Networking and Virtuality in Entrepreneurial Organisations in the Age of Countries without Borders

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crossref http://dx.doi.org/10.5755/j01.ee.26.5.13145

Entrepreneurial organisations continuously search for innovations and innovative ways of doing business that provide a competitive advantage in the market. In the age of countries without borders and free movement of people, organisations in Eastern European countries deal with the lack of high quality labour force caused by migration that forced to seek alternative ways of managing work and workplace. The paper analyses networking, virtual workplace, and other characteristics of job design in entrepreneurial organisation. Results of the research in Lithuanian organisations show positive correlations between corporate entrepreneurship, networking at the workplace, and virtual workplace. Moreover, more entrepreneurial and less entrepreneurial organisations differ in job complexity. No significant correlation between corporate entrepreneurship and two other characteristics of job design, i.e. multitasking and job autonomy, was found. However, they have relationships with virtual workplace as well as networking or job complexity. Current results suggest that further research on job design in the field of entrepreneurship is needed, and call organisations to use virtual workplaces and networking design at the workplace.

Keywords: Entrepreneurial Organisations, Networking, Virtual Workplace, Job Autonomy, Job Complexity, Multitasking, Lithuania.

Introduction

Networks and networking is a highly explored field in entrepreneurship research especially within clusters and regions, but non-local or global networks provide more benefits to organisations than local ones (Eraydin & Armatli-Koroglu, 2005). Networks in entrepreneurship are currently viewed as a source for business growth and successful performance of entrepreneurial business (Lechner & Dowling, 2003, Smallbone & Welter, 2012, Kariv et al., 2009) but Andreossou-O’Callaghan & Lenihan (2008) state that characteristics of organisations lack attention. While topics of virtual entrepreneurship, “e-entrepreneurship” (e.g. Matlay & Westhead, 2005, 279), virtual global entrepreneurs (e.g. Katz et al., 2003), and entrepreneurial activities in virtual market world are investigated (Pihlaka et al., 1999; Nijkamp, 2003), internal organisational features that might have influence on handling virtual world are left aside of the research questions.

Fast growth of information and communication technologies (ICT) has opened new horizons for organisations (Wasko et al., 2011). In addition to their link with virtual business (Nijkamp, 2003, Matlay & Westhead, 2005), there are two arguments for further research. Firstly, ICT are now widely used in everyday life for personal purposes, social interactions, so employees are familiar with ICT. Secondly, ICT have changed workplaces, and employees’ physical location is no longer preventing their successful performance (Townsend, 1998). However, the research literature is barely informative about virtual workplace in entrepreneurial organisations.

Entrepreneurial organisations continuously search for new possibilities and unique combinations that contribute to the successful performance in the market competition (Hsu et al., 2014). As a result, activities with innovation are introduced by proactive, high-skilled employees. However, those employees are usually open to the opportunities provided by the European Union (EU) free movement policy as well. Such employees are valued in any market (Smallbone & Welter, 2012). Entrepreneurial organisations have to innovate in their internal structures, including job design, in order to keep those employees or seek to stay in touch with them. Certain studies reveal that individuals involved in some degree of virtual workplace activity seem to display improved employee loyalty to the organisation, increased productivity, and decreased absenteeism (Pinsonneault & Boisvert, 2001). Virtual workplaces, in which employees operate remotely from each other and from managers, are a reality, and will become even more common in the future (Cascio, 2000).

While entrepreneurship in Eastern European countries has been researched in case of entrepreneurial barriers (Bobera et al., 2014), comparing economies of different development (Lekovic et al., 2014), or other research on the national or regional levels (Krisciunas & Greblikaita, 2007; Buracas et al., 2012), relations of entrepreneurship with virtuality and networking are less investigated. Studies on virtual workplace are more concentrated on the analysis of virtual organisations (Mowshowitz, 2002; Campbell, 1996, 1999; Franke, 1999; Bauer et al., 2003; Merkevicius, 2012) rather than of virtual workplaces (Daniels et al., 2001). Only a few studies of entrepreneurial organisation frequently mention such factors as
organisational structure (Covin & Slevin 1989; 1991; Naman & Slevin, 1993; Hornsby et al., 2002; Chen et al., 2005), control or resource systems (Sathe, 1985; Russell, 1999; Kuratko et al., 2005; Ireland et al., 2009), while others like job design (De Jong et al., 2015) or other technical characteristics of the workplace are significantly less discussed.

The research problem is formulated as follows: how the networking at the workplace and the virtuality of the workplace are related to the corporate entrepreneurship in organisations and what other job design characteristics contribute to this relationship.

The aim of the paper is to demonstrate the importance and analyse the interrelationships of entrepreneurship, networking, virtuality of the workplace, and other important characteristics of job design, and to present the results of the research to Lithuanian organisations.

The paper proceeds as follows. First part provides the review of the research in the field and presents the development of hypotheses. The method section describes the research methodology. It is followed by the results of the survey on networking, virtual workplaces, and other job design characteristics in Lithuanian organisations. The paper is finalized with the last part providing discussion and conclusions.

**Literature Review and Development of Hypotheses**

There are many past theoretical considerations on the entrepreneurial organisations and entrepreneurial behaviour in the literature defining entrepreneurship, corporate entrepreneurship, and its features (Schumpeter, 1934; Handy, 1989; Hisrich & Peters, 1986; Stevenson & Jarillo Mossi, 1990; Covin & Slevin, 1991; Stopford & Baden-Fuller, 1994; Lumpkin & Dess, 1996; Sharma & Chrisman, 1999). Entrepreneurship and corporate entrepreneurship have been recognized as a complex phenomenon with various types, features, and factors (see Dess et al., 2003, Covin & Wales, 2011). Corporate entrepreneurship, as the entrepreneurship on the organisational level, refers to intrapreneurship as entrepreneurship within an existing organisation (Pinchot, 1985; Antonicc & Hisrich, 2001), internal corporate entrepreneurship (Schollhammer, 1982) or corporate venturing (Guth & Ginsberg, 1990) as their domain is related to internal organisation (Duobiene, 2014). Criteria for distinction between entrepreneurial and non-entrepreneurial organisations may be various: entrepreneurial organisations serve different economic functions, they adapt or create different structures, management and processes differently, which eventually allow them to pursue new opportunities. The studies above confirm that differences between entrepreneurial and non-entrepreneurial organisations exist (Schollhammer, 1982; Vesper, 1984; Covin & Miles, 1999).

Differences between entrepreneurial and non-entrepreneurial organisations may be summarized into three categories, i.e. innovations, strategic objectives and potential for growth (Wickham, 2004; Duobiene, 2014). Innovations are at the core of corporate entrepreneurship (Zahra, 1993; Lumpkin & Dess 1996; Antonicc & Hisrich, 2001; Zhao, 2005; Rutherford & Holt, 2007). Wickham (2004) stresses the significance of innovations and identifies significant innovations as a key for success. Entrepreneurial organisations go beyond small business venture because of formally articulated strategic objectives like growth target, market development, and market share or market position. Researchers highlight the importance of strategic goals (Vesper, 1984), strategic renewal (Covin & Slevin, 1989; Guth & Ginsberg, 1990; Covin & Miles, 1999) or self-renewal (Antonicc & Hisrich, 2001; Antonicc, 2007) that are also related to strategy. Continuing Wickham’s (2004) concept, growth is one more characteristic of entrepreneurial organisation. Aulet & Murray (2013) support this idea and highlight the difference in growth between small and medium enterprises and innovation driven enterprises. Since in the beginning of business innovative enterprises focus on global markets and represent ‘new-to-the-world’ ideas, they have a high growth potential. Thus, an organisation may be identified as entrepreneurial by analysing its innovativeness, strategic objectives and potential for growth. The importance of these features and their expression in entrepreneurial and non-entrepreneurial organisations is revealed in both quantitative and qualitative ways (Duobiene et al., 2007; Duobiene, 2014). Moreover, innovations in entrepreneurial organisations are related to networking.

The relationship between innovations and networking in entrepreneurship research is focused mainly on external networking (Lechner & Dowling, 2003; Witt, 2004; Eraydin & Armatli-Koroglu, 2005; Biggiero, 2006). This allows entrepreneurial organisations to grow and ensures competitive advantage (Lechner & Dowling, 2003). Organisations with global networks have more innovations than organisations with local networks, but a positive relation between innovations and networking has been confirmed for both scales of networks (Eraydin & Armatli-Koroglu, 2005). Networking enables organisations to cope with the lack of their own resources via access to other resources (Pikhala et al., 1999), and the value gained from long distance networks is even greater that from close ones (Eraydin & Armatli-Koroglu, 2005). Organisations use external and internal resources for networking because their synergy has positive effects on organisational performance (Belso-Martinez et al., 2011), and the networking integrates internal and external activities of organisations. The research of Andrerosso-O’Callaghan & Lenihan (2008) reveals the influence of organisational characteristics, i.e. ownership, size and age, on networking, but the analysis has been made on external networking.

Although networking at the workplace and within an organisation is important for the pursuit of new opportunities and ideas, internal networking is not any less important. Digitalization and globalization force organisations not only to adopt their strategies ensuring the appropriate knowledge transfer (Biggiero, 2006), but also to change their internal systems, including changes at workplaces (Agypt & Rubin, 2012). An organisation has many networks with different functions that contribute to its performance (Johannisson et al., 1994). Formal networks are generic to organisations due to their basic governance function, while talk networks generate and incubate new ideas. Acquaintance networks provide
practical and political support to entrepreneurial activities that might be activated when needed. While professional networks within organisations help in testing the feasibility of business ideas, they also provide problem-oriented information (Johannisson et al., 1994). A common function of all these networks is information exchange within and beyond the organisation. Organisations have various needs with regard to information exchange, thus, they design workplaces (Aygp & Rubin, 2012) and make changes of job design, including networking, accordingly. Job design characteristics are not extensively researched in case of entrepreneurial organisations while the value of networking is acknowledged for knowledge transfer, learning and innovation (see Huggins et al., 2012). In line with the results of the research on external networking of entrepreneurial organisations and its value to organisations and regions (Nijkamp, 2003; Eraydin & Armali-Koroglu, 2005; Lechner & Dowling, 2003), the following first set hypotheses regarding the higher level of networking as a job design characteristic in these organisations is presented:

Hypothesis 1a: Corporate entrepreneurship will be positively correlated to the level of networking at the workplace.

Hypothesis 1b: More entrepreneurial organisations employ more networking in job design than less entrepreneurial organisations.

The rise of ICT usage has opened new horizons for organisations in regard of new markets (Wasko et al., 2011) as well as provided new ways of running business, i.e. virtual ventures (Pikhala et al., 1999; Wasko et al., 2011) virtual teams (Townsend, 1998; Matlay & Westhead, 2005), virtual employees (Merriman et al., 2007) or virtual workplaces (Cascio, 2000). Virtual settings for a workplace become pervasive in organisations (Merriman et al., 2007), and dynamic, service- and knowledge-oriented jobs are particularly suitable for them (Cascio, 2000). Moreover, physical location of employees is no longer impacting their successful performance (Townsend, 1998). Regarding entrepreneurial organisations and ICT in them, ICT are recognised as a source of innovations and a contributor to new job creation (Cuadrado-Roura & Garcia-Tabuenca, 2004). Despite of the disadvantages like setup and maintenance costs, cultural issues, feelings of isolation, efficiency or trust issues, virtual workplaces provide a set of advantages, i.e. it reduces real estate expenses, increases productivity and profitability, improves services, generates environmental benefits and access to global market (Cascio, 2000).

A virtual workplace is based on ICT, but the nature of virtuality is more complex. Usage of ICT is only one of the virtual workplace characteristics (Daniels et al., 2001). Daniels et al. (2001) have presented a framework to help understand the nature of the virtual workplace. This framework consists of five variables: location, usage of information and communications technologies, knowledge intensity, intra-organisational contacts, and inter-organisational contacts. This framework indicates that research on virtual workplace should take into account its multi-dimensional nature and that virtual workplace practices can may differ by degree on these five facets of virtual workplace. Merriman et al., (2007) agree that research cannot be based on one aspect of virtuality. They propose three dimensions of virtual workplace: geographical dispersion, communication process, and employment permanence. According to Wong & Burton (2000), virtual team has a set of culturally and organisationally differentiated members, who are grouped together temporarily, are physically dispersed, connected by weak lateral ties, and engaged in performing non-routine tasks. Virtual teams employ virtual workplaces. Aggregating different characteristics, this study proposes three main aspects of a virtual workplace: location, virtual communication, and knowledge intensity.

With regard to continuous devotion to innovations and the ability to pursue opportunities, entrepreneurial organisations are expected to use more virtual work in comparison to non-entrepreneurial ones. Entrepreneurial organisations might be flexible in work location, i.e. use home based, remote office, client’s office, and non-office environment. They might also have a higher usage of ICT for intra- and inter-organisational contacts (virtual communication), higher knowledge intensity in comparison with less entrepreneurial organisations. Employees with higher virtuality have higher need for knowledge intensity and higher need of virtual communication, therefore, networking competences might help to achieve their needs (Hill et al., 1998). Thus, the following set of hypotheses is presented:

Hypothesis 2a: Corporate entrepreneurship will be positively correlated with virtuality of workplace.

Hypothesis 2b: Workplaces at more entrepreneurial organisations are more virtual than workplaces at less entrepreneurial organisations.

Hypothesis 3: Networking at the workplace and virtuality of the workplace are positively correlated.

In addition to networking and virtual workplace researchers discuss more job design related characteristics like job autonomy (Hill et al., 1998; O’Neil et al., 2009; Schjoedt, 2012; Dysvik & Kuvaas, 2013; De Jong et al., 2015), complexity (Lichtenstein et al., 2007; O’Neil et al., 2009), and multitasking (Hellmam & Theile, 2011; Robinson & Stubberud, 2012). Virtual work is related to employees’ perceived greater flexibility in work timing and location that might contribute to the greater job autonomy (Hill et al., 1998). Virtual workplace ensures greater job autonomy and it is crucial for organisations (O’Neil et al., 2009; Johl et al., 2010). Furthermore, job autonomy is positively related to entrepreneurial behaviour (De Jong et al., 2015) and determines it (Lumpkin et al., 2009). In entrepreneurial organisations autonomy ensures freedom and independence to pursue entrepreneurial activities. Lumpkin et al., (2009) claim that changes in organisational settings result an effective use of autonomy. Therefore, we hypothesise that job autonomy is positively related to virtual workplace and entrepreneurship in organisations, and present the following hypotheses:

Hypothesis 4a: Job autonomy positively correlates with the virtuality of the workplace.

Hypothesis 4b: More entrepreneurial organisations provide higher job autonomy at the workplace than less entrepreneurial organisations.
The environment where entrepreneurial organisations act is complex (Hayton, 2005). Complexity also exists in organisations because their activities are likely to be interdependent, i.e. for finalizing one task several smaller tasks must be completed (Lichtenstein et al., 2007). However, O’Neil et al., (2009) confirms the negative impact of job complexity on teleworkers success. Thus, complexity of entrepreneurship and entrepreneurial activities (Lichtenstein et al., 2007; Hitt et al., 2001), heightened and forced by increasing market globalization, are familiar to entrepreneurial organisations. Recent conceptual research by Batchelor et al., (2014) also proposes that entrepreneurial work differs from non-entrepreneurial in job design characteristics like skill variety or task identity that are related to job complexity. Furthermore, innovations are the results of entrepreneurial initiatives that go beyond standard job description (Hellmann & Thiele, 2011). Thus, job complexity is supposed to be negatively correlated with virtual workplace, but positively correlated with corporate entrepreneurship with the higher level of job complexity at more entrepreneurial organisations. In relation to that the last set of hypotheses is presented:

Hypothesis 5a: Job complexity is negatively correlated with the virtuality of the workplace.

Hypothesis 5b: Job complexity is positively correlated with corporate entrepreneurship.

Hypothesis 5c: More entrepreneurial organisations employ higher job complexity at the workplace than less entrepreneurial organisations.

In case of job design, multitasking is a norm in the relatively simple structure (Leung, 2003). Organisational restructuring for adaptation to changing business environment and new technologies forces employees to set the order of tasks priority, be ready to switch quickly between one or more tasks, or to complete multiple tasks simultaneously (Agypt & Rubin, 2012; Lin, 2013). Multitasking in organisations provides the possibility to share core competences among different tasks and complete them faster. Nevertheless, the research on multitasking provides ambivalent results. Some researchers found that multitasking decreases profitability of work; it is mainly related to individual capabilities of multitasking (Gendreau, 2007; Lin, 2013, Spink et al., 2008) that can be increased by practicing (Paridon & Kaufmann, 2010). Wasson (2004) states that properly managed, multitasking contributes positively to individual and organisational productivity, especially in virtual work. Although research on multitasking at the workplace has not been conducted in entrepreneurial organisations or related with entrepreneurship, due to intensity and complexity of entrepreneurial activities and possible positive value of multitasking for virtual work we suppose it to be positively correlated with corporate entrepreneurship and will have higher scores at more entrepreneurial organisations. It is also supposed that multitasking will be positively correlated with virtual work in organisations. Hypotheses about multitasking and its relationships are the following:

Hypothesis 6a: Multitasking positively correlates with virtual work.

Hypothesis 6b: Multitasking positively correlates with corporate entrepreneurship.

Hypothesis 6c: More entrepreneurial organisations use higher multitasking job design than less entrepreneurial organisations.

Next part of the paper provides a description of the method used for empirical research and testing of hypotheses which is followed by the main findings of research data analysis.

**Method**

**Research context.** Lithuania is a small Eastern EU country with population of less than 3 million, high emigration rate with negative net migration rate (Eurostat, 2014). A high percentage of emigrants are young, working age, educated people. Similar situation with migration is in Latvia, Spain, Ireland, Croatia, and Portugal as well as in neighbouring Poland (Eurostat, 2014). In case of entrepreneurship, Lithuania is similar to neighbouring countries like Latvia or Poland as well as East Germany, Spain, Italy, and Croatia (Laszlo et al., 2013). Lithuanian entrepreneurial organisations as well as entrepreneurial organisations in similar countries face the question of how to keep qualified and entrepreneurial employees in order to be competitive in the market. As it was mentioned above, one of the solutions could be usage of virtual workplaces. In order to implement such workplaces, it is important to conduct the research of entrepreneurial organisations, their job design, and their workplace specifics regarding virtuality.

**Sampling method and data collection.** Online survey was selected due to high Internet usage level within organisations in Lithuania and possibility to get results from different regions of Lithuania. We used convenient sampling that included graduate students in economics and management fields that had worked in different Lithuanian organisations at the time of the survey. Data collection was extended including snowball sampling technique by asking respondents to share the link to the survey with employees they know from other organisations. 87 questionnaires were returned, but 3 of them had missing values in main variables, so were removed from the analysis. Thus, the total sample consisted of 84 respondents representing different Lithuanian organisations from various cities in the country.

**Sample characteristics.** Regarding characteristics of respondents, 64.7 percent of them were specialists/officers, 24.7 and 9.4 percent accordingly the managers and employees with different experience of less than 1 year (24.7 percent), 1 to 3 years (40.0 percent), 4 to 7 years (17.6 percent), 8 to 15 years (9.4 percent) and more than 15 years (7.1 percent). Relating to characteristics of organisations in the sample, the sample consisted of small, medium and large companies (30.6; 28.2, and 27.1 percent accordingly, remaining 8.2 percent of very small companies and 5.9 percent of missing values) according to the number of employees. Most of the researched organisations (69.4 percent) were privately managed. Regarding the business sector, the sample covered all sectors.
Research variables and instrument. The questionnaire consisted of six sections of questions in 7 points Likert scale, each referring to one of the main variables, i.e. corporate entrepreneurship, networking, multitasking, job complexity, job autonomy, and virtuality of the workplace. Questions about demographic characteristics of respondents (level of the position, work experience in current organisation) and organisations (industry, sector, size, and place) were included at the end of the questionnaire.

For the identification of entrepreneurial organisation the scale of corporate entrepreneurship (Duobiene, 2014) was used. It measures the level of corporate entrepreneurship in three dimensions, i.e. innovations, strategic objectives, and potential for growth. Results of inter-items correlation and factor analysis suggested one of the reversed scored items in the subscale of potential for growth. It revealed a negative correlation to other items in subscale, moreover, it stood out of three factors during factor analysis while theoretically it differs from others only in its reversed coding. Final corporate entrepreneurship scale that had been used in this research consisted of 20 items, of them 7 items on innovations, 8 items on strategic objectives, and 5 items on potential for growth. Cronbach’s α of the full scale of corporate entrepreneurship in (Duobiène, 2014) research was 0.923 and after our corrections in this research it grew up to 0.939.

Networking at the workplace was measured using synchronisation scale by (Agypt & Rubin, 2012). Synchronization as a job design characteristic reflects the requirement of the organisation to perform tasks through networking across the boundaries of the department. Due to the need of synchronization, networking is used for transferring knowledge not only within the organisation but also beyond. The scale consists of 8 items of which one is reverse scored. Cronbach’s α was 0.820.

Multitasking was measured by using four subscales by (Agypt & Rubin, 2012). Subscales of measuring job simultaneity, fragmentation, contamination, and constraint were implemented. 3 items subscale of simultaneity refers to job design with how much a particular job requires multitasking for effective job performance (Agypt & Rubin, 2012) and consists of 3 items. 2 items subscale of job fragmentation refers to job design with how much a particular job requires employees work on tasks that are interrupted by other tasks (Agypt & Rubin, 2012). 6 items subscale of job contamination refers to job design with how much a particular job requires employees work on tasks, interrupted by tasks that require different skills (Agypt & Rubin, 2012). 2 items subscale of job constraint refers to irregularity of the deadlines that effect job performance and consists of 2 items. The full scale of multitasking consisted of 13 items and its Cronbach’s α was 0.801. For measuring job complexity we used items on job variety and items task identity, developed according to questions on job characteristics inventory and referred to employees’ perceptions about their job complexity (Sims et al., 1976). We added two items that reflected skill variety needed to complete common tasks at the workplace. The full scale of job complexity consisted of 7 items with Cronbach’s α of 0.712.

Job autonomy was measured in three subscales. Subscales of decision autonomy and performance autonomy and reward were used according (Phua, 2012). For this research we did not deal with ideal and real situation, so we rephrased the head of these subscales asking respondents to address answers to current organisation only. Subscale of decision autonomy consisted of 5 items and subscale of performance autonomy and reward had 4 items. Each subscale had one reverse scored item. For the total scale of job autonomy we developed a 5 items subscale of measuring work schedule flexibility according to (Rothausen, 1994). Full scale of job autonomy in this research consisted of 14 items and its Cronbach’s α was 0.827.

The measurement of virtual workplace was elaborated according Daniels et al., (2001) framework. Three factors were extracted running factor analysis, so three subscales of virtual workplace were used for further analysis. Location was measured by the level of virtuality from home based to non-office environment. The subscale consisted of 4 items with Cronbach’s α of 0.806. Knowledge intensity was measured by indicators of the level of every day need to renew information about clients, products/services, processes and to order/receive tasks for others/from other employees. The knowledge intensity subscale had 3 items and Cronbach’s α of 0.798. Intra and inter organisational contacts were measured by the level how much time employees spend communicating with colleagues (intra) and other organisations (inter) face to face or by electronic devices. The usage of ICT was measured by how frequent communication with each other and partners using electronic devices appears completing work tasks. It mainly reflects the nature of work that does not require to stay in one place constantly. Intra and inter organisational contacts were merged together with ICT usage according to the results of factor analysis and formed a subscale of virtual communication. This subscale had 4 items with Cronbach’s α of 0.798. Full scale of virtual workplace consisted of 11 items and its Cronbach’s α was 0.856.

Statistical analysis was run using SPSS, including descriptive analysis, correlation (Spearman’s correlation coefficient), and comparison of means (one way ANOVA test and t-test for independent samples). All the results presented in the next part of the paper are statistically significant (p<0.05).

Results

According to the research results, the organisations that participated in the research, demonstrate similar characteristics of corporate entrepreneurship regarding the ownership of capital, while the level of corporate entrepreneurship differs according to the size of the organisation (F(3, 76)=5.072; p=0.003). Specifically, large organisations are more entrepreneurial (M=5.49; SD=0.64) than small (M=4.40; SD=1.30) and medium (M=4.68, SD=1.08) organisations. The overall mean of corporate entrepreneurship in the sample organisations is 4.75 (SD=1.15). According to Z-scores we have set organisations into two groups, i.e. less entrepreneurial (Z-score <=0) and more entrepreneurial (Z-score > 0). The distribution of less
and more entrepreneurial organisations with regard to their size is shown in Table 1.

<table>
<thead>
<tr>
<th>CE level</th>
<th>N of organisations by size</th>
<th>Total N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Very small 14 14 3 38</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Small 12 10 20 46</td>
<td></td>
</tr>
</tbody>
</table>

While very small, small and medium organisations are distributed similarly in both groups, large organisations mainly fall into a group of more entrepreneurial organisations. Thus, further results will provide hypothesis testing and data analysis with regard to the size of organisations.

**Correlation Analysis**

For correlation analysis we have used Spearman’s correlation coefficient due to the lack of normality in data distribution mostly in all variables. Research results show that level of corporate entrepreneurship within organisations is positively correlated with networking (r=0.384; p<0.01), job complexity (r=0.511; p<0.01), and virtuality of the workplace (r=0.317; p<0.01). Positive correlation with virtuality of the workplace was delivered by knowledge intensity (r=0.432; p<0.01) and virtual communication (r=0.240; p<0.05). No significant correlation between corporate entrepreneurship and workplace location, multitasking, and job autonomy was found.

However, networking at the workplace and multitasking are positively correlated (r=0.399; p<0.01). Networking is also positively correlated with job complexity (r=0.411; p<0.01) and virtuality of the workplace (r=0.299; p<0.01) mainly because of positive correlation with knowledge intensity (r=0.359; p<0.01). Meanwhile, job autonomy has no significant correlations with corporate entrepreneurship; it is positively correlated with job complexity (r=0.415; p<0.01) and virtuality of the workplace (r=0.366; p<0.01), therefore, possibly contributing to the relationship of networking and corporate entrepreneurship. Another indirect relationship of job autonomy and corporate entrepreneurship has been investigated in its correlation with variables of corporate entrepreneurship. Correlations of job autonomy with innovations (r=0.215; p<0.05) and potential for growth (r=0.216; p<0.05) is weak, but positive and statistically significant.

Relations between the virtuality of the workplace and other characteristics of job design are also positive. Multitasking is weakly, but positively, correlated with virtual workplace (r=0.292; p<0.01). Similar correlation in both direction and strength characteristics is between job complexity and the virtual workplace (r=0.298; p<0.01). In summary, all four researched variables of job design, i.e., networking, multitasking, job autonomy and job complexity are positively correlated with the virtuality of the workplace. Correlations are presented in Table 2.

<table>
<thead>
<tr>
<th>Main variables</th>
<th>Spearman’s Correlation</th>
<th>Corporate Entrepreneurship</th>
<th>Networking</th>
<th>Multitasking</th>
<th>Job autonomy</th>
<th>Job complexity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Networking</td>
<td>Correlation Coefficient</td>
<td>0.384**</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
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<tr>
<td>Multitasking</td>
<td>Correlation Coefficient</td>
<td>0.154</td>
<td>0.399*</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Job autonomy</td>
<td>Correlation Coefficient</td>
<td>0.192</td>
<td>0.095</td>
<td>0.123</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Job complexity</td>
<td>Correlation Coefficient</td>
<td>0.511*</td>
<td>0.411*</td>
<td>0.170</td>
<td>0.415**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Virtual workplace</td>
<td>Correlation Coefficient</td>
<td>0.317</td>
<td>0.299*</td>
<td>0.292*</td>
<td>0.366*</td>
<td>0.298**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
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</table>

** marks significant correlations at the level of p<0.01.

Thus, the hypotheses about positive correlations of corporate entrepreneurship with networking (H1a) and virtuality of the workplace (H2a) are confirmed. The hypotheses about positive correlations of virtual workplace with networking (H3), job autonomy (H4a), and multitasking (H6a) are confirmed as well. Meanwhile, the hypothesis about negative correlation between virtual workplace and job complexity (H5a) is rejected because the research results show a positive relationship between them. Hypotheses about positive correlations between corporate entrepreneurship and job autonomy (H5b) as well as multitasking (H6b) have been rejected.

**Results of Less Entrepreneurial and More Entrepreneurial Organisations**

The analysis of the results of networking, multitasking, job complexity, job autonomy and virtual workplaces in less entrepreneurial and more entrepreneurial organisations revealed the differences of networking (t=2.599, df=82, p<0.05), job complexity (t=5.767, df=82, p<0.01), and virtuality of the workplace (t=2.210, df=82, p<0.05). Although we have no significant results in case of multitasking and job autonomy, relationship tendency is the same. The results of less entrepreneurial and more entrepreneurial organisations are presented in Table 3.

More networking is used at the workplaces, jobs are more complex and the workplaces are more virtual in more entrepreneurial organisations than in less entrepreneurial ones. In Thus, the hypotheses about the differences in less
entrepreneurial and more entrepreneurial organisations are confirmed in case of networking (H1b), virtuality of the workplace (H2b), and job complexity (H5c). The hypotheses about differences in case of job autonomy (H4b) and multitasking (H6c) were not confirmed due to non-significance of the differences.

Research results reveal the linkage between corporate entrepreneurship, networking at the workplace and the virtuality of the workplace. All of them are positively correlated. Moreover, more entrepreneurial organisations implement higher virtuality at their workplaces as well as higher networking than less entrepreneurial ones. The results provide additional information about entrepreneurship networking at the workplace to the research about external networking of entrepreneurial organisations. To the extent the external networking is important for entrepreneurial organisations (Lechner & Dowling, 2003; Witt, 2004; Eraydin & Armalti-Koroglu, 2005; Biggiero, 2006), the networking at the workplace plays an active role in corporate entrepreneurship. Furthermore, more virtual workplaces in more entrepreneurial organisations than in less entrepreneurial ones suggest further research directions in order to foster virtual work.

The results of the research in Lithuanian organisations revealed that more entrepreneurial organisations use more complex job design than less entrepreneurial ones. Correlation between job complexity and corporate entrepreneurship is the strongest one of the ones investigated in this research. Moreover, job complexity is positively related to networking and virtual workplace. Findings by (O’Neil, 2009) about negative relationship between job complexity and teleworking seem to be not applicable to entrepreneurial organisations, but current results go in line with the complexity of environment in which entrepreneurial organisations act (Hayton, 2005).

The relationship between corporate entrepreneurship and two other research characteristics of job design, i.e. job autonomy and multitasking, was not observed to be of significant level, while positive relationship between job autonomy and entrepreneurial activities had been found in other studies (De Jong et al., 2015; Lumpkin et al., 2009). Thus, both job autonomy and multitasking are positively correlated with virtual workplace, which supports findings of the research about the importance of virtual workplace for organisations. While multitasking might be the reason for stress at the workplace, (Wasson, 2004) claims that in case of virtual work multitasking contributes to individual and organisational productivity. Positive correlation between job autonomy and virtual workplace suggests guidelines for further research on causal relationships, as our research has been limited to the comparison of less entrepreneurial and more entrepreneurial organisations. However, two other relationships, i.e. positive correlations between job autonomy and networking as well as job complexity and multitasking, are confirmed by the results of this research. Although the relationships are not strong, but they are positive, so they might draw the attention of the researchers to researching job design characteristics for entrepreneurial organisations. Current results might also encourage entrepreneurial organisations to use virtual workplaces, employ more networking design at the workplace as well as feel familiar with the complexity there in order to keep the research contributes to the field of entrepreneurial organisations with the results on relations between corporate entrepreneurship and characteristics of job design, mainly networking and virtuality of the workplace as well as multitasking, job autonomy, and job complexity.

Table 3

<table>
<thead>
<tr>
<th>Variables</th>
<th>CE level</th>
<th>M</th>
<th>SD</th>
<th>M &amp; SD error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Networking</td>
<td>Low</td>
<td>4.48</td>
<td>1.11</td>
<td>0.18</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>5.09</td>
<td>1.02</td>
<td>0.15</td>
</tr>
<tr>
<td>Multitasking</td>
<td>Low</td>
<td>4.04</td>
<td>0.70</td>
<td>0.11</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>4.35</td>
<td>1.12</td>
<td>0.16</td>
</tr>
<tr>
<td>Job autonomy</td>
<td>Low</td>
<td>3.92</td>
<td>0.88</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>4.33</td>
<td>1.15</td>
<td>0.16</td>
</tr>
<tr>
<td>Job complexity</td>
<td>Low</td>
<td>4.39</td>
<td>0.64</td>
<td>0.10</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>5.37</td>
<td>0.92</td>
<td>0.13</td>
</tr>
<tr>
<td>Virtual workplace</td>
<td>Low</td>
<td>3.22</td>
<td>1.12</td>
<td>0.18</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>3.79</td>
<td>1.25</td>
<td>0.18</td>
</tr>
</tbody>
</table>

We ran additional statistical analysis to compare more entrepreneurial and less entrepreneurial organisations with regard to their size. General significant difference was found in more entrepreneurial organisations in case of job autonomy (F=7.454, p<0.01). The level of job autonomy is continuously decreasing when the size of the organisation is growing (from M=5.69 in organisations with 10 and less employees to M=3.75 in organisations with more than 250 employees). The difference in networking was found between less entrepreneurial and more entrepreneurial organisations of small size (t=2.321, df=24, p<0.05), i.e. more entrepreneurial organisations use more networking at the workplace (M=5.19, SD=1.17) than less entrepreneurial ones (M=4.13, SD=1.15). However, this difference is not consistent throughout the organisational growth.

More entrepreneurial medium sized organisations reveal higher scores on virtual workplaces (t=2.220, df=22, p<0.05; M=4.25, SD=1.29), especially in knowledge intensity (t=3.111, df=22, p<0.01; M=4.70, SD=1.27) than less entrepreneurial organisations of that size (M=3.23, SD=0.95 and M=3.00, SD=1.35 accordingly). The results showed similar situation for job complexity in medium sized organisations. More entrepreneurial organisations design more complex jobs (t=3.130, df=22, p<0.01; M=5.44, SD=1.00) while less entrepreneurial organisations of that size use less complexity in job design (M=4.36, SD=0.49). No significant differences were found in large less entrepreneurial and more entrepreneurial organisations.

Discussion and Conclusions

Organisations in Eastern Europe have lost advanced professionals and now experience their lack in developing competitive products and services. The growth of international outsourcing – particularly skilled, knowledge-based work – as a core business practice could also mean that virtual workplaces may involve individuals from developing as well as industrialized nations. Entrepreneurial organisations usually not only pursue business opportunities, but also innovate in organisation management. Current
necessary qualified employees in the age of countries without borders and the free movement of people.

**Limitations and Guidelines for Future Research**

Theoretical analysis did not focus on researching causality between entrepreneurship, networking, and virtual workforces due to inconsistent knowledge in the field about their relationships. Current research shows that entrepreneurial organisations implement more networking and virtuality at their workplaces, but the question about causality is open for future research.

The research has been conducted in Lithuanian organisations with convenient sampling, so it has geographic and extrapolation limitations. Extrapolation to the whole population of Lithuanian organisations is limited due to non-random sampling and a small sample size, but the results are pioneering in entrepreneurship field and encourage further research of entrepreneurial organisations.

Furthermore, Lithuania is similar county to other neighbouring countries like Latvia or Poland with regard to migration and entrepreneurship, so the results provide background for further research of entrepreneurial organisations in other countries.

**References**


The article has been reviewed.

Received in September, 2015; accepted in December, 2015.