Effect of Knowledge Management Approaches to Organizational Change

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Abstract: This article is written to call attention for management convergences. In this case we will focus on change management, we will show it briefly how change management developed over its fifty years period. We will classify today’s change management movements, and there we can see that in the classifications some knowledge management approaches are hidden. Then we will conclude a new classification to see, how these knowledge management techniques affects the change in organizations. The main purpose of this article is to emphasize that there are very similar approaches in the field of management we are witnessing to be different just from differing perspectives, and in the meantime we will focus on how these approaches affect our main subject, namely change in organizations.

Keywords: change management, knowledge management

1 Change in Organization

Nothing is more persistent in our life than change. From our childhood we experience permanent change in our life, in the communities we belong to, in the corporations we work and in the environment we live as well. In the western societies it is the most common part of our life, but in eastern it could be observed more or less as well. From the nineteen fifties the management literature has also engaged with this topic. From that point we have countless publications and theories, but we found that the practical work on the change field of the organization is not so easy to implement. As the environment evolves new change theories emerge, but their implementation’s efficiency is far from satisfaction. It is not our aim to criticize theories, nor implementations, rather to make a very brief overview and show the latest movements of the field. We found that the change management literature and the knowledge management literature are interwoven in a significant part in the last few years. In this article we will focus on the approaches that both fields handle as their own. We will show classifications of change management approaches, then we will select the knowledge management approaches from them, and then we will conclude a classification how these approaches affect change inside the organization.
Change management is defined as ‘an organized, systematic application of the knowledge, tools, and resources of change that provides organizations with a key process to achieve their business strategy’ [1] by a consulting firm called Lamarsh. A more exact definition of change management is ‘the process of continually renewing an organization’s direction, structure, and capabilities to serve the ever-changing needs of external and internal costumers’ [2]. These definitions are from the latest researches, but we shouldn’t forget how change management developed over its more than fifty years period.

Lewin’s work was the first inspirational change theory. In 1951 he created a model that consists three phases – unfreezing, moving and refreezing [3] – and is referred in almost every change oriented publication since then.

The first of these phases is unfreezing that means the old habits and behaviors have to be shaking up to raise an awareness of change.

In the moving phase the organization have to close the gap between the desired and the current state. In this phase new strategy and/or structure is created, and behavioral change should also occur.

The final phase of the model is refreezing. In this phase the new ways of working implemented in the moving phase should be cemented.

Later Kotter also made a very inspirational contribution to change theory. He suggested that, instead of the great change management literature and training programs, nearly 70 percent of change initiatives fail to bring their anticipated results [4]. Upon this insight he developed his eight-stage model of why change initiatives fail. The most common errors are the followings according to Kotter:

1. Not establishing a great enough sense of urgency
2. Not creating a powerful enough guiding coalition
3. Lack of vision
4. Under-communicating vision
5. Not removing obstacles
6. Not systematic planning, not creating short-term wins
7. Declaring victory too soon
8. Not anchoring change in the corporation’s culture

Later he also developed a model that gives guidance to avoid these errors.

Sirkin et al [5] focused more on the practical side of change management and developed a model how to evaluate change projects. They suggest that there are four key factors that determine the success of change projects. These are Duration, Integrity, Commitment and Effort.
Duration means the duration of time until the change program is completed if it has a short spam; if not short, the amount of time between reviews of milestones.

Under integrity they mean the project team’s performance integrity; that is, its ability to complete the initiative on time. That depends on member’s skills and traits relative to the project’s requirements.

Commitment means the commitment to change that top management and employees affected by the change display.

Under effort they mean the effort over and above the usual work that the change initiative demands of employees.

Carnall [6] made a very interesting contribution to change theory with defining the change architecture, as it is shown in Figure 1. The question is how we should balance centralized and project-changed change against local management. The advantages of central management are scale economies, the development of a critical mass of skills, and standardization, while disadvantages are lack of flexibility, undermining business unit control of overheads, and business units may be unresponsive to change. In contract with these features the advantages of the local management of change are that users are more fully involved, the development of centers of excellence is at local level, it is more market-focused and the local management feels ‘ownership’. The disadvantages are higher costs.

Source: Carnall [6]
due to duplication, lack of integration and consistency and variable standards and competence.

Change management architecture seeks to create a framework within which these two approaches can be more effectively balanced.

These mentioned change models are very different from each other. A lot of other change models exist that we will not display. Instead of introducing them we will show how change management models are classified.

2 Change Management Movements and their Classifications

As we turn to the classifications of change management initiatives, we should point out two approaches. The first is from Todnem [7] who is arguing on three different perspectives and the other is from Higgs and Rowland [8] who developed a map of change approaches.

Change management approaches can be characterized by the rate of their occurrence. In this view the main distinction is whether an approach involves discontinuous or incremental change in the organization. Discontinuous change can be defined as ‘change which is marked by rapid shifts in either strategy, structure or culture, or in all three’ [9]. Discontinuous change can be effective on a resource based view, but we should see its hindrances as it could properly work only in stable or complex environment, where the new structure could last long enough to reap the benefits of the change.

Incremental change in the other hand deals with movements that involve ‘successive, limited, and negotiated shifts’[10]. In this view change steps are more limited as at discontinuous change, but with a good implemented chain of steps it could be far reaching and much more impressive. These approaches could well answer today’s turbulent environment, as they create an organization that could quickly evolve at ease. Grundy suggests that incremental change should be divided into smooth and bumpy parts, but other authors state that smooth incremental change is outdated by now. Bumpy incremental change ‘is characterized by periods of relative peacefulness punctuated by acceleration in the pace of change’ [11].

Some authors make distinction between continuous and incremental change. According to Burnes [12] continuous change describes departmental, operational and ongoing changes, while incremental change is concerned with organization-wide strategies and the ability to constantly adapt these to the demand of both external and internal environment. These change characteristics are concluded in Table 1.
According to Todnem change can be characterized by how it comes about. In this case Todnem found four type of approaches as shown in Table 2.

<table>
<thead>
<tr>
<th>Type of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned</td>
</tr>
<tr>
<td>Emergent</td>
</tr>
<tr>
<td>Contingency</td>
</tr>
<tr>
<td>Choice</td>
</tr>
</tbody>
</table>

Source: Todnem [13]

Table 2
Change characterized by how it comes about

The planned approach is based on Lewin’s upon mentioned model. Actually planned approaches originated from that model.

The emergent approach to change emphasizes that change should not be perceived as a series of linear events within a given period of time, but as a continuous open-ended process of adaptation.

The contingency approach is founded on the theory that the structure and the performance of an organization are dependent on the situational variables that it faces.

The advocates of the choice approach are suggesting that there is certainly evidence that organizations wishing to maintain or promote a particular managerial style can choose to influence situational variables to achieve this.

Change management approaches can also be characterized by scale. In this view there isn’t so much confusion in the literature as the before mentioned characterizations. Most authors widely agree that four types of change exist in these categorizations: fine tuning, incremental adjustment, modular transformation and corporate transformation.

Higgs and Rowland developed a classification model, where change approaches are visualized in a two dimension space, as shown in Figure 2. In the figure Higgs and Rowland are reflecting to change approaches with labeling their author. The vertical axis of the figure ‘is concerned with the perception of the complexity of
change’, while the horizontal axis reflects whether “it is believed that change can be effected on a uniform basis or is seen as a more widely distributed as an activity” [14].

<table>
<thead>
<tr>
<th>Uniform approach</th>
<th>Change as a predictable phenomenon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lewin 1951</td>
<td>Conner 1992</td>
</tr>
<tr>
<td>Kotter 1995</td>
<td>Senge et al 1997</td>
</tr>
<tr>
<td>Duck 1989</td>
<td>Nadler&amp;Tushman 1999</td>
</tr>
<tr>
<td>Hamer&amp;Champny 1993</td>
<td>Trichy 1983</td>
</tr>
<tr>
<td></td>
<td>Hurst 1995</td>
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<table>
<thead>
<tr>
<th>Disseminated &amp; differentiated approach</th>
<th>Change as a complex phenomenon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pascale 1999</td>
<td>Wheatley 1992</td>
</tr>
<tr>
<td>Beckhard 1969</td>
<td>Lichtenstein 1996</td>
</tr>
<tr>
<td>Senge 1997</td>
<td>Blackmore 1998</td>
</tr>
<tr>
<td>Body&amp;Buocanan 1992</td>
<td>Ashridge 1999</td>
</tr>
<tr>
<td>Senge et al 1999</td>
<td>Shaw 1997</td>
</tr>
<tr>
<td></td>
<td>Weick 1995</td>
</tr>
<tr>
<td></td>
<td>Jaworski and Scharmer</td>
</tr>
</tbody>
</table>

Source: Higgs-Rowland [14]

Figure 2
Map of Literature of Change

3 Change Management Approaches Focusing on Knowledge

In these two brand new classification initiatives we can see that the change management literature includes approaches that are also listed in other management literature, namely in knowledge management. Higgs and Rowland explicitly put Senge’s Learning Organization in their categorization, while Todnem implicitly – in his definitive framework we can see reference to Senge, and some of his definitions can be well understood to Communities of Practice or organizational learning as well. These mentioned approaches have peculiarities in common.

Firstly implementing these approaches influences change inside the organization. The implementation involves change of course, but more interestingly it affects the change ability of the organization.
Secondly all of them focus on knowledge, or knowledge flows inside the organization and are widely recognized as knowledge management approaches.

Organizational Learning theory derives from Argyris and Schön [15]. They suggest when the error detected and corrected permits the organization to carry on its present policies or achieve its present objectives, then that error-and-correction process is single-loop learning. Single-loop learning is like a thermostat that learns when it is too hot or too cold and turns the heat on or off. The thermostat can perform this task because it can receive information (the temperature of the room) and take corrective action. Double-loop learning occurs when error is detected and corrected in ways that involve the modification of an organization’s underlying norms, policies and objectives.

Communities of Practice theory is originated from Etienne Wenger et al [16]. They define Communities of Practice as a group of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis. These people don’t necessarily work together every day, but they meet because they find value in their interactions. As they spend time together, they typically share information, insight and advice, and they solve problems together. They also ponder common issues, explore ideas, and act as sounding boards. In organizational setting it is a community of practitioners who can work in any level of the organization if they meet the upward criteria. They usually enhance their way of living, their motivations and their work efficiency, make process innovations and contrive opportunities to product innovations as well.

The concept of the Learning Organization is originated from Peter Senge [17]. He suggests that the basic meaning of a learning organization is an organization that is continually expanding its capacity to create its future. For such organization, it is not enough merely to survive. Survival or adaptive learning is important and necessary, but for a learning organization adaptive learning must be joined by generative learning, learning that enhances our capacity to create. At the heart of a learning organization is a shift of mind – from seeing ourselves as separate from the world to connected to the world, from seeing problems as caused by someone or something out there to seeing how our own actions create the problems we experience. To become a learning organization one should master five disciplines, namely system thinking, personal mastery, mental models, building shared vision and team learning. A learning organization is a constantly changing organization that not only changes reactively, it is indeed adapting itself to the environmental changes, but try to proactively influence the environment it faces to enhance its creating capacity.

After the introduction of these approaches we should focus on the effect they have on change inside the organization.
4 Effect of Knowledge Management Approaches to Organizational Change

The organizational learning theory focuses on our meta knowledge how we pose questions to previously unknown things and gives a clear process how the organization should acquire new knowledge, ergo learn. After mastering double loop learning, the effectiveness of the organizations change ability increases.

Communities of Practice focus on knowledge, insights and experiences of members in the community – who are usually experts of their field. As they share them certain situations arise when new knowledge is created. The knowledge creation process of Community of Practice is based on the common knowledge pool of the community. When new ideas arise this pool gives a first validation, that later follows the true validation on the field. Supporting Communities of Practices inside the organization means not only enhanced work efficiency, but a better ability to identify and exploit new opportunities.

The Learning Organization defined by Senge is focusing on knowledge via its disciplines. After becoming a learning organization the organization is changing continuously to reshape itself to fit to the environment, exploiting opportunities and creating new ones.

We can also classify these approaches with their connection to a change management framework, see Table 3. We will use a simple classification, but that is in harmony with Todnems work. The classification combines Todnems rate of occurrence and how it comes about dimensions to build a two-dimension space. The reason of this combination is simple. We found that the real differences of the approaches in relation with their effect to change can be well represented with these dimensions, and these dimensions are much more important in the light of the differences under approaches like the dimension of scale. It is because the scale of change is not determined by the approach rather the approach is determined by scale. Any approaches bear the opportunity of any size change that depends only on the depth of their implementation.

<table>
<thead>
<tr>
<th></th>
<th>Stable</th>
<th>Dynamic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned</td>
<td>Organizational Learning</td>
<td></td>
</tr>
<tr>
<td>Emergent</td>
<td>Communities of Practice</td>
<td>Learning Organization</td>
</tr>
</tbody>
</table>

Table 3

Knowledge management approaches according to their connection with change characteristics

In the horizontal axis the rate of occurrence can be seen, but from the view of the organization. Stable means change processes make radical shifts in the organizational structure, strategy or culture, and after the change process the organization is stabilized. Later a new shift can also happen, but between two change processes the organization is stable. This element is in harmony with the
discontinuous change category by Todnem. Dynamic means that change processes are continuous, stable situations of the organization cannot be seen in the long run, i.e. the organization is dynamically changing.

In the vertical axis we used the how it comes about dimension. Planned change means the management determines the important features, or parameters of the change, i.e. it is top-down oriented. While emergent means the parameters or features of change are originated from the front line of the organization, because it has a better insight to the field of operation and bears more practical information than the higher levels of the organization. Emergent change is bottom-up oriented and can only work in flat organizations where authority and accountability are distributed, i.e. the organization is decentralized. It cannot be managed, it can only be leded.

In the view of these dimensions we could not find any approach labeled as a knowledge management approach that fits the planned-stable segment. In this segment Lewin’s work should figure, but it has nothing to do with knowledge management.

In the planned-dynamic segment is the organizational learning theory of Argyris and Schön. Other author’s organizational learning theories are not mentioned because a full analysis of the literature should be taken to decide whether it should fit the planned or the emergent block.

In the stable-emergent segment is Wenger’s Communities of Practice. As this approach is based on a self-organized community that derives from any places of the organization it could only be emergent. These features are well envisioned by Lamontagne in an operating Community of Practice [18]. In the view of organization it is stable, because the organization is changing only when the community finds a new opportunity that has to be exploited by the organization, and the organization is stable between these opportunities.

In the dynamic-emergent segment is Senge’s Learning Organization. The Learning Organization is dynamic, because it is reshaping itself continuously to the environment. These kind of organizations are constantly changing, and the motivations to change can derive from any level of the hierarchy, so it is emergent.

It is very important to note, that our categorization could work well with environmental analysis. According to Marosán [19] environment can be stable, dynamic, complex or turbulent as it is shown in Table 4.
<table>
<thead>
<tr>
<th>Change Parameters</th>
<th>Stable or slowly</th>
<th>Fast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple with little interactions</td>
<td>Stable</td>
<td>Dynamic</td>
</tr>
<tr>
<td>Many, with difficult interactions</td>
<td>Complex</td>
<td>Turbulent</td>
</tr>
</tbody>
</table>

(source: Marosán[19])

**Table 4**

Environmental Characteristics

There is little doubt that an organization working in a stable environment could use Lewin’s change process efficiently. In a dynamic setting the organizational learning theory could suit the organization, because of the low level of parameters and interactions under them change can be top-down oriented, but the organization should have a deeper understanding of the environment, which should come from double loop learning, to cope with the fast change steps.

In the complex environmental setting Communities of Practices could be very efficient. Because of the high level of parameters and the complex interactions under them the higher levels of the organization do not have decent information about the change needed. The on-the-field practitioners can realize the opportunities and initiate change, but because of the not so great pace the organization can calm down after the change process successfully finished.

In the turbulent setting the learning organization could only be the effective answer, because the pace and the difficulty of the environment the organization should always have to fit itself to the current environment and management driven change is out of question.

We should also consider how the environment changed over the last fifty years. The mentioned change or knowledge management approaches were also developed in that rhythm. We do not want to suggest that only the learning organization could be the answer to the question why many change projects fail, or which one should be applied. Any change initiatives can be good answers to change needs, managements should only analyze which one is needed in their situation, and they should do it very carefully. And we also want to suggest that if we label approaches differently they will not be different approaches, maybe with that action they can be better sold by consultants, but they remain the same.

**Conclusion**

In this article we pointed out that the change management literature is interwoven with knowledge management literature. We introduced briefly change management movements, classified them, then found evidence of knowledge management approaches under them. We also analyzed knowledge management approaches according to their change abilities and pointed out how these approaches could fit into the external environment.
References


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