

Business Trends and Tendencies in Organization Design and Work Design Practice: Identifying Cause-and-Effect Relationships

Tomislav Hernaus

University of Zagreb,
Faculty of Economics and Business
Trg J.F. Kennedyja 6, 10000 Zagreb, Croatia
thernaus@efzg.hr

Abstract

Current global business environment has a strong impact on theory and practice of organizations, as well as on working behavior of their employees. Increased complexity and competitiveness is changing settled ways of organizing and working. The ultimate search for the holy grail of achieving organizational effectiveness through better design solutions is gaining momentum. There are many possible areas and means for improvement. Great opportunities emerge from better understanding of contemporary organization and work environment. To seize them, the link between organization design and work design tendencies will be emphasized. Through an in-depth theoretical research on current business trends and their impact on the changing nature of work in organizations, potentially very strong patterns between these two different environmental categories and levels of analysis will be identified. Our extensive analysis of current trends and tendencies in organization design and work design field will provide useful insights for business practitioners and researchers.

Keywords: business trends, organization design, work design, systems approach

Received 1 November 2010

Revised 23 February 2011

Accepted 18 March 2011

JEL Classification: D02, L20, M21

1. Introduction

The global business environment is characterized by rapidly changing requirements that are increasing complexity of doing business and raising the level of competitiveness. The established ways of organizing and working have been put under question. In order to survive, organizations have to quickly respond to accelerating demands for increasingly specialized and integrated products or services, faster time-to-market capabilities, higher quality and more responsive services. Maintaining a status quo is no longer an option, quite the contrary, the organizational ability to change has

become a necessity. The strong need for adaptability and flexibility is the consequence of emerging business trends that are reshaping the world of business.

Various business aspects change significantly on a daily basis. The impact of these changes is stronger than ever and survival in the corporate arena hinges on a better understanding of a range of external and internal forces influencing organizations at various levels.

Many of the emerging forces in business environment are not appropriately covered in the organizational literature and have not been put in the context of their consequences manifested at organizational or work level. Although numerous authors mention possible causes and consequences of required organizational changes (e.g., Galbraith, 2002; Goold & Campbell, 2002; Mohrman, 2002; etc.), only a few of them provide trivial cause-and-effect explanations of possible interactions at various levels.

In other words, it can be argued that the mutual interactions of business trends and organization design tendencies have not yet received sufficient attention. The same can be said about the mutual impact of the changing nature of work and work design trends. It is very hard to trace the connections between these intertwined aspects of business life. In order to achieve a better understanding of the current requirements and to develop solutions which are practicable for managers and consultants, it is necessary to conduct comprehensive analyses.

Both organizational theory and practice are likely to benefit from research into the hidden cause-and-effect relationships between uncertain and unpredictable business trends on the one side and deterministic or eligible managerial decisions on the other. Moreover, determining the cause-and-effect relationships might reveal areas with a potential for improvement and set the ground for achieving higher levels of organizational effectiveness.

In order to create a context which would stimulate the development of both theory and practice, an in-depth theoretical research will be conducted. The research aims to recognize the links between various external forces, present both in general and specific environments, and study their impact on contemporary decisions about organization design and work design practices. Firstly, a detailed overview of current business trends, modern tendencies in organization design theory and practice will

be presented. Secondly, the changing nature of work and emerging work design practices will be discussed. Thirdly, trends and contemporary design solutions at the organizational and work level will be outlined separately. Their systemic and multilevel effects will also be recognized. Finally, our analysis of the widespread network of current trends and tendencies in field of organization and work design will provide useful insights for researchers and practitioners alike.

2. Business Trends and Systems Perspective

In order to recognize and understand the key design elements of organizations and their work, it is essential to identify the key trends in business environment. Those trends do not only shape the way business is done, but also affect the quality of life for each employee in particular and for people in general. The importance, multidimensional nature and complexity of mutual influences and relationships between various trends and tendencies call for applying the systems perspective.

Firstly recognized in biology and nature studies (von Bertalanffy, 1951), the systems perspective has found its full application in conceptualization of complex social systems' interactions (e.g., Katz & Kahn, 1966; Thompson, 1967; Beer, 1980) where organizations are defined as systems with permeable boundaries (Swanson, 2007) that are strongly dependent on their wider context. By addressing the influence of specific and general environment, systems approach dominated the organizational science field in the mid-1960s (Shafritz & Ott, 1987). It offered an intellectual basis for the study of various, dynamic interdependencies present in the business environment.

Systems theory and systems thinking have been employed as a broad conceptual platform for intervening in organizational settings (Lowman, 2002). Rummler and Brache (1995), as well as Swanson (2007) have proposed multilayered models of organizations as systems in which the influence of environment (economic, political, social, cultural, demographic, etc.) on organizational resources and their main characteristics (strategy, structure, technology, etc.) are emphasized as one of the key determinants of organizational effectiveness. There are many other comprehensive conceptualizations and applications of systems thinking and systems approach to various aspects of conducting business, addressing its widespread usage and applicability.

As systems approach dominates much of the thinking both in business and academia, it will be applied for the analysis of complex relationships between various trends and tendencies emerging in everyday business practice. It complies with the recognized pattern of reciprocal influences between behavior and work characteristics at the micro level, and organizational structure and

design at the macro level. Additionally, the systems approach enables a more holistic perspective, reasoning at an abstract level and thinking in relational terms. It emphasizes that everything is connected to everything else and that it is often worthwhile to model businesses in terms of flows and feedback loops (Harmon, 2003).

Reasoning in the abstract is necessary as it allows us to anticipate future business challenges. It is only a starting point – a foundation – for designing and managing organizations that respond effectively to the new reality of cutthroat competition and changing customer expectations (Rummler & Brache, 1995). Although the future ultimately remains unknowable, its roots are in the present and the past. In other words, we can identify many of the key developments for the next few years, from what we observe today. Current trends in science and technology, economic development, government policies, social structure, demographics, and lifestyles will surely shape business environment for the remainder of the decade (Grant, 2009).

Although it is almost impossible to determine all factors influencing modern business practice directly, and tendencies at organizational and work level indirectly, it is necessary to mention those that are the most important:

- *Globalization;*
- *Competitiveness;*
- *Diversity;*
- *Flexibility and adaptability;*
- *Information technology;*
- *Outsourcing;*
- *Knowledge economy.*

Globalization. Global movements along with political and technological changes, cultural and environmental shifts, and economic turnarounds have led to better availability and connectivity, as well as resulted in lower trade barriers (e.g., Ohmae, 1995). Consequently, businesses started operating in various markets, establishing numerous subsidiaries and developing offshore activities. Globalization also led to the creation of a globally competent workforce and the global labor market (Parker & Clegg, 2006). Due to lower transportation costs, globalization has made the world a global village, with new markets offering new challenges and opportunities (Hesselbein & Goldsmith, 2009). Global interdependence has been broadened, deepened and accelerated in all aspects of work and life (Guillén, 2008), which strongly influenced not only organizations, but national economies and individuals as well. The capability of doing business globally is no longer an option, but a very important competitive advantage (Johansson et al., 1993).

Competitiveness. With the competition getting tougher, the maneuver space on the market is reduced. The conditions emphasize time-to-market capability, cost

reduction and performance, as well as customer orientation and creation of strong and sustainable partnership relations. Converging markets force businesses to develop strategies for competing within a far broader market space. The new realities of the 21st century have triggered new thinking about the nature of strategy, the responsibilities of the corporation, and the role of management (Grant, 2009): If a company is to stay competitive, it must continually adapt its products and services to the ever-changing needs of the customer (Mozenter, 1999).

Diversity. The structure of workforce has changed over the years, It has become more heterogeneous – including various aspects of gender, race, cultural background, religion and personal traits. This diversity is a source of innovation, although it can also create conflicts and numerous communication problems. It is necessary to show respect for cultural differences, as well as for different institutional frameworks. Furthermore, as the knowledge, skills and competencies of particular groups of individuals have increased, it has become necessary to apply different approaches to different employee categories.

Flexibility and adaptability. Organizational systems, processes and people can react differently in various situations. Although the importance of flexibility and adaptability, related to animal and plant species, has been thoroughly addressed by Darwin (1859) and his theory of natural selection, business people have only recently become aware and started to apply processes of organizational darwinism (mostly through population-ecology theory of organizations, e.g., Hannan & Freeman, 1977; Aldrich, 1979; Carroll, 1984). It is now clear that sustainable development depends on adaptability. The speed of change emphasizes the need for flexibility and adaptation, which can be achieved by using more organic structures, by implying autonomy and boosting innovation activities.

Information technology. Information technology (IT) has changed the nature of potential organizational solutions in a revolutionary way. By loosening the rigidity of traditional hierarchies it has created new alternatives (Walton & Nadler, 1994). IT has enabled cheap and quick distribution of information and data among numerous employees who may be geographically dispersed. By reducing interaction costs, IT has not only removed the traditional spatial and time constraints, but has also eliminated the need for several hierarchical levels. Furthermore, the introduction of digital technologies and new communications media has encouraged better collaboration and teamwork, improved the measurement and management of business processes (e.g., Burlton, 2001; Becker, Kugeler & Rosemann, 2003; Harmon, 2003), as well as allowed development of knowledge management practices (e.g., Nonaka & Takeuchi, 1995;

Roos, 1996; Despres & Chauvel, 2000). As technology evolves at ever faster rates, technological changes in general, and IT improvements in particular, should be seen as a force with the biggest current and future impact on organizations.

Outsourcing. Increasing competition has made it impossible for organizations to excel in all areas of business activity. Consequently, a new business philosophy evolved. It emphasizes the need for focusing on core business activities which create added value for customers. At the same time, secondary activities, those that are not optimized or not recognized as sources of competitive advantage, should be eliminated or outsourced to external partners (e.g., Duening & Click, 2005). In other words, organizations should perform only the activities at which they are the best, and focus on developing their excellence in a particular area. For handling all other business issues they can engage partners who are specialized for particular services. As a consequence, various organizations join together through contracts, joint ventures or business networks which offer mutual benefits for each party.

Knowledge economy. Although historically organizations were more production-oriented and employees were mostly dealing with simple and routine tasks. technological development and the rise of the service sector triggered further economic development and became synonymous with business success. Knowledge and knowledge economy have taken a dominant position over capital, natural resources or labor. Knowledge is the key source of competitiveness. Designing effective systems for creation, collection, acquisition, distribution and usage of knowledge has become the key challenge in organization design, while business analytics has been hailed as a new science of winning (e.g., Davenport & Harris, 2007; Davenport, Harris & Morison, 2010).

Aforementioned business trends are mutually interdependent and complementary in nature. Acting together, they often impose demanding requirements on organizations and business community as well as create hostile environmental and working conditions. The need to respond to the changing and unstable context motivates academics, managers and consultants to work on developing organizational solutions that will enable organizations to respond to unpredictable challenges and make them sustainable.

3. Tendencies in Organization Design Theory and Practice

The first decade of the 21st century is marked by the unprecedented interest in the new tendencies in organization design. New organizational forms and managerial philosophies have been studied, introduced and proposed. Changing environmental conditions led

to considerable changes in traditional organizational boundaries, which made it necessary to develop new ideas and approaches. Organizations realized that they need to not only focus on how well they are doing today, but also to be especially concerned with how well they can respond to changing environment (Lawler III & Worley, 2006).

Responses to emerging business trends are developed in the organization design field and include the following:

- *Downsizing;*
- *Changing nature of organizations;*
- *Multidimensionality;*
- *Networking;*
- *Lateral integration;*
- *Customer orientation;*
- *Process orientation;*
- *Knowledge distribution.*

Downsizing. Contemporary organizations tend to flatten their structure by removing managerial levels (de-layering) and giving more responsibility for managing and coordinating to teams and employees. Hierarchical levels are eliminated in order to enable making decisions faster and closer to the grass-roots level. Information technology supports better communication and gives a larger span of control. Consequently, it is possible to create flatter structures with fewer hierarchical levels in which autonomy and responsibility are kept at lower levels. Downsizing reduces costs significantly since fewer workers are employed per unit of output as compared to some previous level of employment (Cameron, Freeman & Mishra, 1993).

Nature of organizational changes. Constant change is a derivative of all other macroeconomic forces. As a result, organizations are changing more often, faster and more significantly than earlier. The process of “patching” – where new organizational units are continually being created, merged, and redefined to foster initiative – is prominent. The knowledge and skills needed for designing whole-scale systems are constantly evolving. Managers and consultants need to learn how to simultaneously analyze, design and implement organizational solutions (Walton & Nadler, 1994). Furthermore, since the environment and organizational tendencies are bound to get more turbulent and the pace of change to increase (Pasmore, 1994), it will be a great challenge to build “dynamically-stable”, flexible and adaptable organizations which will still be able to retain their basic identity.

Multidimensionality. As the business environment is becoming more complex, more competitive, and less predictable, survival hinges on higher level performance with a broader range of capabilities. Building multiple capabilities and achieving excellence across multiple areas can only be accomplished if organizations abandon the one-dimensional focus (e.g., on functions

or products) and adopt design solutions that allow them to focus on two or more dimensions (e.g., functions, products, regions, customers, distribution channels, processes, etc.) concurrently. Organizations that address several dimensions simultaneously and deal with complexity internally may be perceived by customers as being more sensitive and more approachable than competitors. Although it is not always possible to avoid multidimensionality, larger organizations should manage its complexity in an intelligent way.

Networking. Organizations are developing stronger relationships with stakeholders. Strategic alliances and partnerships are more common. The emphasis has been put on developing long-term relations with suppliers, partners and customers, while coordination and information sharing along the value chain has been recognized as an important practice. Intranets that link together internal units of the enterprise with outside suppliers, customers, and partners have had a major influence in blurring corporate boundaries (Grant, 2009). Furthermore, Internet technology plays a critical role in increasing the efficiency of communication and coordination within networks, and enables organizations to conduct business virtually through multi-firm collaborative networks (Miles, Miles & Snow, 2006) and communities of practice (Snow & Strauss, 2008).

Lateral integration. Numerous indicators reveal the importance of lateral integration in modern organizations. The traditional organizational model, comprised of functional units and integrated by top management, is increasingly getting replaced by organizational models which can integrate a larger number of business units with a common focus on customers, products, projects or processes (Galbraith, Lawler III et al., 1993). The new lateral orientation and lateral integrative mechanisms (e.g., Mintzberg, 1979; Galbraith, 1994; Mohrman, 2006) will upgrade and, to a certain extent, replace the traditional hierarchical logic.

Customer orientation. Customers are getting more demanding and their satisfaction is emphasized. They are no longer prepared to tolerate lower quality or bad service. Therefore, in order to keep the present and attract new customers, organizations should be designed, led and managed in such a way that customers can easily approach them. In other words, the number of contacts a customer can use to communicate with an organization (“moments of truth”) should be minimized. Moreover, numerous organizations are trying to differentiate themselves through their ideas, knowledge, experience and capability of delivering products and services fully adapted to their customers’ needs (Galbraith, Downey & Kates, 2002), which results in front-back organizational solutions.

Process orientation. The desire to improve coordination

across multiple, linked capabilities and to reduce non-value-added activities has encouraged organizations to align their structures more closely with their internal business processes. By recognizing business processes and focusing on them, organizations gain a more realistic view of their functioning (Bosilj Vukšić, Hernaus & Kovačič, 2008). Such a horizontal approach allows significant savings in terms of time, resources and money, while providing better quality and higher levels of customer and employee satisfaction. Process-based organizational solutions erase the traditional functional barriers and result in more integrated organizations (e.g., Ostroff, 1999; Gardner, 2004; Crosetto & Macazaga, 2005; Hernaus, 2008).

Knowledge distribution. Capabilities, skills and knowledge of organization's members have been identified as the most valuable capital which cannot be copied, but needs to be developed. By introducing a learning organization concept (Senge, 1990), as well as developing knowledge management practice, a lot of attention is directed towards organizational learning, knowledge collection and distribution in an organization. Quality systems for data collection and analysis, as well as for their processing and distribution, are becoming a very important source of organization's capabilities and competitiveness.

It is evident that the field of organizational design offers many novel solutions. Value in organizations is created through unique and internally varied organizational forms. While new organizational solutions are constantly being developed, the older ones are being thought over and adapted, in order to create organizational capabilities that provide competitive advantage (Lawler III, 1996). Front-back organization could be recognized as one of the most influential emerging organizational forms, together with network organization, ambidextrous organization, and process-based organization. These organizational shapes are characterized by multidimensional organic structures which are primarily founded on teamwork. In other words, teams have become the main building block of organizations, those with traditional as well as those with modern structure.

4. Changing Nature of Work

Present day work practices differ significantly from both the traditional model and recent work practices. Employees are better informed, better educated, and less tolerant of work for the sake of work. Physical labor has been replaced by information and knowledge work, supervision by direct observation is often impossible, and service sector has supplanted manufacturing as the dominant employer. Furthermore, the rapid pace of change now demands that decisions be made at the working level (Tenner & DeToro, 2000).

The nature of work is changing dramatically. Previously, work tasks could be anticipated, they were mostly routine, structured, explicit and individual in nature. Currently, as well as in the future, work activities will be ambiguous, abstract, team-oriented, changeable and from time to time chaotic (Cohen & Mankin, 1998). Many new forms of work have recently appeared, e.g. virtual work, distributed work, project work, flexible work, contingency work, telework, etc. The new and challenging nature of work has been empirically confirmed (e. g., Kersley et al., 2006). It has been confirmed that economic, technological and social developments have thoroughly changed work practice (Edwards, Scully & Brtek, 2000). Information technology in particular stimulated the appearance of a new work environment (Howard, 1995) by making it more abstract and flexible.

As the nature of work continues to change on a constant basis the speed of subsequent change in work design practice accelerates dramatically. In order to understand new work design trends, one should firstly recognize the principal aspects of the nature of work which are changing rapidly and irretrievably: (1) sectoral changes; (2) changes in individual employee characteristics; (3) changes in demographic characteristics of the workforce; and (4) cognitive demands and the emergence of knowledge work.

Sectoral changes in the nature of work imply a change from production-oriented work (products are produced by physical labor) to service-oriented work (services are delivered on the basis of knowledge) and direct contact with customers. Job focus is changing as well, mostly in the sense of the number of employees in different sectors and occupations. Finally, the numbers of white-collar and knowledge workers are increasing and the numbers of traditional blue-collar workers declining.

Individual employee characteristics have changed significantly. Employees want to understand the purpose of their work and to have an insight into the whole business process. They want to know how they are contributing to the organization and to perform meaningful work. Even though the majority of workers are still trapped in jobs that frustrate and constrain them, they want to have control over their work and utilize their potential and talent. These changes, as well as the increasing complexity of work design, are related to increased levels of education.

Not only that individual employee characteristics and preferences are changing, the demographic characteristics of workforce are also changing in ways which significantly affect work design. Demographic issues influence the theory and practice of work design in several ways. Firstly, the changing structure of workforce will affect both new and traditional characteristics of work. Secondly, even moderate impact of age, gender and

race characteristics might result in different relationships between work characteristics and performance outcomes. Finally, factors such as age, gender and ethnical status also have an impact on antecedents and processes of work design (Parker & Wall, 2001).

Finally, *the cognitive demands in the nature of work* and emergence of knowledge work are becoming more evident. As knowledge gets obsolete every 5 to 10 years and our cognitive abilities become more sophisticated, it is vital to recognize the importance of continuous, life-long learning and development of more complex, intellectually more demanding tasks. According to Cohen and Mankind (1998), work as a general category is increasingly based on knowledge. Strategic competencies, strong interdependency, process orientation, geographical connection, generating and distribution of knowledge have a strong impact on work design, i.e. on its dynamism, cross-functional nature, systemic focus, and integration.

While the abovementioned changes in the nature of work are evident and have been widely recognized, theories of work design have not been developed concomitantly. There has been little theoretical research in this area after Hackman and Oldham's Job Characteristics Model from the 1970s. However, recent changes in the nature of work have renewed the research interest and launched a new stream of research in work design area.

5. Work Design Trends and Practice

Work design theory has a strong base in business practice. Designing work is a highly complex and demanding activity that influences performance of business processes (Sikavica & Novak, 1999). Therefore, it is important to identify state-of-the-art and future trends in work design used by numerous, primarily high-performing organizations. Best practices often set standards for the majority of organizations which lag behind, passively observing and implementing new solutions with a delay.

Still, even when it comes to the most successful organizations, changes in the area of work design and employee motivation mechanisms tend to follow the dictate of technological and other environmental developments (Mohrman, 2003). As a result, work design solutions are numerous. The most significant trends include the following: (1) systemic character and higher complexity of work; (2) lack of clear job boundaries; (3) variability of work design; (4) stronger focus on work and competencies (rather than jobs); (5) higher work interdependence; (6) emergence of group-based forms of work design; (7) wider application of knowledge, skills and competencies; (8) optimal utilization of human potential; and (9) job crafting.

Systemic character and higher complexity of work. Instead of focusing on lines of responsibility, individual tasks and boxes in an organization chart, present-day work design aims to connect employees and tasks in the system as a whole. Integrating tasks into complete processes is no longer an option, but the absolute requirement for performing work and achieving results (Burlton, 2001). The focus on processes is further supported by the fact that work of an individual is becoming more cross-functional and multi-level in nature. Correspondingly, organizational contribution and system aspects of knowledge work have been getting more widespread (Swanson, 2007), and the growing complexity of work is becoming increasingly problematic to deal with (Bryan & Joyce, 2007).

Lack of clear job boundaries. Technology, dynamic global markets and flattening of organizational structures have caused jobs to be far less static than they used to be. Responsibility boundaries between jobs are getting more unclear in many environments, and employees are encouraged to perform work at anytime and anywhere (Cohen & Mankin, 1998). Consequently, it is not surprising that work analysis can be applied to a broad range of jobs and roles focusing on general business activities and broad dimensions (Sanchez & Levine, 2001). Hence the term work seems to be replacing the traditional term job.

Variability of work design. Forms of work design should not be permanent and should not be presented as permanent. Exactly the opposite, work design should be seen as a strategic and operative tool which changes as a consequence of strategic changes or modifications of its constituent elements (Mohrman, 2003). This means that organizations and related jobs have become more fluid than tasks themselves (Swanson, 2007). Using dynamic work assignments and relationships, individuals are temporarily given responsibility for performing a group of tasks. Furthermore, workers' skills and the needs of the organization are being adjusted (Lawler III & Worley, 2006).

Stronger focus on work and competencies. Modern trends in doing business made the conventional workplace obsolete in many firms. Since knowledge economy has transformed the organizational and technological environment, employees are flexibly allocated to a larger number of tasks and roles which require their competencies (Mohrman, 2003) or to a changing combinations of tasks that need to be performed (Finegold, Lawler III & Ledford Jr., 1998). This practice is popularly called de-jobbing of the organization and has led some experts to announce the end of workplace as a fixed, stable collective of predefined tasks and responsibilities (Bridges, 1994). As a result, organizations have started abandoning the traditional concept of job and replacing it by the concept of work.

Higher work interdependence. Work is getting multifunctional, oriented towards consumers and business processes. As products and services get more complex, employees need to have more knowledge, skills and competencies. Customers are frequently offered custom-made integrated solutions. Work in customer-oriented companies requires a high level of interdependence between members (Galbraith, Downey & Kates, 2002). It is necessary to achieve a higher level of lateral coordination, which will enable individuals to make trade-off decisions and cooperate among themselves as necessary.

Emergence of group-based forms of work design. Work is more often performed in groups rather than individually. Organizations assign working tasks to multifunctional teams in order to integrate different parts of organization. The trend towards teamwork is strongly emphasized in the literature (e.g., Mohrman, Cohen & Mohrman Jr., 1995; Kersley et al., 2006; etc.), and one can anticipate that group-based forms of work design will be even more common in the future. Such practices will lead to a higher work complexity and further adjustments of current organizational concepts, strategies, methods, and skills will be necessary.

Wider application of various knowledge, skills and competencies. Organizations are increasingly looking for employees who possess the knowledge, skills and competencies required for performing different tasks. Moreover, employees are required to undertake both exploratory and exploitation activities as part of their jobs. Consequently, numerous organizations are turning away from the traditional concept of one person performing specialized work. Instead, emphasis is put on the development of human resources who understand both broader strategic issues and specific tasks in organizational environment (Nadler et al., 1992). Although organizations will still need specialists, they will have to expand their knowledge, skills and competencies in order to respond on new organizational requirements. Specialists will be expected to learn fast and to demonstrate a deep understanding of systemic aspects of work tasks.

Optimal utilization of human potential. The usage of competencies and competency-based human resource management systems is getting more common. It enables managers to adjust work situations to the combination of individuals available. Instead of directing efforts to align individuals with present job descriptions, it is becoming possible to build teams, develop goals and adjust work roles to available talent (Lawler III & Finegold, 2000). It is extremely important to utilize the full potential of each employee, as that will lead to a higher level of job satisfaction, higher work performance, minimal absence rate, and, indirectly, to higher organizational success (Lawler III, 1996). Clearly, work should be designed to

stimulate employee development.

Job crafting. Wrzesniewski and Dutton (2001) described a creative, improvisation process which reveals ways in which individuals locally adapt their jobs so as to create and sustain a viable definition of their job and their work identity. The model illustrates how employees craft their jobs by changing physical and cognitive boundaries in order to shape relational frontiers of their jobs. These individuals actively craft their jobs by physically changing the frontiers of tasks, relational frontiers and/or cognitive frontiers of a job. In this way, they create different jobs for themselves in a broader context of already defined jobs.

To sum up, it is evident that changes in the nature of work and related forms of work design have a significant impact. The present-day job context is greatly different from the context in which the main theories of work design were developed (during the 1970s). This does not mean that there is no continuity, but clearly shows that we need to reorient and pay more attention to the causes of work design from the broader context.

6. Interplay between Organization Design Tendencies and Work Design Trends

The broad and highly developed concepts of organization design and work design were historically studied separately. Although the practice has evolved as a result of singular and somewhat distant developments of macro and micro perspectives in the area of organization science, interactions and cause-and-effect relationships between organization design and work design need to be studied more thoroughly. To enable such analysis, they should be positioned in and understood as parts of the same business and scientific context.

The existence of interaction and reciprocal relationships between macro and micro aspects of organizations was recognized 30 years ago (e.g., Roberts, Hulin & Rousseau, 1978; Van de Ven & Ferry, 1980; Moorhead, 1981; Griffin, 1982; Mossholder & Bedeian, 1983; Liska, 1990). However, only recently did the strengthening of multilevel approach contribute to the particular focus (e.g., Klein & Kozlowski, 2000), which development makes integration of issues at various levels of analysis possible both theoretically and methodologically.

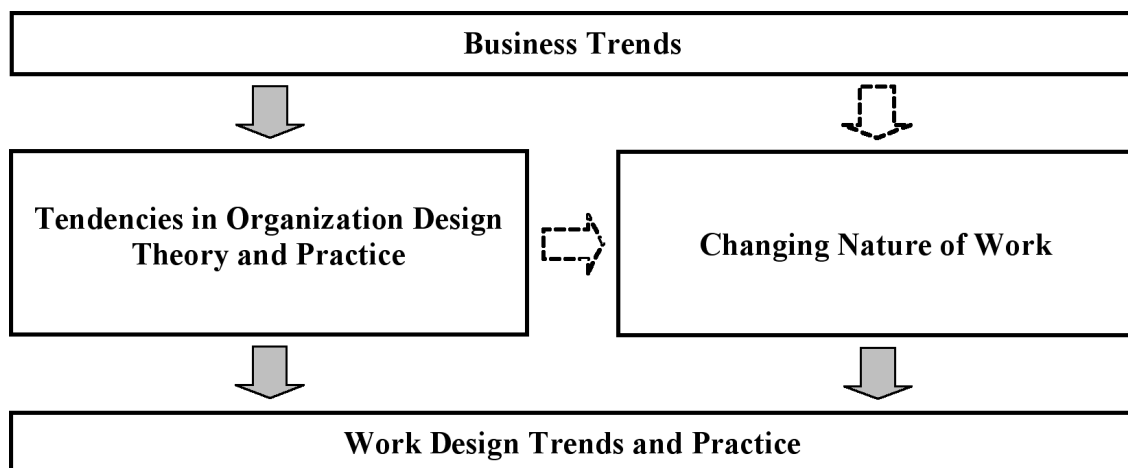
By combining and connecting macro and micro perspectives the multilevel approach throws a new light on complex relationships between organization design and work design, resulting with a more complete understanding of their numerous interactions. Namely, since we are aware that many problems, present at one level of analysis, manifest at others, it is clear that we need to analyze the impact of organizational context on work design, and vice versa, to investigate how aspects of work design shape the practice of organizational design.

Using a multilevel approach and taking into consideration contextual causes allows us to anticipate the forms of work design present in different environments with more accuracy, as well as to understand the impact of comprehensive changes in business environment on work design. If contextual and macro-organizational characteristics and their impact on micro-organizational features are taken into consideration, it is easier to analyze and anticipate design practices, and empirical research results become more consistent. Such a bottom-up approach is far more ingrained and more dominant than the opposite method: the study of impact of job design and micro-organizational aspects on organization design and macro-organizational issues. Therefore, the focus of the paper is entirely on the former, i.e. the relationship between different categories or levels, of trends and tendencies present in modern business.

on each other (Figure 1.). It is therefore obvious that the complex reality of organizational practice can only be studied using a comprehensive approach. The nature of trends and tendencies mentioned leads us to the conclusion that internal organization of firms opens up immense opportunities. Our analysis supports the claim made by Bryan and Joyce (2007): Firms with efficient internal organization have an advantage at seizing the profit-making opportunities in its environment. Consequently, it is extremely important to demonstrate the interaction between organization design tendencies and practice on the one hand, and work design trends and practice on the other. It will enable managers to optimize organizational systems and recognize the importance of upcoming business trends.

There are numerous cause-and-effect relationships

Figure 1: Conceptual interaction between trends and tendencies



Furthermore, when it comes to the study of current trends and tendencies in business environment, it is necessary to distinguish between the level of analysis and the level of influence. Business trends can be characterized as the broadest, highest-level category, because of their strong and widespread influence on all levels: the industry, country and/or global level. In general, they strongly influence tendencies in organization design, while their impact on the nature of work is somewhat weaker, although still present. Furthermore, at the organizational level, tendencies and modern organization design ideas strongly shape and prescribe useful work design practice. The practice is also under a strong influence of the changing nature of work, where the latter is indirectly caused by emerging business trends. It is obvious that relationships between different categories and trend levels are quite complex, with numerous direct and indirect links, as it is aggregately shown in the figure 1.

It is evident that different trends and tendencies impact

between tendencies of organization design and trends in work design. It is, therefore, important to identify and emphasize only the most significant ones. In doing so, it is very difficult to analyze these impacts separately as all tendencies and trends act simultaneously. Although the table 1 lists all potentially important factors, the theoretical discussion that follows aims to highlight only the few most important cause-and-effect relationships. The relationships are presented in table 2.

Flatter and more flexible organization structures, dynamic business processes, as well as changes in other organization design elements necessarily lead to continuous changes in the practice of work design. To be more specific, organization design presents the main contextual element which can either limit or encourage processes of work design. Naturally, all changes are conditioned by the business trends which in some cases directly, and others indirectly, impact the nature of work inside an organization. In other words, in a

Table 1: Overview of potentially strong influences of organization design tendencies on work design practice

<div> <div>Tendencies in Organization Design</div> <div>Work Design Trends and Practice</div> </div>	downsizing	organizational changes	Multidimensionality	networking	lateral integration	customer orientation	process orientation	knowledge distribution
systemic character and higher complexity of work	●		●		●			●
lack of clear job boundaries	●	●	●		●	●	●	
variability of work design		●	●		●		●	●
stronger focus on work and competencies			●	●			●	●
higher work interdependence	●	●	●	●	●	●	●	
emergence of group-based forms of work design		●	●		●	●	●	
wider use of various knowledge, skills and competencies	●	●	●			●	●	●
optimal utilization of human potential	●	●	●					●
job crafting								●

Table 2: Cause-and-effect relationships and propositions

PROPOSITON 1.	<i>Downsizing strategies make the work of employees more complex and systemic in nature.</i>
PROPOSITION 2.	<i>Frequency, scope and speed of organizational changes lead to more variable work design for each particular individual.</i>
PROPOSITION 3.	<i>Multidimensionality strongly influences the necessary level of work interdependence and results in more complex work design.</i>
PROPOSITION 4.	<i>Networking and outsourcing strategy provide a stronger focus on work and competencies.</i>
PROPOSITION 5.	<i>Lateral coordination boosts the emergence of group-based forms of work design and raises complexity of work.</i>
PROPOSITION 6.	<i>Customer orientation requests higher work interdependence.</i>
PROPOSITION 7.	<i>Process orientation leads towards higher work interdependence and wider use of various knowledge, skills and competencies of employees.</i>
PROPOSITION 8.	<i>Knowledge distribution causes higher complexity of work and stronger focus on competencies resulting in optimal utilization of human capital.</i>

contemporary business environment it is necessary to emphasize the role of systemic, i.e. multilevel features and interdependencies. Those who are oblivious to the impact

of these crucial interdependencies will not be possible to seize the opportunities and eliminate the threats of future organizing solutions.

7. Conclusion

In the organizational science a paradigm is developing which will bridge the macro-micro gap both in theory and in empirical research. The organizational research field is undergoing a positive change: a stronger focus is put on organizations as systems, while the systems theory of organizations and multilevel approach to organizations are more frequently used. A multi-level understanding of organizational reality will create preconditions for further improvement of organizational theory and practice by encouraging integration of the field. Starting from precisely decomposing the system to different subelements, but not losing sight of the context, offers potentially useful cognitions of interconnectivity and cause-and-effect relationships between different aspects.

In order to design organizations that will successfully deal with the upcoming competition and increasing changes in consumer expectations, it is necessary to look for systemic and cause-and-effect relationships at various levels of analysis – industry, organization, and work. Namely, work is not being done in a vacuum but in organizations that participate in a market or the global economy. The most successful contemporary organizations are the ones capable of aligning a flexible organizational solution with flexible forms of work design (Gyan-Baggour, 1999). Therefore, organization design does not only shape, but also limits possible choice, i.e. forms of work design.

In an attempt to identify some basic links and guidelines, we jointly presented the current trends in doing business and the ensuing tendencies at the organizational and work level. Furthermore, it is possible to assume that the impact of certain contextual factors on work design will be direct and stronger, whereas other factors will have indirect and weak effects. Likewise, certain trends in work design can be more limited by the broader organizational context, while others can be under their minimal impact. The issue of alignment is very important. Although the problem arises from differences in the dynamics and change tendencies of organization design and work design, the two need to be analyzed as naturally complementary concepts.

In addition to the problem of alignment, the inability to precisely determine cause-and-effect relationships between various variables should be emphasized as a research shortcoming. Although systems perspectives conceptually strive to present a realistic picture of the world, with all of the necessary interdependencies, it is almost impossible to obtain a thorough insight in the nature of particular relationships without applying the *ceteris paribus* assumption.

Furthermore, cross-level and multi-level relationships can be, and usually are, reciprocal in nature. We have applied the top-down approach, which leaves plenty of space for research activities aimed at investigating micro-

macro influences. Additional empirical investigations, both top-down and bottom-up, should be conducted in order to gain a better understanding of various bivariate and multivariate relationships. Such reciprocal influence between organizational behavior and work design on one side, and organizational theory and design on the other, is in compliance with the main characteristics of systems theory of organizations, and supported by the emerging multi-level approach.

Contingency theory of organizations also supports this way of thinking and requires more theoretical and empirical research regarding the alignment between various elements of organization design and work design, under the umbrella of business trends in general. As accomplishing the alignment between macro- and micro-organizational aspects presents one of the crucial and still insufficiently clear cognitions in the field of organization science, it is necessary to encourage further research on the topic. Finally, achieving a better understanding and harmonization can result in significant improvement of work and organizational success. At the same time, one should have in mind that business trends, and especially tendencies of organization design at macro level, define the “playing field”, while each organizational unit, team and/or individual in the organization should learn how to be effective and to “play” successfully in fundamentally different situations. In spite of existing constraints, it is still possible to differentiate successful from unsuccessful business practices at the micro level of work design.

Reference List

1. Aldrich, H. E. (1979). *Organizations and Environments*. Englewood Cliffs: Prentice Hall.
2. Becker, J., Kugeler, M., Rosemann, M. (2003). *Process Management: A Guide for the Design of Business Processes*. Berlin: Springer.
3. Beer, M. (1980). *Organizational Change and Development: A Systems View*. Santa Monica: Goodyear Publishing.
4. Bosilj Vukšić, V., Hernaus, T., Kovačič, A. (2008). *Upravljanje poslovnim procesima: organizacijski i informacijski pristup*. [Business Process Management: Organizational and IT approach]. Zagreb: Školska knjiga.
5. Bridges, W. (1994). *Jobshift*. Reading: Addison-Wesley.
6. Bryan, L. L., Joyce, C. I. (2007). *Mobilizing Minds: Creating Wealth from Talent in the 21st-Century Organization*. New York: McGraw-Hill.
7. Burlton, R. T. (2001). *Business Process Management: Profiting from Process*. Indianapolis: SAMS.
8. Cameron, K. S., Freeman, S. J., Mishra, A. K.

- (1993). Downsizing and Redesigning Organizations. In Huber, G., Glick, W. (Ed.), *Organizational Change and Redesign: Ideas and Insights for Improving Performance* (pp. 19-65). New York: Oxford University Press.
9. Carroll, G. R. (1984). Organizational Ecology. *Annual Review of Sociology*, 10(1), 71-93.
 10. Cohen, S. G., Mankin, D. (1998). The Changing Nature of Work: Managing the Impact of Information Technology. In Mohrman, S. A., Galbraith, J. R., Lawler III, E. E. et al. (Ed.), *Tomorrow's Organization* (pp. 154-178). San Francisco: Jossey-Bass.
 11. Crosetto, G., Macazaga, J. (2005). *The Process-Based Organization – A Natural Organization Strategy*. Amherst: HRD Press.
 12. Darwin, C. (1859). *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*. London: John Murray.
 13. Davenport, T. H., Harris, J. G. (2007). *Competing on Analytics: The New Science of Winning*. Boston: Harvard Business School Press.
 14. Davenport, T. H., Harris, J. G., Morison, R. (2010). *Analytics at Work: Smarter Decisions, Better Results*. Boston: Harvard Business School Press.
 15. Despres, C., Chauvel, D. (2000). *Knowledge Horizons: The Present and the Promise of Knowledge Management*. London: Butterworth-Heinemann.
 16. Duening, T. N., Click, R. L. (2005). *Essentials of Business Process Outsourcing*. New Jersey: John Wiley & Sons.
 17. Edwards, J. R., Scully, J. A., Brtek, M. D. (2000). The Nature and Outcomes of Work: A Replication and Extension of Interdisciplinary Work-Design Research. *Journal of Applied Psychology*, 85(6), 860-868.
 18. Finegold, D., Lawler III, E. E., Ledford Jr., G. E. (1998). Organizing for Competencies and Capabilities: Bridging from Strategy to Effectiveness. In Mohrman, S. A., Galbraith, J. R., Lawler III, E. E. et al. (Ed.), *Tomorrow's Organization* (pp. 133-153). San Francisco: Jossey-Bass.
 19. Galbraith, J. R. (1994). *Competing With Flexible Lateral Organizations*. Reading: Addison-Wesley.
 20. Galbraith, J. R. (2002). *Designing Organizations: An Executive guide to strategy, structure, and process*. San Francisco: Jossey-Bass.
 21. Galbraith, J. R., Downey, D., Kates, A. (2002). *Designing Dynamic Organizations*. New York: AMACOM.
 22. Galbraith, J. R., Lawler III, E. E. et al. (1993). *Organizing for the Future*. San Francisco: Jossey-Bass.
 23. Gardner, R. A. (2004). *The Process-focused Organization*. Milwaukee: ASQ Quality Press.
 24. Goold, M., Campbell, A. (2002). *Designing Effective Organizations – How to Create Structured Networks*. San Francisco: Jossey-Bass.
 25. Grant, R. M. (2009). *Contemporary Strategy Analysis*. New York: John Wiley & Sons.
 26. Griffin, R. W. (1982). *Task Design: An Integrative Approach*. Glenview: Scott, Foresman and Co.
 27. Guillén, M. F. (2008). Globalization and Organization Studies. In Barry, D., Hansen, H. (Ed.), *The SAGE Handbook of New Approaches in Management and Organization* (pp. 182-183). London: Sage Publications.
 28. Gyan-Baggour, G. (1999). The Effects of Employee Participation and Work Design on Firm Performance: A Managerial Perspective. *Management Research News*, 22(6), 1-12.
 29. Hannan, M. T., Freeman, J. (1977). The Population Ecology of Organizations. *American Journal of Sociology*, 82(5), 929-964.
 30. Harmon, P. (2003). *Business Process Change: A Manager's Guide to Improving, Redesigning, and Automating Processes*. San Francisco: Morgan Kaufmann Publishers.
 31. Hernaus, T. (2008). Process-Based Organization Design Model: Theoretical Review and Model Conceptualization. *Third International Workshop on Organization Design*, May 18-20, Aarhus.
 32. Hesselbein, F., Goldsmith, M. (Ed.) (2009). *The Organization of the Future 2: Visions, Strategies, and Insights on Managing in New Era*. San Francisco: Jossey-Bass.
 33. Howard, A. (Ed.) (1995). *The Changing Nature of Work*. San Francisco: Jossey-Bass.
 34. Johansson, H. J., McHugh, P., Pendlebury, A., Wheeler III, W. A. (1993). *Business Process Reengineering – Breakpoint Strategies for Market Dominance*. New York: John Wiley & Sons.
 35. Katz, D., Kahn, R. L. (1966). *The Social Psychology of Organizations*. New York: John Wiley & Sons.
 36. Kersley, B., Alpin, C., Forth, J., Bryson, A., Bewley, G. D., Oyenbridge, S. (2006). *Inside the Workplace: Findings from the 2004 Workplace Employment Relations Survey*. London: Routledge.
 37. Klein, K. J., Kozlowski, S. W. J. (Ed.) (2000). *Multilevel Theory, Research, and Methods in Organizations*. San Francisco: Jossey-Bass.
 38. Lawler III, E. E. (1996). *From the Ground Up – Six Principles for Building the New Logic Corporation*. San Francisco: Jossey-Bass.

39. Lawler III, E. E., Finegold, D. (2000). Individualizing the Organization: Past, Present, and Future. *Organizational Dynamics*, 29(1), 1-15.
40. Lawler III, E. E., Worley, C. G. (2006). *Built to Change: How to Achieve Sustained Organizational Effectiveness*. San Francisco: Jossey-Bass.
41. Liska, A. E. (1990). The Significance of Aggregate Dependent Variables and Contextual Independent Variables for Linking Macro and Micro Theories. *Social Psychology Quarterly*, 53(4), 292-301.
42. Lowman, R. L. (Ed.). *Handbook of Organizational Consulting Psychology*. San Francisco: Jossey-Bass.
43. Miles, R. E., Miles, G., Snow, C. C. (2006). Collaborative Entrepreneurship: A Business Model for Continuous Innovation. *Organizational Dynamics*, 35(1), 1-11.
44. Mintzberg, H. (1979). *The Structuring of Organizations: A Synthesis of the Research*. Englewood Cliffs: Prentice Hall.
45. Mohrman, S. A. (2002). The Organizational Level of Analysis: Consulting to the Implementation of New Organizational Designs. In Lowman, R. L. (Ed.), *Handbook of Organizational Consulting Psychology* (pp. 54-75). San Francisco: Jossey-Bass.
46. Mohrman, S. A. (2003). Designing Work for Knowledge-Based Competition. In Jackson, S. E., Hitt, M. A., Denisi, A. S. (Ed.), *Managing Knowledge for Sustained Competitive Advantage* (pp. 94-123). San Francisco: Jossey-Bass.
47. Mohrman, S. A. (2006). *Strategic Organization Design Workshop*. Los Angeles: Center for Effective Organizations, University of Southern California.
48. Mohrman, S. A., Cohen, S. G., Mohrman Jr., A. M. (1995). *Designing Team-Based Organizations – New Forms for Knowledge Work*. San Francisco: Jossey-Bass.
49. Moorhead, G. (1981). Organizational Analysis: An Integration of the Macro and Micro Approaches. *Journal of Management Studies*, 18(2), 191-218.
50. Mossholder, K. W., Bedeian, A. G. (1983). Cross-Level Inference and Organizational Research: Perspectives on Interpretation and Application. *Academy of Management Review*, 8(4), 547-558.
51. Mozenter J. (1999). *Emerging Trends in Organizational Development*. Independent Study, Boston: Boston University.
52. Nadler, D. A., Gerstein, M. S., Shaw, R. B. et al. (1992). *Organizational Architecture: Designs for Changing Organizations*. San Francisco: Jossey-Bass.
53. Nonaka, I., Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. New York: Oxford University Press.
54. Ohmae, K. (1995). *The End of the Nation State: The Rise of Regional Economics*. New York: Free Press.
55. Ostroff, F. (1999). *The Horizontal Organization*. New York: Oxford University Press.
56. Parker, B., Clegg, S. R. (2006). Globalization. In Clegg, S. R., Hardy, C., Lawrence T. B., Nord, W. R. (Ed.), *The Sage Handbook of Organization Studies* (pp. 651-674). London: Sage Publications.
57. Parker, S. K., Wall, T. D. (2001). Work Design: Learning from the Past and Mapping a New Terrain. In Anderson, N., Ones, D. S., Sinangil, H. K., Viswesvaran, C. (Ed.), *Handbook of Industrial, Work and Organizational Psychology*, Vol. 1 (pp. 90-110). London: Sage Publications.
58. Pasmore, W. A. (1994). *Creating Strategic Change: Designing the Flexible, High-Performing Organization*. New York: John Wiley & Sons.
59. Roberts, K. H., Hulin, C. L., Rousseau, D. M. (1978). *Developing and Interdisciplinary Science of Organizations*. San Francisco: Jossey-Bass.
60. Roos, J. (1996). *Managing Knowledge: Perspectives on Cooperation and Competition*. Thousand Oaks: Sage Publications.
61. Rummler, G. A., Brache, A. P. (1995). *Improving Performance: How to Manage the White Space on the Organization Chart*. San Francisco: Jossey-Bass.
62. Sanchez, J. I., Levine, E. L. (2001). The Analysis of Work in the 20th and 21st Centuries. In Anderson, N., Ones, D. S., Sinangil, H. K., Viswesvaran, C. (Ed.), *Handbook of Industrial, Work and Organizational Psychology*, Vol. 1 (pp. 71-89). London: Sage Publications.
63. Senge, P. (1990). *The Fifth Discipline: The Art and Practice of the Learning Organization*. New York: Doubleday.
64. Shafritz, J. M., Ott, J. S. (1987). *Classics of Organization Theory*. Chicago: The Dorsey Press.
65. Sikavica, P., Novak, M. (1999). *Poslovna organizacija*. [Business organization]. Zagreb: Informator.
66. Snow, C. C., Strauss, D. (2008). Blade.Org: A Collaborative Community of Firms. *Third International Conference on Organization Design*, May 18-20, Aarhus.
67. Swanson, R. A. (2007). *Analysis for Improving Performance*. San Francisco: Berrett-Koehler Publishers.
68. Tenner, A. R., DeToro, I. J. (2000). *Process Redesign: The Implementation Guide for Managers*. New Jersey: Prentice Hall.

69. Thompson, J. D. (1967). *Organizations in Action*. New York: McGraw-Hill.
70. Van de Ven, A. H., Ferry, D. L. (1980). *Measuring and Assessing Organizations*. New York: John Wiley & Sons.
71. von Bertalanffy, L. (1951). General Systems Theory: A New Approach to Unity of Science. *Human Biology*, 23(4), 303-361.
72. Walton, E., Nadler, D. A. (1994). Diagnosis for Organization Design. In Howard, A. et al. (Ed.), *Diagnosis for Organizational Change: Methods and Models* (pp. 85-105). New York: The Guilford Press.
73. Wrzesniewski, A., Dutton, J. E. (2001). Crafting a Job: Revisioning Employees as Active Crafters of Their Work. *Academy of Management Review*, 26(2), 179-201.

Tomislav Hernaus is a Teaching and Research Assistant at the Faculty of Economics and Business, University of Zagreb. His research interest includes designing organizations at various levels, including the job, the process and the organizational level. He received his Master in Organization and Management degree in 2006, and his PhD in Organization Design in 2010 from the University of Zagreb. Dr Hernaus is a co-author of the book "Business Process Management: Organizational and IT approach") and the author of several book chapters, scientific articles and conference papers. For his outstanding scientific effort, he received the National Science Award of the Republic of Croatia for the year 2008. He holds a Certificate in Organization Design issued by Center of Effective Organizations, University of Southern California, and he provides consulting services for large and mid-sized companies.