the least preferred medium. One reason for this could be the level of access, as most workers and subcontractors do not have their own computer but use the unit's shared computers.

When examining the differences in preferences between personnel with and without a Konecranes e-mail address, some clear variations can be seen. Those who have the use of e-mail, generally place it as the most preferred information channel. Those without one, on the other hand, equally prefer information screens and verbal communication to all of the other channels. The difference between male and female respondents' preferences is not remarkable, although the female respondents thought of the bulletin board as clearly the least preferred information channel.

Some differences could also be seen when examining the preferred communication media by the respondent's position (see figure 12). Those in superior positions clearly placed bulletin board as the least preferred medium, while favouring face-to-face communication above all the others. Officials, on the other hand, favoured e-mail as the most preferred communication channel. This might be because officials generally spend a lot of their time in front of a computer to begin with. For workers and subcontractors on the other hand, intranet was the least preferred information source, while there was no clear difference between the other media.

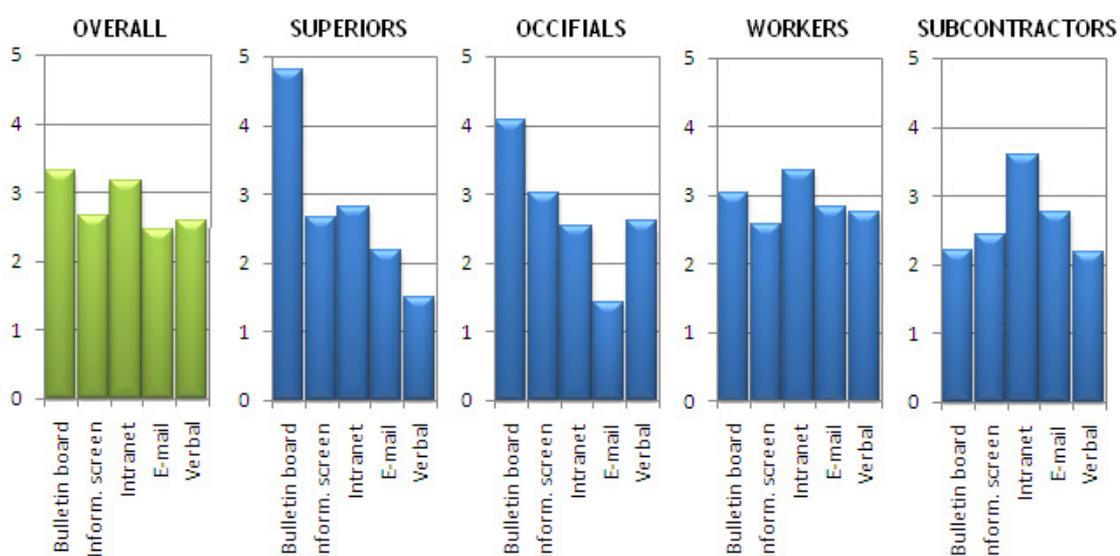


Figure 12 - Preferences in general and by position

9.5 Bulletin board

Most units in Electric's Factory have bulletin boards, which are used to distribute general information, such as instructions for actions in case of an illness; information about free time opportunities, such as company's sport club activities or theatre visits; organizational bulletins; and notices of upcoming events or changes. Bulletin boards are generally placed near the employee changing rooms or near the employees' break areas. This placement ensures that bulletin boards are accessible at least on a daily basis.

Although bulletin boards proved to generally be used less often than the other studied media, the amount of information was not thought to be too extensive. Almost half of the respondents (48 percent) thought that the amount of information on bulletin boards was sufficient,

and over a third (36 percent) said that there could even be more information available on bulletin boards.

Although almost half of the respondents thought that the layout of bulletin boards was quite clear, many thought that while some of the information was easy to find, some was not; or that it was actually quite difficult to find information on bulletin boards. Many of the comments left about bulletin boards support this, as bulletin boards were claimed to be disorganized, and new bulletins were difficult to distinguish from the old ones. Many people also criticized bulletin boards for having a lot of outdated information on show.

Although most respondents have a daily access to bulletin boards, only 56 percent have a bulletin board close enough for an easy access. A third of respondents (34 percent) did admit to only use bulletin boards as the source of information once a week, when almost a third (27 percent) said to use bulletin boards less often than that. Only 16 percent of all respondents said to use bulletin boards daily.

Many respondents suggested that the bulletin boards should be divided into sections depending on the type of information displayed. The suggestions included the board to be clearly divided into categories, such as free time, company matters, current topics etc.

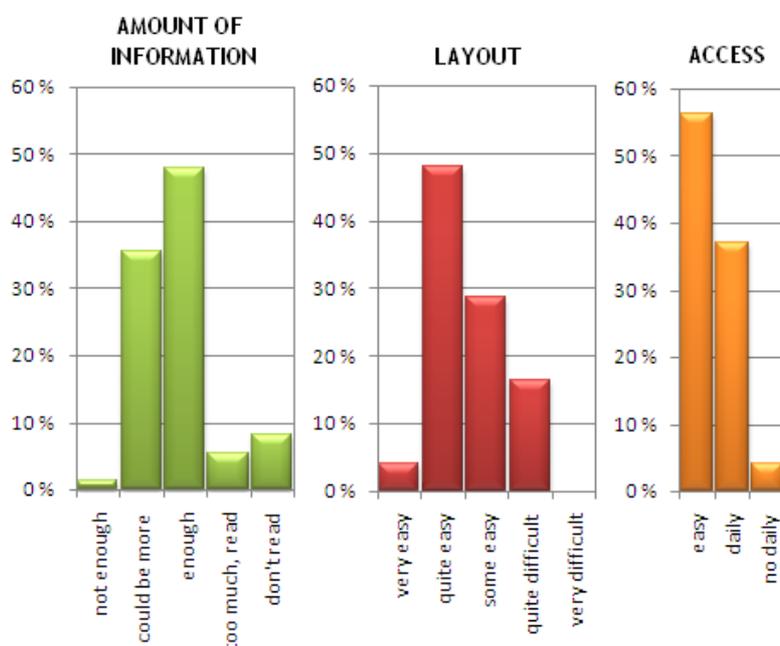


Figure 13 - Bulletin boards

9.6 Information screens

The Electrics Factory of Konecranes Heavy Lifting Ltd. has altogether four information screens spread over the different locations as shown in appendix 1. These information screens are controlled by a computer program, which is only accessible by a small number of people around the organization. A named person has been appointed for the distribution of general information for all of the information screens used in Konecranes Heavy Lifting Ltd. In addition, a person from each factory has been selected to distribute information on the factory's own information screen or screens.

As the operation of information screens is based on computer activities and network connections, they sometimes suffer from technical difficulties resulting, for example, from broken connections.

Information screens were nearly as preferred source of information as were face-to-face communication or e-mail. Almost half (47 percent) of the respondents use information screens daily, and almost a third (26 percent) use them twice or more times per week. Approximately a half (52 percent) of the respondents thought that the amount of information on information screens is sufficient, although a quarter would have liked there to be more. Approximately a fifth (19 percent) admitted information screens to show too much information, yet 11 percent of all respondents would still read what was there. Many of the comments written about information screens supported the problem of excess information. There were several comments that discussed the rotation times of the information screen slides. When some slides were said to go by too quickly, especially if they contain a lot of text, the overall rotation time was thought to be too long. Therefore it would take too long to wait for the required piece of information to be shown again.

When used correctly, information screens are a good source of information, as almost all personnel have at least a daily access to them. Only personnel from the cabin assembly did not necessarily have a daily access to an information screen.

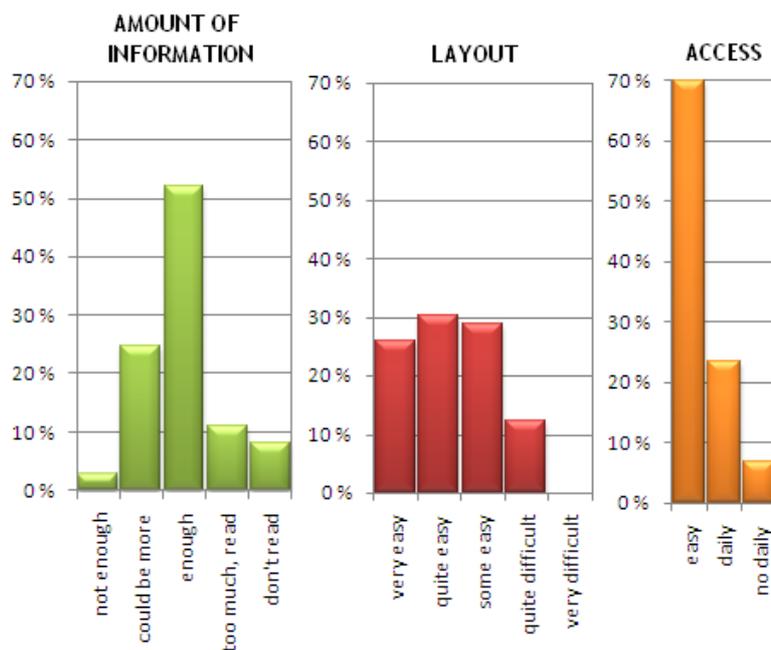


Figure 14 - Information screens

9.7 Intranet

Intranet is the only one of the studied communication channels in the Electrics Factory, which cannot be used as a private channel only for the Electrics Factory's purpose. Therefore intranet cannot be used to inform about the Electrics Factory's own matters, and thus it can only be used to find general information related to the Heavy Lifting Corporation or the entire Konecranes organization.

The use of intranet among the respondents varies significantly as seen in figure 15. While a quarter of the respondents use the intranet daily, another quarter only uses the intranet once a week. Although most of the respondents use intranet at least once a week, some admit to use it less. Someone even reveals in a comment that he does not use the intranet at all.

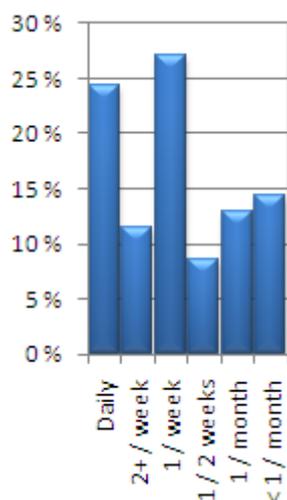


Figure 15 - Utilization of intranet

Although 56 percent of the respondents have a use of their own computer and another 42 percent have a daily access to the intranet, the comments show that some people do not like to sit in front of the computer long enough to familiarize themselves with the intranet. Someone, who uses a shared computer, complains that those computers quite often have queues.

As seen earlier in chapter 9.4 Preferences, workers and subcontractors placed intranet as the least preferred source of information. One reason for this could be the lack of knowledge in how to best utilize the intranet and how to find information from it. Some comments mentioned the intranet to be disorganized, and that old pieces of news were difficult to find. Intranet also received some comments similar to those mentioned about the bulletin boards. Those comments complained that the information was not up-to-date and that old information was still available.

Suggestions were also made to the clarification of different type of information. Someone complained that some paths were too long, and wished that general and technical information would be clearly separated. Another respondent said that it would be good if common matters were clearly separated under their own title.

Intranet seemed to receive the most controversial opinions and comments out of all of the four communication channels studied. While some seemed to dislike the intranet and admitted not to use it regularly, some praised it and said that they could find a lot of information and that the information was quite easy to find. According to one respondent, the clarity of intranet has improved but the organizational diagrams were still not up to date. This, according to the respondent, makes it difficult to contact other units when needed. The main page

of the intranet also received credit: according to a comment, the latest pieces of news are easy to read with just a glance.

Some conclusions can be drawn from the use of intranet. It seemed that those who use the intranet daily find the layout to be easy to follow; and those who only use it once a month or less find the layout to be difficult. Therefore, in order to receive the best benefits for the use of intranet, some training could be organized in order to support its use.

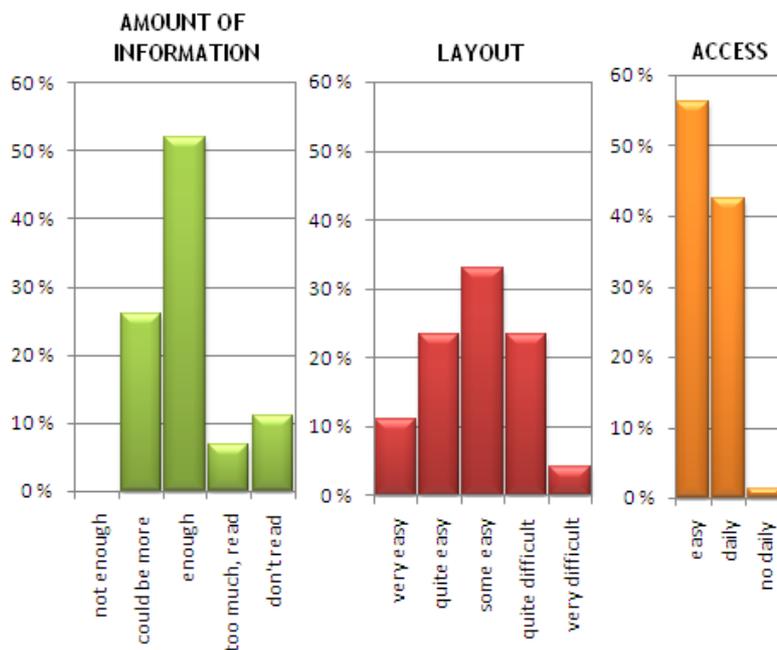


Figure 16 - Intranet

9.8 Konecranes e-mail

Approximately three quarters (77 percent) of the respondents have the use of Konecranes e-mail address. However, only two thirds (66 percent) of those have the use of their own computer. Out of those who do have a Konecranes e-mail address, almost all use it daily (see figure 17). However, there is a small percentage of people who use it less than once a month, although the number is rather insignificant when compared to the amount of daily users.

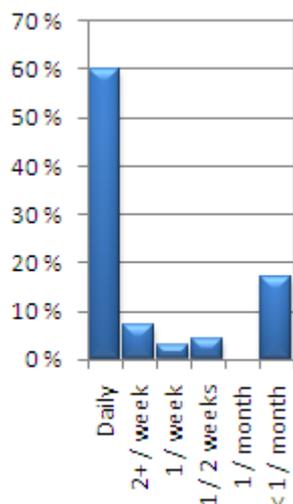


Figure 17 - Utilization of e-mail

Many of the comments related to e-mail criticize the amount of information received in e-mail. There is thought to be some partially unnecessary information, although some respondents would like to see more of the information now found only on the intranet to be distributed also via e-mail. However, it is suggested that e-mail bulletins would be more collective and include links to the intranet in order to follow the particular piece of news, which the receiver finds interesting.

Generally workers, who do not need e-mail in their everyday work, find it to be unnecessary as such. Someone even admits never to have checked the e-mails in his mailbox. As most of the information can be found on bulletin boards or information screens, e-mail bulletins are thought to be unnecessary.

E-mail layout, i.e. how easy or difficult it is to find information, received varied opinions. Almost half (48 percent) of the respondents thought that while some information could be found easily, some information was difficult to find. Almost a quarter (23 percent) found it relatively easy and 14 percent very easy to find information through e-mail. However, some people did find it difficult to find information, perhaps due to the large amount of information available. Generally those who are in higher position receive more e-mail. This could be why superiors say there to be too much information in e-mail, while officials state there to be a sufficient amount. Some officials would even like to receive more information through e-mail.

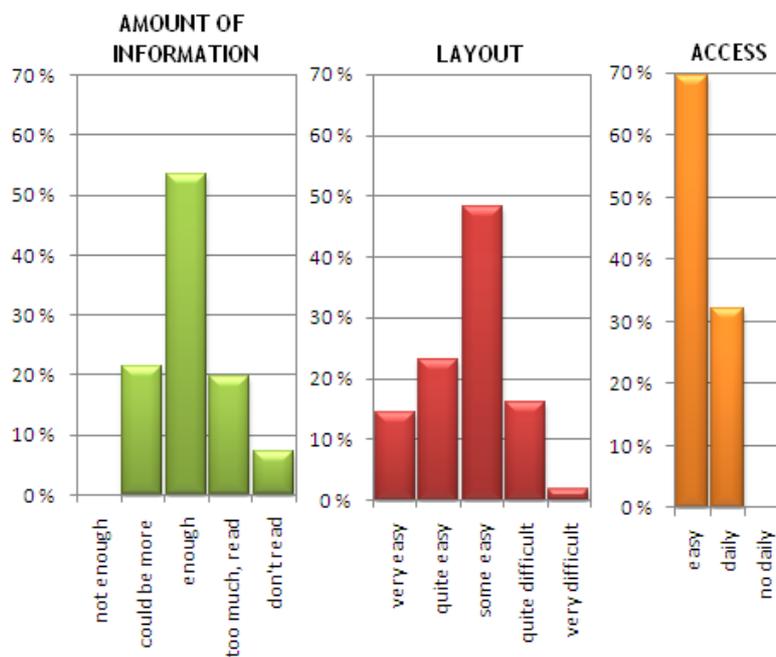


Figure 18 - Konecranes e-mail

Out of those who do not have a Konecranes e-mail address, 71 percent would use it at least once a week. On the other hand, almost a fifth (18 percent) would use e-mail less than once a month. Most of the respondents (71 percent), who do not have the use of a Konecranes e-mail address, have daily access to a computer.

The most preferred sources of information for people who do not have a Konecranes e-mail address are information screens and verbal communication.

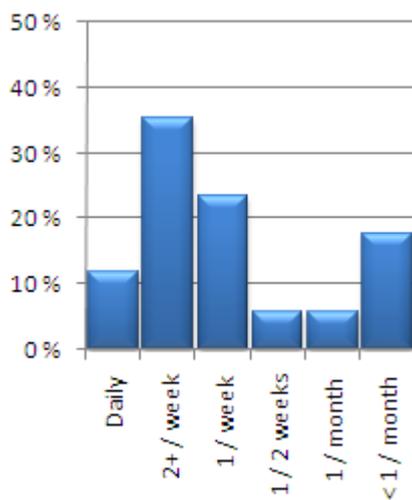


Figure 19 - Potential use of Konecranes e-mail

9.9 Other comments

Some comments, as seen in appendix 3, were also left about the general communication within the Electrics Factory. An important point was made about the significance of verbal communication. According to one respondent, a lot of the information available travels as rumours. The same person explains that it would be important to ensure that everyone receives information equally, as rumours quite easily distort the message and do not always reach everyone who is concerned. Another person values verbal communication above all mediated communication and suggests that general gatherings, where information is distributed, should become a frequent habit. The same person feels that too often new matters are heard through the bush radio as rumours.

As a lot of information is distributed through e-mail, one respondent feels that important information should be compacted and visible on the information screens. As many people receive dozens of e-mails every day, general announcements and bulletins, according to the respondent, are “lost in the flood of e-mails”.

10 Communication barriers in the Electrics Factory

Avoiding communication barriers helps the information to reach the receiver in the correct form and at the correct time. In order to know how to avoid communication barriers, one must first understand what communication barriers are present and which of those are the most frequent and the most harmful.

According to the survey results, the biggest communication barrier in the Electrics Factory is the target group itself. How frequently it uses a particular information source or channel significantly affects what type of and how much of information reaches the receiver. Most people use e-mail, verbal communication and information screens daily, whereas bulletin boards and the intranet were used significantly less frequently. Therefore bulletin boards and the intranet should never be used as the main communication channel for important and urgent information.

The target group's attitude also affects communication. Excess information has been discovered to have a negative effect on the efficiency of communication. Too much information, according to many studies as well as the survey conducted within the Electrics Factory, leads to a lost interest in a particular communication medium. People are reluctant to wait for the required information, such as in the case with the information screens. They are also more

likely to give up on an information search, if the distribution medium is disorganized and the information is difficult to find.

Every distribution medium has its own communication barriers. The main barriers for mediated communication are the distribution methods, amount of information, and different technical problems with electric distribution channels. One of the main communication barriers for bulletin boards, according to the survey results, is the validity of information. Bulletin boards were complained to have too much out-dated information. This unnecessary information is not only confusing, but it also has a direct effect on the length of information search process. Excess information, whether it is out-dated or simply irrelevant to the target group, has a negative effect on the receivers' attitude towards communication.

Excess information was also a major problem with e-mail and the information screens, although not necessarily in the same manner. The survey showed that the amount of information on information screens was not necessarily the problem as such. Instead, the problem was thought to be the slide changeover times and the entire presentation's rotation time. The respondents' opinions, however, varied significantly. While some said that the changeover time was too quick, especially on slides that contained a lot of text, some said that the changeover times were too long. These comments undoubtedly showed two failure points with information screen usage and content: first of all the slide changeover times have not been considered enough, and secondly, some slides have too much text on them. These problems affect the text's readability and therefore can be classed as communication barriers.

Intranet proved to have communication barriers different to those of the other communication channels. While many frequent users praised its layout and amount of information, many of the non-frequent users complained that information was difficult to find. If the target group does not have experience in the use of the intranet, it can be difficult to approach. This incompetence ultimately results in reluctance to use the medium, thus creating another communication barrier.

The location of some communication channels was also commented on. While bulletin boards received appraisal for their placement, information screens were reprehended for their locations both in the test drive and the RTG assembly units. The screens were placed too high up and were too small in comparison. The font on some slides was also complained to be too small, thus jeopardizing the text's readability.

The most significant communication barrier is the location of some units (appendix 1). Especially the cabin assembly and the test drive extension suffer from a lack of communication channels. These do not have an information screen, and the test drive extension does not

even have a bulletin board. The bulletin board in use in the cabin assembly unit is new and relies entirely on the employees' own maintenance.

11 Suggestions

To ensure effective communication, all information channels should be used in order to provide information. However, what type of information is distributed and how depends significantly on the channel used. As bulletin boards and the intranet are not used as frequently among the target group as the other available channels, they should only provide general and background information. In other words, information that is available only when needed and that deepens the understanding of the desired matter.

E-mail and information screens on the other hand are used more frequently, and therefore they can be used to communicate more real-time information. However, they should only be used in a way that does not compromise their benefits. In other words, issues such as excess information should be carefully considered when using these channels.

When choosing a communication channel, the importance and type of the message should always be compared to the media richness of the particular channel. As discussed before, face-to-face communication should always be used when communicating complex messages with high levels of importance, or personal matters. Routine messages and information with lower levels of importance should be communicated through leaner media such as bulletins or other unaddressed documents. Also background information even to the more important matters can be distributed through leaner media, as long as the matters have first been informed about directly.

As the location of some units cannot be changed due to a lack of spatial capacity, frequent (e.g. monthly) meetings held for the entire factory could be arranged in order to provide information equally to all personnel. These meetings should, however, be also held always when needing to communicate important matters concerning everyone within the factory. This ensures factual information to be distributed before the rumours, which may distort the message and create confusion.

Successful communication understands the target group's interests, preferences in information sources and attitude towards information. Frequent communication satisfaction surveys on corporate and factory level could be the answer when planning effective communication. Understanding the target group's interests helps to produce information that will be processed and utilized. Understanding which communication channels the target group is most

likely to use at any particular time and situation ensures effective communication distribution.

11.1 Bulletin boards

The comments received in the survey already suggested that the layout of bulletin boards should be divided into separate categories and that those categories should be clearly distinguished from each other. According to the comments, these different categories could also be colour-coded.

Bulletin boards should also be maintained and updated more frequently. This does not simply mean posting new bulletins but also ensuring that old and out-dated bulletins are removed as they only create confusion and affect the readers' attitude towards bulletin boards. Although one person has the responsibility over all of the factory's bulletin boards, a person from each unit should be appointed to update and maintain the bulletin boards in his or her respective area. This would ease the responsibility of the main person in charge as the bulletins could be posted directly to these appointed people. This would also ensure more frequent and real-time updating of the information, as the geographical distances between the bulletin boards currently make it difficult for one person to maintain all of the bulletin boards.

11.2 E-mail and information screens

According to the survey results, e-mail should be used carefully when distributing information, as the messages compete with dozens of other important postings. In order to avoid information overflow, e-mail should be used to distribute collective information possibly with links to the intranet for those who want to find out more about the matter. These links could be collected into one weekly bulletin, which can be clearly distinguished from other e-mail bulletins and messages by its subject line. This same bulletin could also be posted on the bulletin boards for those without Konecranes e-mail address. However, in this occasion the message should be formatted in a different style to suit the printed form. In other words, instead of direct links to the piece of news, some paths or guidance of how to find the information on the intranet should be added.

Information screens should also be used carefully in order to avoid the communication barriers currently related to them. As it has been studied that electronic text is slower to read than printed text, electronic texts should be more concise. This also applies to messages shown on information screens, as in order to reduce the slides' changeover times; the text

should be short but comprehensible. This requires some competence in informative writing, as often the long bulletin texts need to be summarized into an understandable sentence or two.

As the information on information screens most often is a PowerPoint presentation, training for effective presentation planning could be given to the personnel in charge of information distribution. This training should include examples of effective PowerPoint presentations, writing summaries and using visual aids, such as pictures, in order to emphasize the message and attract the reader's interest. Some standards of slide changeover times should also be examined and set in order to achieve an effective rotation of information. At the same time, standard font should be set in order to avoid situations where the computer attached to the information screen does not understand the font used, and therefore the entire message may be distorted or in some ultimate cases be completely blank.

11.3 Intranet

Intranet shares opinions between those, who use it regularly and those, who do not. While intranet enables the same information to be simultaneously available for all personnel, its use requires some level of competence and experience. The significance of intranet has increased as it has said to revolutionize a company's internal communication infrastructure. However, in order to do so, intranet needs to be formulated from the user's point of view. This can be achieved with user research and analysis.

In order to improve communication through the intranet, some training or a printed guide should be conducted for those with less experience in its use. A printed guide should be concise and include basic instructions of how to find information on the intranet. The guide could also contain a site map, so that those non-frequent users could find the correct path to the desired information more easily.

The intranet user guide should be posted on the bulletin boards so that those who do not have frequent need to use the computers can find it and familiarize themselves with it. A copy of the guide should also be placed near each shared computer so that people wanting to use the intranet can easily relate to some guidance in case they encounter a problem. The guide placed near computers could be more precise and more extensive, while the guide posted on bulletin boards could simply be a visual quick-use guide with basic instructions.

12 Implementation

Internal communication requires constant reviewing and developing. As technology advances, new communicational methods are being introduced to complement or even replace old information channels. In order to receive the best results from these new channels and methods, it is vital to understand how the target group is using them. It is also important to understand the benefits and disadvantages of each communication medium, as well as possible communication barriers related to them.

According to the results received from the survey introduced in chapter 9, a guide to communicating through information screens was formulated. This guide can be found as a whole in appendix 4. The guide has been created in order to improve the efficiency of information distribution through information screens within Konecranes Heavy Lifting Ltd.

This thesis and its survey results will be further utilized in developing internal communication within the Electrics Factory of Konecranes Heavy Lifting Ltd. This project will be conducted in cooperation with the factory management, and will continue to develop internal communication and media placement also for the new factory currently under construction.

13 Conclusions

The importance of communication has increased along with the globalizing business world. The business culture has also changed, and personnel are now more active and interested in their respective company's issues. It is no longer enough to simply expect the personnel to complete the tasks given to them. They need to be involved in the process and feel that their work is appreciated and important.

Internal communication aims to inform and motivate the personnel, create and maintain a good working atmosphere and develop business operations. It supports the business operations and helps to reach corporate goals. Internal communication is needed in building a positive organizational image and identity, and helping the personnel understand what is required from them. Internal communication is closely tied to the organization's management of the organization, whose task is to influence the personnel to work for the common goals.

The goals of communication have changed from the pre-1960s focus on people to today's focus on strategic objectives, which eventually has led to a business-oriented attitude. In corporate communication, the goals most often are to inform or to influence the personnel. In

addition to these, internal communication aims to enhance the 'we' spirit within the organization by generating and maintaining open interaction.

In order to be successful and effective, communication requires careful planning and knowledge of the target group. Successful communication requires understanding of the target group's needs and interests, as well as knowledge of how the communication influences people. In addition, it is important to know how the target group searches for information - i.e. what communication channel they are most likely to use in any particular situation.

Successful communication always requires good planning. A message needs to be logical and comprehensive, yet not too extensive. It is important to define the core idea of the message and build the message around that core. This idea should then be incorporated into the writing of the text, producing a concise and a comprehensive message. In every situation, a well-planned message is readable and usable. It must use a language or languages familiar to everyone it concerns.

Electronic texts should be even more concise than printed versions, as electronic reading is much slower. An informative message should always start with the most important matters, so that the core of the message can be understood within a few seconds. Visual elements should be used with care, and only when they create added value to the reader. Charts should be used in order to clarify the matter discussed. However, charts as well as other visual elements must be generated in such a way that they are comprehensible on their own.

The choice of communication channel greatly affects whether a message will reach the desired target group. The significance of target group analysis lies also here, as it is important to understand what communication media the target group is most likely to use. The choice of media also affects on how quickly a message will reach the target group. Electronic media have provided a fast means of information distribution, although they may not always be accessible for everyone.

Individual factors of the target group affect the efficiency of communication. Although information is communicated for a group, it is important to remember that the group consists of individuals with individual needs and expectations. Understanding the uniting factors between the individuals in a target group makes it easier to determine what type of information should be distributed and how. Personnel can be divided into different groups according to their unifying individual factors such as position, age and time of service; or organizational factors such as unit, geographical location, as well as cultural and situational factors. It is, however, important to remember that regardless of their unifying features, people's understanding of particular subjects is limited by the surrounding environment as well as their past experi-

ences. Every human being also has a different personality, which further affects his or her perception of certain matters.

Different communication channels should be regarded as each other's complements - not alternatives. Utilization of different media simultaneously ensures easier reaching of the target group. Communication can be divided into direct and mediated communication according to the distribution method. Direct communication reaches the target group and enables real-time interaction between the sender and the receiver. Mediated communication, on the other hand, has the opportunity to reach more people in a way that requires less planning and organizing, and thus is less time-consuming. However, mediated communication bears little real-time interaction and may not reach the target group at all.

In order to determine what communication channel to use, the channel's media richness should be considered. Media richness depends on the medium's ability to communicate a message using more than one informational sign as well as its ability to smooth the feedback process. The richest media (face-to-face communication) should be used when communicating important and urgent matters, while leaner media (unaddressed documents) should be used in routine communication.

Although wall-mounted bulletin boards have lost their foothold in many organizations, they should not be disregarded in internal communication as they provide a basis of background information for those who do not have a frequent access to the intranet - or on the other hand are lacking the skills in using it. The importance of electronic communication, on the other hand, is constantly increasing, as speed and geographical independency are required in the globalizing business world. Network (online) communication has a central role in organizational communication, although not everyone has frequent access to the electric media.

Ultimately, successful communication requires careful planning and implementation. Research and analysis of the target group's interests and information search habits ensures better understanding of the implementation of communication. Comprehension of the differences between different communication media also helps to decide, which medium should be used and how.

Successful communication will effectively assist in reaching the organization's goals. Successful communication will influence people and tie the personnel together into a unit, which will work together in order to reach a common goal. Internal communication is needed in the management of people, as well as in building a strong community with good work atmosphere. This in turn will result in more motivated and active personnel, and ultimately will increase the entire organization's results.

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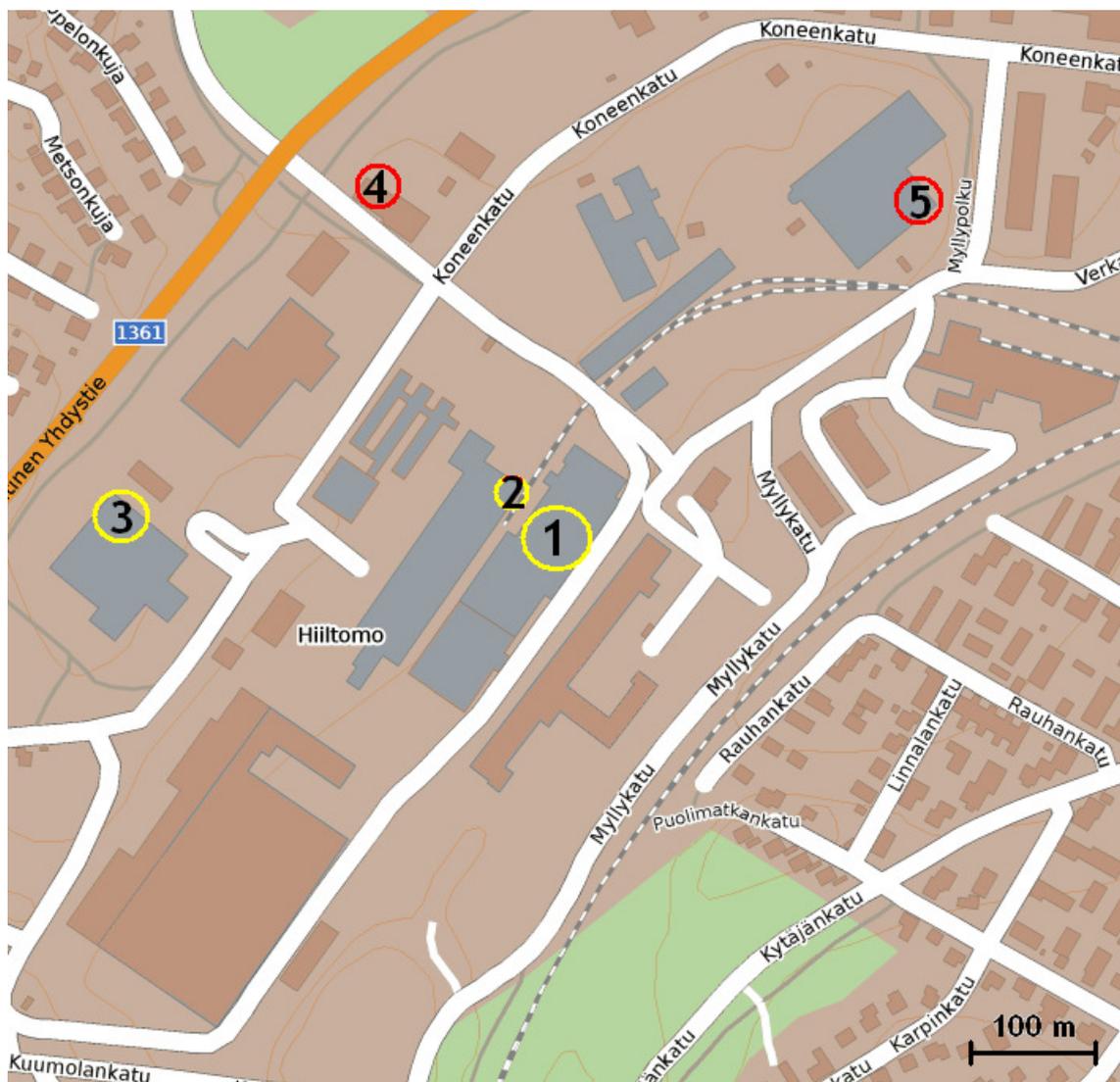
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- Location 1 = Office
Support
Plates & Cubicles
Inverter assembly
- Location 2 = Test drive
- Location 3 = RTG assembly
- Location 4 = Cabin assembly
- Location 5 = Test drive (extension)

The locations with information screens have been marked with a yellow circle.

UTILIZATION OF MEDIA IN INTERNAL COMMUNICATION
Kirsi Mäentausta

January 2009

Respondent

1. **Age** < 25 25-30 31-40 41-50 51-60 over 60
2. **Sex** F M
3. **Duration of employment at Konecranes**
 under 1 yr 1 - 5 yrs 5 - 10 yrs 10 - 20 yrs 20 - 30 yrs over 30 yrs
4. **Department**
 5360, Office 5364, Test drive
 5360, Support 5365, RTG/STS
 5361, Plates & Cubicle rows 5366, Dyna assembly
 5362, Cabins & Pendants 5367, After sales
5. **Position**
 Superior Official Worker Subcontractor
6. **Do you have your own Konecranes e-mail address?**
 YES NO

7. **Use of:** (e.g. how often do you read the bulletin board)
- | | 1 | 2 | 3 | 4 | 5 | 6 | |
|-----------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------------------|
| a) Bulletin board | <input type="checkbox"/> | 1 = daily |
| b) Information screen | <input type="checkbox"/> | 2 = 2 or more times per week |
| c) Intranet | <input type="checkbox"/> | 3 = about once a week |
| d) Konecranes e-mail | <input type="checkbox"/> | 4 = about once every 2 weeks |
| e) Word-of-mouth | <input type="checkbox"/> | 5 = about once a month |
| f) _____ | <input type="checkbox"/> | 6 = less than once a month |

8. **What type of information are you interested in?**

- | | |
|---|---|
| <input type="checkbox"/> Sports activities | <input type="checkbox"/> Menu |
| <input type="checkbox"/> Cultural activities (e.g. theatre) | <input type="checkbox"/> Current topics |
| <input type="checkbox"/> Health services | <input type="checkbox"/> Changes |
| <input type="checkbox"/> Appointments within the company | <input type="checkbox"/> _____ |
| <input type="checkbox"/> Financial situation of the company | <input type="checkbox"/> _____ |

9. **Preferences**

- | | | |
|-----------------------|-------|--|
| a) Bulletin board | _____ | 1 = The most preferred source of information |
| b) Information screen | _____ | 2 = Second most preferred |
| c) Intranet | _____ | etc. |
| d) Konecranes e-mail | _____ | |
| e) word-of-mouth | _____ | |
| f) _____ | _____ | |

Translated survey comments:

Bulletin boards:

- Somehow marked on the bulletin board on which side of the board are the newest notes. Board divided into categories.
- Old stories could be removed quicker from the wall.
- Sometimes difficult to distinguish new and old notes.
- Too much unnecessary stuff.
- Too many notes just confuse, and an individual note can't be seen.
- Disorganised, a lot of outdated information, difficult, OLD-FASHIONED.
- Difficult to notice new notes.
- A lot of outdated information.
- Only in Finnish!
- Large sheaves. Don't read.
- Occasionally too many notes (even on top of each others).
- Occasionally old information on show (I have removed).
- If something is only informed about on the bulletin board, important information might go unnoticed from a lot of people, it is also good to inform a few people verbally.
- Difficult to notice what new information has been added; can't be bothered to stay and look for it.
- On the way to work, if only can be bothered to stop ((office))
- Content mixed up, hobby news away from other notices → separate board.
- There is enough information, but sometimes things are in "disorder".
- The bulletin board could be divided into different subjects, like free time, company matters, current etc. and notes would be placed under the titles.
- The placement of the bulletin board is excellent.

Information screens:

- Time between notices too long; have to wait for too long to see all notices.
- Amount of information. E.g. new in the morning, everything in the afternoon.
- Have to always stay and wait for the picture to change.
- Should be able to choose yourself those screens that you want to read more.
- Pages change too quickly.
- Unnecessary trivia off or at least times shorter.
- Too long rotation times; have to wait for information for too long.
- Have to wait for wanted information.
- Too much text on some slides.
- Have to wait that the screen "rolls over" = takes too long if looking for something particular.
- Too small, in the wrong place ((test drive)).
- (Access) depends on place of work.
- Page changing and time of visibility of each page should be improved.
- Writing too small, too much text.
- Goes too fast. For example 3 pieces of information on 1 page → additional information from elsewhere.
- Too high up or screen too small ((RTG)).
- Notifications of events earlier.
- Font sometimes too small.
- Pages containing a lot of text go by too quickly.
- Error messages on screen cover up information.

- Time “wrong” (clock).
- Screen too small, if you want information you have to go closer.
- Not too much, can even be bothered to read (occasionally).
- Next to working place.
- (Amount of information) too much, there is no time to stand around waiting whether something important comes up on the screen.
- The time and the menu are visible often; other information is visible too rarely to even know to wait.
- Page changing needs to be a little bit quicker.
- The turnover of information could be speeded up. One thing visible for too long on the screen.
- Information screen should be placed better regardless, e.g. behind the assembly desks ((dyna-assembly)).
- Time goes slow for those who wait. The screen rolls on its own speed.
- Information screen content should be improved heavily. Factory’s production situation should be better visible and automatic, so that it wouldn’t be dependent on busyness.

Intranet:

- Newest news should be on the top of the screen and not the bottom.
- I don’t sit in front of the computer long enough to familiarise.
- Intra is as a whole quite a disorganised place and most of the new information is in the “wrong” place.
- Old news / stories difficult to find (search function is not available either).
- Not always up to date = old information!
- Quite muzzy pages if looking for something particular e.g. el.product information behind many links.
- All in Finnish. English option not for Finland news.
- Some paths too long. General & technical separated?
- Don’t really use the intranet.
- Computers have queues.
- Can find a lot of information, quite easy to find wanted information.
- MyKonecranes-development lost a lot of important information, good thing that intraKC is still in use.
- Would be good if common things were clearly separated under own title.
- Quite a lot of breaks (in service).
- Intranet: clarity has improved but e.g. organization-diagrams are not up to date, which makes contacting other units more difficult. Intra’s front page is good: latest news with one glance.

E-mail:

- I get a lot of work-related important information and commands.
- Most can be found on information screen / intranet, e-mail bulletins quite unnecessary.
- Intra has a lot of information that could be distributed via e-mail. Not however appointment news.
- Back to the old partly. Appointments can be left out.
- Partially “unnecessary” information.
- I receive way too much e-mail. CC-style mail should be forbidden.
- Could be more collected information → link.
- Do have an address but haven’t been bothered / remembered to check mails once.
- What do you get there if you’re just a line employee...
- Unit’s computers usually have a queue...

- Good that we no longer receive large attachment mails continuously. Something could be informed in e-mail.
- I receive at least unnecessary Corporate Communications news and reminders to do purchase order invoices.

Other comments:

- Although your work is about utilization of media in communication, nothing in my opinion replaces verbal communication, such as unit's own information gatherings. The information gatherings in question could become some kind of a frequent habit. Because every now and then there's a feeling that new matters aren't told about but they are heard through bush radio.
- Hevari (personnel magazine) is good. Bulletin boards need developing, e.g. title and under that certain information, e.g. health stuff.
- A lot of information comes through e-mail. It is good if all very important matters can be compacted and visible on the information screens. Lot of people get tens of e-mails per day. In this case important general announcements / bulletins "are lost in the flood of e-mails".
- Most of the information travels as rumours, it could even be said as the most important communication channel. It would be important that everyone receives information equally. Rumours will not reach everyone and the message is easily distorted as well.
- PRODUCTION. Flow of information between design and production could be better. E.g. designers should visit production sites to update their information.

Original survey comments:

Bulletin boards:

- Jotenkin merkitty ilmoitustauluun, että missä reunassa taulua uusimmat ilmoitukset sijaitsevat. Taulu jaettu aihealueisiin.
- Vanhat jutut voisi poistaa nopeammin pois seinältä.
- Toisinaan hankala erottaa uudet ja vanhat laput.
- Liikaa turhaa asiaa.
- Liika määrä lappuja vain sekoittaa, eikä yksittäistä ilmoitusta näe.
- Sekava, vanhentunutta tietoa paljon, hankala, VANHANAIKAINEN.
- Uusien ilmoitusten huomaaminen hankalaa.
- Paljon vanhentunutta tietoa.
- Only in Finnish!
- Isoja nippuja. Ei tule luettua.
- Välillä liikaa lappuja (jopa päällekkäin)
- Välillä vanhaa tietoa esillä (olen poistanut)
- Jos ilmoitetaan pelkästään ilm.taululla tärkeä tieto saattaa mennä ohi monelta, kannattaa myös ilmoittaa suullisesti muutamille.
- Vaikea havaita mitä uutta informaatiota lisätty, ei jaksa jäädä etsimään.
- Töihintulomatkan varrella, jos vain viitsii pysähtyä. ((konttori))
- Sisältö sekaisin, harrastusuutiset pois muiden ilmoitusten joukosta → erillinen taulu.
- Tietoa on tarpeeksi, mutta joskus asiat ovat "epäjärjestyksessä"
- Ilmoitustaulun voisi jakaa eri asioihin, kuten vapaa-aika, firman asiat, ajankohtaista yms. ja laput sijoiteltaisiin otsikoiden alle. Eri kategoriat voisi olla väri-koodattuja.
- Ilmoitustaulun paikka on sijainniltaan erinomainen.

Information screens:

- Ilmoitusten aikaväli liian pitkä; joutuu odottamaan liian kauan näkeäkseen kaikki ilmoitukset.
- Tietojen määrä. Esim. aamupäivällä uudet, iltapäivällä kaikki.
- Pitää aina jäädä odottamaan kuvan vaihtumista.
- Pitäisi pystyä itse valitsemaan ne ruudut mitä haluaa tarkemmin lukea.
- Sivut vaihtuvat turhan nopeasti.
- Turha nippelitieto pois tai ainakin ajat lyhyemmiksi.
- Liian pitkät rotaatioajat, joutuu odottamaan infoa liian kauan.
- Joutuu odottamaan haluttua informaatiota.
- Joillain slideilla ihan liikaa tekstiä.
- Pitää odotella että näyttö ”pyörähtää” ympäri = vie aikaa jos hakee jotain tiettyä asiaa.
- Liian pieni, väärässä paikassa. ((koeajo))
- (pääsy) vaihtelee työskentelypaikasta riippuen.
- Sivujen vaihtoa ja kunkin sivun esillä oloa tulisi parantaa.
- Writing too small, too much text.
- Menee liian nopeasti. Vaikka 1 sivulla 3 tietoa → lisätieto muualta.
- Liian ylhäällä tai liian pieni näyttö ((RTG))
- Tilaisuuksien ilmoitukset aikaisemmin.
- Fontti välillä liian pientä.
- Paljon tekstiä sisältävät sivut ohi liian nopeasti.
- Virheilmoitukset näytöllä peittävät tietoa.
- Kellonaika ”väärä”.
- Taulu liian pieni, jos haluaa tietoa pitää mennä lähemmäksi.
- Ei liikaa, jaksaa jopa lukea (välillä).
- Työpisteen vieressä.
- (informaation määrä) Liikaa, ei ole aikaa seisoskella odottamassa tulisiko näyttöön jokin tärkeää.
- Kellonaika ja ruokalista näkyy useimmin, muuta tietoa näkyy liian harvoin jotta tietäisi edes odottaa.
- Sivujen vaihtuvuus oltava pikkuisen nopeampi.
- Tiedon vaihtuvuutta voisi nopeuttaa. Yksi asia näkyy liian kauan näytöllä.
- Infonäyttö pitäisi sijoittaa kuitenkin paremmin, esim. asennuspöytien luokse. ((dyna-asennus))
- Odottavan aika on pitkä. Näyttö rullaa omaan tahtiin

Intranet:

- Uusimmat uutiset tuli olla sivun yläaidassa eikä sivun alalaidassa.
- En istu koneella niin paljon että ehtisin tutustua.
- Intra on kokonaisuutenaan melko sekava paikka ja suurin osa uudesta tiedosta on ”väärässä” paikassa.
- Vanhoja uutisia / juttuja vaikea löytää. (Hakukaan ei toimi)
- Ei aina ajantasalla = vanhaa tietoa!
- Aika sekavat sivut jos jotain tiettyä asiaa hakee esim. el.product info monen linkin takana.
- All in Finnish. English option not for Finland news.
- Jotkut polut liian pitkiä. Yleiset & tekniset eriteltynä?
- Ei oikein tule käytettyä intranettiä.
- Koneilla jonoa.
- Löytyy paljon tietoa, suht helppo löytää haluamaansa tietoa.
- MyKonecranes-uudistus hukkasi paljon tärkeää tietoa, onneksi käytettävissä on intrakc.

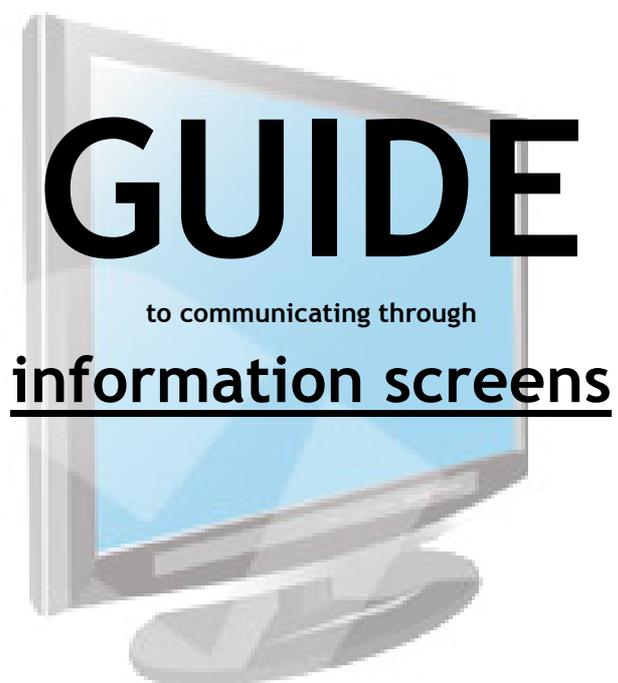
- Olisi hyvä jos olisi selkeästi eroteltu yhteiset asiat oman otsikon alle.
- Aika paljon on katkoksia.

E-mail:

- Saan paljon työhön liittyvää tärkeää tietoa ja käskyjä.
- Suurin osa löytyy infonäytöltä/intrasta, sähköpostitiedotteet aika turhia.
- Intrassa on tietoa, jota voisi levittää s-postilla. Ei kuitenkaan nimitysuutisia.
- Paluu vanhaan osittain. Nimitykset voi jättää pois.
- Osittain ”turhaa” tietoa.
- sähköpostia tulee todella paljon liikaa. CC-tyylinen posti pitäisi kieltää.
- Voisi olla enemmän koottua tietoa → linkki.
- On osoite, mutta en ole jaksanut / muistanut tarkastaa posteja kertaakaan.
- Mitä sinne tulee jos olet vain rivityöntekijä...
- Osaston koneilla yleensä jono...
- Hyvä ettei enää tule isoja liitetiedostoja jatkuvalla syötöllä. Jotain voisi tiedottaa sähköpostilla.
- Omaan sähköpostiini tulee ainakin turhia Corporate Communications uutisia, sekä muistutuksia ostolaskujen tekemisestä.

Other comments:

- Vaikka työsi koskee median käyttöä viestinnässä, mielestäni mikään ei korvaa suullista viestintää, kuten osaston omat infotilaisuudet. Kyseisistä infotilaisuuksista voisi tulla jonkinlainen säännöllinen tapa. Koska ajoittain tulee tunne, ettei uusista asioista kerrota, vaan ne kuullaan puskaradion kautta.
- Intranet: selkeys parantunut mutta esim. organisaatio-kaaviot eivät ole ajan tasalla, mikä vaikeuttaa yhteydenottoa muihin osastoihin. Intran etusivun hyvä: yhdellä silmäyksellä viimeisimmät uutiset.
- Infotaulujen sisältöä tulisi kehittää voimakkaasti. Sinne pitäisi saada paremmin esille tehtaan tuotantotilannetta tyyliin automaattisesti, jotta se ei olisi päällisin kiireistä riippuvainen.
- Hevari on hyvä. Ilmoitustauluissa kehitettävää, esim. otsikko ja sen alla tietyt infot, esim. terveysjutut.
- Suurin osa tiedosta kulkee huhuina, sitä voisi jopa sanoa tärkeimmäksi tiedotuskanavaksi. Olisi tärkeää että kaikille jaetaan tietoa tasapuolisesti. Huhut eivät kantaudu kaikille ja sanomakin helposti vääristyy.
- Informaatiota tulee paljon e-mailin kautta. On hyvä jos kaikki todella tärkeät asiat saadaan tiivistettyä ja infonäytölle näkyviin. Sähköpostia tulee monelle kymmeniä maileja päivässä. Tällöin tärkeät yleiset ilmoitukset / tiedotteet ”häviävät sähköpostin tulvaan”.
- VALMISTUS. Suunnittelun ja valmistuksen välinen tiedonkulku voisi olla parempi. Esim. suunnittelijoiden tulisi käydä valmistuspaikoilla päivittämässä tietonsa.



Kirsi Mäentausta

2009

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1 Introduction

In the last few years, the popularity of information screens has grown significantly due to the development of technology and decreasing costs of the screen systems. Information screens are slowly becoming a part of the comprehensive communication system. They may be set up to work automatically by taking updated content from databases or the Internet - a possibility, which further increases the efficiency of communication. Also new easy-to-use programs for content creation do not require any special competence. The popularity of information screens has been estimated to increase further in the near future due to the development of LCD-screens, decreasing prices and possible new user techniques. (Norlund 2008, 26-28)

This guide has been conducted according to my thesis "Utilization of Media in Internal Communication - Case: Konecranes Heavy Lifting Plc, Electrics Factory" (2009). The results from the thesis and the survey conducted for it have been utilized in order to improve the effectiveness of information distribution through information screens within Konecranes Heavy Lifting Plc. The survey was answered by 73 of the Electrics Factory personnel.

The survey results suggested that the biggest problems of information screens are the amount of information as well as presentation rotation time. Criticism was also given to the amount of text on a page and too small font size.

2 Successful communication

In order to be successful, communication has to gain the target group's attention and influence it in a way the sender of a message has intended. This requires both knowledge of the target group itself and knowledge of how communication influences people. (Högström 2002, 9)

More important than what is being said, is how it is said. The task for the sender is to choose a communication method and style that best suits that particular situation. (Lohtaja & Kaihoviirta-Rapo 2007, 8)

2.1 Planning

Good message rises from good planning. It is easier to bring the text closer to the reader when its logical structure is carefully formulated. Planning should start by understanding the

target group, and defining the core idea of the message. When a message proceeds logically, it is easy to follow. (Lohtaja & Kaihovirta-Rapo 2007, 54)

The choice of communication channel also influences the style of text. Whether a message has been created for the intranet or as a printed publication affects the expressions and length of the text. (Lohtaja & Kaihovirta-Rapo 2007, 54)

It has been studied that people read approximately 25 percent slower from a computer screen than from paper. Therefore it is vital to take notice on the length of the text, and plan the text so that it is suitable for glancers¹ to read. (Lohtaja & Kaihovirta-Rapo 2007, 80)

2.2 Implementation

Any informative text should be formulated as clearly and accurately as possible, in order for the readers to be able to read and understand it. The text should therefore be short but comprehensible. (Lohtaja & Kaihovirta-Rapo 2007, 83-84)

Most readers are 'scanners', who will decide in just a few seconds whether the text is worth reading or whether it is best to move on to other things. Snappy headings and subject-describing subheadings, as well as a clear layout and simple typographical effects make it easier for a scanner to understand the concept. (Lohtaja & Kaihovirta-Rapo 2007, 82)

Electronic and online texts' structural solution and paragraph division should be formulated so that the most important matters are explained in the beginning of the text while moving on to the less important, although essential matters (Kortetjärvi-Nurmi et al.2008, 94).

2.3 Fonts

Choice of a font is also important when creating a readable document. Different fonts can be divided into Roman or Grotesque fonts. Roman letters - such as Times New Roman or Garamond (see figure 1) - have small end lines, whereas in Arial, Tahoma and other Grotesque fonts these end lines are missing. End lines tie the letters together, thus making it easier to read. However, when writing an electronic text - such as online texts or PowerPoint presentations - Grotesque fonts without these end lines are more suitable. (Lohtaja & Kaihovirta-Rapo 2007, 87)

¹ A 'glancer' is a person who will simply glance through the text first without actually reading it. 'Glancers' will pay attention to subject headings, simple typographical effects and visual elements.



Figure 1 - Examples of Roman and Grotesque fonts

When choosing a font for information screens, it is also important to make sure that the computer running the information screen understands the fonts used. Therefore it is best to use standard Microsoft office fonts such as Arial, Tahoma, Century Gothic and Arial Black (see figure 2).



Figure 2 - Different fonts tested on information screens

The size of font is also important. While some of the information screens are located only a couple of meters above the floor, some are situated much higher and thus require a much larger font in order to be readable. As a general guide, no font size under 24 should be used. The preferred font size for standard fonts is 36 to 44. These sizes should also be used on the subject line. Bigger font sizes are also usable, as long as they do not affect the message's readability - i.e. as long as the entire message will fit neatly on one page.

Large font size is more achievable, when the message is compact, i.e. the amount of text is minimal. This can be achieved by careful consideration of what should be said in the message.

2.4 Adding visual elements

A glancer sees pictures and picture headings as well as subject headings, ingresses and typographical effects. However, people should only add visual effects, such as pictures or graphs, if they will create extra value to the reader. To serve a glancer, texts should be formulated so that the message will be understandable in just five seconds. (Lohtaja & Kaihovirta-Rapo 2007, 87-88)

Glancers might only familiarize themselves with the visual elements instead of the text itself, and therefore it is vital that visual elements are understandable on their own. The reader's task can be further eased with symmetrical headings, as symmetry increases readability. (Lohtaja & Kaihovirta-Rapo 2007, 66-67)

In PowerPoint presentations, such as those displayed on electronic information screens, visual elements should be carefully added only when required. Slides should be simple in visual terms and elaborative slides should be avoided. (Jay 2004, 53-54)

3 Successful message

In order to receive the best results in communication effectiveness while using information screens, it should be understood that messages on information screens are not the same as messages for example on bulletin boards. As people have more time and can be more selective with their information search while using bulletin boards, messages placed there can be more extensive.

Messages on information screens should primarily serve a glancer. A good information screen message should be able to be read in just 5 seconds, with the main points simply distinguished from any background information.

Information screen messages should not be more than one page long, as the length of a message affects its readability. It may be so that a reader will only come to the screen during the second or third page of a message, when some of the message is inevitably left out. Longer messages are meant for bulletin boards and the intranet, not for information screens.

The pictures below show an example of how a bulletin-type message can be shortened to a comprehensible and readable information screen message:

<p>TURVAKENKIEN ESITTELY JA TILAUS KONECRANES Lifting Businesses™</p> <p>Heavy Lifting järjestää työntekijöilleen turvakenkien hankkimiseksi toisen esittelytilaisuuden, jossa kengät myös tilataan.</p> <p>Esittely on vanhassa ruokalassa  to 5.3. klo 11 – 15. Esillä on Sievin, Etran ja Jalaksen malleja. Paikalla on osastokohtaiset tilauskaavakkeet, johon tilaajan täyttää nimensä sekä kenkien merkin, mallin ja koon.</p> <p><small>© 2009 Konecranes Plc. All rights reserved.</small></p>	<p>TURVAKENGÄT KONECRANES Lifting Businesses™</p> <p>UUDELLEEN ESILLÄ JA TILATTAVANA VANHASSA RUOKALASSA</p> <p>to 5.3.2009 klo 11 - 15 </p> <p><small>© 2009 Konecranes Plc. All rights reserved.</small></p>
--	--

Sometimes some information is so important that it cannot be left out completely. In this case the information screen message should, however, only show the main points, but guide the reader to find more information either from bulletin boards or the intranet, where the text can be found in whole. Information screens and bulletin boards should in any case live in symbiosis, as it is important that the same information is available from different sources.

4 Conclusions

When planning and implementing an informative information screen message, it is important to remember the few points described in this guide:

Information screen message should first of all be compact and comprehensible, with as little text as possible. Font size should be between 36 and 44, but never smaller than 24. The used fonts should be standard Microsoft office Grotesque fonts (e.g. Arial and Tahoma). Visual elements can be used, as long as they bring added value to the reader. In other words, a glancer should be able to understand the subject of the message simply by glancing at the picture.

Information screen messages should never be more than a page long. If a message is not understandable as such, the message should explain the topic and guide the reader to find additional information on bulletin boards or the intranet.

When following these simple guidelines, communication through information screens can become more effective and thus have an effect on both work satisfaction and the achieved results.

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