

“Strategic HRM: What will work be like in the future, and what impact will changes have on HR departments? Theoretical discussion and practical implications”

AUTHORS	Daniel J. Adriaenssen Jon-Arild Johannessen Helene Sætersdal
ARTICLE INFO	Daniel J. Adriaenssen, Jon-Arild Johannessen and Helene Sætersdal (2016). Strategic HRM: What will work be like in the future, and what impact will changes have on HR departments? Theoretical discussion and practical implications. <i>Problems and Perspectives in Management</i> , 14(1), 94-104. doi: 10.21511/ppm.14(1).2016.11
DOI	http://dx.doi.org/10.21511/ppm.14(1).2016.11
RELEASED ON	Wednesday, 02 March 2016
JOURNAL	"Problems and Perspectives in Management"
FOUNDER	LLC "Consulting Publishing Company "Business Perspectives"



NUMBER OF REFERENCES

0



NUMBER OF FIGURES

0



NUMBER OF TABLES

0

© The author(s) 2020. This publication is an open access article.

Daniel J. Adriaenssen (Denmark), Jon-Arild Johannessen (Norway), Helene Sætersdal (Norway)

Strategic HRM: What will work be like in the future, and what impact will changes have on HR departments? Theoretical discussion and practical implications

Abstract

The issue the authors are investigating is how work will evolve in the future. The question discussed here is as follows: What will work be like in the future, and what impact will changes have on HR departments?

To answer this question, the authors have established the following research questions: 1. What will be the context for work in the future, and how will HR departments be affected? 2. How can organizations develop ideas and innovate, and how will HR departments be affected in the future?

Method: Conceptual generalization. Findings: In the future, work will be largely compartmentalized and performed using specialist skills. Those organizations that survive will be extremely adaptable. Many organizations will be managed in accordance with a logic whereby their component parts are distributed across the global economy according to the following principles: extreme focus on costs, quality and expertise, and a high level of focus on innovation.

Keywords: HRM, strategic HRM, the future of work, innovation, knowledge management.

JEL Classification: M12.

Introduction

Technological development is occurring at an accelerating pace in business and in other areas of society (Hamel, 2012). This is causing a sharp reduction in the cost of communicating information (Brynjolfsson & McAfee, 2014). In addition, there is a general trend whereby former economic borders are disappearing and a global knowledge economy is emerging (Haag et al., 2012). It is possible that this trend began in 1989 with the fall of the Berlin Wall and China's move towards capitalism which occurred around the same time (Castelfranchi, 2007). This trend radically changes the rules of play for work in the future (Bruce & Crook, 2015).

The two key types of changes that will have the greatest influence on the future of work will be technological changes and new ways of organizing production in the global economy (Hamel, 2012).

There is also increasing talk of the transition to the knowledge economy, in which knowledge businesses will be key players (Davenport, 2005; Gershuny & Fisher, 2014). When deciding whether to define an organization as a knowledge business, we must always look at what it produces rather than its input factors or internal processes (Brynjolfsson, & McAfee, 2014). If we fail to do so, we will be unable to distinguish between a knowledge business and a hi-tech industrial business. For example, there

is a great deal of knowledge within a modern hi-tech fish-processing company. There can be absolutely no doubt, however, that such a company produces fish products, not knowledge. There can also be no doubt that knowledge constitutes a large proportion of the input factors in this type of hi-tech business, and is also an important constituent of the processes that will produce the finished product. In the case of a knowledge business, the primary product it supplies to the market will be knowledge, rather than fish, nails or potatoes.

A knowledge worker has been described as a person who has completed three years or more of higher education (OECD, 2000c). A knowledge worker is also described as a person whose primary task is to generate and apply knowledge rather than provide services or produce physical products (OECD, 2000a, b, d). The management of knowledge workers will be crucial for businesses in the future (OECD, 2000d, e) because knowledge workers will dominate the future workforce (Drucker, 1999; 1999a).

In a report published by Oxford University in 2015, it is predicted that as much as fifty percent of today's jobs will disappear in the next twenty years¹. For instance, the following jobs are especially in danger of disappearing: cashiers, retail salespeople, fitters, machine operators, administrative assistants, office staff, cleaning workers, construction workers, service workers, etc. Two factors that will promote this development are new technologies and new ways of organizing work. One of the consequences of this development is that the skills that are in demand will change. A second consequence is that unskilled

© Daniel J. Adriaenssen, Jon-Arild Johannessen, Helene Sætersdal, 2015.
Daniel J. Adriaenssen, Research Fellow, Århus University, Dept. of Psychology, Denmark.
Jon-Arild Johannessen, Ph.D., Professor (Full). Kristiania University College and The Arctic University of Norway, Campus Harstad, Norway.
Helene Sætersdal, Associate professor, Kristiania University College, Norway.

¹ <http://www.stratresearch.se/Documents/Folder.pdf>.

workers will have difficulty in finding work. A third consequence is that jobs that can be automated and performed by machines will be in danger of disappearing in the next twenty years. Simultaneously, when it is apparent that as many as 1/3 of today's students experience difficulty completing their secondary education (specialized subjects and general subjects), we can sense a ticking social bomb waiting to go off at sometime in the future.

In relation to the developments described above, HR departments will probably need to acquire new skills. There are also strong indications that they will play a new role in organizations in the future (Boxall & Purcell, 2010; Adriaenssen & Johannessen, 2017). This will involve being assigned new functions and activities with a change of focus from internal organizational matters to a greater participation in the external business world (Armstrong, 2014; 2014a;

Ulrich, 2013; 2013a; Ulrich et al., 2013; Adriaenssen & Johannessen, 2017).

The article focuses on the following question: What will work be like in the future, and what impact will changes have on HR departments?

In order to answer this question, we have developed the following research questions:

1. What will be the context for work in the future, and how will HR departments be affected?
2. How can organizations develop ideas and innovate, and how will HR departments be affected in the future?

The article is organized around the two research questions above. In conclusion, we will attempt to provide an answer to the article question. The organizing model of the article is shown in Fig. 1.

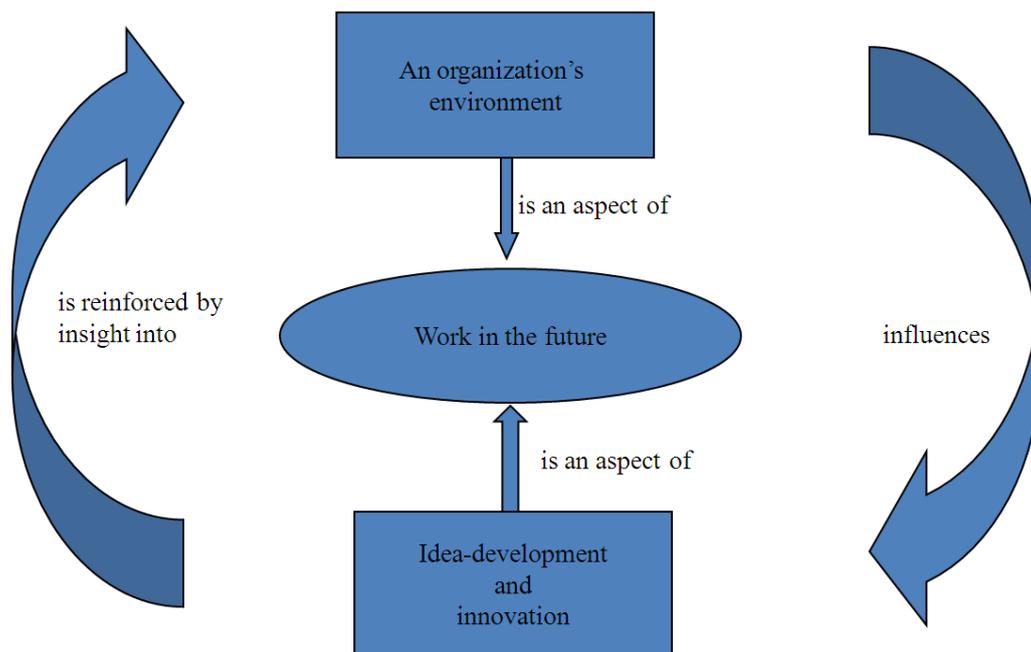


Fig. 1. Aspects of work in the future

1. Methodology: conceptual generalization

In order to come to grips with possible future developments in work, we have used results and syntheses from trend research (White & Younger, 2013, pp. 27-52; Ulrich, 2013; Ulrich & Ulrich, 2010, p. 5; Ulrich et al., 2012, p. 27). Conceptual generalization (Adriaenssen & Johannessen, 2015) is used to create a synthesis and abstraction of the future of work. For further investigation into the methodology of conceptual generalization we recommend the paper by Adriaenssen & Johannessen (2015), and Bunge (1998; 1999; 2001).

Research falls into two main categories: conceptual generalization and empirical generalization (Bunge, 1998, pp. 3-50, 51-107, 403-411). Conceptual

generalization is an investigation where the researcher uses other researchers' empirical findings in conjunction with his or her own process of conceptualization in order to generalize and identify a pattern. This contrasts with empirical generalization, where the researcher investigates a phenomenon or problem that is apparent in the empirical data and only thereafter generalizes in the light of his or her own findings (Bunge, 1998, pp. 403-411). The starting point for the researcher in the case of both empirical and conceptual generalization will be a phenomenon or problem in the social world.

Conceptual generalization and empirical generalization are strategies that are available for answering scientific questions. Which of these strategies one chooses to use will be determined

largely by the nature of the problem and “the subject matter, and on the state of our knowledge regarding that subject matter” (Bunge, 1998, p. 16). Conceptual generalization, which is the strategy underpinning our investigation here, is “a procedure applying to the whole cycle of investigation into every problem of knowledge” (Bunge, 1998, p. 9).

2. An organization’s environment

We will examine the following question: What will work environments look like in the future, and how will this affect HR departments?

The developments in manufacturing companies today point to a greater tendency to replace what were internal core processes with production processes purchased externally in a globally competitive market (Baird & Henderson, 2001). These manufacturing processes can be distributed in the global economy. However, the distribution of manufacturing processes is not arbitrary but purchased by companies according to a specific logic, based on costs, quality, expertise and innovation (Brynjolfsson & McAfee, 2014). We term this the “distribution logic” of companies.

There is also an increasing tendency for companies that traditionally have had their base in manufacturing, such as telecommunications companies, to move in the direction of service and sales expertise (Barney & Clark, 2007). There is a tendency for companies to outsource the manufacture of production units and strengthen their position as system integrators (Davies, 2003). For instance, Ericsson, the communication technology company, outsources the manufacture of cell phones to Flextronics but continues to design and manufacture complex sub-systems for telecommunications. Thus, the trend of such manufacturing companies is that design, development, coordination and sales largely have become the core competencies of such companies (Boxall & Purcell, 2010). The flow of information and communication consequently becomes a necessary condition for success (Brockbank, 2013). We term this “coordination logic”.

Businesses also coordinate and reintegrate the production they have outsourced in the global economy. This requires a special kind of expertise – involving the ability to understand the relationship between the parts and the whole and

having an understanding of inter-relationships (Davenport, 2005; Garud et al., 2002). We term this “reintegration logic”.

In order to compete in tomorrow’s global knowledge economy, distribution logic, coordination logic and re-integration logic are *necessary conditions* for success (Garud et al., 2002). However, they are not the *sufficient condition* for success. The sufficient condition may be termed disintegration logic. This consists of extreme specialization and expertise within a very narrow field; such a development leads to a new global division of labor. In the global division of labor, the geographic location of businesses becomes less important, because the businesses are “blown to pieces” and distributed around the corners of the world. The value creation of businesses takes place over the whole globe according to a logic of costs, quality, expertise and innovation (Hamel, 2012; Hannah et al., 2015).

Strategic subcontractors constitute to an increasing extent what we are accustomed to think of as the core competency of businesses. Business operations are divided into modules that are coordinated and integrated to bring products and services to a market; we term this modular flexibility (Garud et al., 2002). Modular flexibility may best be understood as the Lego bricks of the global knowledge economy. The Lego brick constellations have the advantage that they can be easily taken apart and put together in new ways without the individual Lego bricks changing character. In other words, it is the totality that changes structure when the Lego bricks shift location, not the individual Lego bricks.

This trend is apparent in the service industries, amongst others. For instance, when Scandinavian Airlines move their back-office operations to China, this is done in accordance with a modular flexibility logic; when Norwegian Air Shuttle consider moving some of their production to Ireland, this is also within the same logic; when fish caught off the Finnmark coast in Norway are shipped to China to be processed rather than locally in Norway, this also occurs according to the same logic. Examples of modular flexibility are innumerable and will most likely only continue to increase in the future.

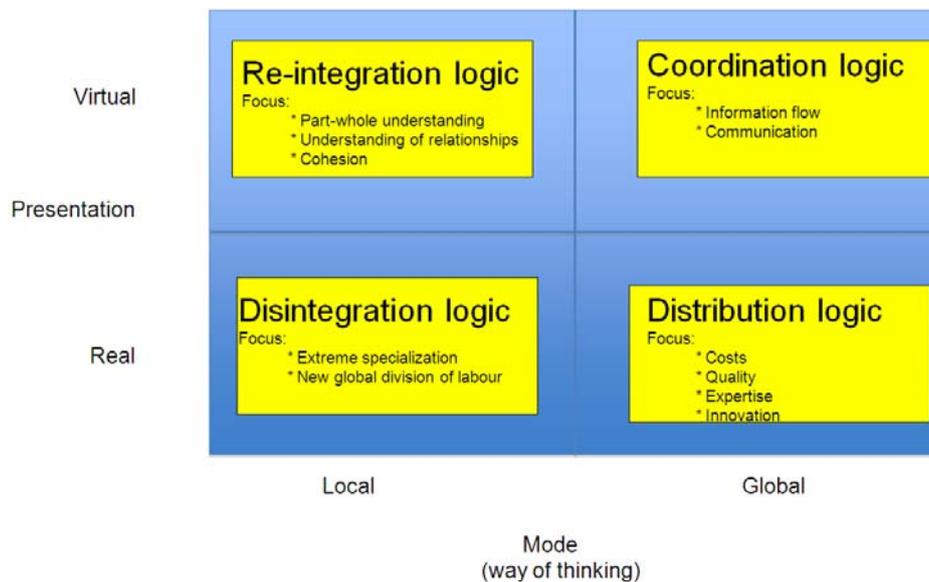


Fig. 2. Modular flexibility in the global knowledge economy – a typology

How will HR departments be affected?

Research indicates that in the knowledge society of the future the following skills will be in demand: specialized skills, creativity, and innovation (Boxall & Purcell, 2010). The following specialized skills will be particularly in demand: innovation skills, change capability skills, transfer of experience, organizational learning, organizational design, performance management, and knowledge management especially (Armstrong, 2014; Adriaenssen & Johannessen, 2017). It is in these areas that HR departments will have an important role to play (Ulrich, 2013; 2013a).

In a globalized market, information, knowledge, skills and attitudes change character (Brynjolfsson & McAfee, 2014). It is therefore imperative that management is able to focus on how knowledge workers are managed, because they will increase in number in the future and eventually make up the core of value creation in organizations (Drucker, 1999; 1999a). A central question in this context will be: how can organizations boost the performance of their knowledge workers? The expertise, creativity and social networking (internal and external) of employees will constitute the core assets in relation to the development of activities in the globalized market of the future (Boxall & Purcell, 2010). However, it is not the individual's knowledge that is of interest in this context, but rather how organizations are able to develop an organizational culture that emphasizes knowledge sharing which structures information and work processes around teams and also promotes the sharing of knowledge that will be crucial to work in the future (Brockbank, 2013). This presupposes that organizations are able to develop and use information resources internally and externally to promote idea development and integration of knowledge that already exists but which must be organized (Guest,

2007); this knowledge will increasingly be external to the individual organization. In this process, HR departments will play a very important role (Adriaenssen & Johannessen, 2017).

3. Idea-development and innovation

The following question is examined here: How can organizations develop ideas and innovation, and how will this affect HR departments in the future?

Innovation is here understood as any idea, practice or material element, which is perceived as new for the person using it (see Zaltman et al., 1973; Johannessen et al., 2001, pp. 20-31). There are three points that are important in this definition:

- ◆ How is the innovation perceived by the individual?
- ◆ The degree of novelty that determines whether it is an incremental or radical innovation.
- ◆ The requirement that an idea must be adopted by the market before it can be called an innovation.

According to this definition, ideas are fundamental to the innovation process. However, Hamel's "Law of Innovation" states that for every 1,000 ideas only one will become an actual innovation (Hamel, 2002; 2012). Given this situation, it becomes imperative that organizations have a well-developed system for the development of ideas, the selection of the ideas to be further developed, and the application of an idea in a market.

Before an idea can be characterized as innovative, it must prove to be beneficial to somebody, i.e. the market must accept the idea and apply it.

The creative process that leads to ideas and then to innovations must therefore be subjected to an evaluation process by a market in order to be

considered an innovation (Amabile, 1996). It is not enough that an idea is new for it to be considered an innovation. An idea may have a large degree of novelty, but if it is of no benefit to the person or persons using it then it is not an innovation as defined by Zaltman et al. (2001, pp. 20-31).

We distinguish between continuous improvements, incremental innovations and radical innovations. Continuous improvements may be defined as the development of existing products and processes. Incremental innovations, which are innovations in small steps, add something to a product that is qualitatively new. This is different from an improvement in quality. Applications for smartphones may be characterized as an incremental innovation of the smartphone, while an improvement of the application is an improvement in quality. However, there is no clear boundary between continuous improvements and incremental innovations.

For the development of incremental innovations and radical innovations, it has been shown that it is advantageous to structure an organization through what is called ambidextrous organization (Reinmoell & Reinmoeller, 2015). Ambidextrous organization may be simply described as a form of organization where operations are organized in a certain way, while idea development and innovation processes are organized as an autonomous process without direct connection to the actual operation of the organization (Tushman & O'Reilly, 1996; O'Reilly & Tushman, 2004; 2007; 2011).

As a rule, radical innovations bring the market out of equilibrium (Bruce & Cook, 2015; Johannessen et al., 2001). The introduction of smartphones is such an example (Christensen, 1997); for instance, Nokia, with a large share of the market for mobile phones, were completely caught off guard when the smartphone was introduced (Christensen & Raynor, 2003).

After studying 85 companies' ways of organizing their innovation work, O'Reilly & Tushman (2004; 2007; 2011) found that ambidextrous organization resulted in the best performance within existing operations and the most successful innovations. An ambidextrous organization is one that can effectively organize its operations while simultaneously providing autonomy and opportunities to explore ideas (Adriaenssen & Johannessen, 2017).

Within the 85 companies that were examined, it was found that some chose to have a functional design where project teams were integrated into existing organizational and management structures. Some of the companies used so-called cross-functional teams, where innovation activities were organized within the established organization but outside the existing management hierarchy. Other companies

used teams that were set up outside the established organization and managerial hierarchy called unsupported teams. Others chose an ambidextrous type of organization where they established autonomous project teams while operating within the framework of the system. Each team had its own processes, structures and culture.

The findings of O'Reilly & Tushman (2004; 2007; 2011) were overwhelming. In the case of launching radical innovations, they found that none of the cross-functional teams or unsupported teams, and only a quarter of those with functional design, produced radical innovations. In the case of ambidextrous organization the figure was 90%. Ambidextrous organization has also proved to be best concerning incremental and radical innovations (Thota & Munir, 2011). Adriaenssen & Johannessen (2017) present a theoretical and model analysis of ambidextrous organization, where HR departments are shown to acquire a brand new functional area of operations referred to as "an eye on the future".

The following presents a brief description of a company in Norway that can be said to have used ambidextrous organization to develop ideas, provide quality improvements and produce innovations. Although the main case is now twenty years old (Johannessen et al., 1996), it is still useful in terms of illustrating ambidextrous organization and also in relation to understanding idea development and innovation processes within a company.

Case letter²: A description of ambidextrous organization in a Norwegian company.

One of the main principles of management philosophy in the Norwegian company referred to here was the development of what may be termed multi-groups, i.e. many functional areas belonged to the same group regarding the production of the company's main product. In the literature in the field of research, this is also referred to as a cross-functional team (O'Reilly & Tushman, 2004). Another guiding principle of the management philosophy was that the management required to rationally justify the rejection of any ideas from individuals or multi groups.

Production was organized around these autonomous groups and consisted of six to seven people and a senior craftsman. The groups were supported by a production coordinator whose main role was to communicate information between the groups and the management; a single production coordinator supported several groups.

² Case letter is a term Mintzberg uses (Mintzberg, 2005) for short reports, analyses and discussion of organizations, but which cannot be considered a full-fledged case study.

A multi-group consisted of people who cooperatively possessed the necessary skills to carry out a clearly defined task. The multi-groups may be understood as part of the company’s quality assurance, learning, and idea generation and innovation systems. However, the most important characteristic of the multi-group was not so much as its actual design but rather how it worked. Through a system of job rotation, the multi-group was intended to avoid segmentation and fragmentation of operations which often occur when there is a great deal of specialization. The multi-groups were self-organized, self-managed and autonomous in relation to the management and flexible in relation to the execution of the duties that were carried out by these groups. The groups constituted the main design behind the activities and processes carried out in the company. The design of the groups was aimed at engaging players in activities, and the emphasis on player participation was well illustrated in what the company called change reports.

Change reports were forms that consisted of three parts. Firstly, the individual operators or a multi-group entered suggestions in the reports addressed to the management concerning elements of the company operations that could be improved. This was a diagnostic procedure in which players searched for what they thought was at fault in the design, production process or product. We have classified this as F-1 (error): so-called single-loop learning (Bateson, 1972, pp. 159-177). Secondly, they could also make suggestions regarding how these errors could be rectified. This was also a troubleshooting procedure, but the participants could also reflect on how they would have rectified what they thought was at fault. We have classified this as F-2: so-called double circuit learning (Bateson, 1972, pp. 159-177). Thirdly, there was also a box on the form for ideas not related to a diagnostic procedure but rather a search process in which the players’ creativity was put to the test. The point of this procedure was to generate ideas which could signal the starting point for something new for the company, i.e. a possible innovation. We have classified this as F-3: so-called deutero-learning (Bateson, 1972, pp. 159-177).

In addition to the change reports, which may be considered a type of organizational learning system, the management had undertaken to provide constructive feedback within one week of the submitted reports. If any proposals for change were not accepted, reasons would be given. This was in itself an innovative management philosophy which is not in evidence in many organizations even today. It can be understood as being related to what Wegge et

al. (2010, pp. 161-171) term “organizational democracy”. Organizational democracy involves a situation in which employees have real influence on decision-making at the top level of an organization. The employees in this case participated in an organizational democratic process when the management had to justify rationally the rejection of any change proposals. If the management were unable to justify rejections, then the ideas would be implemented; this occurred in several cases. One example of such a change proposal was the change in the overall design of an important component of the product. The management were unable to give any rational justification concerning rejection of the proposal, and consequently the change was introduced. The result was that productivity in this area increased by 68 percent as a result of the idea of the change proposal being adopted. An example of a change report is shown in Figure 3. The concepts of single-loop learning, double-loop learning and deutero-learning are taken from Bateson (1972). Argyris & Schön (1978), and Argyris (1999) have also written about these types of learning, but it was Bateson who first introduced them.

Error (F-1) (single-loop learning) (quality improvement)
Error, rectify in the following way (F-2) (double-loop learning)(quality improvement)
New ideas not related to errors (F-3) (deutero-learning) (innovation)
Name Group Department Date sent Date for feedback

Fig. 3. Change reports

4. Analysis, discussion and implication for the HR department

In the case letter, 1654 change reports were classified. The result was that F-1 (single-loop learning) counted for approx. 30% of the change reports; F-2 (double-loop learning) counted for approx. 40% and F-3 (deutero-learning) counted for approx. 30%. In other words, the organizational learning system counted for

70% which contributed to improving the quality in the production process and products. Perhaps the most interesting result in this context was that 30 percent of the ideas proposed by the front line were geared towards innovation. This concerned both incremental and radical innovations that were developed and adopted by the company. The case letter confirms what O'Reilly & Tushman (2004; 2007; 2011), Thota & Munir (2011) and Reinmoell & Reinmoeller (2015) discovered in their recent research concerning the relationship between ambidextrous organization and innovation. In addition, our case letter also showed that ambidextrous organization led to a large improvement in the quality of production and the production process. In their research on ambidextrous organizations, Tushman & O'Reilly (1996, p. 15) refer to Apple Inc. as the most blatant example.

What emerges as a crucial factor in the case letter was how employees, by using their "voice", were able to influence decision-making at the top level of the company.

Some of the literature in the field concerning employee participation examine the structural and political relations in organizations, especially organizational democracy (Wegge et al., 2010, pp. 161-171; Bennis et al., 2012). It is argued that if there is employee participation in the organizational managerial process, this will positively affect employees' attitudes towards change processes (Wegge et al., 2010, pp. 158-171). Organizational democracy has also been shown to increase engagement, satisfaction and involvement among employees and an increased degree of innovation and organizational performance (Harrison & Freeman, 2004, p. 49).

In the literature in the field concerning employees in organizations, there are four concepts that are central. These are: distributed leadership (Wegge, 2010, pp. 161-167), organizational democracy (Harrison & Freeman, 2004), organizational participation (Wegge et al., 2010, pp. 162-165) and non-union collective voice (Gollan, 2010, pp. 212-236), here referred to as "voice". We interpret the four concepts here as aspects of the same phenomenon, i.e. employee participation in organizational management processes (Lele, 2011). However, we believe that the four concepts may be understood at various organizational levels. Organizational democracy may be understood as involving direct and indirect employee participation in strategic decision-making. The learning system in the case letter described above belongs to this level because the management philosophy offers players the opportunity of greatly influencing strategic decisions. Distributed leadership and organizational

participation can be understood as participation at the operational level in which the implementation of strategic decisions occur (see Figure 4). "Voice" concerns "routinized forums in which non-union employees meet with management to discuss issues at either the plant or enterprise level" (Gollan, 2010, p. 213). "Voice" is probably the type of employee participation that has the least influence of the four concepts, while organizational democracy probably has the greatest opportunity of influence.

Wegge et al. (2010) state that: "*Organizational democracy refers to broad-based and institutionalized employee influence processes that are not ad hoc or occasional in nature*" (2010, p. 162). This is consistent with Harrison & Freeman's (2004, pp. 49-53) understanding of organizational democracy. Wegge et al. (2010, p. 162) go on to point out that involvement concerns "mandatory joint consultation" in decision-making processes. They point out that this employee-participation is at a strategic level (see Fig. 4), and this is of interest because this refers to employee participation in decision-making at the highest level of an organization. It is in these forums that premises for decisions are laid and discussions about why and what is to be changed take place.

Distributed leadership focuses on leadership of teams, self-management and the expertise of team members (Wegge, 2010, p. 162; Bennis et al., 2012). In other words, the focus is on the team and self-management in order to improve the performance of the team, and not related to employees' participation in organizational management processes, where the premises for management are decided. Thus, we differentiate between participation in strategic management processes where there is a "mandatory joint consultation", and participation in the processes where the implementation of the strategic processes is undertaken. There is a qualitative difference in the involvement between these two levels, which is highlighted in Figure 4.

What distinguishes distributed leadership from traditional "top-down" management is that the influence and information in distributed leadership does not come as an imposition from the top, but is agreed upon as a reciprocal understanding concerning the necessity of change which is not necessarily the case with "top-down" management (Wegge, 2010, p. 161). However, in our view, distributed leadership as described by Wegge et al. (2010, pp. 161-167) is nevertheless a concept that largely may be included in the traditional management model; that is, where someone makes the decisions while others execute them.

Organizational democracy, however, as the case letter highlights, focuses on employee participation in the management process where the premises for changes are discussed and decided. We emphasize again that it is the type of management philosophy in the case letter in which, amongst other things, the management is required to justify any refusal to reject change proposals rationally that means that we can classify the learning system as a type of organizational democracy (Johannessen & Olaisen, 1993). We are aware of the fact that this is not entirely consistent with the ideas of Wegge et al., but we believe that we can find support for this way of thinking in Harrison & Freeman (2004, pp. 49-53). Nonetheless, we find the same results in our case letter as both Wegge et al. (2010) indicate and Harrison & Freeman (2004) refer to regarding organizational democracy.

Distributed leadership at team level has been shown in three empirical studies to influence the attitudes of employees. This concerns factors such as employee satisfaction, motivation and trust. Other studies show that distributed leadership in various teams, for example management teams, consultation teams and virtual teams, are positively correlated with enhanced performances (Wegge et al., 2010, p. 162).

Distributed leadership and organizational participation (Wegge et al., 2010, pp. 154-161) are arguably crucial for employee involvement in the implementation of decisions, as well as influencing employees' attitudes positively regarding change processes and innovation. However, it appears more doubtful that these two concepts have any special significance in relation to employee participation in organizational management processes at the top level of the organizational decision structure. This is where organizational democracy can be understood as an innovation which may point the way forward regarding work in the future (Bennis et al., 2012; Lele, 2011).

Organizational democracy may be understood as something relatively new in a managerial context. However, it is also possible to identify elements of organizational democracy in the earlier literature in the field, for example in Ackoff (1981) when he uses the concept circular organization, and in Stafford Beer in his sustainable theory of organizations (Beer, 1979; 1981; 1995; Adriaenssen & Johannessen, 2017). Another related concept, organizational culture, may be found in Schein (1985) and Heller (1998).

In Figure 4 we have shown a way of understanding the four concepts regarding employee participation.

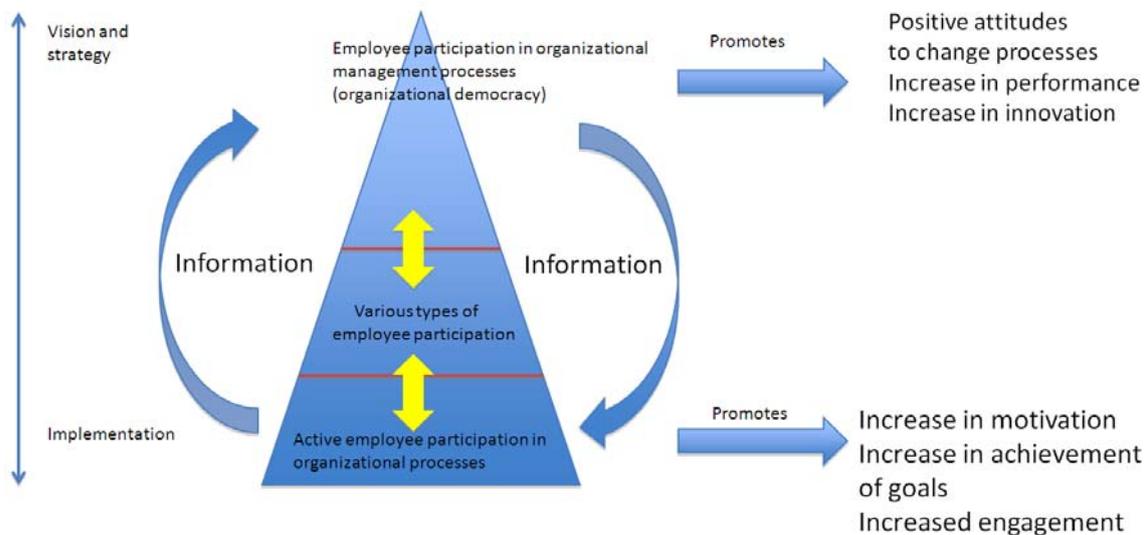


Fig. 4. Organizational employee participation

HR departments can use their organizational expertise to design, develop and implement learning systems that facilitate employees being heard in decision-making processes and in the boardroom. The logic of this approach is that it will improve the organization's performance.

Ideas are the basic element in the innovation process, and the result of systematic and structured idea-development processes in organizations. Developing and selling ideas in the knowledge society is the most important resource in any

organization or business because innovation is a prerequisite for survival in the global environment (Baird & Henderson, 2001). Although the techniques behind the development of the ideas are simple and often may seem straightforward, as described in the change reports in the case letter above, it can take several years of experience to develop an effective idea development system in an organization (Hamel, 2012). In addition, empirical research and meta-analyses show that employee participation in organizations is not easy to achieve

(Wegge et al., 2010). HR departments have the unique position of being able to evolve into something more than just a service provider for the management. They can also actively take a position where they promote value creation in organizations and become an active participant in an organization's strategy process.

The simplest answer concerning how new ideas can be developed is to constantly ensure that all voices in an organization are given the opportunity for expression in relation to the premises for making decisions, i.e. to promote democracy in organizational activities in the company (Wegge et al., 2010, pp. 161-171; Bennis et al., 2012). The rationale is that empirical research has shown that this promotes positive attitudes towards change processes, increasing business performance and heightening the level of innovation in an organization (Wegge et al., 2010, pp. 161-171).

When an idea is developed it should be left to others for further development for practical purposes because it seems there are two different modes of thinking that occur in the idea development phase and in the implementation phase (Amabile, 1988; West, 2002; Hamel, 2012). Developing ideas may be said to involve idea-management, while exploiting the idea belongs to what we call innovation management. The HR department has an important function in relation to idea management, but not to the same extent in innovation management. The paradox of the simultaneous existence in organizations of operational activities and innovation activities can be addressed by ambidextrous organization, as pointed out by Tushman & O'Reilly as early as 1996 and empirically expounded by O'Reilly & Tushman (2004).

Just as some people are concerned with details while others take a bird's eye view, there are those who develop ideas while others exploit the ideas for practical purposes. Enterprises need to organize the relationship between these two modes of thinking and acting, for example through ambidextrous organization (O'Reilly & Tushman, 2004; 2007; 2011; Thota & Munir, 2011; Reinmoell & Reinmoeller, 2015).

New and creative ideas do not necessarily emerge as a result of laying brick upon brick of knowledge, developing expertise or by becoming an expert in the relevant field. Arguably, this is a necessary but not a sufficient condition for innovation. New ideas often emerge as a result of giving everyone within an organization a voice through such a learning system as we have described in the case letter above, and in the above discussion concerning employee participation in organizational decisions. HR departments can play a crucial role in promoting this type of idea development in organizations. The development of this new approach in HR departments will contribute to the development of ambidextrous organization and open

up the opportunity for increased performance and innovation, a view which is supported by Tushman & O'Reilly (1996), O'Reilly & Tushman (2004; 2007; 2011), Thota & Munir (2011), and Reinmoell & Reinmoeller (2015).

Conclusion

The question that we have investigated in this article is: What will work be like in the future, and what impact will changes have on HR departments?

Our findings are that work in the future will be largely compartmentalized and based on specialized skills. Those businesses that survive will be highly adaptable. It is highly probable that these businesses will be managed largely in accordance with the "Lego-brick principle". In other words, their component parts will be distributed across the global economy according to the following principles: extreme focus on costs, extreme focus on quality, extreme focus on expertise, and a high level of focus on innovation.

This will make it difficult for HR departments to find qualified workers, even where the rate of unemployment is high. The reason is that the skills that will be in demand will be highly specialized. These specialized skills will be found in the global, rather than necessarily in the local or regional, labor markets. Accordingly, we will experience rising unemployment locally while at the same time businesses will be struggling to find qualified personnel.

Businesses are demanding skilled workers and most of all skilled workers who possess highly specialized skills. As a result, society will encounter problems on at least at two levels. Firstly, it will be crucial to train people in specialized skills so that those who complete their training get the types of jobs for which they are trained. Secondly, problems for people who have not completed specialized training will only accelerate. Accordingly, it appears that the skills gap will increase sharply between those who have the necessary specialized skills and those who have not completed specialized training. This development will coincide with a sharp fall in demand for unskilled labor.

For HR departments, the findings described above mean that they must increase their focus on recruiting, developing and retaining workers with critical skills. There will also be an increasing need for employees in HR departments to develop new skills themselves. These skills will be in the following areas: knowledge management, performance management, innovation management and organizational design. In view of the trends described in this article, there is much to suggest that HR departments will perform a new, qualitative role in businesses in the future.

References

1. Ackoff, R.L. (1981). *Creating the Corporate Future: Plan or be Planned for*. London: John Wiley & Sons.
2. Adriaenssen, D., Johannessen, J.-A. (2015). Conceptual generalization: Methodological reflections in social science a systemic viewpoint, *Kybernetes*, 44 (4), pp. 588-605.
3. Amabile, T. (1988). A model of creativity and innovation in Organizations, in Staw, B.M., Cummings, L.L. (ed.). *Research in Organizational Behavior*, 9, pp. 123-167.
4. Amabile, T. (1996). *Creativity in context*, New York: Westview Press.
5. Argyris, C. (1999). *On organizational learning*, Oxford: Blackwell.
6. Argyris, C., Schön, D.A. (1978). *Organizational Learning – A Theory of Action Perspective*, London: Addison Wesley.
7. Armstrong, M. (2014). *Armstrong's Handbook of Strategic Human Resource Management*, New York: Kogan Page.
8. Armstrong, M. (2014a). *Armstrong's Handbook of Human Resource Management Practice*, New York: Kogan Page.
9. Baird, L., Henderson, J.C. (2001). *The Knowledge Engine*, San Francisco: Berrett-Koehler.
10. Barney, J.B., Clark, D.N. (2007). *Resource-Based Theory: Creating and sustaining Competitive Advantage*, Oxford: OUP.
11. Bateson, G. (1972). *Steps to an ecology of mind*, London: Intertext Books.
12. Beer, S. (1979). *The heart of enterprise*, Chichester: John Wiley & Sons.
13. Beer, S. (1981). *Brain of the Firm*, New York: John Wiley & Sons.
14. Beer, S. (1995). *Diagnosing the system for organizations*, London: John Wiley & Sons.
15. Bennis, W.G., Cloke, K., Goldsmith, J. (2012). *The End of Management and the Rise of Organizational Democracy*, New York: John Wiley & Sons.
16. Biswas-Diener, R. (2011). *Positive Psychology and Social Change*, London: Springer.
17. Boxall, P.F., Purcell, J. (2010). An HRM perspective on Employee Participation, in Wilkinson, A., Golan, P.J., Marchington, M. & Lewins, D. (eds.). *The Oxford Handbook of Participation in Organizations*, Oxford: Oxford University Press, pp. 129-151.
18. Brockbank, W. (2013). Overview and Logic, in Ulrich, D., Brockbank, W., Younger, J. & Ulrich, M. (eds.), *Global HR Competencies: Mastering Competitive Value from the Outside*, in New York: McGraw Hill, pp. 3-27.
19. Bruce, D., Crook, G. (2015). *The Dream Café: Lessons in the Art of Radical Innovation*, New York: John Wiley & Sons.
20. Brynjolfsson, E. McAfee, A. (2014). *The Second Machine Age*, New York: W.W. Norton.
21. Bunge, X.E., Bunge, M. (1998). *Philosophy of science: From problem to theory*, Volume 1, New Jersey: Transaction Publishers.
22. Bunge, M. (1999). *The sociology-philosophy connection*. New Brunswick, NJ: Transaction.
23. Bunge, M. (2001). *Philosophy in crisis: The need for reconstruction*. Amherst, NY: Prometheus Books.
24. Castelfranchi, C. (2007). Six critical remarks on science and the construction of the knowledge society, *Journal of Science Communication*, 6 (4), pp. 1-3.
25. Christensen, C.M. (1997). *The Innovators Dilemma: When New Technologies Causes Great Firms to Fail*, Boston Massachusetts: Harvard Business School Press.
26. Christensen, C.M., Raynor, M.E. (2003). *The Innovators solution: Creating and sustaining successful growth*. Boston Massachusetts: Harvard Business School Press.
27. Davenport, T.H. (2005). *Thinking for a Living. How to Get Better Performance and Results from Knowledge Workers*, Boston: Harvard Business School Press.
28. Davies, A.C. (2003). Are Firms Moving Downstream into High-Value Services? In J. Tidd, F.M. Hull. *Service innovation: Organizational responses to technological opportunities & market imperatives*. London: Imperial College Press, pp. 321-340.
29. Drucker, P.F. (1999). Knowledge worker productivity: The biggest challenge, *California management Review*, 41 (2), pp. 79-94.
30. Drucker, P.F. (1999a). *Management Challenges for the 21st Century*. New York: Harper Collins.
31. Garud, R., Kumaraswamy, A., Langlois, R. (2002). *Managing in the Modular Age: New Perspectives on Architectures, Networks and Organizations*, New York: Wiley-Blackwell.
32. Gershuny, J., Fisher, K. (2014). *Post-industrial society: Why work time will not disappear for our grandchildren*, Center for Time Use Research, Department of Sociology, University of Oxford.
33. Gollan, P.J. (2010). *Employer Strategies Towards Non-Union Collective Voice*, I.
34. Wilkinson, A., Gollan, P.J., Marchington, M., Lewin, D. (ed.). *The Oxford Handbook of Participation in Organizations*, Oxford University Press, Oxford, pp. 212-236.
35. Guest, D.E. (2007). HRM and the Worker: Towards a new Psychological Contract, in Boxall, P., Purcell, J. & Wright, P., *The Oxford Handbook of Human Resource Management*, Oxford: Oxford University Press, pp. 128-146.
36. Haag, S., Cummings, M., McCubbrey, D., Pinsonneault, A., Donovan, R. (2012). *Management Information Systems for the Information Age*, McGraw Hill, Ryerson.
37. Hamel, G. (2002). *Leading the Revolution: How to Thrive in Turbulent Times by Making Innovation a Way of Life*, Boston: Harvard Business School Press.

38. Hamel, G. (2012). *What matters now: How to win in a world of relentless change Ferocious Competition, and Unstoppable Innovation*, New York: John Wiley & Sons.
39. Hannah, E., Scott, J., Trommer, S. (2015). *Expert knowledge in Global Trade*, London: Routledge.
40. Harrison, G., Freeman, R. (2004). Democracy in and Around Organizations, *The Academy of Management Journal*, 18 (3), pp. 49-53.
41. Heller, F. (1998). Influence at work: A 25-year program of research, *Human Relations*, 51 (12), pp. 1425-1456.
42. Johannessen, J.-A., Olaisen, J. (1993). The information intensive organization: A study of governance, control and communication in a Norwegian shipyard, *International Journal of Information Management*, 13 (5), pp. 341-354.
43. Johannessen, J.-A., Hauan, A., Olaisen, J. (1996). *Strategies for Innovation, A Longitudinal Case Study Approach*, Oslo: Fagbokforlaget.
44. Lele, C.G. (2011). *Organizational Democracy: Collaborative Team Culture: Key to Organizational Growth*, New York: Atlantic Publisher.
45. Minzberg, H. (2005). *Managers not MBAs: A Hard Look at the Soft Practice of Managing and Management Development*, New York: Barret-Koehler.
46. OECD. (2000a). *A New Economy? The changing role of innovation and information technology in growth*, Paris.
47. OECD. (2000b). *Economic Outlook*, Paris.
48. OECD. (2000c). *Education at a Glance: OECD Indicators*, Paris: CERI.
49. OECD. (2000d). ICT Skills and Employment, Working party on the information economy, Paris, 15 November, DSTI/ICCP/IE (2000) 7.
50. OECD. (2000e). *Knowledge Management in the Learning Society*, Paris: CERI.
51. O'Reilly, C.A., Tushman, M.L. (2004). The Ambidextrous Organization, *Harvard Business Review*, 82 (4), pp. 74-81.
52. O'Reilly, C.A., Tushman, M.L. (2007). *Ambidexterity as a dynamic capability: Resolving the innovators dilemma*, Boston: Harvard Business School Press.
53. O'Reilly, C.A., Tushman, M.L. (2011). Organizational Ambidexterity in Action: How managers explore and exploit, *California Management Review*, 53 (4), pp. 5-22.
54. Reinmoell, S., Reinmoeller, P. (2015). *The Ambidextrous Organization*, Oxford: Routledge.
55. Schein, E.H. (1985). Defining organizational culture, *Classics of organization theory*, 3, pp. 490-502.
56. Thota, H., Munir, Z. (2011). *Key Concepts in Innovation*, London: Palgrave Macmillan.
57. Tushman, M.L., O'Reilly, C.A. (1996). Ambidextrous Organization: Managing Evolutionary and Revolutionary Change, *California Management Review*, 38 (4), pp. 8-30.
58. Ulrich, D. (2013). Foreword, in Ulrich, D., Brockbank, W., Younger, J., Ulrich, M. (eds.), *Global HR Competencies: Mastering Competitive Value from the Outside*, New York: McGraw Hill, pp. 5-11.
59. Ulrich, D. (2013a). Future of Global HR: What's Next? in Ulrich, D., Brockbank, W., Younger, J. & Ulrich, M. (eds.), *Global HR Competencies: Mastering Competitive Value from the Outside*, New York: McGraw Hill, pp. 255-268.
60. Ulrich, D., Younger, J., Brockbank, W., Ulrich, M. (2012). *HR from the Outside in: Six Competencies for the Future of Human Resources*, New York: McGraw Hill.
61. Ulrich, D., Ulrich, W. (2010). *The Why of Work*, New York: McGraw Hill.
62. Wegge, J., Jeppesen, H.J., Weber, G.W., Pearce, C.L., Silva, S.A., Pundt, A., Jonsson, T., Wolf, S., Wassenaar, C.L., Unterrainer, C., Piecha, A. (2010). Promoting Work Motivation in Organizations: Should Employee Involvement in Organizational Leadership Become a New Tool in the Organizational Psychologist's Kit? *Journal of Personnel Psychology*, Special Issue: Shared Leadership, 9 (4), pp. 154-171.
63. West, M.A. (2002). Sparkling fountains or stagnant ponds: An integrative model of creativity and innovation implementation in work groups, *Applied Psychology: An International Review*, 51, pp. 355-387.
64. White, J., Younger, J. (2013). The Global Perspective, in Ulrich, D., Brockbank, W., Younger, J. & Ulrich, M. (eds.), *Global HR Competencies: Mastering Competitive Value from the Outside*, New York: McGraw Hill, pp. 27-53.
65. Zaltman, G., Dunchan, R., Holbek, J. (1973). *Innovations and organizations*, New York: John Wiley.