▨ Transition into virtual organisation - does the practice follow the promising theory

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Abstract

Virtual business modes emerge as a result of a desire to improve market position, gain competitive advantages and of course, the will to bring in more profit. Companies deploy and participate in virtual partnerships in order to effectively detect market demand, develop new products and services, identify new opportunities to improve quality of their work and lastly find possibilities to lower organisations' costs. Corporate culture and values are in transition, requiring new breed of employees with new skills. The composition of today's workforce has changed and has higher expectations than their predecessors. Traditional values and behaviours are being challenged. The changes in internal and external business environment around the world have demanded drastic changes or turnabouts of working habits of the organisations. The need to change or to effectively manage change appears when the financial indexes predict no forthcoming future for the company without immediate and severe transformation. The re-form of the organisation and the knowledge of the personnel must be founded on a specific competitive advantage that will enable the company a reliable recovery. Therefore, is the virtual atmosphere the path to follow?
Keywords: Organisation, Characteristics, Virtual organisation, Culture

Povzetek

Prehod v svet virtualnih organizacij – ali praksa sledi obetajoči teoriji

Virtualne poslovne oblike nastajajo kot rezultat zahtev po izboljšanju tržnega položaja podjetij, pridobivanju konkurenčnih prednosti in želja po čim višjem dobičku. Podjetja razvijajo virtualna združenja in v njih sodelujejo z namenom učinkovitega odkrivanja tržnih zahtev, razvoja novih proizvodov in storitev, identificiranja novih možnosti za izboljšavo kakovosti dela ter zniževanja stroškov. Poslovna kultura in vrednote podjetja so se znašli v prehodnem stanju, saj potrebujejo novo generacijo kadrov, ki bo imela drugačen odnos do dela in predvsem visoko strokovno znanje. Današnja delovna sila je drugače strukturirana in ima višja pričakovanja od svojih predhodnikov. Spremembe znotraj podjetij in v njihovem zunanjem okolju zahtevajo učinkovite prilagoditve načina poslovanja podjetij. Potreba po spremembi oziroma učinkovitem upravljanju sprememb se pokaže, ko napoved finančnih indeksov ne predvideva obetajoče prihodnosti podjetja brez takojšne in neprizanesljive spremembe. Preoblikovanje organizacije in znanja zaposlenih mora temeljiti na točno določenih konkurenčnih prednostih, ki bodo omogočile podjetju zanesljivo izboljšanje. Torej, ali naj se podjetja podajo na pot proti virtualnemu poslovnemu svetu?
Ključne besede: organizacija, značilnosti, virtualna organizacija, kultura

1 INTRODUCTION

Organisations are important as clusters of people spend large amount of time in them. In contemporary society, an individual subsists most of his/her time within different organisations. The incentive behind this conjunction is goal-oriented as an individual joins organisations to achieve those goals that individually could not be accomplished. Organisational change is mostly connected with services or products, participants involved and an organisation itself. A change in environment can consequently cause a change within an organisation.

Virtual environment enables potentially extremely dynamic and effective organisations. Individual's involvement in a virtual corporation overachieves traditional working efforts and is therefore crucial in the challenging environment where completely committed approaches are essential.

The aim of this paper is to introduce, review and evaluate the transition of the organisations from tra-

ditional into virtual business modes. The paper investigates basic concepts of virtual organisations as well as the possibilities of effective virtual culture deployment. Consequently, the theoretical acknowledgements will be extended with the obtained information from the ongoing European Union research project conducted in the field of virtual organisations. Hence, a conclusion will be drawn based upon the introduced aspects of virtuality and its successful deployment.

The paper is divided into several sections. Section 2 presents the definition of an organisation as well as explains its main characteristics such as e.g. formalisation and complexity. Section 3 aims at introducing a brief historical view of the virtual evolution and provides the reader with a definition. Section 4 explores the business culture within traditional and virtual organisations, as well as tries to identify the reasons for potential dissimilarities. Section 5 introduces best practices currently conducted within the European Union through the ongoing research project called the VOSTER project. Finally, section 6 presents a conclusion based on the acknowledged information and results drawn from the VOSTER project.

2   THE CONCEPT OF TRADITIONAL ORGANISATION

An organisation or a company, an enterprise or a firm, a business or an establishment in general can be illustrated as a network of individuals collaborating with a purpose of achieving a specific goal. The aim of every establishment can be basically identified as a production of products or services that satisfy identified consumers' needs and subsequently facilitate their existence. An organisation is definitely such establishment and can therefore be defined as a composition of interacting relationships between individuals that empower the existence as well as specialised characteristics by this enabled network of people and accordingly a structured realisation of identified goals (Lipovec 1997).

It is important to emphasise that the above definition of an organisation is twofold as firstly, an organisation viewed as a static process; where the process is seen as collaboration among the relationships at specific time cross-sections; and secondly, an organisation is viewed as a dynamic process; where it enables a continuation and characteristics within an organisation's working modes.

Characteristics of Traditional Organisation

Rozman (2000) argues that each corporation differentiates from other as organisation, structures and processes within each are unique; consequently, he identifies eight such characteristics: formalisation, specialisation, standardisation, hierarchy of authority, complexity, centralisation, professionalism and configuration of the working structure.

- Formalisation is illustrated through written rules, procedures and regulations to direct and guide employees' working modes and is usually defined as the corporation is found and established.
- Specialisation is a process of identifying specific tasks and their allocation to either individuals or groups within the corporation that are skilled to efficiently carry them out (Hellriegel et al. 1996).
- Standardisation of work processes presents the level of description of specific tasks, work positions etc. The level is high if all tasks are performed in the same way throughout the organisation and at the same time throughout any subsidiaries at disperse geographic locations.
- Hierarchy of authority is a consistent process that defines the level of authority among the superior staff and their subordinates. Furthermore, it outlines the level of control of each superior member has over his/her subordinates.
- Complexity is seen as a direct consequence of the specialisation process and the formation of departments, and illustrates the number of work positions, as well as the number of departments (Dimovski et al. 2000).
- Centralisation is linked to the question where predominately lies the authority. The two most familiar situations are žat the top' when the process of decision making is positioned at the top of the pyramid and žspread among different levels' when the process of decision making is decentralised.
- Professionalism denotes the dimensions of formal education and improved knowledge of the workers (Daft 1998) and is at high level when the execution of the work related tasks requires highly educated personnel.
- Configuration of the working structure explains how and where personnel are working as well as examines the relationships among staff of different functions and departments.

The characteristics of traditional organisations and

their evolution in the virtual business environment will be studied in the following sections.

3 EVOLUTION FROM TRADITIONAL TO VIRTUAL FORMATION

Changes, innovations and pressures from the market and consumers empower the creation of new organisational forms and procedures, such as virtual organisations. How or why has a need for virtual organisation evolved? According to Franke (2001) it was Mowshowitz who introduced the term. Many followers including Mews (1997) apprehend reasons of how or why. The later distinguishes of guidelines that lead in the direction of a virtual organisation. Firstly, market is constantly changing, which consequently changes the demand and supply conditions. Market today is increasingly becoming customer-orientated which leads to specialisation, individualisation and globalisation. The other guideline focuses on the role of information and communication technology and its incredibly fast progress. Speed, quantity and quality of communication have allowed the development to this extent. Therefore, information and communication technology is seen by Franke (2001) as an enabler and at the same time as a driving force towards the virtual organisation.

Other authors (Whiteley 1996; Trkman 2000) also recognized the potential and impact of information and communication technology. The effective and innovative use of information and communication technology is, as argued by Whiteley (1996) one of the most effective devices for gaining a competitive edge as it enables new explorations whose successful deployment may increase company's competitive advantage, reform and perfect productivity and efficiency, provide alternative methods of successful management as well as potentially expand business past its current borders.

Trkman (2000) understands the competitive advantage as an improvement of company's competitive ability, which is either direct or indirect consequence of information and communication technology implementation and therefore results in greater business efficiency. The essential criteria for determining competitive advantage is that information and communication technology's benefits are higher than total cost connected with information and communication technology implementation, maintenance and practice.

Traditional organisations working modes are in majority forcefully structured and defined with no or very little room for the individual's independent exploration. Mowshowitz (2002) argued that such accession may overlook more worthy choices as well as enable deployment and implementation of substandard ones. The solution lies in the concept of a virtual organisation as it firstly opens up the universe of possible options and secondly establishes explicit procedure for making choices (Mowshowitz 2002).

New organisational structures like virtual corporations have the potential according to Blecker et al. (2000) and Mowshowitz (2002) to provide the flexibility, reduce the complexity, risk of management necessary to survive in the actual economic environment, increase efficiency, lower production costs, and improve the coordination and control of functions. Mowshowitz (2002) argued that in the traditional organisations it is the specialisation of the tasks among the personnel that can consequently be associated with the increase in efficiency and improved coordination, and control of the functions; whereas in a virtual organisation it is the relationships and the communication ability between the participating partners that does the job.

Concept of Virtual Organisation

Literature offers many different interpretations for phrases virtual organisation, network organisation, social organisation, virtual corporation, virtual enterprise, virtual company, virtual factory, extended enterprise, cluster of enterprises, supply chain management etc. (Franke 2001; Grueninger et al. 2000; Mowshowitz 2002; Ouzounis et al. 2001). Venkatraman et al. (1998) defined a virtual corporation as a strategic approach that is singularly focused on creating, nurturing, and deploying key intellectual and knowledge assets while outsourcing tangible, physical assets in a complex network of relationships. The ability to recognise and alter knowledge to gain maximum results within a partnership or a network is vital as effective knowledge management institutes and maintains networkability.

Franke (2002) on the other hand introduced a concept of a Virtual Web Organisation that consists of three elements – Virtual Web Platform, Virtual Corporation and Management Organisation. Virtual Webs are also defined by Goldman et al. (1995) as an open-minded collection of pre-qualified partners that agree to form a pool of potential members of virtual corporations.

Virtual Web platform enables the development of a virtual corporation by enabling terms for cooperation between involved partner firms as well as provides the environment in which trust between partner firms can develop. Therefore, a virtual corporation evolves from some of the partner firms included in the virtual Web platform to satisfy a particular need or produce a product and is dissolved once the need is satisfied or the product created. The facilitator and the catalyst (Franke 2002) role are performed by the virtual Web management organisation or the net-broker. Its functions include an initiation and maintenance of the virtual Web platform as well as forming and facilitating the operations of dynamic virtual corporation; operations such as forming strategic partnerships, organising network activities, identifying new business opportunities. Therefore, virtual Web management organisation coordinates management functions as needed in stable virtual Web platform, and enables the architecture and development of dynamic virtual corporations.

Hence, a virtual organisation can be defined as an organisational construct that delivers its highest customer value through constant allocation and dynamically assigning or reassigning parts of its value creation process to satisfiers that have been selected based on identified requirements and other factors relevant to competitive advantage (Franke 2001).

4 VIRTUAL CULTURE

Corporate culture and values are in transition, requiring new breed of employees with new skills. The nature, together with the need to quickly adopt and utilise changes in today's business environment, force companies to expand their traditional way of decision making to higher level, by not only considering technical aspects of problems but also including needs and requirements of everybody involved, in order to make these changes a successful ones. The composition of today's workforce has changed and has higher expectations than the ones of their predecessors. Traditional values and behaviours are being challenged. The organisation's internal environment includes corporate culture, production technology, organisational structure and physical facilities; however, corporate culture has been gaining importance to competitive advantage and is defined as the set of key values, beliefs, understandings and norms shared by members of an organisation. Daft (1995) stated the

internal culture must fit the needs of the external environment and company strategy. So, what changes occur in the culture when external environment becomes internal?

Turbulent environment caused by the above or other elements can be effectively contained within virtual culture environment. However, it is important to understand that virtual collaboration often lacks especially informal relationships and support that are usually formed in traditional organisations. When participating in a virtual corporation, it is likely that small conflicts evolve into important and crucial ones; and consequently affect and further pressure the involved parties. Virtual environment enables potentially extremely dynamic and effective organisations. Individual's involvement in a virtual corporation overachieves traditional working efforts and is therefore crucial in the challenging environment where completely committed approaches are essential. The fact remains – conflicts, misunderstandings, and the lack of informal personal contacts can emerge extremely fast in virtual corporations due to geographically dispersed partners, and hence, it is imperative for new communication methods to be deployed.

A virtual environment usually experiences clashes and difficulties due to a broad and at the same time specialised knowledge and backgrounds of the involved parties in the primary phases of the cooperation. However, if the cooperation is an effective and a successful one, overall and individual gains develop swiftly. Being involved in a virtual corporation, the individuals as well as the organisation itself experience advantages such as better overall performance, achieving difficult to replicate products or services, accomplishing customer value, completing products or services that cannot be substituted, and executing things that have greater than average cost value margins. The core values and attitudes toward work also depend on the culture. Some of the cultures like risk taking, competition, freedom belongingness; reputation and social recognition contribute very much towards performance and contribution of the executives.

5 BEST PRACTICE

The European Union (EU) has in recent years actively participated and supported the research and development in the area of virtual organisations. The ongoing research project is the VOSTER project due

for completion in July 2004. The project has identified, characterised and integrated the virtual organisations concepts within the VOSTER consortium that conjoins thirty EU projects from fourteen leading European organisations in the field of virtual organisation with the aim of collecting, analysing and synthesising the results from the EU projects. Based on up to date research the following characteristics of virtual corporations can be identified:

- *Dematerialisation.* Whereas employed objects and manufactured products in the traditional enterprises acquire physical form, due to increased virtualisation in the virtual organisations field the products become potentially immaterial; as witnessed in forms such as virtual product and service, telework, virtual teams, virtual organisation and virtual community. Davidow et al. (1992) defined virtual products as being produced instantaneously and customised in response to customer demand (while possessing the characteristics such as 'just in time supply, work teams, flexible manufacturing, reusable engineering, worker empowerment, organisational streamlining, computer-added design, total quality, mass customization').

- *Delocalisation.* A very influential market change is the internationalisation of markets and the globalisation of competition. Delocalisation enables enterprises to arise from being locally based into gaining global presence. According to Saabeel et al. (2002) via modularisation of the product design and the production, a high degree of product/service flexibility is reached as the modular production approach opens the way to joint purchasing on e-markets. The process of globalisation provides organisations to locate their production where is most profitable. To cope with the increasing competition in a globalised market, organisations focus on a relatively small number of core competencies and co-operate extensively with other organisations to keep up with technological developments or to improve their efficiency to achieve low costs to remain their competitiveness.

- *Asynchronisation.* Presents being of digital communications without any timing requirements from transmition (Merriam-Webster Dictionary). Information and communication technology enables people to communicate via asynchronous means to receive, compose, and sent their messages when they deem convenient (Broadbent 2002) by using

E-mail, Voice Mail and Multimedia Mail Systems and Computer Conferencing Systems. The absence of time potential increases organisations' efficiency and success, as well as strong presence on the market.

- *Integrative Atomisation.* Information and communication technology enables organisations to improve their flexibility in order to stay competitive and efficiently deal with fast changing marketing conditions. According to Franke (2001) in order to decrease complexity and to increase flexibility companies employ the core competence strategy. He argued that this strategy means that the economic actors concentrate on what they can do best, they specialise in certain areas, they develop and constantly improve their core competencies. However, a core competence on its own does not create any value. Therefore, companies have to search for value chains where they can integrate their core competencies. Travica (1999) defines the process as the capability of including different external parts in order to complete a value creation process.

- *Temporalisation.* Emphasizes the fact the virtual organisation form is of a temporary nature.

- *Non-Institutionalisation.* Is associated with the lack of having incorporated structures and highly formalised system and is witness through approaches like net-working, working from home, etc.

- *Individualisation.* Introduces a way to lower cost of mass production by customisation. Stabile changes present on the market have influenced the organisation's focus from the customer-orientation towards customer-integration.

The VOSTER Project

The European Union (EU) has in recent years actively participated and supported the research and development in the area of virtual organisations. The ongoing VOSTER research project is due for completion in July 2004. The project has identified, characterised and integrated the VO concepts within the VOSTER consortium that conjoins thirty EU projects from fourteen leading European organisations in the field of virtual organisation with the aim of collecting, analysing and synthesising the results.

In the following, the connection between the theoretical appraisals and the up-to-date practice is presented. Selected case-studies are the ELEGAL Project that deals with legal and contractual issues, and the

GLOBEMEN Project that focuses on the manufacturing process of unique outputs from information and communication technology (ICT) support perspective.

The ELEGAL project has came across the two main organisational characteristics - dematerialisation and asynchronisation as demonstrated through the contracts' negotiation and signing process conducted virtually over the web. Primary users within this virtual organisation are IT management and venture capitalists (project stakeholders), as well as the clients that are involved in the process of broker services. As the project deals with the set up of the legal and contractual issues such as ICT usage throughout the VO life cycle, the changes are imposed by process improvements as well as technology and/or software implementation of value chain management and relationship management mainly through creational and operational phases of the VO's life cycle.

The GLOBEMEN Project observed the following main organisational characteristics - dematerialisation, delocalisation, asynchronisation, atomisation, and individualisation, while the primary users being the management and network or VO partners that are performing four main processes and management roles are carried out by organisations that have individuals in the background. First is a process of network initialisation, followed by the processes of network management, VO initialisation and VO operation. The process focuses on the manufacturing process of unique outputs from ICT support perspective by firstly setting up a specific VO and secondly, deals with VO operation management. Modifications vary regarding the previous levels of preparation and collaboration for each involved partner and are again witnessed in the organisational design in the creational and operational phases of the VO's life cycle.

6 CONCLUSION

The paper aimed at introducing and evaluating the transition of the organisations from traditional into virtual business modes by investigating basic concepts of virtual organisations as well as the possibilities of effective virtual culture deployment. The theoretical acknowledgements have been extended with the obtained information from the ongoing EU research project conducted in the field of virtual organisations.

Based on above discussed issues, market conditions (the supply and the demand) have been changing. Customers are increasingly becoming aware of their specialised needs and therefore demand more specialised products. Consequently organisations need to develop and produce a broader product range that satisfies those needs. The individualisation of products means that companies have to tailor their output (products and/or services) according to individual customer wishes (Franke 2001). The comprehension of the term product has evolved as well. Products are not just things with features; they are things-with-features bundled with services (Fuller 1993). Mass customisation is associated with small volumes and is according to Saabeel et al. (2002) a production and delivery process through which mass-market goods and services are individualised to satisfy a very specific customer need, at a competitive price. Therefore, organisations need to find ways to satisfy these demands by connecting into efficient and successful dynamic networks.

Frederix (2002) stated that virtual corporations consisting of geographically dispersed, independent units are the reality in global economy. The main force of virtual deployment is the ability of a company to participate in projects otherwise too complex by providing specific core competences and simultaneously gaining the same from the involved partners. According to Cevenini (2002) every partner contributes to the final goal by concentrating on specific competencies; and every ring of the value chain is taken up by those partners who are the best at it. The evolution of virtual organisations is as a new mode provoking different feelings and expectations among the staff and may consequently result in a development of conflict situations. Every organisation, traditional or virtual, needs to be aware of potential problems and barriers that can arise. Virtual culture is a reality, and has evolved from traditional business culture. Every new change provokes certain actions and it is up to the realisation of such actions as well the involved individuals to embrace virtual culture.

To conclude, virtual business environment arises as a consequence of a need to improve market positions, gain competitive advantages, etc. New dynamic and effective companies deploy and participate in virtual partnerships in order to successfully identify market demand, develop new products and services, identify new opportunities to improve quality of their work and lastly find possibilities to lower organisations' costs. Each partner's contribution in a virtual corporation overachieves traditional working efforts

and is hence vital in the challenging environment where completely committed approaches are fundamental.

However, as illustrated by selected case-studies, such promising theory is not (yet) effectively deployed and followed by the up-to-date practice. Even though some fundamental forms of virtual partnerships are being seen and exercised, a true virtual organisation with its elements such as dematerialisation, delocalisation, asynchronisation, integrative atomisation, temporalisation, non-institutionalisation and individualisation is still long way from becoming a part of everyday business world.

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