

# Selected Concepts of Leadership in Self-Organizing Teams

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**Abstract.** Self-organizing teams are a common way of organizing teamwork in sectors related to modern technologies, especially in programming teams. Agile methods often promote and advocate such teams. One of the problems in this form of team organization is the issue of leadership, and particularly the relationship between vertical leadership - of one person, and horizontal leadership - of team members. In the literature on the subject, we can find traces of many concepts in such a broad area as the issue of leadership. However, several selected concepts allow us to capture an emerging feature in self-organizing teams: the taking over of leadership functions by team members. Shared leadership is where the leadership function comes from team members, not one appointed leader. Distributed leadership is where leadership in the organization is taken over voluntarily by individuals. Balanced leadership, where the vertical leader enables team members to take over leadership functions depending on the situation. The selected concepts presented here allow for a better understanding and research of the nature and phenomenon of leadership in self-organizing teams.

**Keywords:** Agile Teams, Self-Organized Team, Emergent Leadership.

## 1 Introduction

Self-organizing teams have become a common way of team organization, especially in the case of software development. There is no surprise that the key aspect of Agile methods is work based on self-organizing teams. [2, 3]. Inspired by the Agile Manifesto of Software development [1] they are characterized by minimal structure, based on the collaboration of the whole team and the capability to adapt to changing project requirements [2]. Self-organizing team is a vital topic for research with many open questions [3].

One of the challenges of such teams is the aspect of leadership [6]. Especially the relation between vertical, nominated leader, and horizontal leadership among team members [5]. In the practice of software development teams, particularly those working with Agile methods, the role of the formal leader is not very clear. There are of course recommendations by many frameworks, like the most predominant Scrum, how the leadership can look like [7], and usually it is a supportive role.

Leadership plays a crucial role in every organization, regardless of its type and what aspect it concerns, the whole organization, project, or team. The nature of leadership

has been examined since the very beginning of human reflection on our interactions and includes such topics as the traits of leaders, their behavior, and skills, as well as a source of power and influence, among many others. Scientific approaches to leadership are trying to systemize and provide more rigor in formulating conclusions [10]. Even in management science leadership is not very easy to define and to put it into extremes, there are many definitions of leadership, almost as many as researchers [10].

## 2 Leadership concept in Self-Organizing Teams

How leadership looks in self-organizing teams is a multilevel phenomenon. Starting from the team perspective there is an element of sharing responsibilities. Research on teams working with Scrum even suggests elements of shared leadership [3] despite the roles defined by popular frameworks [7, 6]. If we consider a multiteam set-up in an organization another concept looks very promising in shading light three is distributed leadership [9]. When we consider formal and nominated leaders another concept helps in explaining the dynamics between the team and leaders which is balanced leadership [4]. Naturally presented leadership theories are just a small fraction of the broad landscapes of leadership theories that are currently discussed in the literature.

### 2.1 Shared leadership – emergent phenomena in a team

Shared leadership is usually described as a team-level emergent phenomenon where one or more team members are taking responsibility for leaders [8]. For a better understanding the following table, shows its characteristics [8].

**Table 1.** Shared leadership characteristics

<b>Perspective</b>	<b>Key elements</b>	<b>Opposite situation</b>
Source of power	Influence among team members, horizontally spread by people on the same level of organization hierarchy.	Nominated leader only, vertical relations to the team in organization.
Level of analysis	Group level where leadership is emerging.	Perspective of individual behavior.
Scope of influence	Leadership and influence is broadly distributed among team members	Leadership and influence is focused in one person.

Shared leadership is rarely examined in project-based environments [5] and may bring a better understanding of team-level dynamics.

## 2.2 Distributed leadership – emergent leadership in an organization

Distributed leadership was primarily examined in the educational context, however, its implications become useful in general application in business [9]. How distributed differs from shared leadership is described in Table 2.

**Table 2.** Shared leadership vs distributed leadership

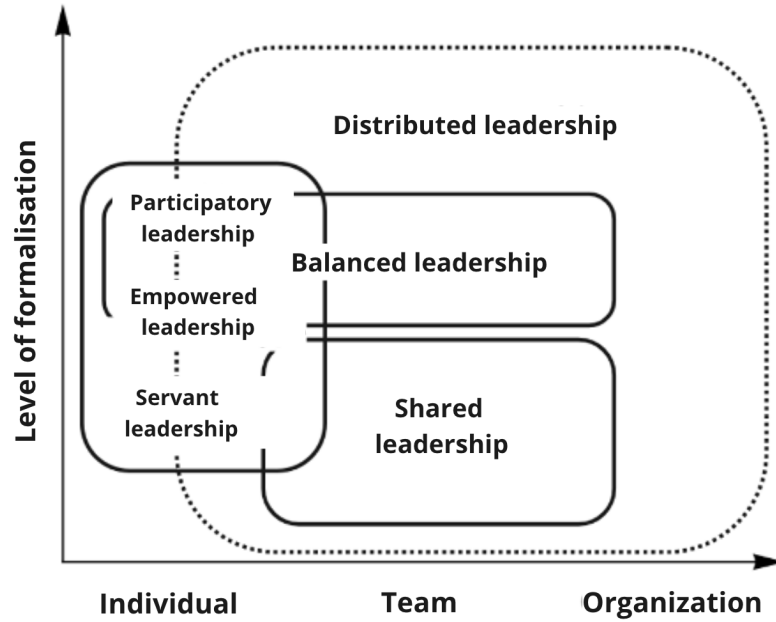
<b>Perspective</b>	<b>Shared leadership</b>	<b>Distributed leadership</b>
Source of power	Formal and informal leaders in teams.	Formal and informal leaders in organization.
Process	Mutual influence among team members.	Leadership is created by first leaders and followers through mutual interactions.
Shared understanding	Shared cognition and understanding in team.	Share cognition and understand is affected by the organization context.
Advantage	Team advantage	Synchronized actions in organization
Level	Team	Individual, team, group, organization

## 2.3 Balanced leadership – the interplay between leader and team members

The third concept presented in this short overview of useful leadership connections in the context of self-organizing teams is balanced leadership. The idea behind this concept is finding a balance between vertical and horizontal leadership. The formal leader has an intention to share responsibility when the horizontal leaders are ready and expose it [9]. Attitude, situation, and trust are key factors for enabling balanced leadership in a team [9]. It is a temporary situation in a team and changes during the project cycle. However, the dynamics of taking reconciliation and sharing in a team provide a useful framework for research.

## 3 Synthesis of leaderships concepts supporting self-organizing teams

The scope of scope of leadership in self-organizing teams is very broad. In this very short abstract, there is only a place for the most prominent concepts. Leadership has a dynamic and interpersonal character and depends on how formal it can be and how it is spread in the organization. Visualizing the concepts in Figure 1. can be used as a helpful tool for examining the leadership in the practice of self-organizing teams.



**Fig. 1.** Synthesis of leadership concepts

More insights into how leadership is shaped in self-organizing teams is needed. There is much more research ongoing, and one is conducted w by the author of this abstract.

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