

# The Negative Effect of E-mails at Work

Dalia ZELIKOVICH<sup>1</sup>

## *Abstract*

*Although the e-mail is considered to be a fundamental element of organizations' communications layout, most researches had focused on the "positive" aspects of using e-mail, which is more likely to imply better proficiency and efficiency. However, this "positive" point of view has led most researchers to ignore negative aspects associated with using e-mails at work.*

*This paper focuses on e-mail related activities in the workplace, in particular emails that are sent during work hours, and demonstrates the great extent of waste involved in their daily use, not just for private purposes, but also for purposes of work.*

*The research field is combined HR and ICT, and the rationale for this thesis was examined focusing on large service organizations.*

**Keywords:** HRM, ICT, dissatisfaction at work, e-mail at work, service organization, organization culture/policy, net connections, efficiency, cyberloafing.

**JEL classification:** M15, M12

## Introduction

Since it was introduced, more than 4 decades ago, e-mail usage is rapidly growing, both the number of users and by volume and extent in which it is being used. According literature, this rapid growth of use is not only a matter of technological improvement or fashionable trend, it also changes the way organizations work and employees interact leading to faster communications, both within and outside the organization, wider and closer relational networks and greater efficiency expressed among others by higher productivity and lower costs. E-mails at work undoubtedly serve as a major and essential trigger in the modern world. Service organizations, which differ from production organizations or Hi-Tec organizations are supposed to use the e-mail differently. The literature relating to web-based tools such as e-mails deals with the change generated by the use of these tools at work and the identification of the global trend associated with the engagement of these tools in the business environment. In particular, researchers have focused on how the frequent changes in the rigorous, aggressive and competitive environment motivated organizations to adopt these technologies with the intention of turning work processes into more proficient and efficient ones. Thus, technology serves as a strategic and tactic mean. By adopting these

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<sup>1</sup> Dalia ZELIKOVICH, E-mail: [daliaze@013.net](mailto:daliaze@013.net)

technologies organizations were not only able to preserve their relative positioning but in some cases gain competitive advantage and market leadership. Seemingly, along with wider use of e-mails at work one should expect higher efficacy resulting from the improvement of communications and business processes in and across organizations. However, this "**positive**" point of view has led most researchers to ignore negative aspects associated with using e-mails at work. Questioning these "**negative**" aspects might lead to question the fundamentals of organizational Information Technology perceptions and HRM such as: How companies conduct in view of frequent and increasing use of e-mails at work? Are companies aware of intrusions and obstructions caused by this conduct? And mainly, are companies attentive and responsive to the many negative impacts and consequentially tremendously increasing costs related to the ways e-mails are used at work? Conversely to previous researches, this research adopts a different perspective trying to examine how loss of work hours can result from the (**mis**)use of e-mails during work hours for personal purposes and needs. In regards to that, how **dissatisfaction** at work may contribute to time waste resulting from e-mail usage at work. While previous studies have shown that e-mail usage for private purposes can be related to aspects of ineffectiveness, this is in fact a first attempt to inclusively model the mutual influence of satisfaction at work, private e-mails usage and work related e-mails on employees' ineffectiveness and organizational efficiency.

**Table 01 The web usage among Israelis**

	Search information and general data	93%
	<b>E-mail</b>	<b>84%</b>
	Reading newspapers / news	74%
	Download Software / Files	65%
	Perform banking / finance	48%
	Games	46%
	Chat	43%
	Buy / order a product or service	42%
	Listening to radio stations	28%
0	Participation in forums	25%
1	Dating	10%

Source: (Goldman, 2004)

Hi-Tec companies use e-mails as a major communication and working tool, sometimes the only one, unlike production organizations, which almost do not use it at all. However, service organizations e-mail usage is expressed through the provision of greatest utility to the organization and the customers, and not all employees are using it during the whole day. In Israel, employees in service

organizations use it at work occasionally when it is needed, and when its total usage enlarges the overall value delivered to the customers. The research excluded Internet and Net activities such as Facebook, Twitter and the like, which in most cases are for private purposes (in Israel), and automatically restricted by the organizations, and focused only on e-mail as a daily working tool.

The fact that the researcher uses that tool during the entire day and as result receiving irrelevant private and work-related e-mails has led her to investigate the negative effects of e-mail usage during working hours in large service organizations in Israel. E-mail usage in service companies seemed quite interesting for the researcher mainly because little research has been done about it, if any at all. The service organizations that were chosen for the research are organizations whose main work (in Israel) **is not using e-mails, but only from time to time during the day.**

The researcher has chosen large organizations, as it seems that in such large organizations a low level of supervision; monitoring and transfer of normal operating procedures exist. In addition, organizations that have a large number of employees can be better overviewed statistically, and the larger the organization is, the higher the number of its employees, which creates higher transaction of e-mails. In these organizations, it highly likely that the e-mail would be non-work related, because the employees would be more bored. In large organizations, large number of employees may cause employees to send more non-work related emails due to boredom or some other factor. These researches indicate the number websites, e-mails, and Internet users that were added.

**Table 2 The distribution for e-mail only (2009)**

• <b>90 trillion</b> – The number of e-mails sent on the Internet in 2009.
• <b>247 billion</b> – Average number of e-mail messages per day.
• <b>1.4 billion</b> – The number of e-mail users worldwide.
• <b>100 million</b> – New e-mail users since the year before.
• <b>81%</b> – The percentage of e-mails that were spam.
• <b>92%</b> – Peak spam levels late in the year.
• <b>24%</b> – Increase in spam since last year.
• <b>200 billion</b> – The number of spam e-mails per day (81% are spam).

Source: <http://royal.pingdom.com/2010/01/22/internet-2009-in-numbers/>

For that purpose, the researcher has chosen organizations from the service sector, which have more than 500 employees and use e-mails not as their main working tool. All selected companies for this research, are senior and leading service companies in Israel.

***To sum up:** This research work findings will add a small brick to the great knowledge existing on the e-mails and its efficiency issue, along with a greater knowledge that will probably serve other managers to improve this currently popular communication method in their organizations. It also examines*

*the tools that business professionals use to manage the e-mail platforms. Most importantly however, the research identifies strategic options, which HR and IT managers are using with these platforms. Therefore, their efforts are aligned with their business goals, and will enlarge the overall values organizations gains, which is composed of many elements. In addition, it grants the firm with cost reduction, HR efficiency with better communication inside and outside the organization, better time management, replaced information that previously was hard to get or obtain, and more. Finally, the research explores interruptions such as (dis)satisfaction at work and the extent to, which the e-mail tool contribute to interruptions and diminish our ability to focus on important tasks.*

### **Literature review**

Undoubtedly, the main part of the literature has focused on the "positive" aspects of using web-based tools. We used the term "positive" because, roughly phrased, most of the research have sought to confirm a positive relation between the use of e-mails and the attribute in question, such that higher e-mails usability is more likely to imply better proficiency and efficiency. For example, Powell, (2003); Coulson-Thomas, (2005); Marson and Marson, (2002) show that e-mails have become an integral part of routine lives by providing an efficient form of communication. E-mails use is also found to be positively correlated with knowledge and information sharing and business related interactions (Marson and Marson, (2002); Powell, (2003); Harney, (2001); Buechner, (2001)). Others, for instance St-Pierre and Raymond (2004), found that web data had successfully replaced conservative information tools such as papers, while Smith et al., (2005) and Coulson-Thomas, (2005) suggested that the quality of both organizational social relationships and organizational social climate is determined by employees' productivity and that the latter is related to the use of e-mails. Finally, Spithoven (2003) and Kilpatrick (2000) agree that using e-mails improved workers' morale and helped them complete their tasks more quickly and Fallows (2003) argued that most employees referred to e-mails at work as something that helps them work efficiently and fulfill their tasks.

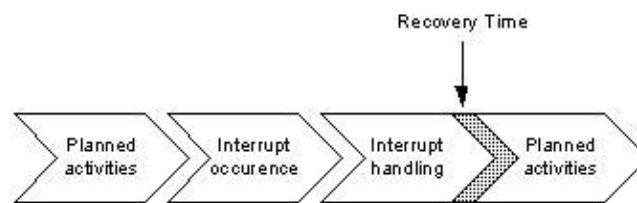
However, only a few researches were found to deal with the current research's main interest, meaning the negative aspects using e-mail at work have on organizational management and business processes conduct. Much of the research have focused on time waste resulting from private and personal e-mails usage during working hours, for instance Adam, (2002); Websense, (2006) and Arnesen and Weis, (2007). Other negative aspects of e-mails usage considered infrastructure exploitation overload (Adam, 2002; Girrier, 2003; Ingham, 2003; Dawley and Anthony, 2003, "cyberloafing" (Lim, 2002; Zoghbi et al., 2006), and the difficulties for employees to manage their inbox (Dabbish, et al 2005; Kankaanranta, 2005; McShane and Von Glinow, 2003).

Overall, researches agree that although technology has a positive influence on organizational performance and business success mainly by helping employees

to simplify their work (Forman et al., 2007), technology also impose direct and indirect costs on organizations because employees spend more working hours on the web regarding non-work related issues (Simmons, 2007). Negative usage of e-mails also may have unethical consequences mainly as a result of cyberloafing (Fallows, 2003 or Lichtash, 2004). Moreover, awareness among companies to the risks involved in these unethical issues resulted in a prosperity of legislation aimed at preventing attempts such as to pull out information of intellectual property, preventing insult and offensive e-mails, and other online violations that can seriously muddy the organization reputation (Ashmore and Herman, 2006 and Jengchung et al., 2008) and by that minimize internal bias and harassment claims (Ha-Redeye, 2007).

The e-mail communication tool acts the same, and the fact that e-mail messages do have some disruptive effect by interrupting the user was discussed by Jackson, Dawson and Wilson (2003) who illustrated the three phases of interruption that subtract from the planned activities time process and lose of further time recovering their concentration as follow:

**Figure 1: The three phases of interruption**



Source: Jackson, T.W., Dawson, R.J. and Wilson, D., 2003

The three phases of interruption including the recovery time in the above research showed that e-mail messages do have some disruptive effect. Findings have shown out, that e-mail inbox was checked for incoming e-mails every five minutes by the majority of employees. They responded to those arrived e-mails within six seconds, and a recovery time between finishing reading these incoming e-mail and returning to the previous work's task existed. At later stage, Jackson, Dawson, and Smith (2006) have rechecked the recovery time with similar results.

Surprisingly, the literature provides only little information about attempts to tie organizational policy and culture to e-mails usage. In most cases organizations were trying to minimize risks by stating and promoting an optimal policy and culture atmosphere. Researchers have been investigating mechanisms of enforcement information technology rules mainly by prohibiting employees from sharing information (Anderson, 2000 and Bohrer et al., 2003) or mechanisms of enforcement by monitoring systems or controlling employee's actions (Wilson, 2006 and Jengchung et al., 2008) and also there is the law aspect (Booth, 2009).

In view of this, as shown by Krasny and Meade (2001) and Vardi, (2001), employees' "web" attitude, perceived culture and policy regarding e-mails usage

are often mistakenly considered as private. This is also why research regarding the influence of socio-demographic profile of employees on e-mails usage is rather scarce. Furthermore, evidence suggest that socio-demographic influence varies considerably over time and with regard to other aspects among which are age, gender education level, organization type, subordinates and position at work (I.e Andreassen et al., 2007; Wangberg et al., 2008 and Fallows, 2005).

Thus, conversely to previous researches, this research adopts a different perspective focusing on examining the loss of work hours resulting from the (mis)use of e-mails during work hours for personal purposes and needs. Furthermore, as e-mail traffic and volume become exponentially larger with e-mails being automatically forwarded to many e-mail addressees or mishandle them, both within and without the organization, taking up bandwidth and overloading IT infrastructures, this research aims at exploring how e-mail usage is in fact an unproductive mean of communication that might decrease the organization's efficiency, productivity and capability.

As stated by the author (Zelikovich, 2001 and 2007), not only that large e-mail volume required more attention from the organization administrators, such as technicians and IT managers, causing larger costs, but it also implicitly imposed administration costs on employees because of the need to handle so much information. In this perspective, e-mail volume overload have produced larger overheads costs.

However, while these costs are to some extent predictable, growing e-mail popularity has also presented many employees with the opportunity to use the organizational tool for their private needs. As reviewed, most researches have referred to this issue by examining the extent of this behavior, e.g. how many employees behave like that and use e-mail for private purposes. From this perspective, the current research is a first attempt to evaluate the actual aspects of this behavior, e.g. to examine how an employee behaves and how this behavior reflect on the organization.

E-mail usage increased the number of tasks that employees perform, and as consequence, control over those tasks. It is associated with the design of jobs and is an extension of job enlargement. That wonderful communication working too, has changed job definition, enriched organizational development and behavior, mainly improving work processes, so they are more satisfying for employees. High levels of performance and satisfaction should result from a match between the growing needs of an individual and the motivating characteristics of the job being performed. A work challenge is one of the satisfaction factors that repeated it in most researches. Employees may fill less satisfied in their position due to lack of challenge, repetitive procedures, or an over-controlled authority structure.

Satisfied employees tend to be productive, who positively affect productivity, and dissatisfaction among employees negatively affects company bottom line.

Although for the most part technology was believed to enhance productivity and efficiency, there are more and more evidences that web based

applications, and as shown by Zelikovich (2007) e-mails in particular, might harm these important business objectives. In the long term, efficiency depends on finding new ways to create new things, which requires a combination of technology and processes of change in organizations. The question of efficiency, which is usually referred to as a product of time and money invested with regards to the output, has become more complex and elusive as economies drift from manufacturing products to intangible products such as service or knowledge-based products. Organizations must ask themselves two questions: firstly, is the work effective? Secondly, are skills and abilities of employees being exploited to the full?

While previous studies have shown that e-mail usage for private purposes can be related to aspects of ineffectiveness, this is in fact a first attempt to inclusively model the mutual influence of satisfaction at work, private e-mails usage at work and work related e-mails on employees' ineffectiveness and organizational efficiency.

### **Rational**

Undoubtedly, the literature review demonstrates relations mainly to the **positive** aspects of web-based tools, and how it became an integral part of routine lives, by providing an efficient form of communication, and enabling knowledge and information sharing and business related interactions regarding the average office time spent on. As for the **negative** aspects, there are almost no studies that address these issues, and demonstrate how web based tools usage including e-mails are affecting organization and employee work efficiency. Differently from most of the current researches handling the positive side of using e-mails at work in this research is examining the loss of work hours resulting from the use of e-mails during work hours for personal purposes and needs. Furthermore, the business e-mails that are being sent almost automatically contain many addresses and variety of different substance. Not much research investigated, explored or examined e-mail usage as an unproductive means of communication that might decrease organization efficiency, productivity and capability. In literature, **no relations** were found between private e-mails, working e-mails and the ineffectiveness of e-mails at work. Conversely, there are certainly other relations concerning private e-mail and its contribution to ineffectiveness, but there is no integrated model that evaluates the totality of these impacts simultaneously. Many researches referred to the **unethical** aspects of e-mail usage, mainly from the **cyberloafing** aspect and awareness to risks involved regarding **law** aspects such as attempts to pull out information that is considered intellectual property, insult and offensive e-mails, and other online violation that seriously muddy the organization reputation. In literature, no relations were found between **policy**, organizational **culture** and e-mail usage, in which organization was trying to minimize risks by creating policy and culture atmosphere.

In literature, **satisfaction** at work was widely discussed from almost all possible aspects of job satisfaction factors, but still there is no one universal definition and no relation were found regarding e-mail usage.

In addition, No relations were found for the negative aspect of the **network** as knowledge transfer tool. Researchers, who reviewed it from the positive aspect of relations establishment, deal with the growing challenges of technological knowledge. It results mainly when uses Information and Communication Technologies (ICT). This effectiveness is supported by recognition of the importance of human interactions in network with the use of Expert system's implementation process. This ICT importance is also mentioned by Gorry (2009) who emphasis that human interactions in network contribute to effectiveness and therefore organizations see the ultimate goal the need to exploit technology in new knowledge management network systems. Both Gorry (2009) and Feng, et al (2009) agree that management should recognize that new technology never grants its reward freely and it demands a cost when it strengthens our abilities.

Undoubtedly, most articles engage with **demographic** parameters, which hold meaningful value components of e-mail usage, although they have changed over time and hold conversely effects, among them age, gender education level, organization type, subordinates, and position at work. Questioning these "**negative**" aspects might lead to question the fundamentals of organizational Information Technology perceptions such as how companies conduct behavior in view of frequent and increasing use of e-mails at work is. Are companies aware of intrusions and obstructions caused by this conduct behavior? Mainly, are companies attentive and responsive to the many negative impacts and consequently tremendously increasing costs related to the ways e-mails are used at work? These are questions that we'll try to find the answers in our next paper.

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