Abstract: The aim of this paper is to present several selected management concepts that support self-organizing teams. The chosen concepts are agile project management, teal organization, holacracy and sociocracy, and the paper places emphasis on the organizational factors in each of presented concept. Four groups of organizational factors were extracted: culture, structure, management and processes. The value of this paper is that it is a comparison of the extracted groups in the selected concepts. The outcome of this work was the discovery that the organizational culture in each of the concepts was very similar, yet, the structure supporting self-organizing teams may vary in effect, starting from the project, to the whole organization. Still, the management and processes appeared to be very similar in the teal organization, holacracy and sociocracy. Moreover, agile project management was more similar to traditional organizations. The paper emphasizes the need for further research, in particular, in companies which have adopted the presented concepts.

Keywords: self-organizing teams, agile project management, holacracy, sociocracy, teal organization.

1. Introduction

In recent years the interest of self-organizing teams is rising. At the same time a significant number of publications regarding teams and workgroups (Guzzo, and Dickson 1996; Hoda, and Murugesan 2016; Mathieu, et al., 2017). Changes in the business environment and rising complexity of work cause situation where self-organizing teams deciding how the work can be done and adopt to changes achieve extraordinary results (Bondarouk, et al., 2018). Druskat and Wheeler (2014) share survey research in which 79% of companies from Forbes 1000 implement actions supporting empowerment, self-deciding, and autonomy in teams in order to improve efficiency and productivity. Organizational factors supporting self-organizing teams are the topic of this paper.
In this article, the popular concepts assume self-organizing teams even treat them as one of the fundaments are presented. The various selected concepts have well-acknowledged positions and practical implementations. Agile project management has been implemented successfully in the IT industry for over 20 years (Dingsøyr, et al., 2012; Serrador, and Pinto, 2015). The teal organization is an idea based on self-managing, wholeness and evolutionary purpose (Laloux, 2014), can be seen even as a paradigm in management (Blikle, 2017). Holacracy assumes self-organization as a building block of the system, the recipe, how to create organizational structures (Robertson, 2007). Sociocracy can be though as a set of ideas on how to create a system form organization based on cybernetics and governance model (Romme, 1995).

Each of the presented concepts deserves deep interest and own research papers, in this article the focus is on elements related to organizational factors. This is not a complete list of concepts, ideas or systems as well there is no statement that self-organizing teams cannot be observed in organizations where the concepts are not present. An additional value of this paper is a comparison of organizational factors among selected concepts supporting self-organization.

2. Self-organizing teams

Many scientific disciplines have been studying working groups for years (Mathieu, et al., 2017), among them, psychology, sociology and management science. The definition of a team varies, one describes the team as a group of people with a sense of purpose and distinctive, as well as work engagement (Guzzo, and Dickson, 1996). The particular example is self-organizing teams, described in 50s XX century, where an autonomous group of employees took responsibility for own supervision (Hoda, and Murugesan, 2016). Bondarouk and collaborators (2018) historically suggested three waves of research about self-organizing teams. The first wave described a self-organizing team as a learning social system. The main focus of this wave, also named classical, was on characteristics of such teams. The second wave of research, dating on 80s of the XX century was concentrated around the performance of self-organizing teams. The beginning of 21st century brought the third wave which has been looking at an evolutionary aspect of teams and their dynamics, in this category author of this categorization (Bondarouk, et al., 2018) highlights works on teal organizations (Laloux, 2014). It is worth mentioning the distinction between the terms self-management and self-organization of the team. Andrzej Blikle (2017) in his works argues that in organizational and working context the term self-organizing team is more accurate. However, in the literature of these terms are often used interchangeably.

Self-organizing teams manage their own work, distribute tasks and participate together in decision making (Hoda, Noble, and Marshall, 2010). Autonomy is a necessary element for self-
organizing teams, even precedes the emergence of self-organization. Autonomy, in addition to the individual level, applies to the team level as well (Langfred, 2000).

Nonaka and Takeuchi (1986) in their famous article in Harvard Business Review provide three features that are the foundation of self-organizing teams: autonomy, cross-fertilization (various skills, complementary to each other among team members) and self-transcendence. A similar set of features Moe and collaborators (2010) proposed as dimensions describing the team. Among the dimensions describing self-organization, they distinguished autonomy, shared leadership, team orientation, redundancy, team members' learning (Moe, et. al., 2010).

3. Organizational factors

The organization can affect the team in different ways. Organizational factors may relate to culture, values, structures, procedures or policies (Zidane, et al., 2016). Project Management Institute distinguishes five groups of organizational factors according to a handbook: organizational culture and styles, communication, structures, processes and environmental factors PMBoK (2013). For the purposes of this article, the following groups of factors have been identified: culture, structures, management and processes.

Organizational culture is a very broad concept and can be understood differently. One of the definitions treats culture as a set of values, beliefs and norms of behaviour adopted in the organization (Zidane, et al., 2016). Another view is presented by Schein (2010), after analyzing several definitions, he describes culture as common assumptions of the group, which were taught while solving various problems. In addition, Schein suggested understanding culture on three levels. The first presents tangible results of culture so-called artefacts. The second layer describes exposed values and the third one basic assumptions. Aninkan and Oyewole (2014) suggest that culture precedes all other organizational factors, the structure emerges from culture as well as other conditions, such as procedures and processes.

The structure is related to the power distribution and decision-making process. The development of Information Technology allows to work from different places, virtual teams are more frequent. In this context, a hierarchical structure, where supervisors control every aspect of work is not very efficient (Bondarouk, et al., 2018). The network-based structure of stimulates high-performance teams (Tröster, et al., 2014). Self-organizing teams do not need the hierarchical structure, on the contrary, team members spontaneous take specific roles and responsibilities according to needs (Hoda, Noble, and Marshall, 2010).

The management in the organization, leaders and managers have a significant impact on teams. In the case of self-organizing teams, their role is reduced to facilitators, ensuring and enabling appropriate working conditions, taking care of information flow and supporting their
work (Druskat, and Wheeler, 2003). Instead of traditional supervision, planning and controlling of work, leaders support the self-organization of teams (Hoda, Noble, and Marshall, 2010).

Processes are a very broad category of organizational factors, PMI (2013) lists activities related to planning, policies, procedures or creating knowledge bases. Hoda and colleagues (2010) identified processes related to legal services, negotiating contracts, financing and maintaining infrastructure, assuring those processes by the organization has a positive effect on the self-organization of teams.

The above selected organizational factors, culture, structure, management and processes constitute a reference point for comparing the concepts later in the article.

4. Selected management concepts

4.1. Agile Project Management

Agile Project Management is rapidly gaining popularity both in the IT industry and beyond. The management based on Agile values started in the 1990s has become the dominant way of organizing work in the IT industry (Dingsøyr, et al., 2012). The approach supports the interactions between people above procedures and processes, close cooperation with the client, focusing on running software and readiness for changes instead of following the plan (Highsmith, and Fowler, 2001). According to the authors of the Agile manifesto, self-organizing teams develop the best architecture and design requirements (Highsmith, and Fowler, 2001). Agile project management is based on the incremental delivery of the product, instead of the traditional, divided project phases. The client participates in the software development process and has the impact and possibility to see the results of increments which is usually earlier than traditionally at the end of the project phase.

The self-organizing team is responsible for daily activities in the project such as planning and work allocation, specifying requirements, monitoring progress, or solving current problems (Hoda, and Murugesan, 2016). However, Agile is a set of values and principles which can be implemented using various methods. The most popular methods based on an Agile approach are Scrum, Xtreme Programming (XP), Lean Software Development, Feature Driven Development (Dingsøyr, et al., 2012).

Culture in Agile Project Management is based on Agile values. In the case of this concept, Agility is the main building block of organizational culture and should be supported and understood by leaders (Sheffield, and Lemétayer, 2013). The artefacts of Agile Project Management are elements of methods, like in Scrum burn-down charts and visualization board for tasks in the sprint.
The structure in Agile Project Management is usually based on one of the Agile methods, mostly used Scrum or its elements with a mixture of engineering practices taken from XP (Dingsøyr, et al., 2012). Figure 1 shows the structure of the team working using the Scrum approach.

The Scrum Team consists of three roles. The Product Owner shares product vision maximizes return on investment and prioritizing tasks for the development team, as well as working with stakeholders. Scrum Master is responsible for efficient usage of the process and helps solve team problems. A development team, usually three to nine people, focuses on creating a working product in a given iteration.

Management as a group of organizational factors is associated with the support of managers and leaders of the organization. The managers are responsible for creating and shaping conditions for the work of Agile teams (Hoda, Noble, and Marshall, 2010). They are supporters and act as facilitators for teams, instead of planning work and allocating tasks (Druskat, and Wheeler, 2003).

Hoda and colleagues (2010) identified processes related to legal services, negotiating contracts, financing and maintaining infrastructure, ensuring those process by the organization has a positive effect on the self-organization of teams. All processes related to the direct work of the team, such as planning and division of tasks, problem-solving is primarily on the shoulders of the project team. Only supporting processes, such as recruitment, financial and legal services are supported by organization managers (Hoda, Noble, and Marshall, 2010).

4.2. **Teal organization**

Fredric Laloux presented a new organizational model in the famous book “Reinventing Organizations” (2014). The model based on case studies of twelve companies that have existed on the market for at least 5 years and employed at least 100 people. Companies defined as teal organizations had common pillars, such as based on self-managing teams, employee wholeness and the evolutionary purpose of the organization. Self-management, also understood here as self-organization (Blikle, 2017), does not require hierarchy or consensus as a way of making
decisions to conduct large-scale initiatives. Wholeness can be described by the postulate of bringing the whole employee to the organization, not only his narrow professional identity, where emotions and intuition are ignored. The third pillar, related to the evolutionary purpose, is based on the premise that the organization is supposed to serve instead of focusing on predicting the future.

The teal colour has been taken from the systematics of organization management styles over the centuries, inspired by the development of consciousness (Laloux, 2014). The red colour has been assigned to an organization where one authoritarian leader dictates despotically all actions and rejecting them causes serious penalties. Such organizations can be represented by mafias or street gangs. The amber colour describes organizations with very strong hierarchy, where decision making occurs at each level, as well the originsations formalized codes of conduct. The army and the Catholic church are examples of such organization system. The orange colour describes organizations where there is a cult of effectiveness, the result justifies the means and achieving it is the priority. People are treated as resources to achieve the organization's goals. An example of an orange organization would be stereotypical international organizations. The green colour depicts organizations based on participation, despite the hierarchy in this style, the focus is on employee motivation based on respect and freedom, even family values. Cooperatives are an example of this style. The teal describes a style where the starting point is a good life and its implementation through work. Partnership and trust between employees are the foundations of this style. The main characteristic of this style is the lack of a rigid organizational hierarchy. Examples of such companies were presented in the book Laloux (2014) from various industries such as health care, energy distribution or production.

Each of the companies presented by Laloux (2017) and Andrzej Blikle (2017) has its own unique organizational culture. In teal companies, culture is shaped by the evolutionary purpose of the organization. For example, one company bases its culture on values such as trust, justice, freedom, commitment and taking a prudent risk (Blikle, 2017).

Laloux (2014) in his book describing the idea of teal organization presents examples of a company where the structure of the teams was based on one of three models: a parallel team, an individual network, and nested teams. Figure 2 shows a visualization of such assemblies.

![Figure 2](image)

**Figure 2.** Team structures in teal organizations. Source: Laloux (2014).

Team member shares its responsibilities and there is no strict structure. The teams work together in order to accomplish their tasks. Teams members with more professional experience serve as mentors and can act as coaches.
The management of the organization is focused on supporting employee initiatives. Leaders and founders are key to teal organizations, supporting self-organization. The strategy in traditional organizations is shaped by the board. In teal organizations, an evolutionary strategy is the result of the work of all employees who have a sense of understanding the purpose of the organization.

Processes in the teal organization are separated into individual teams and individuals who want to take responsibility. Some people have an advisory role for given processes, for example, recruitment or HR processes. Teams are responsible for the processes themselves. At Buurtzorg, where there is no middle-level management, the team is responsible for how to do something and to what extent organize recruitment, plan work and handle administrative and office issues (Laloux, 2014).

4.3. Holacracy

Holacracy can be described as an operational model for an organization. Created by Brian Roberston based on experience at Ternary Software, and then disseminated by the consulting and training company HolocracyOne. The author of the concept describes Holocracy as an organizational practice (Roberston, 2007). Holacracy is described as one example of teal organizations (Laloux, 2014). Self-managing teams, so-called circles, interpenetrating in terms of decision and responsibility. Employees are assigned roles, not positions that can change over time (Roberston, 2007). Within the operating system, there are two main processes, management and operational. The core of the concept of holacracy is structure based on circles. The management process is related to defining and modifying circles and roles. The operational process is related to obligations within a given circle.

The most famous example of adapting holacracy is the Zappos company which sells shoes and clothes online. The company made revolution management and adapted the holacracy with the result of resignation for over a dozen percent of employees (Bernstein, et al., 2016). The culture of holacracy is based on the appreciation of individual employee activities and the promotion of cooperation (Roberston, 2017). Companies adopting Holocracy are a focus on shaping the organizational culture that supports self-organization. The Zappos company bases culture on ten values such as modesty, passion, fun, but also positive thinking (Bernstein, et al., 2016).

The organization of a company based on the holacracy model consists of circles. Self-organizing teams are responsible for various aspects of the company's operation. Roles assumed by circle members are related to individual responsibility, not a position in the company. A very important role is an intermediary, who ensures the correct flow of information between the circles (Roberston, 2007). The visualization of the circles is shown in Figure 3.
Organizational leadership and management are spread over the various roles assumed by members of the organization. Management meetings take place in the designated circle and the adopted schedule. Processes in the organization are separated into individual circles.

4.4. **Sociocracy**

The Sociocracy is a management system that has roots in cybernetics and the governmental system, which is an alternative to democracy, aimed at creating a harmonious social environment (Romme, 1995). Etymologically, socios means partners. Gerard Endenburg applied the principles of Sociocracy to the management of organizations (Romme, 1995). The foundation of Sociocracy is a decision-making process based on consent, not on a majority decision. The organization is based on a hierarchy of circles that overlap and where each member of the company actively participates in their work. Sociocracy empowers each member of the organization.

The culture of Sociocracy is based on mutual equality and empowerment.

![Figure 3. Circles structure in Holacracy. Source: (Robertson, 2007).](image)

![Figure 4. Circles in Sociocracy. Source: own.](image)
Circles as illustrated in Figure 4, arise when they have a common goal and their manager, elected on the basis of consent. The decision-making process based on consent assumes that every vote is equal, and a given proposal can be put into action when there is no objection, there is no need to obtain a majority. Any organization member submitting an idea takes responsibility for it.

The concept of sociocracy is least described in the literature on the subject, however, the ideas contained in it were the inspiration for holacracy (Roberston, 2007), and the decision-making process based on consent is sometimes practiced in teal organizations (Laloux, 2014).

Table was borrowed from a publication; the source should be provided under it. You should not insert tables as figures, but as Microsoft Word tables. The text must contain a reference to a given table (Table 1).

### 4.5. Organizational factors in the selected management concepts

The presented concepts have many common features and assumptions. Organizational factors in the concepts support self-organization. The list of these factors is presented in the form of a table.

#### Table 1.

*Summary of organizational factors supporting self-organizing teams*

<table>
<thead>
<tr>
<th>Concept</th>
<th>Structure</th>
<th>Culture</th>
<th>Management</th>
<th>Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teal organization</td>
<td>Self-managing teams, depending on the organization. Parallel networks, circles, or teams. There is no defined and rigid hierarchy.</td>
<td>Based on values such as trust, justice, freedom, commitment and prudent risk-taking</td>
<td>The management of the organization supports employee initiatives and ensures space for self-management of teams.</td>
<td>Processes divided into individual teams and units that they want to take responsibility for. Some people have an advisory role for given processes.</td>
</tr>
<tr>
<td>Holacracy</td>
<td>Organizational circles and roles. The important role of the intermediate.</td>
<td>It is based on appreciating the individual activities of employees and promoting cooperation.</td>
<td>The management process is related to the definition and modification of circles and roles.</td>
<td>The operational process is related to obligations within a given circle</td>
</tr>
<tr>
<td>Sociocracy</td>
<td>Interlocking circles to which members of the organization belong. A circle may have a manager.</td>
<td>It is based on mutual equality and empowerment.</td>
<td>Circle managers ensure the flow of information and consent during voting.</td>
<td>Responsibility of all members of the organization.</td>
</tr>
</tbody>
</table>

Source: own.
5. Summary

The article compares very different concepts, some are a set of ideas, and some recipes and ready models to implement. However, the concepts presented have a lot in common, especially when it comes to supporting self-organizing teams. Organizational conditions are very briefly presented in the article. Four groups of organizational factors were distinguished: culture, structure, management and processes.

A detailed summary of organizational factors is presented in Table 1. Organizational culture in all presented concepts manifests common elements. Putting interpersonal relationships, trust and openness or empowerment in the center of attention means that self-organizing teams become part of organizational culture and are supported by it. The structures in all concepts encourage, even assume, self-organization of teams. The management and role of organizational leaders are slightly different in the concepts presented. From the supporting and responsible role for the team, such as the case of Agile Project Management, to the role of a coach and trainer for the founders of teal organizations. Processes, like management, are most defined in the case of Agile Project Management. Concepts such as teal organizations, holacracy or sociocracy tend to attribute responsibility to specific groups or circles.

Undoubtedly, further research on the presented concepts can bring many interesting conclusions and common relationships. The author of the article recommends research on companies that have implemented the analyzed concepts in order to actually compare how the organizational conditions of the presented concepts look in practice.

References


