Examining new ways of office work between the Netherlands and the USA

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Abstract. There are many definitions of new ways of work, but working with a computer at another location than at the office or at the clients' location with Information Communication Technology as a support is becoming more prevalent. A new office having shared desks and facilitating informal meetings along with a changed leadership style is yet another way. Examining the experiences of alternative work styles, telework, between the Netherlands and the USA are especially apparent in the design of office environments as is the emergence of new leadership behaviors to promote safe and healthy work.

Keywords: new ways of work, office design, telework, flexible and alternative work styles, culture

1. Introduction

New ways of work are being seen in many cultures. The information and communication technologies like teleconferencing and internet facilitate distant work [15]. Elements of the new way of work differ depending on the definition and how the organization designed and implemented the program. Often the following elements were observed: flexible working times, working from home or while travelling, Information Communication Technology (ICT) which facilitated distant work, a new way of leadership, more empowerment and an office with shared desks and an interior design that stimulated informal meetings [4].

1.1. The Netherlands perspective and experience

In a study of Hengst et al. [9] six Dutch organizations that were changing to a new way of work were evaluated. Three were governmental organizations and three were private companies. Four main effects of new ways of work programs were found and are described below:

1. Working remotely had a (slightly) positive effect on productivity. It results in better use of skills, reduces commuting/travel time (working at home)

and allows for better concentration. The meetings were more efficient when communicating remotely because everyone is more focused on the formal agenda. On the other hand, the communication spectrum is narrower than face-to-face communication, which can make it less productive in high pressure situations, dealing with complex, innovative tasks or if mutual conflicts needed to be resolved.

2. The effects on stress were minimal and the workload itself remained fairly stable. The pressure from clients was in most cases already present and at a fairly high level. However, it was noted by the participants who had started adapting to the new way of work that the expectations of management, colleagues and clients were more tense when everyone was accessible (24/7) and able to work.

3. A positive effect found was that employees working remotely had options in maintaining a good work-life balance. Employees expressed having more control of their own time. On the other hand, this element of control introduced a new work dimension, as they had to arrange and facilitate this issue of work-life balance. For some individuals, this notion of control and flexibility could contribute to higher job stress.

4. Another consequence of working remotely was the challenge employees may feel making a connection with the organization resulting in them feeling

relatively isolated. Given this situation, employees may be tempted to look for other jobs where they can develop a stronger affiliation with the organization.

1.2 The USA perspective and experiences

Nearly 26 million (20%) of the U.S. working adult population of 139 million currently telework [11]. As noted by Hengst et al [2], Information Communication Technology, coupled with environmental and economic issues, patterns of office and computer work will be influenced, as teleworking is changing how these office employees are working, commuting and communicating [11,5,8]. Telework, a widespread practice that has steadily increased in the United States and abroad, allows employees and their tasks to be shared across settings away from a central place of business or physical organizational location [3,5,12]. In 2010, the total number of people who worked from home or another remote location for an entire day at last once a month has declined, probably due to the higher unemployment. However, while the total number of teleworkers has decreased, the percentage of people who telework more than once per month has increased. Both private industry and the federal government have encouraged these alternative workplace changes, many of which have been observed to be beneficial to the economy, to the environment, and to the quality of family life [1]. The U.S. federal government, encouraged by congressional legislation and the Office Program Management (OPM) telework directive, is supporting telework programs including flexible and alternative office workspaces [18].

It could be that these effects are country and culturally specific. The way of work in the Netherlands could be contributing to the specific outcomes discussed earlier. A focus of this paper is to examine if these effects are found for other countries and what similarities or differences are reported. Specifically, we will report experiences and data from the USA and the Netherlands in this paper.

2. Method

To answer whether cultural differences or similarities are found, nationally available data in the literature as well as case studies and reported experiences of the USA and the Netherlands are examined and compared. Additionally, based on companies' experiences and research in evaluating New Ways of Work in the USA [e.g., 5,10,7,6] a reflection is given,

framed within the four points of the Netherland study by Hengst [2].

3. Results and discussion

3.1 Comparing the Netherland and USA new way of work experiences

Shown in Table 1 are some key concepts and issues that have been noted in the literature and in various company case studies regarding telework and new ways of work styles, including leadership and management behaviors. This table presents the two countries' experiences and the noted trends observed in the Netherlands and the U.S.

3.1.1 Netherlands

In the Netherlands, 15.2% of the population is doing computer work at another location than the office or at the location of the client [13]. A study of Mastrigt et al. [16] indicated that the work station at home is not the ideal work situation. The shared desks are seen often in the Netherlands [21] and new problems are the work-life balance and connection with the organization [9].

A new problem is also to make the shared work station your own desk [21]. The ICT is often available at home, however, it is still not as good as it is at the office [9]. Furthermore, the software for distant meetings is often not compatible with the main systems used at work, or the process to use it is too complex [21]. On the other hand, examples of successful telework and alternative work styles can be seen as well [21].

Some challenges in managing new ways of work have emerged in both countries. In the Netherlands, a new leadership style in combination with empowerment has not been easy to implement [21]. It requires managers to shift their control styles and the practice of evaluating their employee's performance.

Office interiors can provide more opportunities for informal meetings and discussions when telecommuters come to work at the main organization or a remote workplace site (see Figure 1). With mobile ICT, virtual teams can bring their work tools to these types of office settings and engage in informal face-to face communication.

3.1.2 United States

Telecommuting appears to have both positive and negative consequences for employees, regarding the

safety and health effects, however the complexities of these consequences have yet to be explored [6] . Working at home may reduce stress and injury risk by harmonizing work and family demands and minimizing daily commutes. Positive factors frequently reported include the elimination of office stress, individual modification of the work environment, greater accommodation of the disabled, reduced rates of sickness absenteeism, increased productivity, better sense of control over the job and workplace, and a higher level of job autonomy [1,2,7]. Conversely, negative issues often raised are social isolation, career stagnation, family conflict, and higher perceived workload levels [17]. These presumed benefits need to be balanced against the risks from loss of safety and ergonomics oversight, introduction of occupational hazards into the home working environment, the blurring of work and family roles, social isolation from peers and the constant feeling of being linked to the workplace (for further discussion see Robertson et al., [19].

Virtual workplaces combined with ICT have helped managers gain trust in communicating with their employees and learning how to manage them remotely. Thus, new ways of managing is emerging and a shift from behavior-based to output-based performance controls are occurring to allow managers to adapt to the changes brought on by telecommuting [14]. Training managers to implement and manage these new ways of working is tantamount to the success of the program. Companies need to provide training not only to managers on how to work with employees, but also to employees on what kind of behavior is acceptable in this new way of working and the new kinds of spaces that are created to support alternative work styles.

The design of workspaces to support virtual and telecommuters is evolving. Organizations are still transitioning to this new paradigm and are still wrestling with the implications of how to define and rethink company space. As more workers become mobile, it is even more critical to have office spaces where they can meet and reconnect when they are in the office. Today, there are a variety of alternative work styles that organizations can use to address the changing nature of work. These include hoteling where one makes a reservation based on unassigned seating; hot-desking where it is first come, first served, and evolved open plan environments where there are fewer and lower partitions, along with quiet rooms and team spaces (See Figure 2).

Aligning the telework or new way of work (alternative work style) with a company's corporate goal is critical and essential to establish a successful telework program [20]. Improving the work experience for employees by supporting new ways of working may be tailored and customized for each organization. Some organizations may use a telework strategy that combines an evolved open-plan with unassigned seating along with telework. The leading edge companies seek to foster some type of connection by providing workspaces that are multifunctional in which employees can move around as needed while doing different types of work with coworkers.

A cultural change must precede or accompany any new way of working or telecommuting program. Management must align the rewards and recognition system so that employees will adopt the new way of working without being concerned about undesirable consequences of working away from the traditional office setting. For teleworking programs to become sustainable a culturally friendly environment needs to be created, one that will be receptive to alternative work styles.

Table 1.Examining and comparing New Ways of Work (e.g., telework, alternative work styles and workplaces) between the USA and the Netherlands

	USA	Netherlands [source]
Employees working at home	20% [19]	15.2% [13]
Good work station at home	Rarely [8,19]	No, kitchen table/couch/desk [16]
Smaller offices with shared desks	Frequently [10,20]	Seen frequently [21]
New issue: life-work balance/stress	Often [2,6,7,18]	yes new problem [9]
Need for personification	Yes [10]	Yes [21]
New ICT for distant individual work	Often [3]	Often [21]
New ICT for distant meetings	Seldom [3]	Seldom [9]
New leadership problem	Often [14]	Often [21]
Offices with more informal meeting	Examples of [20]	Examples of [21]

Figure 1. Example of an office interior stimulating informal meetings.

Figure 2. A collaborative, privately enclosed small team workspace with ICT support. Adjacent to this team workspace are individual workstations [20].

4. Conclusions

Alternative work styles, mobile working, and telework are all new ways of work that are present around the world. With new and mobile technologies, we have opportunities to work anywhere at any time. With this new way of work, several issues arise that are important to understand as organizations design, implement and manage these new types of work programs.

In this paper, we examined and compared national data as well as case studies and reported experiences of the USA and the Netherlands to better understand the issues of this new way of work and to see if they are culturally specific. Although the definition of alternative work style or new ways of work differed depending on how the organization designs, implements and manages them, several common elements and themes were observed. Changes in the physical work environments at both the home and office settings were noted along with the need for having ICT support for team meetings and other communication.

Work-life balance and related work stress are emerging issues along with creating and sustaining a culturally friendly atmosphere towards flexible work styles. Management leadership style as well as how employees interact with their managers and coworkers is also changing along with the modality of the interaction as more communication is taking place using ICTs. When adopting new ways of work the organization's cultural characteristics and the alignment of work style with corporate goals is essential to the success of these programs. When New Ways of Work programs, are developed accordingly, safe and healthy workplaces are created.

References

[1] M. Apgar, (1998). The alternative workplace: Changing where and how people work. *Harvard Business Review,* 76(3), 121-136.

[2] D.E., Bailey & Kurland, N.B. (2002). A review of telework research: findings, new directions, and lessons for the study of modern work. *Journal of Organizational Behavior* 23, 383-400.

[3] F. Belanger, R.W., Collins, & P.H. Cheney (2001) Technology requirements and work group communication for telecommuters. *Information Systems Research* 12(2), 155-176.

[4] M. Blok, E. de Korte., L. Groenesteijn, M. Formanoy, P. Vink, The effects of a task facilitating working environment on office space use, communication, concentration, collaboration, privacy and distraction. Proceedings of the 17th World Congress on Ergonomics, Bejing, 2009.

[5] D.D. Davis & K.A. Polonko. (2001). Telework in the United States: Telework American survey. Available on-line at: http://www.workingfromanywhere.org/telework/twa2001.ht

[6] R.S. Gajendran & D.A. Harrison (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology* 92(6), 1524-1541.

[7] J.G. Grzywacz, P.R. Casey & F.A. Jones (2007). The effects of workplace flexibility on health behaviors: A cross-sectional and longitudinal analysis. *Journal of Occupational Environmental Medicine,* 49, 1302-1309.

[8] S.S. Harrington & B.L. Walker (2004). The effects of ergonomics training on the knowledge, attitudes, and practices of teleworkers. *Journal of Safety Research* 35, 13-22.

[9] M. denHengst, J. de Leede, M.P. de Looze, F. Krause and K. Kraan, Working on distance, virtual teams and mobile work (in Dutch) TNO, Hoofddorp, 2008.

[10] Herman Miller, Inc. Set them free: How alternative work styles can be a good fit. http://www.hermanmiller.com (2007).

[11] International Telework Association, WorldatWork. Telework Trendlines 2009. Scottsdale: WorldatWork. http://www.workingfromanywhere.org/new/trendlines_2009

[12] S. Karnowski & B.J. White (2002). The role of facility managers in the diffusion of organizational telecommuting. *Environment and Behavior* 34(3), 323-334.

[13] L. Koppes, E. de Vroome, M. Mol, B. Janssen and S. van der Bossche, De nationale enquête arbeidsomstandigheden 2010. TNO, Hoofddorp, 2011.

[14] N.B. Kurland & C.D. Cooper (2002). Manager control and employee isolation in telecommuting environments. Journal of High Technology management Research, 13, 107-126.

[15] S.Y. Lee and J.L. Brand, Effects of control over office workspace on perceptions of the work environment and work outcomes. J. of Environmental Psychology 25 (2005), 323-333.

[16] J. S. Mastrigt et.al.. New regulations for working conditions for new ways of work? (in Dutch) Tijdschrift voor Ergonomie 2011 36(2): 38-41

[17] D.W. McCloskey & M. Igbaria (1998). A review of the empirical research on telecommuting and directions for future research. In: The Virtual Workplace. Hershey, PA: IGI Publishing, pp. 338-358.

[18] Office of Personnel Management, Interagency telework site (2009), http://www.telework.gov.

[19] M. Robertson, ,L. Schleifer and Y.H. Huang, Examining the macroergonomics and safety factors among teleworkers: Development of a conceptual model, Proceedings of the 16th Interantional Congress of the International Ergonomics Association, In press:2012 CD ROM

[20] M. Robertson, Y.H. Huang, M.J. O'Neill, L.M. Schleifer (2008) Flexible workspace design and ergonomics training: impacts on the psychosocial work environment, musculoskeletal health, and work effectiveness among knowledge workers. Applied Ergonomics 39 (4):482-494.

[21] P. Vink (ed). Proven effects of the office interior (in Dutch), Kluwer, Alphen, 2009