MANAGEMENT 4.0

HANDBOOK FOR AGILE PRACTICES

Release 1
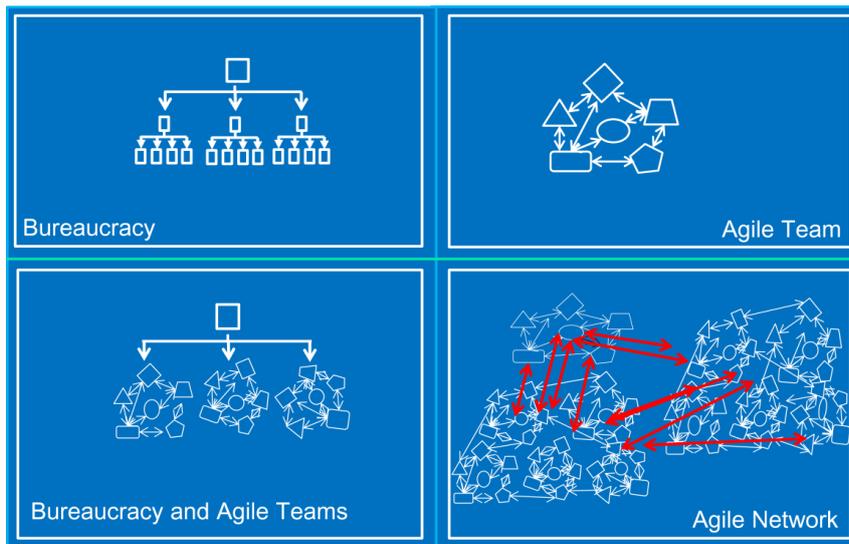
Extract from this book

Bureaucracy

Agile Team

Bureaucracy and Agile Teams

Agile Network

(Figure based on http://www.forbes.com/sites/stevedenning/2016/09/08/explaining-agile/#727a73c12ef7, accessed 15/12/2016)

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PREFACE

Perhaps you are familiar with the phrase: "Are you just residing or have you started to live? (Wohnst du noch oder lebst du schon?)" If we interpret the message in this slogan within the context of "Agility", it could be more freely interpreted as "Are you still just plodding on, or are you making sense of your life?"

The buzzwords "Agility, Agile or Agile Management" are often interpreted as miracle-workers.

But the number of different meanings attributed to these terms is immense: There are thousands of experts and tens of thousands of books and articles on what agile work actually is. And on the subject of agility, everyone is an expert – everyone knows how to do it best. But out of the thousands of experts and books, which ones are right? Or are all of the experts right? What is of importance? What do we need to know, so we can assess what is right in our own context?

There are those that suggest "unless you are sprinting all the time, you are too slow, and you are not agile". Then there are others who argue that "if you are unsure of your product vision, then this is a sure way to make lots of mistakes". Others place trusty old Lean and Kanban on a pedestal. And then there are those who assume complexity is responsible for everything. And if all else fails – it is a question of attitude as to whether one is agile or not. Last but not least, there are the pragmatists who have introduced the hybrid of - 'do not throw away the old, but include something new'.

The "Agile Management" professional group of the GPM (German Association for Project Management e.V.) was founded to offer a deeper understanding of agility: our aim is to understand the need for a new kind of management, grounded on basic principles and free from pigeonholing.

Our vision "together with users, to establish cross-sectoral agile working models to deliver added value for the future" flows into an integral theory-practice framework: We believe that this framework includes a new mind-set of agility, systemic thinking, an openness to welcome the 'new' as a friend, and the capability of retaining proven management tools.

When one starts to deal with the important things in life like love, truth or agility, then the picture tends to have as many facets as there are people. In discussing this topic, it becomes increasingly clear that it is not possible to give an operational definition of agility without including a context. – Hence this book has no chapter on "definition". What emerges though, are principles of agility (like natural laws) that hold concepts together. These principles are explainable and help in understanding the practice. They also help assess which expert ideas are useful and which are only useful in a particular context.

This book was conceived as a manual or "handbook" and ended up as a "brain book". It is full of concepts and principles – some rough and coarse – some fine polished. But all help to understand and put into practice the agile movement, and to ride this great wave without sinking!

3 Theoretical Foundation

3.1 Positioning: Models, Theoretical Approaches, Definitions

Author: Alfred Oswald

Summary: This chapter defines agility and Management 4.0.

Key Terms: Agility, Management 4.0

Agility stands for maneuverability, alertness, flexibility, and adaptability, but also for speed and creativity. Agility includes skills and values that people or organizations have, or consider to be important. Very often agility is seen in the context of competences, which in times of change and uncertainty enable people and organizations to act adequately. Agile people and agile organizations are those that show energy in their actions and use this energy effectively. Agile people and agile organizations are distinguished by their ease of value creation.

Agile people and agile organizations are not hindered in thought and action by conditions. They show the necessary mental flexibility and openness to see, permit and absorb new things. Agility reflects the belief that the values of maneuverability, alertness, flexibility, adaptability, openness, speed and creativity are central components for a business benefit creation process. These values are necessary conditions to perceive situations and be attentive and vigilant, and to have the freedom to then be able to act. However, this is not sufficient to permit and carry out agile behavior. This is where Agile Management begins. We understand Agile Management as a leadership and management practice, to be able to act in an agile and proactive way in a complex environment characterized by uncertainty. It is described as an agile mind-set with a focus on:

- leadership for which self-leadership is the basis
- leadership, which is based on a respect for basic human needs
- leadership, which demands an understanding of complex systems and promotes their regulation through iterative procedures
- people who self-organize in teams
- fluid organizations, which promote adaptable and fast delivery of useful results and create innovative customer solutions through proactive dealing with changes

Figure 3-1 outlines a semantic network covered by the cornerstones of (Agile) Management 4.0:
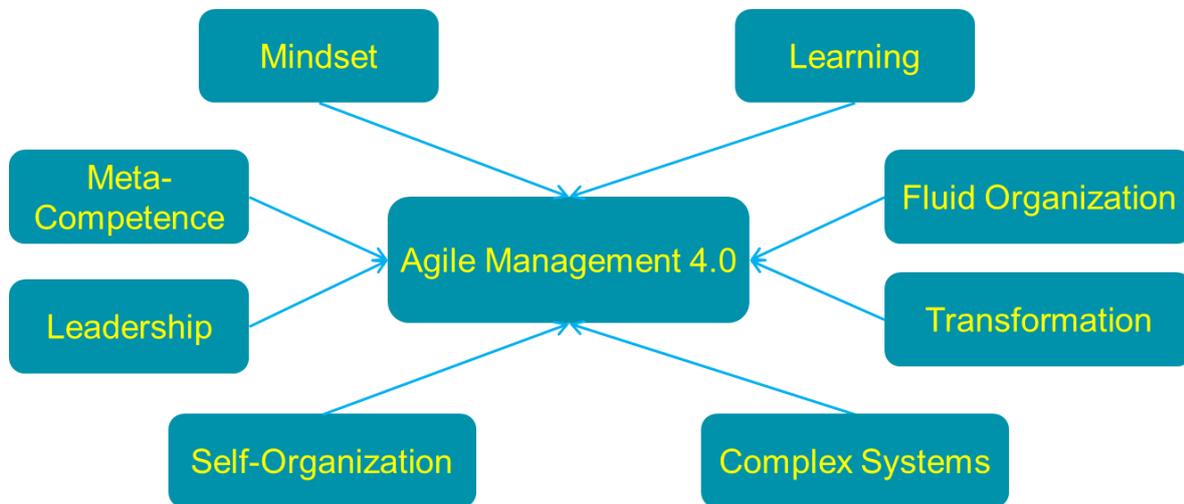

Figure 3-1: Cornerstones of Agile Management 4.0

In this Management 4.0 Handbook we will illuminate the following cornerstones: Mind-set and Learning, Meta-Competence and Leadership, Self-Organization and Complex Systems and Fluid Organization and Transformation.

We will show that selection of these conceptual fields is not arbitrary, but arises naturally. Management 4.0 is a tool to create agility in a complex system. The central anchor for all other considerations is the conceptual field "Mind-set"; here agile mind-set. With this term we describe a personal attitude or an organizational attitude. The mind-set is the basis for the ability to learn and develop meta-competence to act within complex systems. Self-Organization is a specific type of organizational complexity and regulates system complexity to create new system structures. It is, inter alia, the basis of so-called high-performance teams. With the term "Fluid Organizations", we describe organizations that behave in an agile manner as a whole and are capable of building and breaking down structures and processes, depending on their needs, to create business value in a complex environment. Systems interventions in complex systems are carried out via Leadership. Therefore, Leadership requires consideration of the interaction of system and intervening leader, perception of systemic patterns, and an agile adaptation of interventions. Leadership is the prominent active role in Management 4.0 (Oswald 2016). All these accumulate as Transformation, the need for permanent adaptation of complex systems to complex environments.

Management 4.0, as described in this handbook, integrates existing frameworks, such as Scrum or Kanban, but also extends far beyond these, based on a theoretical background and the described principles of agile management. The presented theories and practices are not industry-specific, although the examples are from specific domains of industry. However, it is our aim to show underlying general agile concepts in industry-specific examples.

We will use Agile Management and Agile Project Management often synonymously, as we believe that in a complex system and environment, these differences are increasingly losing ground.

(Agile Project) Management 4.0 supports and promotes the integration of traditional project management techniques: Accordingly, we define Hybrid Project Management as project management, based on an agile mind-set, which applies Agile Management 4.0 and supplements this where appropriate by models and methods of traditional project management. As we will see later, we integrate traditional PM tools in the Mind-set of Management 4.0 and not vice versa: So traditional PM tools do not prevent agility per se, it is a person's mind-set that prevents agility. Therefore, agile tools may be at home within a traditional mind-set, but agility is not.

Literature

Oswald A, Köhler J, Schmitt R (2016) Projektmanagement am Rande des Chaos, Springer Vieweg, Heidelberg

3.3 Complexity, Agility and Agile Management

Author: Alfred Oswald

Summary: Complexity, understood as characteristic of a system, leads to a perception of incomprehensibility and unpredictability. Complexity is the result of recurrent self-referential interaction of (many) system elements. To be effective, an agile manager has to monitor complexity drivers, identify complex social and technical interaction patterns, and adapt their actions based on PDCA-cycles.

Key Terms: Complexity, Complexity Driver, Systemic Patterns, Social Interventions, PDCA-Cycle

In Chapter 1 "Agile Management – Why Classical Management has Reached its Limit", we outline one of the main current drivers of social and technical complexity: Digitization. Other drivers, especially on the societal level, are disruptive innovations, ecological requirements or cultural interactions of different societies. In the context of a project, the scope of the project, the stakeholders and their respective organizations are the main drivers for complexity (Oswald 2016).

We speak of complexity if the social interactions or technical interactions of a system are, to a large extent, vast and unpredictable. We understand complexity as a system characteristic, which a system displays under specific conditions: A system shows complexity if all system elements interact coincidently, resulting in nonlinear interactions. For example, a system of two communicating human individuals mostly shows complexity, because the resulting systemic communication pattern is based on reciprocal adjustment and alignment of individual behavior patterns. The characteristics of the systemic communication pattern, are in fact based on individual behavior patterns, but also have other aspects: e.g. creativity is released or communication is trapped in a blocking pattern. Sometimes, to an external observer, the communication pattern looks simple, if only one-way information is transferred. Or it looks complicated, if the transfer of information shows many, yet straightforward facets. And at other times, communication is extremely unfocused and unpredictable. In this case, no stable systemic communication pattern is recognizable and we speak of chaotic

communication. So the same communication system can show simple, complicated, complex or chaotic behavior. If more and more people are involved in a social system, as for example, in a project, the likelihood grows that the system will display only complex or chaotic system behavior: The simultaneous, self-referential behavior of all system elements results in ystemic behavior of the system as a whole.

Digitization, disruptive innovations, ecological requirements or cultural interactions of different societies are environmental complexity drivers, which reinforce project inherent complexity drivers, such as project scope or stakeholder structure. Very often, the environmental complexity drivers act only through inherent complexity drivers: For example, in a project, the compulsion or desire to digitize business processes leads to a high(er) degree of innovation and/or degree of novelty, which in turn, fires technical and social complexity.

A manager and leader can remain effective in a complex environment if they introduce, in addition to long-term planning, a short-term horizon, allowing them:

- to monitor all complexity drivers carefully and continuously,
- to design and recognize systemic (social and technical) characteristic patterns,
- to act in an agile manner using systemic interventions and to learn to adapt actions, respectively.

Based on this insight, Oswald (Oswald 2016) describes in detail, the different models required to stay effective in a complex context:

- Complexity drivers are analysed by the diamond project type model
- The Dilts Pyramid, together with several psychological and social models, allows the analysis of systemic patterns. Recognized social patterns are used as input for the building of hypothesis for social interventions.
- The design of systemic patterns is supported by the model of self-organization.
- Agility is supported by continuous application of one or several interrelated Plan-Do-Check-Act-Cycles (PDCA-Cycle). Depending on context, each "phase" in a PDCA-Cycle is supported by different agile techniques. The chosen collection of agile techniques for a specific context is referred to as an agile framework. Scrum or Kanban are examples of agile frameworks.

In the following chapters we will outline some of these issues.

Literature

Oswald A, Köhler J, Schmitt R (2016) Projektmanagement am Rande des Chaos, Springer Vieweg, Heidelberg