TOUCHPOINTS, TIME AND DYADS: A CASE OF INTERNAL ORGANIZATIONAL COMMUNICATION

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ABSTRACT

The study presented in this paper is based on three interrelated aspects. The first aspect is the touchpoint used. A touchpoint is anything that can be used to enable a connection between minds and the exchange of information. The second aspect is the time spent on information exchange. The third aspect is the interpersonal dyads that exist in organizations. With a structured interview as a data collection tool and with a number of 259 dyads it was possible to analyze the correlation between time spent by dyads on information exchange and the number of different touchpoints used by the dyads. All dyads on average used almost 20 minutes to exchange information every day at work. 12, 6 minutes (64%) were spent on work-related topics and 7,1 minutes (36%) were spent on private topics. The working hypothesis was supported and verified: dyads that spend much time exchanging information also use a higher number of different kinds of touchpoints. The level of privacy might be a driving factor.

Keywords: Touchpoint Management, Interpersonal Dyads, Information Exchange, Media Multiplexity Theory, Work Relations.

INTRODUCTION

The term touchpoint originally comes from the field of business and marketing communications (see e.g. Elias, 1999; Spengler & Wirt, 2009; Dhebar, 2013; Lee, Chung & Nam, 2013). In this paper, though, it is used with a specific meaning: A *touchpoint* is defined as anything (an area, a point/set of points or a surface/set of surfaces) in time and space with the purpose to temporarily enable *sharing* of information and *minds* to be connected. It is important to state that a touchpoint is not synonymous with a medium because it can rely on several media. It is not the same as a technological device since we often get in touch with each other without devices and sometimes use more than one device at the same time. A device like a smart phone also has different ways to get in touch with others, for example via a phone call, SMS, e-mail, video call or an image-based message (cf. Norman, 2011). It would not be fair to equate touchpoint with the term channel since a touchpoint can rely on one or several channels. A touchpoint is not the same as software like Skype that has at least three functions (video call, phone call and chat) because all can be used as a touchpoint separately but also as one touchpoint in parallel/integrated (e.g. phone call and chat together).

If touchpoints are the windows or interfaces that make it possible for two individuals to get in touch we can assume that they have certain qualities that make them more useful or preferred in specific contexts and in relation to central factors. The contexts and factors highlighted in this study are a workplace setting, colleague dyads, the time used to exchange information and the kind of topics communicated: work-related topics or private topics. The purpose of the present study is to find out (1) how much time dyads spend on information exchange per dyad, (2) to what degree they communicate about work-related topics compared to private topics in each dyad, (3) what kinds of touchpoints they use and rank highest, and (4) if there is a correlation between time spent on information exchange in a dyad and the number of

touchpoints regularly used by the dyad. The fourth part is the main purpose of the whole study but it relies on the three other parts to become doable. A working hypothesis is that *the more time dyads spend on sharing information the more touchpoints they use*. This might, for example, suggest that dyads that spend much time exchanging information at work use an above average number of touchpoints and dyads that spend less time exchanging information use a below average number of touchpoints. The following section will offer a historical and theoretical overview of the important aspects when it comes to workplace communication and the different ways we get in touch to exchange information. The concept of touchpoint will be specified in terms of parameters that describe in what ways touchpoints differ and what different touchpoints actually can offer. The last sections explain the methods used, present the main results and propose ways to reason about the result in light of the theoretical concepts used in the discussion.

LITERATURE REVIEW

Researchers have for some time now tried to find out the effects and usefulness of different ways to share information in the workplace. Theories about media richness (Daft &Lengel, 1986) and social presence (see Walther, 2011) have been around for decades. The richness hypothesis suggests that some types of shared information demand rich media to optimally come across while other types of information need lean media. Social presence theory focuses on the experience of someone being present on the other end. Social presence is suggested to mean that we want to feel that we are communicating with a human being and that is most obvious when we communicate face-to-face. The feeling of presence is reduced when we communicate via phone and even more reduced in written form. The first theory focuses on the media used and the information shared while the other theory focuses on the social aspect of communication and how the sense of sociality can more or less be deprived by the use of technology. Both theories have been questioned. Many scholars have tried to improve the media richness hypothesis (Dennis, Valacich, Speier & Morris, 1998; Dennis, Fuller &Valacich, 2008; Carlson &Zmud, 1999; D'Urso& Rains, 2008; Kock, 2002; 2005; Lo & Lie, 2008; Sheer & Chen, 2004; Sheer, 2011). The media richness theory has low empirical support. The followers, on the other hand, have support for claims like that the media we know well and have access to makes the sharing of information rich in a sense or that the relationship might be an important factor in choosing media. Social presence theory has also been improved and developed (Rice, 1993; Yoo&Alavi, 2001; Dennis et al., 2008; Ayaß, 2014).

The picture is now more complex than it initially was. It is highly probable that it is easier to develop a relationship face-to-face but it is fully possible to develop a relationship into a close/deep relationship via text-based media only (Walther, 2008; Ledbetter, 2015). A more fruitful direction regarding how to get in touch and share information today is based on a wide set of touch points, or what Watson-Manheim & Bélanger (2007) call a media repertoire. First, certain kinds of social interactions propose more optimal choices while other kinds of interaction suggest other choices. Both Rice (1993) and Watson-Manheim &Bélanger (2007) found that face-to-face is preferred when people are getting to know each other, when they have to resolve a conflict/disagreement and during negotiation. Coordination and exchanging timely information was most often done via e-mail, voice mail or phone. Exchanging information in general was done best via phone or text-based media but the generation of ideas or sharing of more complex knowledge was accomplished more through scheduled face-to-face interactions/meetings. We can derive a pattern from this suggesting that now that we have several ways to get in touch and share information we tend

to use this variety to be able to function at work both when it comes to task-oriented sharing and when it comes to relational sharing. Another important tendency is that we more and more experience a combination of tools to optimize the information exchange (Watson-Manheim &Bélanger, 2007; Denis et al., 2008; Walther, 2011; Sheer, 2011). The relatively new Media multiplexity theory (see Ledbetter, 2015) relates technology use to social aspects like the closeness of the relationship. The theory predicts the following:

- Strong ties (i.e. close relationships) will generate a high degree of exchange like sharing information, services, coordination and social support, regardless of media used.
- Strong ties indicate a wider use of media that is several kinds of touchpoints, while weak ties indicate one or two ways to get in contact.
- Individuals, groups and dyads have certain first-choice media and second-choice and so on.

The Media multiplexity theory is primarily based on private communication and private dyads. There might be a good reason to find out if there are similar tendencies in professional dyads as a part of internal organizational communication. Instead of using the term strong ties we can look at how much time dyads spend on information exchange during work. Individuals that spend much time communicating with each other don't necessarily have strong ties but might know each other well on a professional and private basis.

Since this study uses the term touchpoint instead of media or channel it is important to describe what is specific about different touchpoints. The following section will describe touchpoint affordances and characteristics.

Affordances And Properties Of Touchpoints

The properties of touchpoints can be determined by a number of parameters. Every touchpoint has a certain affordance or set of affordances. It is the affordance/affordances that determine what we can accomplish with the touchpoint or what we believe can be accomplished. To determine the properties and affordances of various touchpoints, each can be positioned within the following parameters:

- Media parameter (type and number). Every touchpoint is based on one or several media. Media here means the physical particles or waves that stimulate the sense organs or the sensory receptors. The term media is often used synonymously with the technological devices that we use every day like TV, radio, telephones, newspapers and computers (see Perrin & Ehrensberger-Dow, 2010). A technological device is dependent on something that can stimulate the senses directly. So in some cases we need both sound waves and light waves to stimulate the eyes and ears. That means that the touchpoint can rely on two or more media. In some cases the touchpoint can rely on only one (like in a phone call when we only receive sound waves).
- Size parameter. A touchpoint has a size. It can be as small as a telephone display or it can be as large as a TV-screen. The size of the touchpoint can affect the amount of information exchanged.
- Duration parameter. Duration can be understood in three ways. (1) The time it takes from the onset of a touchpoint to the ending. (2) How long the information is retrievable. A written message often has the advantage that it can be re-read while speech dissolves as soon as the sound waves have passed the receiver (Young, 2011). (3) The duration might be regulated, meaning that it is pre-decided when the onset of the contact is beginning and when it is supposed to end. This is often the case in meetings while it is less likely in spontaneous interactions.

- Degree of closeness in time parameter. A high degree of closeness in time means that there is no delay from the production of the message to the reception of the message. It can also be called synchronicity. The highest degree possible can be found in face-to-face interaction. A low degree of closeness in time exists when there is a long delay between the production of the message and the reception of the message. This can be found in traditional mail writing. The delay can, in some cases, be weeks or more (Allwood, 2014; cf. Norman, 1999).
- Degree of closeness in space parameter. A touchpoint has a degree of closeness in space. A high degree of closeness in space means that the co-communicators are in the same location, most typically in each other's personal or intimate zone (cf. Hall, 1969). A low degree of closeness in space can be found when two persons are far away from each other. A long distance phone call, chat or e-mailing are examples of this (Allwood, 2013). Bolchini and Shirong Lu (2013) calls closeness in space *co-located* and distance in space *dislocated*.
- Sense modality parameter. To be able to communicate an agent needs at least one *sense modality*, most often the visual or auditory modality, to receive the communicated message (Partan&Marler, 2005; Paivio, 2007; Allwood, 2008; 2014; Gurban&Thiran, 2010; Walker-Andrews, 2012; Liebal et al., 2014). A touchpoint can offer a maximum of sense modality information at the same time, that is five senses, for example in intimate communication. Touchpoints like phone calls or post-it notes rely on only one sense modality. Sense modalities are sometimes called input modalities (Ruiz, Chen &Oviatt, 2010).
- Production modality parameter. Modes of production (Kress, 2010; Cobley, 2010; Gurban&Thiran, 2010), production modalities (Partan&Marler, 2005; Allwood, 2008; 2014; Burgoon, Guerrero &Manusov, 2011; Liebal et al., 2014) or output modalities (Pandzic, 2010) make it possible to create and send a message. A touchpoint can afford information from one or several production modalities. One production modality could be speech or writing. Other production modalities could, for example, be gestures, voice quality, facial expressions, odors, touch, posture, sound effects, images/photographs, maps or diagrams. Some touchpoints do not offer information from more than one production modality.
- Intensity parameter. A touchpoint can afford a certain degree of intensity (see Norris, 2004). *Amplitude*, for example a strong voice, or *salience*, like a bright color, can in itself be intense. Some touchpoints cannot offer high intensity (e.g. a post-it note) and some touchpoints can be perceived as too intense (someone shouting in your ear or a punch toyour face).
- Complexity parameter. A touchpoint can afford a certain degree of complexity (Norris, 2004; cf. Norman, 2011). How complex the message is, or parallel messages are, ranges from simple (or low) to high complexity. Some touchpoints can offer high complexity while others offer low complexity. When more than two sources are involved the complexity afforded is not higher but the complexity of information diffused is higher since we have more participants and cues to keep track of. Redundancy and non redundancy (Partan&Marler, 2005) are components of the complexity. High redundancy is often related to low or mid complexity while non redundancy, as when several production modalities with (in themselves) different meanings are used, most often implies high complexity. This can also be related to the number of participants. When one participant communicates something at the same time as another and the messages are highly congruent, the complexity is lower than when two participants at the same time communicate conflicting messages.
- Directionality parameter. A touchpoint can be unidirectional or bidirectional (Holmes, 2005). A letter, a podcast or any kind of recording is unidirectional. From sender to receiver. A telephone is bidirectional and offers co-communicator interaction. There might also be degrees of directionality. I can both hear and see you but you can only hear me (due to a bad Skype connection or software failure). The directionality or the number of unique interactions is higher than two in a group (Rothwell, 2007). Person A can be directed towards person B

while person C observes/listens. This is different from when person A stops person C from contributing while turning to person B to get a response.

- Sequence, turn and feedback parameter. A touchpoint can offer different degrees of sequence, turn management and feedback (see Allwood, 2008; 2014). It is not just easier but also desirable to structure a face-to-face, video call or phone call conversation in a sequence with turns compared to a handwritten letter correspondence. It is not as disturbing if two persons happen to write a letter to each other at the same time as it would be if two individuals talk at the same time. Some touchpoints can offer synchronized feedback (e.g. face-to-face and phone call) while other touchpoints can only offer delayed feedback or no feedback (notes and letters). With no feedback it is more difficult to know if the co-communicators understand each other well or at all. Feedback offer smoothness to the synchronous interaction (Jensen, 2014).

With all these parameters to consider there can be a huge number of possible touchpoints. Based on this, two touchpoints that might seem similar are not. Reception staff often stands or sit behind a counter, which creates a lower degree of closeness in space compared to a touchpoint without a counter. The counter creates a sense of distance that is not there in a face-to-face situation without any barriers. The difference between a voice mail and a pre-recorded audio message compared to a phone call is the duration, the directionality and the possibility of feedback or the need to manage turns. A recording has a fixed duration, it is unidirectional and it offers no feedback. On the other hand it relies on the same type and number of media and it might be equally complex and intense. Since every kind of touchpoint offers something specific to its users, it can also affect how goals can be attained and what type of information can be shared.

METHODOLOGY

This section will highlight the specific touchpoints used in the present study, the participants involved, the data collection tool and the way data analysis was done.

Kinds Of Touchpoint

The choice of touchpoints was inspired by Rice (1993) and Watson-Manheim &Bélanger (2007):

- **Face-to-face** (informal/spontaneous). This kind of touchpoint involves at least two types of media; it involves at least two sense modalities and at least two production modalities. The closeness in time and space is high, the complexity and intensity is high, and it is bidirectional and needs sequencing and turns management and can offer immediate feedback. The onset of the touchpoint usually happens when the communicators establish eye contact or when one calls the other person's name and it ends with a verbal closure or loss of eye contact.
- **Group** (informal/spontaneous). The group touchpoint is similar to face-to-face except for the perceived complexity (and maybe intensity based on more expressions at the same time) and the higher or different need for sequencing and turn management.
- **Meeting** (formal, scheduled interaction, two or more participants). Meeting as a touchpoint is similar to the previous two touchpoints except for the fixed duration and onset, the expected use of a table as a barrier in between the participants and a higher regulation of sequencing and turn management. Based on the higher degree of regulation in a meeting it might be lower in complexity and intensity compared to dyadic face-to-face and group interactions.

- **Phone call**. A phone call as a touchpoint only relies on one medium, one sense modality and a low number of production modalities. It is synchronous but dislocated. The complexity and intensity is lower than the previous cases but is still rather high. It is bidirectional and needs to be ordered in a sequence and in the managing of turns. The feedback is instant but only based on auditory cues.
- **E-mail**. E-mail as a touchpoint only relies on the light waves and the visual sense modality. There are some but a restricted number of production modalities (for example bold face, color, text size, font style or emoticons) offered. It is asynchronous and dislocated. The delay from sending the message to receiving it can be rather short but the delay from sending the message to a response can be long. The degree of complexity and intensity is low to mid-level. A long written message can, as a whole, be complex, especially based on the high amount of information shared, but also based on levels of abstractness or levels of uncertainty. The possibility to get feedback or be sure that the receiver understands it the way it is intended is low. E-mails are unidirectional but can come close to being bidirectional.
- **SMS**. This kind of touchpoint is supposed to be short in length and based on that can have a short delay in time between the contributions. Otherwise an SMS is similar to an e-mail except for the size of the display compared to a computer screen (if that is used).
- **Video call** (Skype). A video-based touchpoint is similar to a face-to-face touchpoint in many aspects. The major difference is the number and types of media available, the number of sense modalities available and the number of production modalities available. The intensity and complexity can be high but the complexity can also be influenced by some noise (bad image or sound quality) and lack of redundancy. Skype is also software that can offer text-based messages at the same time as video conversation. This can offer both redundancy and nonredudancy (complementarity). This also means that the duration of the text is longer than the duration of the spoken messages, making it easy to go back and read it again.
- **Chat** (text-based). There are several kinds of chats that can be used. Some are smartphone-based, some are computer-based and some are part of an internal network or communication system. Chat is similar to e-mail and SMS in most respects except the closeness in time compared to e-mail or the larger display compared to a phone. The availability might be more restricted compared to both e-mail and SMS. A chat is more bidirectional than an e-mail.
- **Notes** (including post-it notes). People still write notes and some of them are simple post-it notes. This kind of touchpoint is very limited compared to the other kinds. The message is short and that makes it very low in complexity. It is unidirectional and the level of feedback is low or non-existent. A post-it note is often used to initiate (can you contact me asap?) an interaction in another kind of touchpoint but it can also be used to end a series of conversations as a confirmation.

Some of these touchpoints are similar but there are aspects that make them differ. An important factor is availability. Not all participants had access to Skype or even an own phone.

Participants

Members from three small Swedish organizations participated. The first organization is an estate agent firm with eight members. The second organization, with 13 members, is a public culture center with a library as their main service. The third organization is a mail order and a web shop company with 18 members. Only 9 out of the total number of participants (39) are men. In the first organization the number of possible dyads is 28, in the second the number of dyads is 78 and the number of dyads in the third organization is 153. The total number of dyads available is 259. These dyads are the basic units that are studied closer.

Data Collection

The data collection tool used is a structured interview based on a pre-printed form. In the form, the following four aspects were measured / estimated:

- How much *time* each individual spends on average per day with every other individual in the organization communicating about *work-related topics*. Time intervals were used to help the participants estimate how much time they spend on communication. The intervals ranged from less than one minute up to more than four hours per work day.
- How much *time* each individual spends on average per day with every other individual in the organization communicating about *private topics*. The time intervals were the same as above.
- How many *touchpoints* are used with every unique co-worker while communicating about *work-related topics* and a ranking of the touchpoints from most used to least used.
- How many *touchpoints* are used with every unique co-worker while communicating about *private topics* and a ranking of the touchpoints from most used to least used.

The estimations in every dyad were calculated into an average. The sum of both parties' time estimation was divided by two. Since the correlation in estimations all over is 0,65 ($p<0,001$), there is some discrepancy between the parties in each dyad. Work-related time estimation was higher in correlation and private time estimation was lower. Creating an average valueprobably makes it more accurate from an objective point of view. The number of touchpoints used was added and divided by two and if the number was not a whole number it was rounded up. The rankings were handled outside of the dyads, meaning that each individual's ranking was counted and summarized within the organization.

Data Analysis

Most of the calculations are just average values. To test the working hypothesis and related combinations a correlation analysis is done. The time estimations of each dyad will be tested against the number of touchpoints used in each dyad. T-tests and F-tests are done.

RESULTS

The result is presented in three sections. First the time estimations will be presented, then the touchpoint rankings and finally the correlations for the dyads.

Time

Each dyad spends 12,6 minutes on average communicating about work-related topics and 7,1 minutes on average communicating about private topics (equal variances were not assumed, $F=4,94$; $p<0,001$, and a T-test for different means is significant; $p<0,001$). This means that each dyad spend 19,7 minutes on average on communication per dyad at work and 36 % of this time is devoted to private topics. The total number is somewhat higher in the smaller organizations compared to the larger. In the larger organizations there are a higher number of dyads that spend less than one minute on communication per dyad per day.

Touchpoint Ranking

The touchpoint most often used according to the participants is face-to-face dyadic interaction. This is the case in all three organizations. In second place all three organizations rank spontaneous group interaction. Number three is e-mail, just ahead of meetings. The third and fourth positions are not the same in all three organizations. In fifth position the

participants ranked phone calls and in position six they ranked notes. SMS is in position seven, chat in position eight and video calls in position nine. Only two organizations used chat and only one organization used video calls (Skype). The largest organization ranked e-mail in third, phone call in fourth and meeting in fifth position. Not all members of the organization had meetings more than once per month. The administration had many more meetings than the staff in the warehouse and in customer service. The number of touchpoints used per dyad when communicating about work-related topics is four and the number for private topics is two (equal variances were not assumed, F=4,06; p<0,001, and a t-test for different means is significant; p<0,001). The typical ways to communicate about private topics were face-to-face or in groups (Variance=0,92 and Standard deviation=0,96), most often during coffee breaks and lunch breaks. The other touchpoints had less impact. In the work-related communications the variation of touchpoint is higher (Variance=3,72 and Standard deviation=1,93).

Correlations

Four variables can be tested in a correlation test. (1) The time spent on work-related topics can be tested against the time spent on private topics. (2) The number of touchpoints used in work-related communication can be tested against the number of touchpoints used in private communication. (3) The time spent on work-related topics can be tested against the number of touchpoints used in work-related communication. (4) The time spent on private topics can be tested against the number of touchpoints used in private communication. Private communication refers to communication about private topics shared while at work. The correlation between work-related topics and private topics indicates that dyads that spend much time on work-related topics also spend much time on private topics (r=0,51; F=93,99; p<0,001). The leaders in two of the organizations deviated strongly from this tendency. Their dyads were above average in time spent on work-related topics and far below average in time spent on private topics. The normal pattern is that dyads that are above average in one category also are above average in the other category and dyads that are below average in one category also are below average in the other category. The number of touchpoints used in a dyad on work-related topics correlates with the number of touchpoints used by the dyad on private topics (r=0,45; F=65,56; p<0,001). Once again, the leaders in two of the organizations deviated strongly from this tendency. Their dyads were above average on touchpoints used while communicating about work-related topics and below average on touchpoints used while communicating about private topics.

The time spent on work-related topics in a dyad correlates with the number of touchpoints used by the dyad when communicating about work-related topics (r=0,45; F=65,75; p<0,001). This means that the dyads that spend much time communicating about work-related topics use many touchpoints to share information. Dyads that spend little time communicating about work-related topics use very few touchpoints. We also find a similar but less strong tendency in the last test. The time spent on private topics in a dyad correlates with the number of touchpoints used by the dyad when communicating about private topics (r=0,22; F=13,51; p<0,001). Most participants only used one or two touchpoints (face-to-face and group) even if they communicated for longer times about private topics. That is probably the main reason why the correlation is so low even if it is significant.

DISCUSSION

We know from this study that workers in very small organizations spend almost 20 minutes

on average on each dyad per day. About one third of the time is spent on private topics. Since this number is relatively high it makes sense to compare work-related communication with private communication at work. Dyads that share work-related topics also share a lot of private topics. This can be compared with the strong ties in the Media multiplexity theory (Ledbetter, 2015). If there are similarities between dyads that spend much time on communication about a variety of topics and dyads with strong ties we might expect these dyads to use many touchpoints. This is what the present study has found. The more time spent on communication the higher number of touchpoints used. This tendency is more true for work-related topics than for private topics but significant in both cases. The working hypothesis is supported and verified. All three organizations are located in a country with several alternatives available when it comes to communication technology devices. The kind of business they deal with is also digitalized to a high degree. Despite that, the two most used touchpoints are face-to-face in spontaneous dyads and face-to-face in spontaneous groups. They allow a high degree of social presence since they are synchronous and co-located. The touchpoint in the third place, e-mail, offers a low degree of social presence, being somewhat asynchronous and dislocated.

This idea might be a bit misleading. People sometimes use e-mail in combination with meetings or in combination with phone calls. People in meetings are co-located and primarily communicate face-to-face but sometimes need information in written form as a support for decision-making. This information is often shared via their portable computers that they have brought to the meeting as a working tool. It can also be the case that two co-workers speaking on the phone share information via e-mail to be able to prepare for an upcoming meeting with all the necessary facts/numbers. Phone calls are synchronous which means that the use of e-mail is part of a synchronous touchpoint. Even if it is possible to combine some devices with face-to-face or devices with each other as one integrated touchpoint (cf. Watson-Manheim & Bélanger, 2007), it is most probable that e-mail still is used as a single touchpoint being slightly asynchronous and dislocated. It is worth mentioning that even if the suggested touchpoints in this study seemed to be fixed from the start, all participants were asked if they used other alternatives but no one wanted to add anything. There might be other touchpoints or technology devices that are used in other organizations but since these nine alternatives were the only ones used it would be meaningless to add more to the list. It was rather the other way around. Only one organization, the largest, used all nine touchpoints and one organization, the public culture center, used only seven touchpoints on the list.

The Media multiplexity theory (Ledbetter, 2015) suggests that individuals, dyads or groups tend to have their favorites among touchpoints. What we can see is that all three organizations have very similar rankings. On a group level it works one way. On a dyad level there is also a very similar trend. Most dyads prefer the same order of touchpoints. A few individuals have favorites that differ from the wider tendency. Some few individuals prefer text-based touchpoints. It might be a personality related preference. The dyads these few individuals constitute one part of become influenced by the preferences they hold in the choice and use of touchpoint. Everyone in the organization knows that these few individuals prefer to share information via text-based touchpoints if possible. How we handle the exchange of information is not just a question of what a touchpoint can offer as it is also influenced by other factors. In this study it becomes obvious that the relationship and the time spent on information exchange has an impact, especially an impact on what kind of touchpoints are used and on how many different touchpoints are used. Why we have a tendency to use more touchpoints in dyads with strong ties or dyads that spend much time on information exchange can possibly be explained by two factors. (1) People that know each

other well do not have to share background knowledge every time. They know that the other party also knows about certain information. With this common ground it is possible to share messages with a low level of information/complexity (see Knapp &Vangelisti, 2009). This allows dyads to share short text-based messages without information loss. (2) People that communicate have goals (Berger, 2007; 2008; 2010; Dillard, 2008; Wilson, 2010). Some goals are complex and some are not. The simple goals might only need touchpoints that offer a low degree of modalities and a low degree of complexity. The complex goals demand touchpoints that can offer a high degree of complexity or an integrated touchpoint (cf. Watson-Manheim & Bélanger, 2007). This means that individuals and dyads learn to know what touchpoint (simple or integrated) are most optimal in relation to the goals. Learning to manage the touchpoint is one possible factor. When you know it well you can expand the use (cf. Carlson & Zmud, 1999; D'Urso& Rains, 2008).

The result clearly states that communication about private topics shared during work time (including breaks) demands a low variation in touchpoints used. When individuals have coffee breaks together or eat lunch together they are already face-to-face and have no need to communicate via other touchpoints. It is also likely that dyads that share work-related information face-to-face use the opportunity to share information of a private nature when they have already established a touchpoint. Private information is, to a high degree, stored in people's minds and can most easily be shared orally. The result from other studies (Rice, 1993; Watson-Manheim &Bélanger, 2007) has indicated that people at work tend to prefer face-to-face when exchanging private information. All this taken together might explain why face-to-face communication is exclusively used for private information sharing. Work-related information exchanged is of another kind. Being more centered on text, often stored on computers, it naturally involves many text-based devices beside the more oral alternatives.

Finally, the interesting deviation by two of the leaders might give a clue as to what is driving the use of many touchpoints. It is rather obvious that the two leaders in question do not want to share private information. Dyads that do share private information to a high degree also use several touchpoints. This might suggest that the dyads that become more private, or closer (Knapp &Vangelisti, 2009), are the ones that develop a stronger tie and, in line with the Media multiplexity theory (Ledbetter, 2015), are the dyads that use more touchpoints. The level of privacy might be an indicator of how well parties in a dyad know each other and therefore how easy it might be to communicate in several ways, with several means, using several touchpoints.

CONCLUSIONS

To conclude the study, all dyads on average used almost 20 minutes to exchange information every day at work. 12,6 minutes (64%) were spent on work-related topics and 7,1 minutes (36%) were spent on private topics. The information exchanged was shared during regular work hours. The most used and highest ranked touchpoint was face-to-face in dyads and face-to-face in groups. In number three the participants ranked e-mail, in number four meetings, in number five phone calls and in number six notes. Only one organization used all nine alternatives, including SMS, chat and Skype. Private communication is typically oral and thus face-to-face while the work-related communication, being both written and/or oral, can be shared via a variety of touchpoints. The working hypothesis was supported and verified. Dyads that spend much time exchanging information also use a higher number of different kinds of touchpoints. The correlation is rather strong. The correlation is significant but a bit weaker for private topics. It is also worth mentioning that dyads that spend much time on

work-related topics also spend much time on private topics. This correlation might be a sign of a strong relationship or what can be called a strong tie. A similar tendency is found in the comparison between touchpoints used while communicating about work-related topics and touchpoints used while communicating about private topics. Dyads that use many touchpoints in the first case also use many touchpoints in the second case. Some few examples have been found that go against the stream. Two leaders spend much time and use many touchpoints when they exchange work-related information but little time and very few touchpoints when they exchange private information. They do not want to be (too) private and therefore it might be suggested that the level of privacy, among the rest of the participants, at least partly drives or allows the wide use of touchpoints.

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