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THE STRATEGIC DECISION ON THE MANAGEMENT MODEL

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Abstract

The digital era is characteristic of advanced ICT technology that globally allows quick connection and knowledge sharing, and as such, it increases global knowledge turnover, speeds up changes and brings unpredictable events. It forces companies to be flexible, and innovative. Flexibility and innovativeness require good work with knowledge. Companies can use the potential of their knowledge only when they choose proper management model.

Management model is how management activities are organised and interlinked in the organisation. Different management models offer organisations different opportunities and represent different threats. Choice and application of the proper management model is the strategic decision that influences success of the organisation. The paper discusses four typical contemporary management models and their potential for organisation in the digital era. The conclusion is that there is no one “best” model for organisations in the digital era and that organisations when choosing the model must take into account concrete aspects of their internal and external conditions. Still, there are models that support work in the digital era more than other.

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1. Introduction

The digital era is characteristic of advanced ICT technology that globally allows quick connection and knowledge sharing, and as such, it increases global knowledge turnover, speeds up changes and brings unpredictable events. It forces companies to be flexible, and innovative. Flexibility and innovativeness require good work with knowledge. Companies can use the potential of their knowledge only when they choose proper management model.

Management model is how management activities are organised and interlinked in the organisation. Different management models offer organisations different opportunities and represent different threats. Choice and application of the proper management model is the strategic decision that influences the success of organisation. Different business environments require different management models. First ideas on management models appeared more than hundred years ago. Since then people in organisations, consultancy companies and theorists developed and promoted different management models. The paper starts with a brief excursion to history paying attention to some of such management models. Then four management models typical of our times are described, explained and their potential for the digital era is discussed.

The paper is organised as follows. It begins with a Literature review and Theoretical framework focused on management models, their development in history, Birkinshaw's approach to management models and on the topic of the digital era. Research methodology follows. In chapter Findings, four typical management models of our era are described and their potential for the digital era is discussed. Paper is finished with Conclusions and Discussion.

2. Literature Review and Theoretical Framework

2.1. Management Model

Management model is the organizational paradigm, or organizational ideology. It is the way how managers manage organization (Birkinshaw & Goddard, 2009). Proper management model creates competitive advantage; a poorly chosen management model limits organization (Birkinshaw, 2010).

Breen and Hamel (2007) write that what organisations limits the most is not their operational or business model but the model of their management.

2.2. Evolution of Management Model in History

Although the term management model is new (Heydebrand, 1997; Birkinshaw & Goddard, 2009), the first management model was developed by Henry Fayol who defined six areas of corporate activities; technical, commerce, financial, security, accountancy and administrative (managerial). The administrative area consists of five administrative activities; prediction (planning), organizing, directing, coordination and control. These five areas represent what we call managerial functions these days. Areas of corporate activities and five administrative activities are accompanied by 14 principles of management: division of labour, authority and responsibility, discipline, unity of command, unity of direction, subordination of individual interest to general interest, remuneration of personnel, centralization, line of authority, order, equity, stability of tenure of personnel, initiative and esprit de corps (Fayol, 1949; Veber et al., 2009).

Fayol's management model showed its functionality in Fayol's enterprises and organizations can use it even nowadays.

Max Weber adopted a different approach on management model. Based on his researches at churches and the army he created the concept of a rational bureaucracy (Weber et al., 2009). Weber emphasizes that bureaucratic organizations stress the reason as a leading factor and that people behave according to calculable rules (Borgatti, 2010) and the formal authority (Ivanko, 2013; Cutajar, 2010). Weber tended to depersonalize the management in the way as we do not (Ivanko, 2013). The legal authority is the fundamental differentiating characteristic of Weber's bureaucratic model. Weber highlights six principles: formal hierarchical structure, management by rules, organization by functional specialisation, managers as salary officials, employment based on technical qualification, written documents. Authority and responsibility are clearly defined and officially sanctioned. Job descriptions are specified with responsibilities and line of authority. All employees have thus clearly defined rules in a system of authority and subordination (Weber, 1978).

Gulic and Urwick built on works of H. Fayol and elaborated managerial functions to the model called POSDCORB (Urwick & Gulick, 1937). The acronym includes seven basic functions – planning, organizing, staffing, directing, coordinating, reporting and budgeting. All of them are necessary for efficient management of corporate activities. Urwick and Gulic understood the organisation from the organic point of view. They write that it is axiomatic that the whole is equal to the sum of its parts. But in dividing up any "whole," one must be certain that every part, including unseen elements and relationships, is accounted for (Urwick & Gulick, 1937).

Zelený (2005) writes that Tomáš Baťa, Czech entrepreneur, founder of the world operating shoe-manufacturing company, created autopoietic management model based on three basic processes – manufacture, interconnections and degradation. Manufacture covered inputs, creative processes, new components, rules, and guidelines. Interconnection covered managerial rules, agreements, networks of manufacturers, positions of individual elements in the organisation. Degradation collected rules and processes related to consumption, outputs, and employees leaving the organisation. The organization kept all three processes in balance and everything worked in harmony.

Elliot Jaques (1989) addresses management model in a different way than already mentioned authors. He divides organizations to seven strata. Each stratum represents specific decision-making complexity and requires specific cognitive capacity of the employee. Jaques (1989) argues that when organizations' hierarchies correspond to his identified strata, and when people have a clear picture of what is expected of them, companies can achieve "requisite organization", allowing people to reach their full potential.

Senge (1990) comes with an organic approach to management of organisation. His management model called a learning organisation is based on five disciplines (personal mastery, mental models, shared vision, team learning, system thinking) that when used in balanced support organizational learning. McKinsey developed their famous 7S model that covers strategy, systems, staff, systems, style, skills and shared values (Weber, 2009).

We chose discussed management models as examples from many different models that developed during the 20th Century. When doing his researches in contemporary organisations (case studies,

questionnaires, review of the literature on principles on which managerial work is done), Julian Birkinshaw discovered that organisations choose between four basic management models these days. Birkinshaw classification of management models is a contemporary approach. As such it is discussed in the next chapter.

2.3. Birkinshaw’s Concept of Management Model

Review of the literature on principles on which managerial work is done showed that four sets of activities are crucial for the organisation (Birkinshaw & Goddard, 2009). It is setting objectives (planning), motivation, coordinating activities and decision-making. These four groups of activities can be executed differently in different organisations, but the style of their execution oscillates between two polar points of view. In case of objectives, boundaries are created by clearly defined short-term goals contra oblique high-level long-term objectives. In case of motivation, one side is the extrinsic motivation the other the intrinsic motivation. In case of coordination (authors understand it as a horizontal process), it is from using formal and well-structured management processes (bureaucracy) to spontaneous coordination through mutual adjustment (emergence) and for deciding, it is from hierarchical centralized deciding to collective wisdom.

Objectives and motivation are called “ends”, e.g. what the company wants to achieve and coordination and deciding are called “means”, e.g. what allows the organization to achieve what they want. Means create the horizontal axis of the matrix and means create the vertical axis of the matrix.

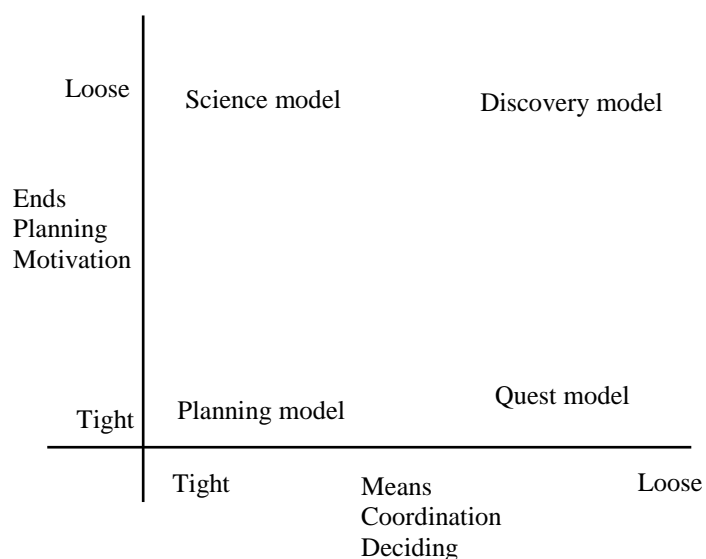


Figure 01. Four management Models (Birkinshaw & Goddard, 2009)

The model offers four management models. The planning model works with well defined, usually short-term objectives, bureaucratic objectives, extrinsic motivation and strict hierarchical decision-making. The Quest Model works with clearly defined objectives, extrinsic motivation but management processes and decision-making is delegated to employees. E.g. employees are told what to do, but they decide themselves on how they work. The scientific model is just opposite; managerial processes and decision-making are clearly defined but employees are free to decide on objectives and motivation is intrinsic. The

fourth model is a discovery model where managerial processes, decision-making, motivation and objectives are loose.

The different model is convenient for the different situation. Planning model is convenient for mature businesses operating in a stable environment. Quest model is good for established growing companies in competitive markets. The scientific model is recommended for innovative knowledge intensive organisations. Discovery model can be found in start-ups and highly changeable environment (Birkinshaw & Goddard, 2009).

In the light of the literature, we argue that different managerial models have different strengths and weaknesses in the digital era.

2.4. Digital Era, its Impact on Organisations

The digital era started with the shift from mechanical and analogue electronic technology to the digital technology and can be traced back to the fifties of 20th Century. It fully evolves in past 20-25 years due to technology changes in the field of telecommunication and technology miniaturization. Cambridge dictionary (2018) defines it as the present time, when most information is in a digital form, especially when compared to the time when computers were not used.

Technology increases the speed and amount of knowledge turnover in the digital era (Shepherd, 2004). It influences all aspects of management; from strategy creation to implementation (Rogers, 2017). The digital era can be seen as the development of an evolutionary system in which knowledge turnover is not only very high but also increasingly out of the control of humans, making it a time in which our lives become more difficult to manage. The social and economic implications of the digital era are huge and will increase as technological functionality becomes more knowledge-based, our everyday lives and understanding of ourselves become more linked to it, and it takes on a 'life' of its own (Shepherd, 2004).

Summing it up. The digital era is characteristic of advanced ICT technology that globally allows quick connection and knowledge sharing, and as such, it increases global knowledge turnover, speeds up changes and brings unpredictable events. It forces companies to be flexible, and innovative. Flexibility and innovatiIt is possible to transform explicit knowledge back to data and share via ICT technology. But explicit knowledge as such cannot create values. Tacit knowledge is needed to use and transform explicit knowledge into products, services and innovations. Tacit knowledge is difficult or impossible to transform into explicit knowledge. It develops in learning by doing, it is subconscious and as a "human" dimension of knowledge, it can be shared only in human interaction, not through technology. The digital era makes work with explicit knowledge simpler and increases explicit knowledge turnover. At the same time, it requires organisations to develop and use tacit knowledge. In the digital era, management model must support sharing of both dimensions of knowledge. Digitalisation helps with intensifies work with explicit knowledge. As for tacit knowledge, management model must develop tacit knowledge sharing environment.

3. Research Method

The paper presents the development of management models, from historical to contemporary. This part of the paper is based on review of the literature. Then we analyse four contemporary management

models as described by Birkinshaw and Goddard (2009) and evaluate their potential for volatile global digital environment. The methodology used for the literature review was as usual for this type of theoretical research. We collected described and evaluated different approaches and different ideas on management models and cases of organisations that use specific model. The data used are secondary data collected from traditional and electronic media. The paper pays attention to both historical approaches and the latest approaches in the field. We used comparison, induction, deduction, abstraction, generalisation and critical thinking to do the analysis of potential of four contemporary management models for the digital era.

4. Findings

Birkinshaw and Goddard (2009) distinguish four management models used in contemporary organisations; planning model, quest model, discovery model and science model. Planning model is a traditional model based on the division of labour. It is typical for big companies with mature business that are long-term leaders in their market, like for example WalMart, and McDonalds. The environment the organization with planning model operates in is stable and predictable. Some organisations also adopt this management model when they are in crisis and clear rules and directive management is required. Planning model is typical of clearly defined rules and processes (coordination), centralized planning and deciding and extrinsically oriented motivation. The major advantage of the planning management model is clear responsibilities and roles. The major disadvantage is an inability to respond quickly to changes due to the centralization of planning, deciding and control, e.g. when something changes, the response is delayed as the problem must be transferred to higher organizational levels that decide and their decision transferred back down to levels that execute it. The planning model creates steep hierarchical structures that inhibit knowledge sharing; knowledge shared in the top-down direction is biased by context given to it at every organizational level it goes through. There is no way, how to transmit knowledge from bottom levels to top levels of organisation and transfer across levels is not possible at all. Although traditional and for many organisations typical, planning model eliminates both explicit and tacit knowledge sharing and as such it is not convenient for the knowledge intensive environment of the digital era.

The discovery model is opposite model to the planning one. Small companies in early stages of their development or by companies that operate in the changeable and competitive environment adopt it. Planning, motivation, cooperation and deciding are decentralised and delegated to people on lower levels of organisational structure, actually at executers of activities with value added for customers. This approach allows natural knowledge sharing (including tacit knowledge). That is why innovative organisations like Google, Facebook, Morning Star, Patagonia use this model even though later when they grew it creates chaos that may be difficult to manage.

Quest and science models are the combination. In the quest model, planning is centralised, and motivation is extrinsic; coordination and deciding are delegated to lower levels. Means are centralised and how to achieve them is up to individual employees. This model is typical for establish and growing organisations in dynamic and competitive fields like a banking sector (UBS, Lehman Brothers). Quest model introduces internal competitiveness where knowledge of individual and group becomes a competitive advantage. People tend to keep their knowledge (both explicit and tacit) for their purposes and do not share it. Competitive environment based on extrinsic motivation and lack of control of the behaviour

of employees may lead to over competition and fight for good results by hook or crook; it may jeopardise the organisation as it happened in Lehman Brothers. Quest model as the planning model does not meet requirements of knowledge-intensive environment of the digital era.

The science model works with centralised coordination and deciding but with decentralised planning and extrinsic motivation. E.g. setting objectives is up to employees, but they must follow certain rules and guidelines. Science model is a model common of knowledge-intensive businesses such as research and development organisations, project organisation. Examples are Bill & Melinda Gates Foundation, and Arup. It allows knowledge sharing in defined borders of research or project teams but may limit knowledge sharing across them (knowledge monopoly). Still, this model can be used in digital era conditions.

Except traditional organisations with planning model and start-ups with discovery model, the majority of organisations use the combination of models depending of their situation. For example, Google started with the clean discovery model but when the company grew up, the model brought too much chaos and the company started to move to the planning model. Being aware of disadvantages of the planning model, Google tries to keep some aspects of the discovery model like self-organising teams especially in parts of the organisation where the major business is done.

In the most innovative times of the 90th of 20th Century, Intel used so-called fluid organisational structure. The structure consisted of three layers. The vertical layer was responsible for the management of the company (both day-to-day and strategic) and was hierarchical. In this layer, normal, routine operations were carried out by formal, hierarchical, bureaucratic organisations. The horizontal layer was responsible for the creation of the major values of the organisation. It created, distributed and used knowledge (both tacit and explicit). The horizontal layer consisted of project teams. The third layer, the knowledge layer, was responsible for archiving and recording knowledge. It included all tacit and explicit knowledge of the organisation - documents, filing systems, IT databases, etc. All employees of the organisation were obliged to record their knowledge there. Both explicit and tacit knowledge was archived there. People were encouraged to move between layers. In case that they failed in their new role (say that team manager became manager of a big department in the horizontal layer) they were returned to the last role where they were successful. Intel combined planning and discovery models and implemented permeable borders between them.

Some organisations go even further beyond the discovery model and adopt management based on self-managing community. People create communities naturally. At the workplace communities support intense knowledge sharing. A French machinery company FAVI and Buurtzorg, healthcare organisation from the Netherlands, serve as an example of such organisation (Laloux, 2014).

5. Conclusion and Discussions

This paper brings discussion on management models for the digital era. The digital era is characterized by technology, which increases the speed and breadth of knowledge turnover within the economy and society (Shepherd, 2004). As such, the digital era calls for management models that support knowledge sharing and work with knowledge (both explicit and tacit). Birkinshaw and Goddard (2009) discovered that today organisations use four basic management models; planning, quest, discovery and science model. The planning model as a traditional model based on the division of labour does not meet

requirements of the digital era for knowledge sharing at all. It actually inhibits it. This finding fully corresponds with ideas of Laloux (2014) who calls the traditional hierarchical organization model the amber organization. The amber organization creates organizational structures that are stable and can scale which is their great disadvantage in changeable knowledge-intensive environment. The quest model is based on internal competitiveness and it limits knowledge sharing. This finding is in relation with works in the field of knowledge management and management of knowledge workers (Davenport & Prusak, 1998; Davenport, 2005) that point out that internal competitiveness makes knowledge a power, limits it sharing, creates knowledge monopolies and inhibits internal knowledge market of organization. The science model is the model that supports knowledge sharing limited to teams or working groups. It may inhibit work with knowledge and innovativeness in case that it rigidly follows defined procedures of work (bureaucratic coordination) and fails to change them depending on new situations and knowledge. The discovery model is the best model for knowledge sharing but it causes chaos if the organization is bigger. Laloux (2014) calls this model the green organization and states that bringing consensus among large groups of people is inherently difficult. It almost invariably ends up in gruelling talk sessions and eventual stalemate. In response, power games break out behind the scenes to try to get things moving again. Power can't simply be wished away. Like the Hydra, if you cut off its head, another will pop up somewhere else (Laloux, 2014). Community based self-managing organizations mentioned in this paper are the fifth management model that can be found in practice. There are not many organisations like that yet but globalized changeable knowledge-intensive environment of the digital era may force others to try this model. Laloux calls this model the "teal" organization (Laloux, 2014) and Breen and Hamel (2007) think that this type of management model represents switch from tradition management paradigm based on the division of labour to the new paradigm of management.

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