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## Information and Communications Technology's Impact on Work-life Interference: Cases of 'Employee-friendly Organizations'<sup>1</sup>

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### Abstract

In our paper we examine the theoretical and practical impacts of information technology on work and work-life interference. Our paper is based on the results of the 'Employee Friendly Workplace' research project conducted in Hungary between 2007 and 2012, in which we explored the practices of ten family-friendly or best workplace prize-winning companies using qualitative research methods (individual interviews and focus groups). The main foci of our study are to explore the different perceptions, expectations and interpretations regarding employees' work-life balance, how these are related to companies' employee friendliness, how the employee-friendly practices are transformed by Information and Communication Technology (ICT).

Based on our research, the role of ICT is controversial: 24-hour online availability and the opportunity to work over the Internet with computers and mobile phones from anywhere can evidently support a healthy work-life balance (WLB) and provide the possibility of a more flexible work schedule. At the same time, though, these can disturb the balance and invade private lives, creating a kind of 'modern slavery'. In some cases employees become addicted, and the border between their work and their private life becomes blurred: they are willing to sacrifice their family time or hobby to work day and night, and in some cases this can become an expectation towards employees as well. We reach the final conclusion that technology solves several problems connected with work-family balance and obviously helps employees to find self-fulfilment in their work and family at the same time, while it creates new problems: overwork, obsession with work (and technology itself), mental and physical exhaustion and burnout. At the same time, work social support, independently from ICT, provides the greatest help for employees in need.

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*Keywords:* ICT; work-life interference; work-life balance; employee friendliness; family friendliness; work-family interference.

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## ***1. Introduction***

We are witnessing a radical change in workplaces that might affect people's lives to a similar extent as the separation of home and workplace did during the Industrial Revolution. In the nineteenth century, work and life became clearly separate (Golden and Geisler, 2007), and this revolutionized gender roles, created a public-private dichotomy between the two separate spheres and consequently caused work-life balance issues to emerge. The forces of capitalism (Kaufman-Scarborough, 2006) and post-Fordist time regimes – which even refer to greedy organizations (Geszler, 2016) – occupied an increasing amount of space in people's private sphere. It seems that information and communication technologies (ICT) also have an enormous impact on people's working and private life.

In this paper we disseminate the results of a research project concerning the impact of information and communication technology on work-life interference. The aim of our 'Employee Friendly Workplaces' project was to uncover the actual organizational and individual practices shaping employees' perception and interpretation of their work-life balance in contemporary Hungarian organizations. We wanted to highlight good and bad practices, so we approached organizations that have a reputation for being employee friendly. We defined employee-friendly organizations as those that are rewarded as the best workplaces, family-friendly workplaces or most desired workplaces or those that emphasize their inclusive and supportive work practices in their employer branding. Employee-friendly work practices include work-life balance supporting organizational practices, and we focus on these in this paper. Within organizations we did not want to concentrate only on young mothers or young parents, who are probably the most often investigated group of employees when the research question concerns work-life boundaries, but we wanted to obtain a fuller picture by including employees with caring responsibilities for people other than children (e.g. ageing parents or other relatives), employees with special hobbies (time-demanding or specific sources demanding activities outside work) and any other employees who want to live a full life and whose life is not fully occupied with their work, which we hoped was true for the majority of working adults. This is why we defined our research as employee-friendly organizational research, which might include family-friendly practices or any form of employee-supportive initiatives. Although the initial idea was to concentrate on work-life boundaries, one theme that emerged during the empirical study was ICT. After understanding the role of information technology in practice, we realized that these changes are so fundamental that they lie at the very heart of the actual practices of contemporary work, so we placed information communication technology at the centre of our investigation.

The structure of the paper is the following. In the theoretical part, we investigate both the work-life boundary literature and the impact of ICT on the lives of employees', with special emphasis on work-life boundaries. In the second part of the paper, we introduce the research project and the research methods applied, present our empirical findings and explore the employee-friendly practices used in the investigated Hungarian organizations, because we realize that these practices shape the

employees' expectations and perception of work-life boundaries. Therefore, we do not investigate the direct impact of ICT on work-life boundaries; rather, we explore how employee-friendly practices are changed by ICT and how this reframes their relationship with the perception and interpretation of work-life boundaries. Work-family balance literature (Michel et al., 2009) indicate that there are four factors which clearly influence work-family boundaries: (1) work social support, (2) job involvement, (3) work role conflict and work role overload, and (4) work role ambiguity, and these factors also emerged in our empirical investigations, so we organized our findings accordingly. Finally, in the conclusion we evaluate the changes in contemporary workplaces in the light of the theories presented and the empirical findings uncovered.

## ***2. Work-life boundaries and ICT: Theoretical background***

The available time of an adult person can be divided into different spheres: production and consumption or production and reproduction, paid time, obliged time and discretionary time, work and life and so on. Kaufman-Scarborough (2006) compiled a comprehensive summary of the literature in this sense, and we apply Arndt et al.'s (1981, in: Kaufman-Scarborough, 2006) division to capture the main domains of adults' life: *career-oriented activities*, *home-oriented activities* and *leisure-oriented activities*. While we are fully aware of the fact that family is only a small part of home-oriented activities and leisure-oriented activities, work-family interference investigations can be found most frequently in the literature, which is why we highlight concepts that only concentrate on the work-family issues, because we believe that they are applicable to our wider empirical investigations as well with or without minor changes. Geurts and Demerouti (2003) summarized the development of the theoretical concepts into three groups: (1) classic theories, (2) role-related theories and (3) current theories. We concentrate on the role-related theories and the current theories in our paper.

### ***2.1 Role-related theories***

Individuals may fulfil several roles at the same time. Research focusing on the consequences of this phenomenon has come up with two variants: the theory of scarcity and the theory of enhancement. The fundamental thesis of the theory of scarce resources is that people have limited time, energy and attention resources. Consequently, multiple roles require the sharing of these limited resources, thus, scheduling and allocation will have key importance. The more roles the individual undertakes, the more probable it is that fulfilling one role will hamper another, which leads to the exhaustion of resources and, ultimately, role strain appears (Goode, 1960). In contrast to the theory of compensation, the reasons for resource sharing are not dealt with here. Instead, the theory of scarce resources focuses only on the individual's inner, personal resources (Haar and Bardoel, 2008). Much of work-life boundary research explicitly or implicitly builds on this assumption. Critiques (Sieber, 1974; Marks, 1977) argue that fulfilling multiple roles does not necessarily lead to

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negative consequences in each case. Subsequently, this gave impetus to the enhancement approach.

The main theoretical starting point of the enhancement approach is that taking up multiple roles may even result in positive consequences. Sieber (1974) suggested that in the case of individuals simultaneously fulfilling multiple roles, advantageous influences may outweigh strain caused by role accumulation. Four positive consequences of role accumulation are given: role privileges, status security, getting access to resources that support status enhancement and role performance, personal enrichment.

As an alternative to the theory of scarcity, Marks (1977) came up with the so-called expansion theory. Although this theory seems to respond to the contemporary challenges of individuals, it is again an under-researched issue in everyday practice. According to this, time and energy are not to be considered as inherently scarce resources which set up limitations in individuals' lives, but rather, they make sense as factors determined by a certain 'contract' made by the individual concerning a given role(s). This theory presupposes that physical and mental energy is abundant and continually renewable at the hands of the individual. The feeling of exhaustion in a given role is not due to the exhausting nature of the role itself but to the person's commitment to a given role(s). Supposing the individual has more and less important roles to fulfil at the same time, the feeling of scarcity will be felt in the less important roles, i.e. when they wish they could use time better elsewhere.

As most theories concentrate on the problematic side of the issue, these are the most quoted approaches. The work-family conflict concept applies the theory of scarce resources to the work-family interface. The two life domains are in competition for the same resources (time, attention, energy), although the individual has only a limited supply of them. Consequently, the individuals have to share their resources between the two domains since satisfying one role expectation makes it difficult or even impossible to satisfy the other, so the individual is faced with a role conflict when he tries to fulfil work and family roles (Greenhaus and Beutell, 1985).

Work-family conflict is a fundamental source of strain and has a strong influence on the individual's well-being (Frone et al., 1994). According to Greenhaus and Beutell (1985), work-family conflict may be related to three main principles: time, strain and behaviour.

Time-based conflict means that time dedicated to fulfilling the expectations of one domain is used up by fulfilling expectations of the other domain.

Strain-based conflict in essence, means that strain (dissatisfaction, anxiety, exhaustion etc.) caused by one domain makes it difficult to meet the challenges of the other domain.

Behaviour-based conflict refers to the phenomenon when behaviour forms that work well in one domain are not efficient in the other - yet the individual is unable to change them.

In all the three types of conflict a distinction may be made between the influence of work on family (WIF) and the influence of family on work (FIW). In the former case, the domain of work has a negative influence on family life; in the latter case, it is vice versa (Gutek et al., 1991; Frone et al., 1997).

The above conflict types are shown in the table below (Carlson et al., 2000).

Table 1 - WIF and FIW

		Direction of work-family conflict	
		<i>Work interference with family</i>	<i>Family interference with work</i>
Type of work-family conflict	<i>Time</i>	Time-Based WIF	Time-Based FIW
	<i>Strain</i>	Strain-Based WIF	Strain-Based FIW
	Behavioural	Behaviour-Based WIF	Behavioural-Based FIW

In both WIF and FIW, several antecedents can be shown in the two domains. However, as Frone, Russell and Cooper (1992) underlined, there is evidence suggesting that work happens to interfere with family life (WIF) more frequently than family life interferes with work (FIW). Recent studies have shown that WIF and FIW have different antecedents: work-related antecedents have a stronger impact on WIF, while problems stemming from the family domain have a bigger influence on FIW (Fu and Shaffer, 2001). Therefore, in this paper we concentrate on the work-related antecedents of WIF. In most of the theoretical models dealing with work-family conflict the most frequently identified antecedents related to the domains of work and their descriptions are summarized in Table 2 (Michel et al., 2009). Not only theoretical articles, but also empirical findings support the relationship between these variables and WIF. Thomas and Ganster (1995) reported that work-related social support may alleviate work-family interference. The data obtained by Frone et al. (1997) gave support to these findings. Numerous research studies underpin the existing positive relationship between an individual's job involvement and perceived WIF (Frone and Rice, 1987; Frone et al., 1992). Work role conflict too appeared to be positively related to WIF (Greenhaus and Beutell, 1985; Fu and Shaffer, 2001). There is some evidence suggesting that work role overload inflates WIF (Beigi et al., 2012; Byron, 2005), and the same can be said regarding role ambiguity (Aryee, 1992).

Table 2 - The most frequently identified antecedents of WIF and FIW

Theoretical concept	Definition	Source
Work Social Support	'Social support is an interpersonal transaction that involves emotional concern, instrumental aid, information, or appraisal.'	<i>House, 1981, p. 39 in: Carlson and Perrewé, 1999, p. 514</i>
Job Involvement	'Cognitive or belief state of psychological identification.'	<i>Kanungo, 1982, p. 342</i>
Work Role Conflict	'Simultaneous occurrence of two (or more) sets of pressures such that compliance with one would make more difficult compliance with the other.'	<i>Kahn et al., 1964, p. 19</i>

Work Role Overload	'An individual's level of perceived role overload in the work domain.'	<i>Carlson and Kacmar, 2000, p. 1039</i>
Work Role Ambiguity	'The lack of clear, consistent information that is associated with a person's position.'	<i>Kahn et al., 1964</i>

## 2.2 Current theories of WLB

The concept of work-life balance (WLB) is broadly used in both everyday life and scientific terminology. Work-family balance (WFB) is less often mentioned in everyday contexts, yet scientific research places much more focus on this than on work-life balance. The most probable reason for this is that WFB can be operationalized better than WLB; that is, the two domains that WFB refers to can be more specifically addressed.

Initially, the concept was given a negative definition, being identified as the absence of conflict between work and family: 'Satisfaction and good functioning at work and at home with a minimum of role conflict' (Clark, 2001: 349). (In the terminology of the above models, WFB was high when the influence of the work domain on the family domain (WIF), and vice versa (FIW), was of low frequency and low intensity.)

After the turn of the millennium, Greenhaus et al. (2003: 513) gave a preliminary definition of WFB: 'the extent to which an individual is equally engaged in - and equally satisfied with - his or her work role and family role'. Voydanoff argued that work-family balance may be derived from the person-environment fit, as WFB is a 'global assessment that work resources meet family demands, and family resources meet work demands such that participation is effective in both domains' (Voydanoff, 2007: 138).

Greenhaus and Allen captured the essence of WFB by defining it as 'the extent to which an individual's effectiveness and satisfaction in work and family roles are compatible with the individual's life priorities' (Their definition was cited by Butler et al., 2009: 10.). Concerning the above definitions, Grzywacz and Carlson (2007) formed three points of criticism:

They are distant from everyday reality; that is, it is improbable that an equal measure of involvement would be necessary in the work and family life domains for the realization of WFB (see Greenhaus et al., 2003).

Voydanoff's (2007) above definition is too abstract and alien to life; that is, it is rather unlikely that ordinary people would try to reach a 'balance' by thinking about how to satisfy their family demands with the help of resources at work (and vice versa).

The concept of 'individual satisfaction' does not include the relationship with other people; that is, it 'isolates individuals in their work and family-related activities from the organizations and families in which these activities are performed' (Grzywacz and Carlson, 2007: 457). Thus, WFB is reduced to an issue of individual perception. Furthermore, the concept allows for the realization of WFB even if - as the case may be - it is harmful to others, which, as the critics have argued, is contrary to the fundamental sense of WFB. If we regard WFB as

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completely dependent on individual perception, three further problems must be faced. First, the phenomenon is difficult to study, as it takes place in individuals' minds. Second, it is almost impossible to form organizational strategies at the system level to improve WFB, because the life conditions of organizational members and their individual perception of them can be very different. Third, since the definition is given at the individual level, in the event of failed WFB, full responsibility is placed on the individual, although the potential roles of organizational and social factors are not negligible either.

On the basis of the above comments, Grzywacz and Carlson (2007) proposed their own definition, which is able to eliminate the above-mentioned problematic aspects and at the same time integrate the strong points of earlier theories. This definition sees work-family balance as an 'accomplishment of role-related expectations that are negotiated and shared between an individual and his or her role-related partners in the work and family domains' (Grzywacz and Carlson, 2007: 458). What makes this approach interesting is that it does not interpret work-family balance from the point of view of individuals but considers individuals in relation to other persons. Moreover, it does not limit individuals in their fulfilment of role expectations; that is, WFB may be realized even with a certain degree of work-family conflict. Furthermore, WFB in this context requires neither efficiency nor satisfaction in any of the life domains. The point is efficient performance in fulfilling roles with positive consequences in the two life domains. Contrary to work-family conflict or work-family enrichment, the concept of WFB does not deal with mutual role influences between the two domains. The main focus in this case is placed on the individuals' ability to take up and respond to the responsibilities arising in the domains of work and family. Obviously, conflict and enrichment between the two domains have their respective influence - and so have a number of other factors, for example how the individual is able to take part in the negotiation process concerning responsibilities in the two life domains (Carlson et al., 2009).

This leads us to the question of who might have an effect on somebody's work-family balance. It is quite obvious that everybody has a responsibility for the decisions in their own life; however, our definition emphasizes the fact that the concept of work-family balance seeks the mutual benefit of the individual, the company and the whole society. Thus, work-life balance features two other protagonists, the company and the state, which - as beneficiaries - have responsibilities as well, because they have numerous tools in their hands to support people in achieving work-family balance.

### *2.3 ICT's impact on WLB*

Greedy organizations (Coser, 1974, cited by Geszler, 2016) expect individuals to engage in work for as long as possible, since the pressure from organizations is endless. Nowadays organizations provide their employees with information technology (laptops, mobile phones, etc.) to guarantee access to their working material (most often information), and connectivity has become an organizational norm (Richardson

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and Benbunan-Fich, 2001). Organizations do not mind whether their employees complete their work tasks at a distance, and they believe that nomadic computing facilitates collaboration and increases the productivity of employees (Richardson and Benbunan-Fich, 2001).

Dén-Nagy (2014), in her literature review, emphasizes that the interpretations of the relationship between the two life domains are diverse and depend on the applied theoretical frameworks. She suggests that two theories dominate the empirical literature on the work-life interface - spillover theory and border theory - and that the impact of ICT could be different in the different frameworks. For example, in the framework of spillover theory (e.g. Király et al., 2015), with ICT tools work can have positive and negative impacts on the other domains and vice versa, so four different groups of impacts can be identified. In the case of border theory, the relationship is more complex: 'border theory argues that the primary connection between work and family systems is not emotional, but human. People are border-crossers and make daily transitions between the two worlds; they shape their environments and they are also shaped by them. Border-crossers, who make frequent transitions between work and family domains, negotiate and cross boundaries and construct the demarcation line. There are also border-keepers, who are especially influential in defining both domains and the border, and other domain members can also play a role in creating the WLB.' (Dén-Nagy, 2014: 197). In border theory the corporate context and culture (as well as the norms of the family) have an important role in accepting or not accepting the decisions of the individual, for example regarding the use of ICT tools. In the state of blending, in which the transitions are so frequent that there are no longer any borders, ICT tools could be of huge importance: they could cause tension and stress (e.g. a working mother feeding her baby while working on the laptop and feeling ashamed about not performing in any role), but they could help to find a balance and an effective way of performing different tasks and feeling proud about it.

While organizations argue that ICT makes better work-life balance practice possible, since working time is more flexible and employees can fulfil their private life duties and desires without many time constraints, the constant connectivity is criticized by family members as 'absent presence' (Middleton, 2008), which means that connected individuals might be present in the family or another private life situation but their mind is absent, since their full focus is on their work.

Although most literature criticizes connectivity as a form of colonization of private life by the organization, since individuals might not stop working in non-work time (Wajcman et al., 2008; Gold and Mustafa, 2013; Hislop et al., 2013), because ICT can create a sense of 'anytime, anywhere' contestability, the work-life boundary becomes blurred and permeable. Wajcman et al. (2008) investigated whether work influences non-work time or vice versa, and their representative survey research proved that contacting family and friends during work hours is actually more present than working in non-work time with the help of ICT devices, in this case with mobile phones.

Work-family enrichment is the least discussed in the literature. Maertz and Boyar (2011) convincingly showed that there are 'episodes' on the boundary when enrichment takes place thanks to information technology, while it is also true that work-family conflict is often present on the boundary as well. We also have to note

that Kreiner et al.'s (2009) research insightfully revealed that people suffer from the intrusion of work on family - defined as 'boundary violation' - when it is actually against their work-family preferences. To translate it into everyday words, people might not feel it to be problematic to work in non-work time if they prefer to deal with the work issue in this situation, but they might equally be upset if they want to concentrate on private life in the given time. The same can apply in the opposite situation: people might find it problematic to receive a phone call from a family member if they want to concentrate on work, while they might not find it to be a problem at all if they would prefer to have a break from the work at the given moment anyway. The major question - stemming from the previous discussion - is 'who manages the work-life boundary?' The individual or the organization? This question is present in the literature (e.g. Golden and Geisler, 2007), but it is also a central question of our empirical research.

### *3. Research framework and methodology*

The empirical data stem from the 'Employee Friendly Workplaces' research project exploring the organizational practices perceived as employee-friendly and their relationship with employees' expectations and interpretations regarding work-family balance in organizations awarded prizes like 'best workplace', 'family-friendly workplace' or 'most desired workplace'. Qualitative data were gathered to gain access to the complex and varied ways in which organizational members understand, construct and experience employee friendliness and its possible relationship with the work-life interface while uncovering its unexpected, hidden aspects too.

The main research question was: 'How are employee-friendly practices influencing the perception and interpretations of work-family balance?' In our paper we concentrate on the question: 'How are employee friendly practices transformed by ICT?' We approached the field with an exploratory attitude, aiming to discover a wide range of organizational-level (culture, structure, exposed values of founders and owners, etc.), group-level (such as group dynamics and roles) and individual-level (e.g. motivation) practices perceived by organizational members as employee friendly. Following the data analysis, we realized that ICT has a huge impact on our investigated phenomenon; this led us to investigate how the employee-friendly practices are transformed by ICT and how ICT influenced WLB (or WFB).

The empirical research project was launched in 2006, and the data collection took place between 2007 and 2011. The aim was to contact all the prize winners or nominees in the years of data collection. This ambitious plan was only partly fulfilled, because not all the organizations responded to our call. In this paper we focus on six organizations - all winners of one of the above-mentioned prizes - which provide good cases of ICT's transformative effect on employee-friendly practices; besides the positive influences, evidence of work-family conflicts was found. The sample companies are consulting firms (A, B and C), a publishing company (D), an FMCG (Fast-moving Consumer Goods) company (E) and a bank (F). Detailed data on our sample are presented in Tables 3 and 4.

*Table 3 Focus groups*

	<b>Sector</b>	<b>Number of participants</b>	<b>Positions</b>
Focus group1	HR consultant	8	employees
Focus group2	HR consultant	8	middle managers
Focus group3	Media	5	employees
Focus group4	Media	7	middle managers
Focus group5	Management consulting	8	employees
Focus group6	Management consulting	7	middle managers
Focus group7	Management consulting	6	employees
Focus group8	Management consulting	6	middle managers
Focus group9	FMCG	6	employees
Focus group10	FMCG	7	middle managers
Focus group11	bank	6	employees
Focus group12	bank	6	middle managers

Table 4 Interviews

	<b>Gender</b>	<b>Parental status</b>	<b>Age</b>	<b>Education</b>	<b>Area</b>
Interviewee1	female	pregnant	25-35	University	HR
Interviewee2	female	grandmother	55-65	College	accounting
Interviewee3	female	mother	25-35	University	CEO
Interviewee4	female	mother of twins	25-35	College	HR
Interviewee5	male	non parent	20	Secondary	HR
Interviewee6	female	mother	45-55	college	HR
Interviewee7	male	father	25-35	university	HR
Interviewee8	female	grandmother	55-65	college	CEO
Interviewee9	female	mother	25-35	college	Finance
Interviewee10	male	father	35-45	college	art manger
Interviewee11	female	single mother	35-45	university	PR
Interviewee12	female	non parent	25-35	university	marketing
Interviewee13	male	father	35-45	university	HR
Interviewee14	female	non parent	25-35	university	consultant
Interviewee15	female	non parent	25-35	university	consultant
Interviewee16	female	mother	35-45	university	HR
Interviewee17	female	mother	35-45	university	partner
Interviewee18	male	father	35-45	university	partner
Interviewee19	male	father	35-45	university	partner
Interviewee20	male	non parent	35-45	university	CEO
Interviewee21	male	father	45-55	college	sales
Interviewee22	male	father	45-55	college	training manager
Interviewee23	male	non parent	45-55	university	sales
Interviewee24	female	mother	35-45	university	assistant
Interviewee25	female	mother	35-45	university	trainer
Interviewee26	female	mother	25-35	university	HR
Interviewee27	female	mother	25-35	university	marketing
Interviewee28	female	mother	35-45	university	finance
Interviewee29	male	father	35-45	university	sales
Interviewee30	female	mother	35-45	university	sales
Interviewee31	male	father	35-45	university	IT
Interviewee 32	female	mother	35-45	university	HR
Interviewee 33	female	mother	35-45	university	finance
Interviewee 34	male	father	25-35	university	finance
Interviewee 35	male	father	35-45	university	finance
Interviewee 36	male	father	35-45	university	IT

	Gender	Parental status	Age	Education	Area
Interviewee 37	female	mother	35-45	university	finance

The contact with the organizations was established through the HR managers, who also contacted the organizational members and asked them to participate in the research. During the data collection, the largest amount of data was generated through interviews (focus groups and individuals). We started with an HR expert interview to gain a deeper understanding of the official HR discourses regarding organizational practices aiming at employee friendliness, the kind of person recruited and promoted and the organizational culture while also asking for help in identifying further useful informants from different organizational levels. Two focus group interviews were organized in each company - one focus group interview for the middle management from different functional areas and one for the employees, each with 6-10 participants. We conducted several individual qualitative interviews in each company (3-4 top management interviews and 3-5 employee interviews). From each organization we collected relevant documents, like organizational charts, orientation books, collective agreements and HR procedure documentation such as mentoring systems, career management systems, cafeteria systems (if there were any), ethical declarations or other important statements. In this paper we concentrate on the findings of the focus groups and personal interviews.

#### ***4. Main findings***

We answer our research questions by exploring the practices perceived by the employees as being employee friendly, which help them to prevent work-family conflict, and by showing the interconnections with ICT. We discuss these interconnections depending on four commonly identified antecedents of WIF (Michel et al., 2009): (1) work social support, (2) job involvement, (3) work role conflict and work role overload, and (4) work role ambiguity.

##### ***4.1 Work social support***

The main support in work comes from immediate colleagues. In cases in which the employees cooperate in teams, several examples are to be found about supporting each other. In cases in which everybody performs their own duties, they substitute for each other when necessary (because of their children being ill or other urgent problems). Most of our interviewees told us that the facts that they know each other's work and that there is a sort of *esprit de corps* make it possible to help each other out in the department. This gives flexibility to everybody, which is very useful when unexpected events happen in their private lives that have a very high priority and cannot wait. Here the company only provides the framework for their employee-friendly practice; the employees themselves, the small communities, create the actual practices and give the support.

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Here, at our company we try to respect that everybody may have some private duties that need their attention as well. These duties may be related to the children, or to old parents, who need nursing. When - for example - somebody's aged mother needs medical help, then the employee must leave the workplace. We always solve this situation, because we have enough employees, and we undertake each other's tasks without complaint. And this favour is reciprocal - next time it'll be returned. (Focus group, employee, Company A)

ICT offers new possibilities for supporting others, as the associated costs and time involved in asking for help and providing help are much lower than those for personal, face-to-face support. In this regard ICT helps to elevate the level of work social support among colleagues. However, this might lead to 'overconsumption' of support, which might have a negative effect on the individuals' WLB.

It is expected at my company that we should be reachable during vacations. I told them that I am not happy about it, I usually climb during my vacation: I have two daughters around me and I do not want to answer mobile phones in the mountains. (Focus group, manager, Company F)

In this case we found that although connectivity has become an organizational norm (Richardson and Benbunan-Fich, 2001), it is also accompanied by the norm of reciprocal substitution of colleagues, and as a consequence the interviewees reported high levels of work satisfaction and the negative effects of WIF could be reduced. The presence of the norm of reciprocal substitution goes together with silence around ICT, which highlights the transformed nature of connectivity - trusted personal relationships connect, and technology only supports this.

Sometimes the company provides the flexible framework, but it is the close community and the direct manager who create the actual practice:

The editorial office is designed so that everybody works in pairs. This is a compromise sometimes, but on the other hand it is functioning very well. (...) It is clear who is your partner, so if I don't finish my job, and I leave it for you, the next time you can do the same for me. (Focus group, employee, Company D)

Similarly to our earlier example, we also found evidence here for the significance of reciprocal collegial obligations in making technology work for the benefit of the employees and the organization. These examples also highlight the cultural embeddedness of the above-mentioned relationships, in which group work and results are more important than individual performance and technology becomes supportive.

#### *4.2 Job involvement*

When work is hobby, high job involvement is present, and in this case the availability of ICT is perceived as supportive for work-life balance, and consequently as an

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employee friendly practice. Individuals protect themselves from the negative effects of modern technology through high job involvement too. Work as hobby is true mainly in creative jobs (in our research, online media jobs and consultancy). It is strengthened by ICT, which provides the freedom to work (live for your 'hobby') at any place and at any time.

People work 8 hours a day here, but sometimes more, much more even. But let me mention that most of our colleagues are youngsters, they are fast-paced guys, they are sharp all day and they are thinking 24/7. Whenever they have an idea, even at home, they sit down behind their computer, and start to work it out. (...) They do this because they like to do this, not only for money. And this might lead to overwork. (Interview, top manager, Company D)

Generally unlimited mobile Internet access provides the basis for this kind of individual work obsession, which could create a similar culture.

My area, the Internet, is not an employee-friendly genre. Virtually I don't have a well-defined working time. In the online genre one has to be alert 24/7. When something happens at 10 p.m., and I don't answer my phone, I have to listen to unpleasant comments. (Focus group, manager, Company D) (editor-in-chief of a popular Internet car website)

In some cases the corporate culture is about competition, which reinforces the 24/7 working style:

Our company hires racehorses, who just ride towards the finish line wearing blinkers - nothing and nobody counts for them. (...) They are sending the emails one after the other, they are going forward in fifth gear. They call me Saturdays at 10 a.m., or Sundays at 2 p.m. - doesn't matter for them. (Focus group, manager, Company C)

In the above examples, we find evidence of connectivity functioning as an individual and a perceived organizational norm (Richardson and Benbunan-Fich, 2001); however, there are significant differences between individual interpretations of this norm and thus it can lead to organizational conflicts, to forms of boundary violation (Kreiner et al., 2009) and to perceived attempts at the colonization of the private life (Gold and Mustafa, 2013).

These examples describe competitive cultures, in which the individuals are overworking not only because they are fully involved and passionate about their jobs, but also as a way to increase their visibility to their managers and to create pressure on their colleagues in a way that is difficult to counteract, because they can be perceived as positive interactions from the organizational perspective. In these cases technology not only makes it possible to overwork but also supports visibility, thus becoming supportive of individual goals and reinforcing the competitive nature of the organizational culture.

Job involvement is a double-edged sword. Because it is technically possible to work from home, at any time there is a high risk of ignoring the importance of relaxing (leisure-oriented activities), and above all our informants mentioned that certain areas of their private life were compromised. For the majority it was small children or in some cases ill parents. However, a few respondents also mentioned some of their hobbies, which they pursued even in overtime periods.

The year before my son was born was very intense. The [financial] crisis was very important, but on the other hand it required an awful lot of time. In this sector [banking] the crisis changed the work tremendously, and I would not have been able to do it with a family. The quality and the quantity of work would not have been possible with a small child. It only happens every 100 years, so it is really exceptional. (Interview, Company F)

In some cases it seemed natural to sacrifice family obligations (i.e. missing Mothers' Day at school) or activities to meet expectations. If family comes first, sometimes there is negative feedback: 'I received feedback during my performance evaluation that I spend too much time with my family: I enjoy myself, and it is a problem. I should work more' (focus group, manager, Company B).

#### *4.3 Work role conflict and work role overload*

Organizations, by unconsciously creating work role conflicts and expecting their employees to be overloaded with work, have a huge impact on work's interference with family. In these cases technology is a great help, because it makes work possible at any place and at any time, but it also results in work invading private life: people work in their free time, for example during their summer vacation. Each and every focus group discussion gave examples of these kinds of strain-based work-family conflicts (Greenhaus and Beutell, 1985).

Here are for example the distance work possibilities ... sometimes ... it exploits people. So the telephone is constantly ringing, e-mails are arriving, I also receive hundreds of SMSs, so it is difficult. It is difficult to make my colleagues understand that I am on vacation. I want to be alone, give me a break .... (Focus group, managers, Company F)

My phone beeps at 2 a.m. and I hear that I have received an e-mail. I forgot to turn off, and I check the mail because I am not sleeping. (Focus group, managers, Company B)

... something happened during my vacation: there was an important tender, which we needed to win; I received an SMS, so I returned back home from my vacation in Asia, because the application deadline was during my vacation time. (Interview, manager, Company B)

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The above quotes illustrate situations in which ICT creates an opportunity to invade and colonize the private life of organizational members (Gold and Mustafa, 2013). The seriousness of these cases can be emphasized by highlighting that colleagues are disturbed by work-related issues during their highly limited vacation times and sleeping times, which prevent them from proper recreation and regaining their energy for work (Marks, 1977).

ICT can be a good help in several cases, even to organize certain family issues (e.g. registration, payments, etc.), but it is not always possible. We should note that, although multinational companies here introduced modern technology at the same time as other subsidiaries around the globe, public administration and the everyday usage of the Internet and modern technology in Hungary is 'a bit behind the rest of the Western world'. It is an interesting contradiction that employees of multinational companies find it natural to use the most up-to-date technology and they expect and demand the same level of modernization from outside their workplace, which is very often not the case.

I have to calculate the time when I arrange certain things in my family time, which is not actually being with my family, but it needs to be done, and I would be happy to do it online or through a phone call, but I cannot, because I have to be personally present to arrange it. (Interviewee, manager, Company F)

Sometimes, it is not a question that I write a report during the weekend, because my boss needs it on Monday morning; it is OK, because I know it is important, and I know she does not ask it too often. (Interviewee, Company F)

ICT can prevent certain overload in people's lives, although it should be a conscious decision to use the possibilities of technology wisely, for example trying to achieve the segmentation of the separate life domains (Cifre and Salanova, 2008). 'We organize our meetings in Microsoft Outlook. I have scheduled every day 8-9 a.m. that I take the children to the kindergarten. And I have already scheduled two days after 5 p.m. every week - this is my defensive strategy' (focus group, manager, Company D).

This can be perceived as segmentation, but in the same time we have to notice that the individuals' personal life becomes highly visible to the organizations, thus increasing the possibility of their control. Individuals introduce their personal obligations into the official work planning, to gain the right to carry them out during those hours, which are not even official working hours. The personal tasks presented to the organization are those that are widely accepted in broader society, like taking children to school or kindergarten, so they also have to have a socially enforced personal case. This is perceived as defensive by the individuals, so technology is no longer supportive but has two faces - it can be used to control you, and you can use it to control the control that they have over you.

However, overload sometimes is not solved: 'I see it quite often, that somebody has an important family programme, but he/she still has some work, which

- I think - could easily be done next morning, but the person considers that it should be done during that evening' (focus group, manager, Company D). From the quotes above, we conclude that leaving important work for the next day is highly problematic for a large number of employees. The stressfulness of not having finished the scheduled work tasks is actually a very similar stress factor to having to finish work at home. Both of these can lead to the so-called 'absent presence' (Middleton, 2008), which means that the individual is physically at home but not available to family members because he or she is mentally or physically occupied with work or work-related feelings.

Many new gadgets and applications have been invented and developed recently that help people to perform their job far away from their workplace. As a result, individuals are no longer necessarily tied to the workplace. Most of the tasks that require the office computer can be carried out on any computer that is connected to the Internet. We have seen examples in which the clients know the mobile phone number of the company's responsible employee, so they can be called 24/7. This may contribute to a high quality of service because of the personal relationship and the immediate response, but there is also a huge risk of stress for the employee, as the phone may ring in the middle of the night. Even during a holiday the phone must be there, as nobody can substitute for the employee who is on holiday without harming the good client-company relationship, as it is based on personal contact. 'Blackberry and notebook are a tool of modern slavery. They are an umbilical cord' (focus group, Company D).

A lack of modern technology makes work more complicated, stressful and time consuming. The availability of continuous upgrades to technologies increases expectations towards users and thus the lack of up-to-date technologies and applications can be a huge burden on them. The sales force of Company E did not receive laptops, only desktop computers and mobile phones. The administration of the daily sales could not be undertaken immediately after visiting a customer but could only be carried out during the evening with desktop computers, when all the administration should have been performed manually during the day. This obviously meant that work had to be completed in non-work time and in the sales force's homes, not in the workplace.

#### *4.4 Work role ambiguity*

Ambiguity can be perceived as something bad, neutral or even cheerful. Unclear definitions of work roles can lead to unnecessary overwork, although the opposite may also happen: when it is not obvious what is expected in the work, employees may enjoy greater freedom. Most respondents were self-confident regarding their work roles, but we detected a couple of examples of role ambiguity. For example, one respondent wanted to return from maternity leave to her previous job, which is actually guaranteed by law, and the situation became a little uncertain. The uncertainty regarding the work role disturbed the respondent's overall life satisfaction.

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One of my colleagues told me that somebody was being interviewed for my job. My boss made a joke about it when I visited the company, and I told him that I wanted to return from maternity leave as soon as possible, but at the latest in spring. So it was a kind of misunderstanding, although I told him in advance that I wanted to return in the summer or a bit earlier or a bit later. It was a miscommunication; there was no document that proved that I said in advance that I would be back to work during the spring. (Interview, Company F)

Ambiguity in our case had no connection with ICT; for example, technology did not lead to higher or lower levels of clarity in work roles and the ambiguity could not be solved by any technological device. The only reason to include ambiguity in work roles in our research is that it has an impact on WIF.

For example, I am at home at the weekend, and I just quickly check my mails, because I do not want to answer 400 e-mails on Monday morning, and I answer a mail, then the colleague who I had answered immediately rings me up because he saw that I had answered his mail. (Focus group, managers, Company F)

In the above example, the use of ICT in personal time is unclear – it has different meanings for the employees. Some of them might use it to make their work life easier, with no desired contact with their colleagues, while for others it serves to contact their colleagues in their free time too. In the quote we can see that different tools – SMS, email and calls – are perceived differently; an unspoken hierarchy exists between them when it comes to their intrusive nature. Writing an email might be not as pressuring as a call. There is ambivalence regarding which tool to use and how to use it in personal time.

## *5. Conclusion*

Our research results show that companies provide ICT tools as employee friendly practices for individuals to balance their work and life, but it is just an opportunity and in itself does not help create and maintain a healthy work life balance, so it is not employee friendly per se. The four antecedents of WIF can explain if and how ICT is transformed into employee friendly practices. Namely, some of the antecedents of WIF through organizations can have positive and negative effects on individuals' lives, but not all of them are affected by information technology. Social support is the only antecedent that has a solely positive effect: in organizations in which employees are ready to help each other in exceptional situations, they suffer least from work-family conflict and they see their life situation as smooth and their problems as solvable. Where social support is present, we can talk about a collaborative organizational culture and complaints concerning ICT are missing, highlighting the transformed nature of connectivity – trusted personal relationships connect, and information technology supports this. Therefore, social support is not fully independent of ICT; it relies on it, but it is not driven by it, rather being used as a tool for respectful

connections. Thus it can be concluded that during the design and development of corporate ICT systems firms should consider particularly strongly not just technological effectiveness but also the influence this has on social support in the organization.

Job involvement might lead to general work satisfaction or even general life satisfaction, and technology can help employees to organize their lives to fulfil their work and family obligations more smoothly; in other words, people might enjoy work involvement while they are with their families. But, job involvement has a high risk of overwork, and eventually the family might suffer from it. Here ICT's transformative effect is also embedded in the organizational culture: in a competitive culture, it becomes a tool of pressure and control through increased visibility, and often we can observe a process in which a technological possibility becomes an unwanted expectation. The role of individual motivations in the use of ICT was also highlighted and proved again the necessary moderating effect of the organizational culture.

Role overload and role conflict have an even more problematic impact on WIF, and technology clearly plays a role in both. Organizations might provide the necessary technical devices to be able to work anywhere (and at any time), and if there is a culture within the organization that is particularly performance-oriented, there is a high risk of one's family becoming priority number two. Work role ambiguity does not obviously enhance or hinder WIF; at the same time, technology does not seem to play a strong role in it.

To conclude, the role of ICT is controversial: mobile technologies evidently can support a healthy WLB and provide the possibility of a more flexible work schedule, and this why companies are ready to invest in ICT's, and provide them as helping employees' work-life balance, consequently as being employee friendly work practices. At the same time, though, they can invade private lives, creating a kind of 'modern slavery'. In some cases employees become addicted, and the border between their work and their private life becomes blurred: they are willing to sacrifice their family time or hobby to work day and night. This lifestyle could easily lead to mental and physical exhaustion and burnout. In other cases they believe that they have to be online all the time: if they do not read e-mails during holidays or pick up the phone 24/7, it means that they are not carrying out their job properly or that without their contribution the company would collapse. The question is: who created the 24/7 culture? Did employees themselves create the 'myth of availability' or is it a kind of role ambiguity? Alternatively, is it really a natural requirement of customers or certain industries?

We reached the final conclusion that technology solves several problems connected with work-life balance, and it obviously helps employees to find self-fulfilment in their work and family life at the same time, while it creates new problems: overwork, obsession with work (and technology itself), mental and physical exhaustion and burnout. More research is needed to discover the negative consequences of ICT, so that we can learn how to live a healthy life with the new technology.

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