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## The use of electronic communication tools in the office workplace

### Introduction

One of the strongest factors in recent years that influence communication in the workplace is undoubtedly the development of technology. Electronic means of communication have become every day tools to facilitate cooperation and communication in the office environment.

This is an extremely dynamic area. The basic tool – email – is being supplemented by new solutions. Some of them are gaining recognition in the business world, others – do not. There is a group of corporate social networking tools (e.g. Chatter, Jive, Yammer) dynamically growing. The question arises, how social media, so popular in private use, play a vital role in business communication.

While the use of CMC (Computer Mediated Communication) tools in the workplace in Western countries is a frequent subject of research, it looks different in Poland. Few studies include: [Muszyńska, Swacha, 2014; SARE, 2015; Wróbel, 2010].

The goal of this article is to identify the scale of Computer Mediated Communication tools use in office environment in Poland. It begins with review of surveys illustrating the scale of the CMC use worldwide. Then author presents results of own survey of Polish office workers. It should be noted that the sample used in the research is not representative.

### 1. The use of CMC tools in previous studies

The total worldwide email traffic, including business and consumer emails, is estimated to be over 215 billion emails/day by year-end 2016. It is expected to grow to over 257 billion emails/day by the end of 2020. The expected annual growth is 5% per year [Radicati, 2016, p. 4].

The expansion of mobile devices is changing the way people use email. According to [IBM Marketing Cloud, 2016, p. 27] nearly half (49%) of all emails in 2016 were read on mobile devices<sup>1</sup> throughout the world. Meanwhile, the transition to mobile devices results in different users' behaviours.

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<sup>1</sup> Email messages accessed via a mobile operating system (iOS, Android, etc.).

[Fluent, 2016, p. 4] research done in the US shows that users primarily checking their email on smartphone were more active in communication than other users. They checked their email more often, e.g. 52% of them check emails as they arrive or many times a day comparing to 37% in a group of users primarily checking email on another devices.

Analyzing the correspondence in the workplace the average number of emails in 2015 (Table 1) was 122 per day, including 88 business emails received and 34 sent [Radicati, 2015, p. 4].

**Table 1. Business emails sent and received per user/day (worldwide figures)**

Business emails	2015	2016	2017	2018	2019
Average number of business emails sent and received per user/day	122	123	124	125	126
1) Business emails received	88	90	92	94	96
<i>Legitimate emails</i>	76	76	76	76	77
<i>Spam emails</i>	12	14	16	18	19
2) Business emails sent	34	33	32	31	30

Source: [Radicati, 2015, p. 4].

Similar outcomes might be found in [Osterman Research, 2013, p. 1, 3]. According to this research employees sent 30 emails and received 80 emails (median) on corporate/work email system on a typical workday. Moreover, despite the alternative forms of communication, 90% of information workers were using email as much or more than they were 12 months ago. They spend 149 minutes using email on a typical workday. The next were telephone (66 minutes) and instant messaging (29 minutes). Undoubtedly email is a dominant communication tool in office environment.

In [Purcell, Rainie, 2014, p. 7] research 78% of office workers, who were also Internet users, confirmed that email was an important tool in their work. The same opinion about social media was declared by only 7% of respondents. Despite the growing popularity of social media, their importance in the workplace was much lower.

SARE, email marketing provider, conducted a survey of Polish email users in 2015. The large diversity of email activity was observed among respondents. The sample was dominated by a group of people receiving on average 21–40 emails a day (30% of respondents). It should be noted, however, that almost half of respondents receive more than 40 emails per day (46%) and about one-quarter (22%) – more than 70 emails a day. Statistics included both business and private correspondence [SARE, 2015, p. 10].

This author conducted a survey focused on business communication in 2010 [Wróbel, 2010, p. 116–127]. More than a half of respondents – office

workers (57%) received not more than 10 email per workday, 19% received 11–20 emails, 12% – 21–40 emails and 13% – more than 40 emails.

[Muszyńska, 2011, p. 97–100] researched popularity of CMC tools compared to traditional communication in companies implementing IT projects. The most frequently used types of communication in project teams were face-to-face and meetings (26%), phone (21%) and instant messaging (19%). Non-real time electronic tools (email, wiki, www) were less popular.

The important part of research is focused on consequences of email use in offices. Researchers analyse email overload phenomenon [Edmunds, Morris, 2000, p. 20; Vidgen et al., 2011], misunderstanding risk [Cramton, Orvis, 2003, p. 224–225], increase in the permeability of work/family boundaries [Haddon, Silverstone, 2000; Valcour, Hunter, 2005].

## **2. Research results: the use of CMC tools in office workplace**

### **2.1. The research methodology**

The goal of the research was to measure electronic communication intensity in office workplace. The target population were office employees working in Poland. A total of 125 paper questionnaires were filled out. Respondents were postgraduate students of the University of Gdańsk, all of them were office workers. The sample in the research is not representative. It included: 43 men and 82 women; 22 assistants, 71 specialists and 32 managers. The survey was carried out between December, 2016 and January, 2017. Preparation for the survey included a review of the existing research and interviews with selected office employees.

### **2.2. The research outcome**

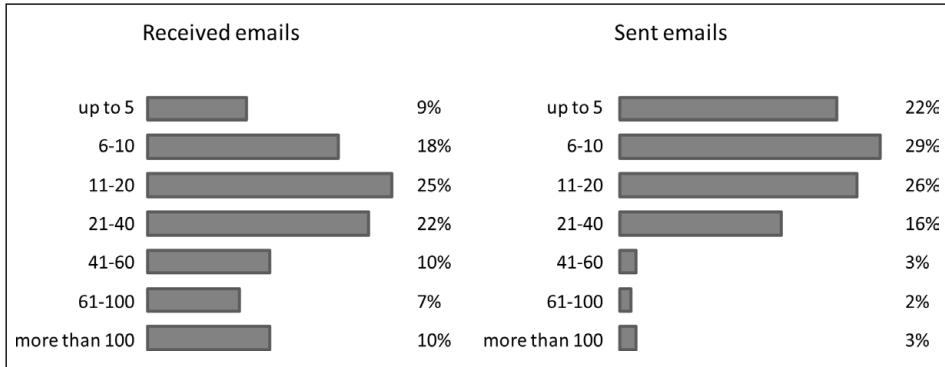
The electronic communication of employees who took part in the research was moderately intensive. The average number of emails received (35.5) and sent (17.5) by respondents was much lower than reported in Osterman Research in 2013 (80 received and 30 sent) and Radicati in 2015 (88 received and 34 sent). However, it was significantly higher than results achieved by author six years earlier [Wróbel, 2010, p. 120].

Nearly half (47%) of all respondents received 11–40 emails each workday. On the other hand, there was a small group of respondents (10%) receiving a huge number of messages – more than 100 emails. Respondents received, as in the other studies, more emails than they sent. Only 23% of them sent more than 20 emails per day (Figure 1).

The deeper analysis shows that managers sent and received much more emails than other respondents (assistants, specialists). Half of respondents employed on non-management positions (48%) received 6–20 emails per day. Half of managers (50%) received 11–40 emails per day. Most of heavy users receiving more than 100 emails per day were managers. An average

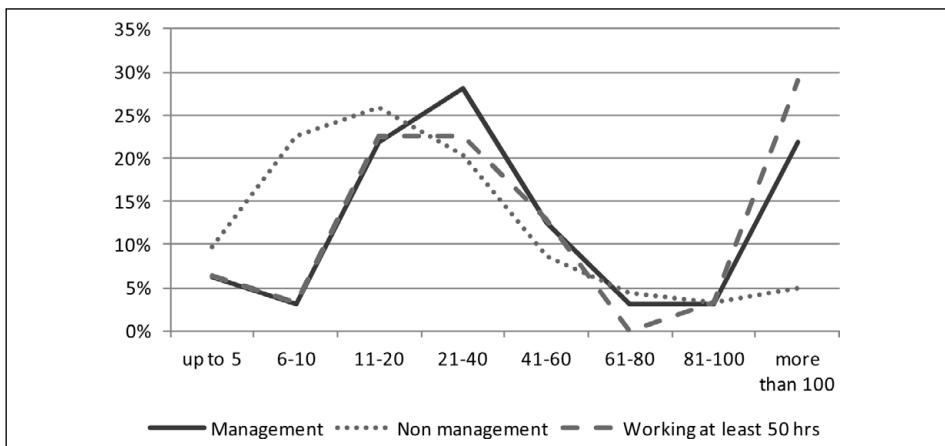
numbers of received emails were: 28.7 – non management, 51.8 – management. It means that managers received almost two times more emails than non-managers (Figure 2).

**Figure 1. Business emails sent and received per user/day**



Source: Own research.

**Figure 2. Business emails received per user/day in different groups of employees**



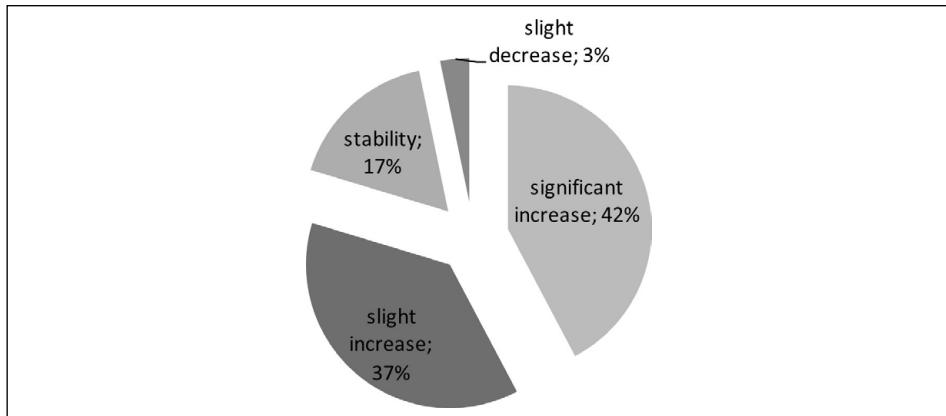
Source: Own research.

In order to complement the analysis another group was isolated – employees working at least 50 hours per week. Members of this group received even more emails than managers (57.6 vs. 51.8). One third of these respondents (29%) received more than 100 emails each business day, comparing to 22% of surveyed managers.

Even though number of emails is not high comparing to studies done worldwide, 80% of respondents confirmed that they had observed increase in a number of business emails during last 3 years (42% even declared

strong growth). In managers' group 52% of respondents declared strong growth (Figure 3).

**Figure 3. The opinion of respondents about changes in number of business emails in last 3 years**



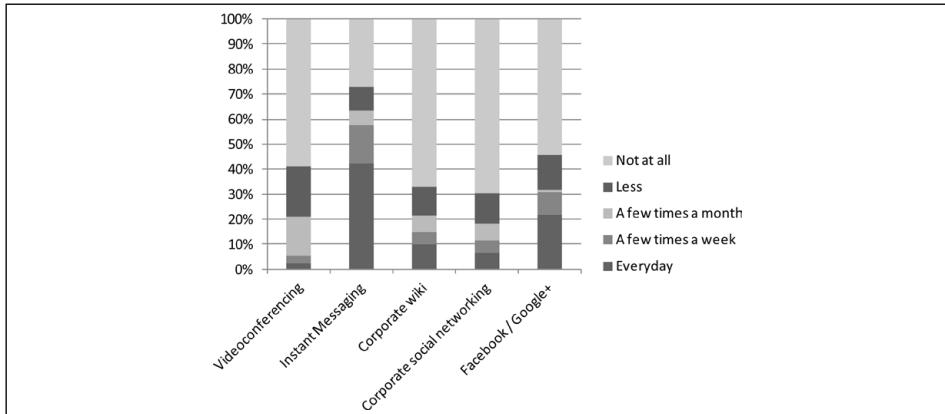
Source: Own research.

The email was a dominant business communication application, but employees used other tools as well. The second most popular was instant messaging (IM). Most respondents fall into two groups in terms of frequency of IM use: heavy-users (58% of respondents used IM at least a few times a week) and non-users (27%). Those who used IM quite rarely were minority (15%).

Other communication tools were much less popular. Facebook and Google+ were used every day or almost every day for business purposes by 31% of respondents while similar tools suited to corporates' needs (corporate social networking, e.g. Chatter, Jive, Yammer) were less popular (respectively 11%).

Videoconferencing and corporate wiki were every day tools for only 6% and 15% of respondents. It is worth mentioning that much more companies use videoconferencing (41%) than wiki (33%), but it is rarely every day communication tool. It is not surprising as videoconferencing scope of use is quite narrow – usually two-way communication in geographically distributed teams (Figure 4).

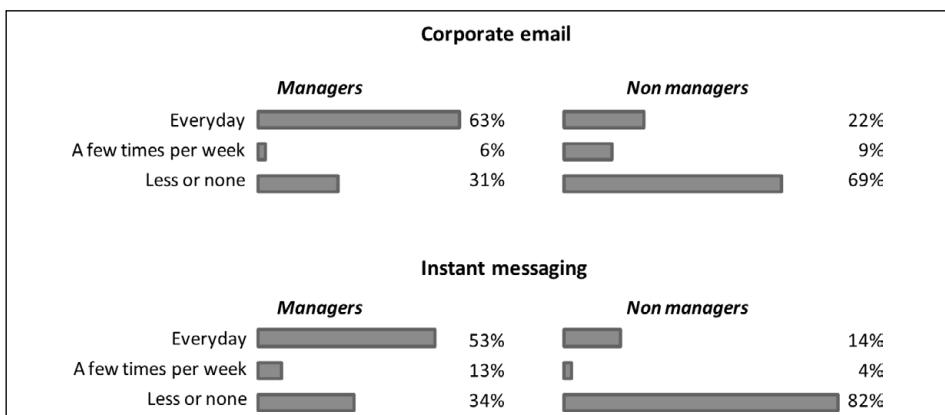
Managers used CMC tools more often than non-managers. For example 42% of managers used videoconferencing at least a few times in month comparing to 14% of non-managers. The 75% of managers used IM at least a few times in week comparing to 52% of non-managers.

**Figure 4. Frequency of CMC tools use in business communication**

Source: Own research.

The way people use electronic communication tools is changing. Smartphones are becoming more and more important tools in accessing corporate email, instant messaging, wiki or corporate social networking. As other surveys show [e.g. Fluent, 2016] the use of smartphones intensify communication processes. The significant share of respondents used smartphones to communicate by email (50%) and IM (45%) – with different frequency. The other communication tools were much less popular among smartphone users.

There was significant difference between managers and the rest of respondents in terms of frequency. Most managers access every day their email and IM using smartphone (63% and 53%). Non-managers used smartphone for this purpose rarely – only 22% and 14% used it every day (Figure 5).

**Figure 5. Frequency of CMC tools use via smartphone**

Source: Own research.

## Conclusion

Email was dominant electronic communication tool used by office workers. Although the number of emails sent and received by respondents was approximately 50–60% lower than in worldwide studies [Radicati, 2015; Osterman Research, 2013], most respondents (80%) confirmed they saw increase in email communication in last three years. The reported number of emails received per workday was significantly higher than six years earlier in similar research done by author [Wróbel, 2010]. The second popular tool was instant messaging which was used by 73% of respondents.

There was still huge gap between those two tools and the rest. Electronic communication in office workplaces is changing slowly. Such tools as videoconferencing, wiki, corporate social networking were present in small percentage of companies and they were not used as intensive as email and IM. For example, corporate social networking was used in 30% companies but only 7% of respondents reported that they used it on every day basis.

The way electronic communication in office workplace was used differed in specific groups of employees. Managers used to receive almost two times more emails than non-managers. They also used analyzed CMC tools more often than non-managers. It shouldn't be surprising as their role usually requires intensive horizontal and vertical communication. They also used more devices for communication, especially smartphones. As a result, managers can more quickly respond to incoming messages. These results support [Madden, Jones, 2008, p. 23] research who concluded that higher paying jobs require more attention to email.

Another group of respondents very intensively using electronic communication tools were employees working more than 50 hours per week (both managers and non-managers). The received even more email messages than group of managers. The open question is what was the cause and what was the effect. Are positions requiring many hours of work communicate more intensively? Does intensive electronic communication extends number of working hours?

The presented survey has certain limitations. The sample used in the research was not representative. Indicators, e.g. number of emails sent and received, number of working hours were self-reported by the respondents.

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## **The use of electronic communication tools in the office workplace (Summary)**

Electronic communication tools facilitate cooperation and communication in the office environment. Although it is an extremely dynamic area, business

communication is dominated by two “traditional” tools: email and instant messaging. The other tools are used in small percentage of companies and they are not used as intensive as email and instant messaging. The dynamics of communication is higher in managerial group. Managers used to send more emails comparing to non-managers. They also used more devices for communication, especially smartphones.

**Keywords**

Computer Mediated Communication, business communication, office workplace

