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## Media Choice in Multicultural Business Interactions

### Abstract

The aim of this study was to identify which media is chosen for Computed-mediated Communication (CMC) in multicultural business interactions when the main language of communication is English as a *lingua franca*. The second aim was to determine how the results of this study should be taken into consideration at Higher Educational Institutions (HEIs) in curriculum development. The analyses employed in this survey followed **Media synchronicity theory** (MST), originally proposed by Dennis/Valacich (1997) and later refined by Dennis et al. (2008). This study was conducted using a mixed method approach with data from a quantitative survey regarding media usage of 274 respondents and qualitative theme interviews of five working life representatives. The findings indicate that the choice of media varies between different countries and is dependent on the different capabilities and synchronicity of the media. The team structure, communication processes, choice of language, cultural diversity and ethical rules of the company play an important role in communication and are meaningful when choosing the media for communication. The main conclusion is that the ability to choose the media that is suitable for varying communicative situations in working life has become essential and therefore needs to be developed as part of curriculum development work at HEIs.

### Keywords

Computer-mediated Communication (CMC), media choice, working life communication, ELF, higher education

### 1. Introduction

Increasingly, we use mobile and virtual communication for networking, learning, and innovation in working life (Waldeck et al. 2012; Kirkwood/Price 2005). Furthermore, the new workplace has become more and more intercultural and multilingual (Lam et al. 2013; Huhta 2010, Lönnblad/Vartiainen 2012). Internationalization has augmented the importance of communication and networks (Ojala 2008) and to be able to communicate in virtual networks, new communication competences are required, along with skills in language and intercultural communication (Lönnblad/Vartiainen 2012). It is therefore evident that there are new needs for computer-mediated communication, but the importance of choosing the correct medium has been largely neglected thus far. The medium affects how we are able to communicate in certain communication situations and as such should be taken into consideration in greater detail.

In fact, not only the communication situation but also the choice of language, such as English as a *lingua franca*, as well as cultural differences may affect how we prefer to communicate. English as a *lingua franca* refers to a situation where speakers have different first languages and a variety of cultural identities may be involved (Hülmbauer et al. 2008). CMC in environments where most of the persons do not speak English as a mother tongue is often seen more challenging than face-to face communication (Lockwood 2014). When using English as a *lingua franca*, some people prefer using email while some may find a skype call more effective. It is therefore worth investigating which aspects affect the choice of medium for communication. According to earlier

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studies (see Daft/Lengel 1984; Tidwell/Walther 2002; Dennis et al. 2008; Walther 1992, 1996, 2012), the possibility to deliver cues like gestures, facial expressions and emotions is important in CMC. Furthermore, the development of technology has not only increased the number of the media but also the capabilities of the medium to support communication. Therefore the skill to be able to choose the right media for communication in multicultural business environments has become crucial. Downplaying the need of this skill will increase the risks for misunderstandings not only due to the use of English as a *lingua franca* but due to the inappropriate media choice for communication. In order to be successful in modern working life, organizations have to adapt to the changes in communication competence requirements (Darics 2015), media choice being an example of such a requirement.

This knowledge on media choice in virtual multicultural environments is extremely important for HEIs in order to be able to prepare students for working life. HEIs cannot support the development of students' communication competence if they are not aware of the communication processes and media used in working life. This is equally relevant to degree program students and corporate customers who would like to get further training in communicating in English in virtual teams.

In this study, CMC will be discussed, focusing on media choice in virtual workplace communication when the main language of communication is English as a *lingua franca*.

Research objectives are:

- To examine the frequency of various media used for communication in Finland and in other four European countries
- To examine if the communication language affects media choice
- To identify the synchronicity level of the media used in communication
- To determine how these results should be taken into consideration at HEIs

The study undertaken is based on a survey that gathered information from five different European countries (England, Finland, Germany, Poland and Spain) about media preferences in virtual and mobile work. The data obtained in Finland (N=58) were compared with data collected in the four other countries (N= 274) to identify possible differences in usage of media. The aim of this comparison was to simulate an authentic multicultural communication situation from a Finnish communicator's perspective where most of the participants spoke English as a *lingua franca* but also native English speakers were involved. **Media synchronicity theory** (MST) was used as background theory. The aim was to find out if there were differences in the choice of communication media used for business interactions when communicating in virtual environments in English. Based on the results, we discuss how communication competences could be developed at Higher Educational Institutions (HEI), as higher education is seen responsible for ensuring that their students' competences meet the communication skills required in occupational contexts (Hellekjær 2012).

## 2. Virtual workplace communication

Globalization and new communication technologies have changed our ways of working. Virtual teams are formed by individuals who work together maybe from distributed locations, from different countries, either asynchronously or synchronously (Horwitz et al. 2006). Most relevant changes at work are the rise of knowledge work, the possibility to work over larger distances, the shift to self-managing teams and the increasing number of those who work in various social and virtual spaces and use technology for communication (Jones/Hafner 2012). In this globalized and digitalized work, the importance of effective communication is growing (Lam et al. 2013: 68).

Technology enables communication in this sociotechnical environment where technical aspects, cultures, relationships between people and political processes are interacting (Barassi/Treré 2012). The need for face-to-face interaction has been reduced due to the development of technology, including internet and high bandwidth. Technologies offer platforms and tools for videoconferencing and other communication medium and, especially in distributed work, this has an essential role (Weimann et al. 2013: 336). Also, the ways in which we communicate have been changed by wikis, blogs, social networking and social practices (Coiro et al. 2008: 5). Not only the ways of communicating but also communicative situations, interaction and language are changing (Darics 2015).

To enhance communication between teams, it is essential to understand the complexity of work requirements. Whether it is a question of routine reporting or creating knowledge collaboratively, the expectations of managing communication vary significantly (Lockwood 2014). In virtual work contexts, employees and managers have to be able to use ICT tools effectively, be actively involved in meetings and discussion, express opinions or facts in a brief but understandable way, use local language and understand cultural differences (Lönblad/Vartiainen 2012: 33). As Hofstede et al. (2010: 391) describe, the use of ICT has certainly brought people together, but while technology works in the same way irrespective of the location, the way people use it differs according to their culture. He also correctly points out that the use of ICT itself has not made the need for intercultural communication any less important.

Thus, the ability to choose the suitable media for certain communication situations has become an essential part of communication competence (Ferrari 2013).

### 3. Theories on technology use in communication

CMC research has presented several theories on the effectiveness and use of media in communication. One of the most well-known theories is **Media Richness theory** (MRT) by Daft/Lengel (1986). They argued that nonverbal cues like gestures, immediacy of feedback, language variety and personal focus affect the effectiveness of communication process and, due to that, CMC differs from face-to-face situations. They suggest that face-to-face communication is most effective and media, such as email, is lean or less rich and therefore not as effective for communicating equivocal issues (Daft/Lengel 1986). Technology has changed radically from those days and CMC now supports also social interaction and networking. Communication through media can be seen equally good, or even better than face-to-face communication in certain situations. Social information processing theory (SIP) argues that the lack of cues does not mean that communication could not be as good as face-to-face communication. Building interpersonal relationships in computer-mediated environments may take longer but the quality can be as good as in face-to-face relationships. Walther (1992) has based these arguments on text based communication and argues also that CMC can exceed face-to-face communication. He suggests that in hyperpersonal interaction through media (Hyperpersonal model, Walther 1996) the sender has time to consider what to write and he is also able to control the information he wants to deliver of himself. Also cues can be delivered through various media in multiple ways to support communication (Walther 2012).

The cues are important but media can be seen having many other capabilities than just delivering cues. **Media synchronicity theory** proposes that communication performance can be improved by selecting a variety of media with different capabilities into communication processes.

Media synchronicity process differs from prior media theories in six aspects. First, a task is understood as a set of communication processes to achieve and develop shared understanding. There are two communication processes, conveyance and convergence, which facilitate the research on media capabilities. Secondly, these information processes also require individual processes, namely information transmission and processing. Third, there are five media capabilities that influence the synchronicity of media and further communication processes. Capabilities iden-

tified by Dennis et al. (2008) are **transmission velocity**, **parallelism**, **symbol sets**, **rehearsability** and **reprocessability** (Figure 1). **Transmission velocity** means the speed at which a medium can deliver a message to the recipients. **Parallelism** refers to the extent to which signals from many senders can be delivered over the medium at the same time. **Symbol sets** is the number of ways in which a medium allows information to be encoded for communication (visual, verbal, written communication), including cues. **Rehearsability** enables the sender to carefully modify a message before sending it to ensure that meaning is expressed as intended. **Reprocessability** of a medium enables both senders and recipients to reread and reconsider prior messages before engaging in communication (Dennis et al. 2008).

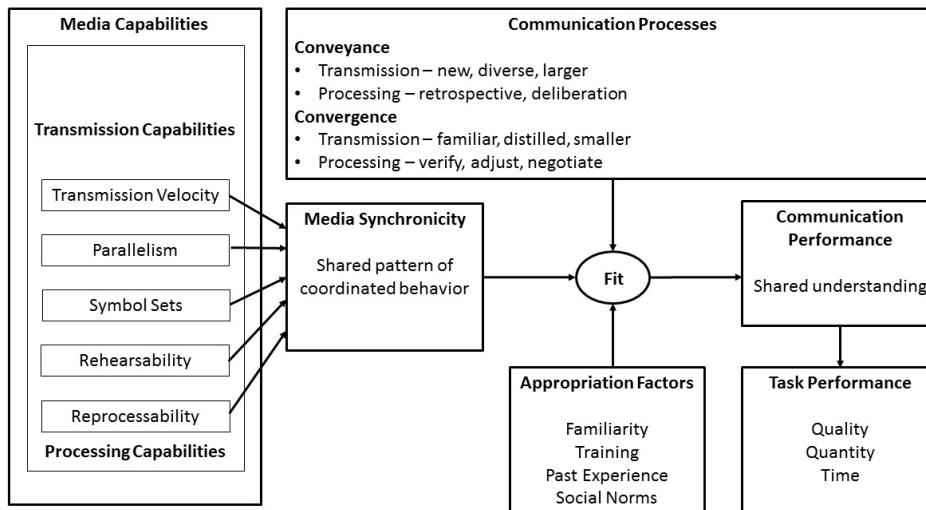


Figure 1. Media synchronicity theory (Dennis et al. 2008)

Fourth, this theory refers not to a certain digital medium but to the capabilities the medium offers. To fulfil a task is a result of various communication processes facilitated by different media. For example, Skype can be used for both videoconferencing and instant messaging. Fifth, conveyance is supported by low synchronicity media, whereas convergence with high. Dennis et al. (2008) also suggest that as media, tasks and individuals become more familiar to the user, the need for high synchronicity media is reduced (Dennis et al. 2008: 575-576). In this article, **Media synchronicity theory** is applied to analyse the capabilities of media chosen for communication because it allows us to explain media choice from the cue perspective but also from other capabilities.

#### 4. Media choice in multicultural teams

Virtual communication is affected by cultural differences and use of languages that may not be the team members' mother tongue (Lönnblad/Vartiainen 2012). Klitmøller/Lauring (2013) propose that both the language used and cultural differences affect communication but in opposite ways. To share equivocal (tacit) information in a team with differences in cultures and language skills, face-to-face or rich media is preferred due to the possibility to use nonverbal cues like gestures and body language. Instead, while sharing canonical knowledge, virtual communication is as effective as face-to-face communication. They suggest that in addressing cultural differences, rich media would be the best choice, however, leaner media support team communication when the skills of the language used differ (Klitmøller/Lauring 2013: 404-405). Moreover, Spears et al. (2001) propose that by using leaner media, the team could avoid the possible negative impacts that cultural and linguistic differences may cause in communication (Spears et al. 2001).

Therefore, in virtual teams, it is easier to communicate using written media rather than spoken (Charles/Marschan-Piekkari 2002), as individuals who do not share the same mother tongue often prefer to use email over telephone (Shachaf/Hara 2007). According to Klitmøller/Lauring (2013), the use of email may lead to better results of group performance and it supports writing by offering automatic grammar and spell-checkers.

On the other hand the Finnish national report on English use at work shows that Finns use English mostly in non-productive situations, such as reading web pages and emails or to search for information (Leppänen et al. 2011). According to Hofstede et al. (2010: 117), in collectivist cultures such as Finland, social networking is often the primary source of information, whereas in the individualist societies the first source tends to be media. This could reflect the need of collectivist cultures to communicate using e.g. instant messaging more.

When using media for communication at work, Finns tend to communicate quite formally in English, irrespective of the choice of media (Pérez-Sabater et al. 2016). Nevertheless, Finns are generally seen as possessing good language skills and many surveys confirm that English has gradually become the most widely studied language and most common foreign language used in Finland (Confederation of...2014; Kangasvieri et al. 2011).

To summarize, we can state that to be able to succeed in communication in multicultural virtual teams, participants have to be able to choose the right media for communication, taking into account the communication process, language used and cultural differences.

## 5. Methods and data collection

The present study follows a mixed method approach which consists of the analysis of data obtained from 274 responses to an online questionnaire (58 responses from Finland, 43 from Poland, 105 from Spain, 22 from Germany and 46 from UK), together with data from interviews carried out with 5 working life representatives in Finland. The questionnaire was chosen because it allows the gathering of large samples. Furthermore, it allows various statistical tests of variances and correlations of the data gathered from Finland and other countries, which can further be quantified. (Collis/Hussey 2013).

The questionnaire had 20 statements or questions and a Likert scale. The five scales correspond to the following: never, occasionally, sometimes, frequently and always and they indicate the frequency of a particular medium used in communication. Furthermore, respondents were asked to give background information. In this survey, only data concerning the use of media at work in English and in mother tongue, as well as background data, were considered (see Appendix 1). The questionnaire was translated into five different languages by native persons who worked as English language and communication teachers in their countries. Special attention was given to understanding the scale from never to always and possible risks of misunderstanding were minimized by using visual ascending scales in the questionnaire. After testing the questionnaire in each participating country, an invitation to participate in the online questionnaire was sent to working life networks using social media (LinkedIn, Twitter) and also emailed to participating organizations' interest groups. Due to the use of social media, the total number of recipients and response rate cannot be estimated, but a massive pool of potential respondents was gained through social media. The data gathered with the online questionnaire were processed using SPSS, a computer statistical program. Descriptive statistics, frequency distribution, cross-tabulation and non-parametric tests like Mann Whitney U and Wilcoxon tests were used to analyse the quantitative data and to identify possible variations and correlations between the data. Nonparametric tests were used because the data did not follow a normal distribution. The Finnish answers (n=58) were compared then to the answers from the other countries involved (n=216).

The interviews were chosen to gain in depth information of the same themes as presented in the questionnaire by giving the interviewees the possibility to discuss also other topics and facts, experiences and opinions (Collis/Hussey 2013). The qualitative data was gathered conducting

semi-structured interviews in Finland. The themes for discussions were sent to the interviewees beforehand. Two personal interviews and one group interview were conducted (1 hour/interview) and transcribed. Thematic analysis was used to analyze this data in NVivo-computer qualitative analysis program. The citations from the interviews used in this article were translated from Finnish into English and the translations were approved by the interviewees.

### 5.1. Descriptive statistics of the respondents

Of the respondents, most were over 40 years old. In Finland most were female and in other countries male. Almost all respondents from Finland spoke Finnish as their mother tongue and most of the respondents from other countries spoke Spanish. Most of the respondents in both categories were not managers or owners of the companies. Large, small and medium size, small and micro companies participated in this survey (Table 1).

Variable	Finland (N=58)	Other countries (N=216)
<b>Age group</b>		
40 years or under	33%	48%
over 40 years	67%	52%
<b>Gender</b>		
female	76%	47%
male	24%	53%
<b>Mother tongue</b>		
Finnish	94%	-
Swedish	3%	-
Arabic	3%	-
Spanish	-	42%
Polish	-	19%
English	-	19%
German	-	8%
Catalan	-	6%
other	-	6%
<b>Status</b>		
manager, owner	31%	21%
other	69%	79%
<b>Company size</b>		
large	66%	49%
small or medium size, small, micro	34%	51%

Table 1. Descriptive statistics of the respondents in Finland and other countries (n=274)

### 5.2. Description of the interviewees

Table 2 describes the background information of the interviewees. The interviewees were chosen to represent a sample group with comprehensive understanding of the communication in their organizations, of different genders, from varying company sizes and doing business in various industries internationally.

	Gender	Company size	Status	Industry	Time
INT_1	male (M1)	medium	manager/owner	Lightning industry	21.5.2015, 47:51min
INT_2	female (F1)	large	manager/owner	Manufacture of food products	22.5.2015, 64min
INT_3	female (F2)	large	employee	Financial and insurance activities	4.6.2015, 59:46min
INT_3	female (F3)	micro	manager/owner	Accommodation and meeting services	4.5.2015, 59:46min
INT_3	male (M2)	micro	manager/owner	Computer programming, consultancy and related activities	4.6.2015, 59:46min

Table 2. Interviewees in Finland

Interviews 1 (INT\_1) and 2 (INT\_2) were interviews with one person and Interview 3 (INT\_3) a group interview with three participants.

## 6. Results

Analysis of the data, both quantitative and qualitative, identified several important aspects in media choice in business environments where English is used mostly as a *lingua franca* but also as mother tongue. Moreover, the frequency of use of communication media varies in different countries and the choice of media in communication is affected by the language used. Through **Media synchronicity theory** we suggest that these findings are important because media chosen for communication have different capabilities in the delivery of information, especially when you are not using your mother tongue. Finally, results show that media choice is also affected by the communication processes in the companies. The following sections detail the most significant results of the survey.

### 6.1. Use of online communication media at work in English

One of the objectives of this study was to examine the frequency of media used for communication in various countries. Table 3 illustrates the mean values of the respondents from Finland and from other countries when asked how often they use the communication platforms mentioned below at work when using English (scale 1-5).

Communication media	Finland (N=58)		other countries (N=216)	
	Mean	SD	Mean	SD
Email	4,34	1,23	4,30	1,10
Videoconferencing	2,82	1,31	2,97	1,40
Social networking	2,63	1,31	2,33	1,37
Document sharing platforms	2,57	1,37	3,18	1,45
Discussion forum	2,34	1,10	2,33	1,30
Instant messaging	2,30	1,19	2,99	1,49

Table 3. Mean values and standard deviation of usage of online communication media at work in English (scale 1 never-5 always)

The values show that email is the most used communication medium both in Finland and in other countries, and the second medium in Finland is videoconferencing, e.g. Skype, whereas in other countries it is document sharing platforms. The least used communication platform in Finland is instant messaging and in other countries social networking. Note that forum usage in Finland is as low as social networking in other countries.

As shown in Table 4, there were some differences in the usage of media between the countries.

The most significant differences concern the use of instant messaging and document sharing platforms. These differences were calculated using cross-tabulation. Cross-tabulation was chosen because it would give information of the comparison of the frequencies. Table 4 demonstrates that there are differences in the use of instant messaging by Finnish workers in comparison with the other countries.

		Instant Messaging				
		Never	Occasionally	Sometimes	Frequently	Always
Countries	Finland	30,40 %	26,80 %	28,60 %	10,70 %	3,60 %
	Other countries	25,20 %	13,80 %	19,00 %	20,50 %	21,40 %
Total		26,30 %	16,50 %	21,10 %	18,40 %	17,70 %

Table 4. Usage of instant messaging in Finland and in other countries

It seems that people in other countries use instant messaging more frequently in their workplace communication in English than people in Finland. Pearson chi-square test revealed that the percentage of the usage of instant messaging significantly differed by country ( $X^2(4, n=266), 17,11, p=0,002, \text{Cramer's } V=0,254$ ). The strength of association between the variables is moderately strong.

The results show that the differences on the use of document sharing platforms are not statistically significant and the association between the variables is very weak ( $X^2(4, n=265), 8,48, p=0,75, \text{Cramer's } V=0,179$ ).

Nonparametric Mann-Whitney U tests were used to analyze if the use of media differs by gender, age and status. In Finland, women use more social networking ( $p=0,037$ ) than men. In other countries women use videoconferencing more than men ( $p=0,009$ ). In Finland the older age group (over 40 years old) uses videoconferencing more ( $p=0,030$ ) than the younger age group, whereas in other countries the younger age group uses more email ( $P=0,008$ ) and document sharing platforms ( $p=0,048$ ). The use of media did not differ by status.

## 6.2. Communication language and the use of media

Nonparametric Wilcoxon tests were used to test whether English is preferred more often than the participants' mother tongue in media communication or vice versa. This analysis revealed that 19% of the respondents in other countries spoke English as their mother tongue.

In Finland emails are used more in English ( $p=0,02$ ). The same applies to other countries ( $p<0,001$ ). The results are shown in Table 5.



Email (in mother tongue – in English)		n
Finland	Negative Ranks	20
	Positive Ranks	5
Other Countries	Negative Ranks	93
	Positive Ranks	30

Table 5. email usage in mother tongue and in English

However, discussion forum is used more in mother tongue. This is true in Finland ( $p=0,033$ ) and in other countries ( $p=0,012$ ).

Discussion forum (in mother tongue – in English)		n
Finland	Negative Ranks	10
	Positive Ranks	19
Other countries	Negative Ranks	45
	Positive Ranks	62

Table 6. Use of discussion forums in mother tongue and in English.

Finns normally communicate by instant messaging in Finnish ( $p=0,019$ ). Whereas in other countries the preference of mother tongue is not applicable.

Instant messaging (in mother tongue – in English)		n
Finland	Negative Ranks	9
	Positive Ranks	19

Table 7. Use of instant messaging in Finland in mother tongue and in English.

### 6.3. Synchronicity levels of the media used in communication

The third objective of this study was to identify the synchronicity level of the media in communication. **Media synchronicity theory** (Dennis et al. 2008) was applied in this analysis. All media categories employed in work place communication were analyzed from the perspective of five capabilities presented by **Media synchronicity theory**. As shown in Table 8, various media have different capabilities and synchronicity levels to support communication.

Media categories	Transmission Velocity	Parallelism	Symbol Sets	Rehearsability	Reprocessability	Synchronicity
<b>Email</b>	Medium	High	Few/ Medium	High	High	Low
<b>Discussion Forum</b>	Medium	High	Few	High	Medium	Low
Document sharing platforms (Dropbox, <b>google docs</b> , etc.)	High	Medium	Medium	Medium	High	Medium
Social Networking (e.g. Blogs, <b>Facebook</b> , Twitter)	Medium	High	Many	Medium	Medium	Medium
Instant Messaging, synchronous (e.g. chat, <b>WhatsApp</b> )	High	Medium	Medium/ Many	Medium	Medium	Medium
Videoconferencing ( <b>Skype</b> , etc.)	High	Medium	Medium/ Many	Low	Medium	High

Table 8. Analysis of used media according to Media synchronicity theory

It is important to notice that all media categories mentioned above include various media, and the levels (low/medium/high) of the capabilities they offer vary. Therefore, in Table 8 above the media analyzed in each category is bolded. Following **Media synchronicity theory**, the most used media, email, is a low synchronicity medium. The speed of delivering the message to the recipients is not high but you can receive many emails at the same time from many senders. Email is preferably text based and not to send a set of symbols, which means that email is not the optimal choice to deliver cues. Rehearsability and reprocessability are high because email enables the sender to consider how to write and what to write before sending it; prior messages are accessible in email history for rereading by both the sender and the receiver. As Dennis et al. (2008) defend in their article, a low synchronicity medium is useful mostly for conveyance. If we compare this with results shown in Table 5, we prefer to choose low synchronicity medium email in business interactions when using English as a *lingua franca* in Finland and in other countries.

Discussion forums are also categorised as low synchronicity media. Document sharing platforms, social networking and instant messaging, however, can be used for both conveyance and convergence of information due to the set of capabilities they offer. Videoconferencing media (e.g. Skype) are high synchronicity media. The speed of sending a message is high because the sender and recipient are communicating at the same time and various sets of symbols including cues can be delivered. Rehearsability is low because you cannot modify your message before saying or writing it. Also, reprocessability is low or medium if the meetings are recorded or not. Another salient point that has surfaced in our study is the fact that videoconferencing is the second medium in Finland and in other countries the second medium is document sharing platforms. These have different capabilities to support communication. In other countries, videoconferencing is used more frequently than in Finland but what is interesting is that in other countries people prefer to use document sharing platforms when communicating in English.

#### 6.4. Interviews on working life communication

For the qualitative part of the study, three interviews were conducted with five interviewees. In the interviews three themes were discussed:

- virtual communication
- using English in virtual working life communication
- understanding cultures

Under the first theme, the use of media in virtual communication was discussed. Four categories of communication can be identified in the interviews: email communication, video conferencing, social media communication and face-to-face communication. The interviewees from large companies emphasised the use of email in communication as preferred medium. Email is considered very effective when used to its full potential. One of the large companies stated that they employ email because one can save the communication thread and access it also afterwards, by contrast one large company underlined the problems in using it, especially the size of attachments and the number of emails.

INT\_1\_M1: *it's not like the information is in the inbox of three different customer service agents but there's a shared location, an address where all nine ten people have access now.*

INT\_2\_F1: *Or just the fact that, at least we have such large files that we cannot even attempt to just go and email them*

While analysing the factors behind these views, it was noticed that the first large company uses email for customer service, logistics and sales while the other focuses heavily on marketing.

The videoconferencing media mentioned by the companies in the interviews was Skype for Business, and it is used in one large and one micro corporation. Different capabilities of the medium and advantages in global communication were discussed.

INT\_3\_M2: *Probably yes, oh yes it is, and instant messaging as well, yes. That's where you can just throw in a quick question. And it does replace email for sure.*

INT\_2\_F1: *Lync is used and also more in this international communication.*

An interesting point is that one medium size company uses only email in virtual communication and does not encourage the use of videoconferencing.

The use of social media was very active in two organizations, one micro and one large. Both used it for marketing and communication with consumers, mentioning Instagram, Facebook, Pinterest and Youtube. In one of the large firms, the use of social media was forbidden.

INT\_2\_F1: *...that people are encouraged to be in social media and notify if they see something,*

INT\_3\_F2: *...that you were not allowed to go on Facebook or we cannot for example check our personal email on the work computer*

When talking about social media, the following aspects were mentioned: you need to follow, listen and communicate with the customers in social media. You have to be available 24/7 and be ready for crisis communication. Also ethical aspects, such as copyrights and communication policies were discussed in the interviews because of the challenges they may pose in social media. In addition, corporations tend to localize the choice of medium to fit the target culture and language.

Even though the interviews were about media used in communication, the importance of face-to-face communication as first contact was obvious in all interviews.

INT\_2\_F1: *But still I think it's really essential to have face-to-face.*

INT\_3\_M2: *But yes, let's say that when I do project work, then the project does normally start with a face-to-face kick-off.*

The second theme discussed was the use of English in virtual communication. Under this theme the English skills were mentioned. In some companies the level of English skills is checked in the recruitment process.

INT\_2\_F1: *When it comes to recruiting people, it's more like a precondition that they know English.*

Overall, in Finland the younger generation is considered to possess good English skills. The employers do not expect the new employees to know all the specific terms in the field, as they can be

learnt at work. But they think it is important that HEIs teach the students how to communicate in English virtually when using English as a *lingua franca*.

INT\_1\_M1: ... *one should be able to adjust their level of English to the level of the recipient,*

The third theme, understanding cultures, was mentioned often but only once especially linked to virtual communication. According to the interviews, virtual communication cannot replace the significance of face-to-face communication in understanding cultures.

INT\_1\_M1: ... *Face-to-face you can at least try to read what they mean*

Understanding cultures is considered as a skill you can really learn in authentic working life situations.

An interesting point is that technical skills and problems were hardly mentioned in discussing virtual communication.

## 7. Discussion and Conclusion

This study was conducted to examine media preference in workplace communication in English as a *lingua franca* and in mother tongue, as well as to identify the synchronicity level of the medium used. Finally, the results of the study will serve to determine how communication competences at HEIs should be developed.

If we compare the findings of this study with previous studies we can agree on three issues: the frequency of media chosen for business communication is affected by the cultures of the communicators. In general, we use media with different synchronicity levels when communicating in English as a *lingua franca* than for communicating in our mother tongue, with the exception of email, and it is noteworthy to highlight that communication processes and communication policy affect media choice in multicultural business communication. These findings will be discussed further in this section to show how complex the issue of media choice is.

One clear result of this study is that employees of the companies use various media actively in virtual business communication in English, yet the significance of face-to-face communication is underlined. The use of various media highlights the importance of understanding which medium supports communication processes in various situations and ability to choose the best media for these communication situations. In all participating countries email is still the most popular medium in multicultural communication in English. It is seen as a low synchronicity medium and its popularity may be linked to the use of English as a *lingua franca*, as email allows you time to consider what to write and to check your spelling, as suggested by Klitmøller/Lauring (2013). Email messages can also be stored, allowing workers to return to these messages later (Dennis et al. 2008), thus enabling communication irrespective of time. Spears et al. (2001) have affirmed that using media like email with low capability to deliver cues may lower the risk for possible negative impacts. In this study we could not find any support for this. It should also be noted that email has a long history in CMC and it is familiar to employees, which may explain some of its popularity. Besides, time differences in multicultural communication may support the choice of email for communication.

But when we look at the second most used medium, we can state that cultural differences may occur as Hofstede et al. (2010) have put forward, with Finns using video conferencing when communicating in English, whilst the other countries use document sharing platforms and instant messaging. The most interesting results concern the use of videoconferencing and instant messaging. In this study we were not able to show what kind of communication processes (convergence or conveyance of information) video conferencing and instant messaging are used, but the possible factors behind the results can be discussed. As Finns are rather formal in their English communication at work, this may affect the use of instant messaging at work, since instant messaging is seen as quite an informal media. Furthermore, Finnish culture is also quite task-based

and thus a relationship-based medium such as instant messaging may not be suitable for workplace communication. On the other hand, instant messaging, such as WhatsApp, would provide fast communication that is typical for Finnish culture. In this case, faster communication is provided by videoconferencing media which is seen as high synchronicity media with possibilities to use many symbols including cues. Formal negotiations are easy to conduct in these synchronous virtual environments supported by the fact that Finns have good skills in English (Leppänen et al. 2011). An interesting feature is that in Finland the older generation is using videoconferencing more than the younger generation despite the fact that the older generation has traditionally been considered to have lower skills in English. The relevant question that could not be answered in this study is which features of the medium we use when communicating, such as web cameras and discussions, only text based chat or just anonymous listening. The use of videoconferencing may resemble the use of instant messaging. Nevertheless, comparing the results in Finland to earlier studies where Finns were seen as non-productive users of technology at work in English (Leppänen et al. 2011), the results of this study suggest that Finns use technology more productively and more in social communication today. Conversely, in other countries the media are used more frequently overall in business communication than in Finland.

The findings of this study imply that the communication language affects the choice of the medium. This is supported by the result that the respondents in all countries have a preference for email when communicating in English as a *lingua franca* compared to the communication in mother tongue. This can again be explained by the low capability of the medium to deliver symbols including cues and high ability rehearsability and reprocessability. On the contrary, in Finland, the media seen as medium or high synchronicity media are employed more in work-related communication conducted in Finnish. However, according to interviewees in Finland, cues support sharing equivocal (tacit) information and knowledge creation between the participants who do not share the same mother tongue or culture especially in project communication. In project communication, delivering the cues is important in supporting the building of relationships and also in easing the communication when language skills and cultures differ. These views are supported also by **Media synchronicity theory**. In light of these findings, it can be suggested that we use media with different capabilities in English as a *lingua franca* and in the communicator's own mother tongue. But to be able to state that language used for communication affects our choice of media, a deeper analysis of business communication situations should be conducted in order to find out if the choice is related to conveyance or convergence of information when communicating through certain media in English as a *lingua franca* and in mother tongue.

Finally, it is important to note that even though we know which medium would be the best choice for certain communication processes, it may be impossible to use. According to the interviewees, there were several aspects that affected the media choice, such as time difference, tools offered by their company and ethical aspects, such as communication policy of the company.

This study has raised more questions and suggestions for future research than given answers but it may have relevant implications for teaching at HEIs. The findings imply that in working life, workers have to be able to understand that the choice of media for multicultural virtual communication is affected by many factors such as culture, language used and communication processes in the company. This is an issue that should be discussed when planning curricula at HEIs, and we should support students' understanding of how communication media have various capabilities to support communication. Furthermore, some of these capabilities may not be regarded as suitable for communication in a foreign language in a multicultural team.

Development of competences needed in CMC should be integrated into the learning as a process, not only as part of English language or communication courses. If we think of learning as a process where students work independently and in multicultural groups, asynchronously and synchronously, delivering information or creating new knowledge, the learning process itself could form a learning environment for developing communication. This means that CMC should be seen as a tool for learning, not only as a learning objective.

By giving students autonomy to choose the communication media they want to use in communication, we support the ability to choose the right media for certain communication situations. Although we suggested that companies prefer different media for communication, we cannot predict the career paths our students will be following, thus making the skill to choose the right media for communication more important.

However, CMC is not only about choosing the medium. From the perspective of this study, it is also about the ability to communicate in English whilst taking into consideration aspects of intercultural communication. Furthermore, we found that ethical questions, such as communication policy, are an important part of working place computer-mediated communication. All these issues are closely linked to working life and to the company where the students will be working. Understanding of these issues can be achieved at HEIs but, in the development of high level competences, authentic working life communication situations are relevant. To develop these communication competences the learning spaces should therefore reach from HEIs to real organizations. As a result of this discussion, the following suggestions are made to enhance the development of students' communication skills at HEIs:

- The concept of working place CMC and required competences should be defined at HEIs
- CMC should be understood as convenience and convergence processes and as a tool for building business relationships
- CMC in English in multicultural virtual teams should be included in curriculum planning
- The ability to choose the right medium for communication should be developed actively and integrated continuously in the entire learning process, thus actively engaging the chosen media in the studies
- The essential skills that affect the choice of medium are managing professional English, understanding cultures and following communication policies of the employer. The development of these skills should be integrated to go hand in hand with the development of digital skills
- The learning spaces for developing these skills should be an integration of authentic working spaces and learning environments offered by HEIs and created by students and the working life together.

The main conclusion of this study is that the skill to be able to choose the right media for working life communication needs to be developed at HEIs. The work teams, communication processes, choice of language, various cultures and ethical rules of the companies play an important role in communication and are meaningful when choosing the media for communication.

To be able to meet these working life requirements, self-directed learning of students is needed with active co-operation between working life and HEIs.

Further research is needed to investigate the possible effects of language and CMC levels on the choice of communication medium.

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## Appendix 1

The questions and variables of the questionnaire used in this study

### 1. Identification of interviewee

#### 1.1. Age:

Less than 20 ▾

#### 1.2. Gender:

Female ▾

#### 1.3. Mother tongue:

Arabic ▾

#### 1.4. Sector:

Agriculture, forestry and fishing ▾

#### 1.5. Indicate which type of organization you work in:

Private ▾

#### 1.6. Job role:

Owner/manager ▾

#### 1.7. What type of company you work for:

International ▾

#### 1.8. Which is the scope of your company?:

International ▾

#### 1.9. What type of organization you work for?:

Large (>250) ▾

**2. 1. I use these online communication tools at work in English:**

	Never	Occasionally	Sometimes	Frequently	Always
Document sharing platforms (Dropbox, google docs, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instant Messaging (e.g. chat, WhatsApp)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social Networking (e.g. Blogs, Facebook, Twitter)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teleconferencing (video and/or telephoning on the Internet, Skype, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**2. 2. Do you use another tool? Which?:**

**2. 3. I communicate in my native language (if it is other than English) using:**

	Never	Occasionally	Sometimes	Frequently	Always
Document sharing platforms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instant Messaging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social Networking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teleconferencing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>