

ELEMENTS FOR MODELING CHANGE MANGEMENT

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Abstract: Economic models tend to describe individuals behavior, entities or systems in terms of underlying characteristics such as risk attitude, internal and external flows or functional structures. Independent on where the subject is situated in the real life, this characteristics change through experience triggered on the micro or the macro dimension of the four levels of influence: social, political, technological and economical. Models usually ignore change because, traditionally are considered in this way the simplicity of the model, as a necessary condition for modeling. A reason would be the unclear position that change takes in building up a model. In this paper we stress that modeling the change management is vital for any enterprise in order to thrive for a sustainable business.

Key words: change management, enterprise structure, influences, force field diagram.

1. INTRODUCTION

The change at the level of the enterprise is considered after decades of academic debates and managerial practice one of the top priorities and challenges, which an entity with economic activity is facing in the battle for the sustainability of its core business direction.

The field "under the microscope" is represented by the process flows and business processes of small or middle class enterprises, which entail the vital touch of the managerial practice. We followed in our studies the process of change which induced, mostly in the last two decade "profound and radical alteration" [1] in the present social, political, technological and economical realities of the enterprises.

We consider that the modeling of the change management process can be efficiently carried out only if the moment of occurrence/impact of change is accordingly measured.

In this direction, the consultants John Heyes& Asociates and Peter Hyde elaborated the unique model in Management Consultancy, which requires a Change Indicator in order to function properly. The authors consider that "on long term, the success of the planned changes can be measured through performance indicators [...] but on short term the most powerful tool for evaluation is the common perception of the employees on the ways the changes are being implemented" [2].

In the following we will not discuss universal descriptive or normative models such as the ones elaborated by Dyer, Lorsch, Ghoshal/Barlett or Robbins, Kotter. [3–6, 8, 9], our actual research confronts with the challenge of being some of the few researchers, as far as we know, who confront with the problem of quantifying change in the enterprise.

The corner stone of our research is Kurt Lewin's Force Field Diagram [7], which transposed in the context

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considering the company as a complex system of tangible and intangible forces, which find themselves in a dynamic equilibrium.

2. CHANGE MANAGEMENT

of an economic entity, will deliver, following insights on what are the main elements of the change process: trig-

gers/drivers and resistors/barriers. This principle suggests

2.1. What is Change Management?

Change Management is the part of the economic sciences which encompasses "the set of abilities, techniques and disciplines through which complexity and specialization are transformed in actions and results" [10], using the feature of organizing, in the context of a vision

While defining the elements that are characteristic for the change in order to start modeling the change management process, one has to adopt and understand the saying of Marcel Proust: "Models change, being born by the need of change itself".

This research paper attempt to answers the following question: What general elements that define the change can be adopted in the frame of modeling the change management process?

2.2. Stages in the administration of the change

It can be conclude and agree after a detailed documentation [3–15] with the Hrebiniak's point of view who stresses that in the change management process there are six stages [11]:

- 1. The magnitude and content of change. Here, questions like: *How big is the problem the enterprise has to deal with? What needs to be changed? Etc.*
 - 2. The available time to make the change happen.
- 3. Tactics in the change implementation process. Here are meant periods, milestones, Gantt charts, etc.
- 4. Responsibility and accountability. Who is in charge, which can be praised or blamed? Is for everyone clear what their role in the change process is?
- 5. Getting over/dealing with the resistance to change.

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6. Monitoring and control of the implemented change until a well defined point in time and space in which the change process is situated.

From the six stages we extracted, as shown in the next chapter, the defining elements that included into the enterprise equation of change would ease the path to its strategic objectives.

3. THE DEFINING ELEMENTS OF THE CHANGE MANAGEMENT PROCESS

The first stage (a) of the change process is to define the dimension and the impact area of the change, which has to be implemented.

The second stage (b) represents the time management of the change management process.

The third stage (c) combines features of the project management process with change management techniques with the aim to determine the needed forces and resources to make the change happen.

If we try to separate these first three stages, we will observe that they are practically interdependent. The dimension of the change, being threat or opportunity, and the time available for the implementation of the change interact through paths that lead to defining the ways of action and the necessary forces that will make the change. From the third stage of the change, we may extract a defining factor that puts the dimension of the change and the time for the change in relation.

Hrebiniak put this argument in the following context: "The relation between the dimension of a change and the time disposable for that change determine the way the change is being implemented, its cost and benefits and the probability of its successful implementation" [11].

From this onset, one can conclude that the change management process is influenced by the following three variables: the dimension and complexity of the problem, the available or allocated time for the change and the speed of change. In our approach for defining the elements of influence for the change management process, we consider the change speed only as an output, a result of the interrelation of the three mentioned stages.

The elements that we could extract until now as defining for the modeling of the change management process are vital quantification process of the need for change, identification of the exact available timeframe and using the relevant change management techniques in a given context.

Further, in our analysis we will consider the issues stressed out by the fourth stage of the change process. In this stage, it is important to define everyone's role in the change process. The structural integration is vital for the success of the implementation of the change in an enterprise. It is crucial that everyone knows its role and place/position in the system and that the managers know with whom they need to interact.

The task should be clearly defined in the way of a job description. Most times, it happens that during a change process in an enterprise, the things are not that simple and clear as they are thought to be and the authority is not always devoiced of ambiguity. This happens mostly in complex organizational structures where responsibility and accountability easily fade away. When tasks and

responsibilities overlap, one thing is clear: either everyone is responsible or no one.

The next element which we extracted has to do with what Edward T. Jackson and Yusuf Kassam [13] call "Participatory Evaluation in Development Corporation" or Beer, Eisenstat & Spector [14] "The Critical Path to Corporate Renewal" where they consider that: "The vision on the change has only then value if the managers succeed to share it with every single employee of the enterprise through creating a sense of urgency."

The forth element is building the appropriate *informational infrastructure* that enables nominal delegation of task and responsibilities and eliminates accountability issues. This informational infrastructure is being built on two dimensions of the enterprise:

- the structural dimension;
- the cultural dimension.

These two pylons, if understood and mastered efficiently by the managerial stuff, could confer the informational infrastructure of an enterprise operational effectiveness. These two factors are not only defining for the informational infrastructure but also for the entire change management process. The structure of an enterprise has to fits its culture and vice versa in order for the change agents to be sure of a positive, optimum impact of their actions and applied methods.

The fifth stage in the change management process deals with resistance to change. The barriers of change come from every single level and dimension of the enterprise. Resistance to change comes from people who built barriers for their own apparent security and well-being.

There are perception problems (*social*) of the change which have a negative impact mostly on creating an image of the own status (enterprise, problem) and in finding and evaluation of the solutions. These factors can lead to a suboptimal change strategy and to waste of financial, human or time resources.

In the same context, we speak about emotional restrictions/problems that slow down the generation of new ideas and about cultural restrictions given by the *political* level of the enterprise with the roots in its organizational culture.

The environmental issues are characterized by the relation from the workplace and have side effects in the fourth and fifth stage of the change management process – responsibility and accountability and dealing with the resistance to change.

Very closely linked to the environmental barriers are the cognitive barriers, which occur after the inadequate usage of the language, the rigid adoption of the implementation or the lack of complete and concrete information

Because of the resistance to change issues, the implementation of the change in an enterprise could fail.

The fifth stage in modeling change management is a database for options-choices that a change agent can use and adopt in order to break the barriers of change in addition to the fact that until reaching the fifth stage the managers were acting to influence the scaling down of the barriers for change.

The sixth stage in the change management process is the change monitoring and control. The control process is the feedback done through the monitoring feature of the implemented change.

The first step of the change control is the comparison of the change state, made until a specific point, in place and time with the strategic change goals imposed to be achieved. These measures can be undertaken in every step of the change management process and they provide an incessant up-to-date definition of the status-quo of the enterprise. Because of the need of monitoring and control of the change, a new approach was elaborated in the quantification process of the status-quo of the enterprise.

The final and decisive element in modeling the change management process is a complex *change-measuring tool*, which has the following features:

- Extracts information from the four levels of influence within an enterprise – social, political, technological and economical, which correspond to the two dimensions that have influenced the enterprise – the micro and the macro dimension.
- The quantification is done with the help of composite indicators specific for every level and every dimension.

As mentioned above the monitoring and controlling features are present through all the stages of the change management process. Hence, the change-measuring tool is used accordingly.

Except the above-mentioned six stages, which delivered necessary corresponding elements for modeling the change management process, it was underlined that for a successful administration of the change, one has to give the right attention to the following facts too:

- Administration and change of the organizational culture.
- The objective and realistic evaluation of the power and influence culture in the organization.

From these insights, we stress out following elements: a clear *vision and knowledge about the organizational culture* of the enterprise that undergoes the change process and the good *positive way of use of power and influence* throughout the change process.

4. THE FORCE FIELD DIAGRAM APPROACH

As stated at the end of the third chapter on analyzing the fifth necessary element in modeling the change management process, our approach would have as a result a change detection and measuring tool which allows the change agent (person/group of persons) to manage and quantify the strategic milestones which have to be reached in every one of the change stages.

The change management is a process based on procedures. It starts with the detection of one or more triggering factors and ends with the consolidation of the new status-quo of an enterprise. Lewin the American social psychologists who contributed to science group dynamics and action research, developed the Force Field Diagram. There he assumes that there is a dynamic interaction between two kinds of opposed forces, which maintain the balance (in an enterprise). Lewin based his model on engineering principles of force analysis taught in Static and Dynamics of Forces in Mechanical Design. He applied this concept, which primarily dealt with physical forces to more emotional and organizational forces for

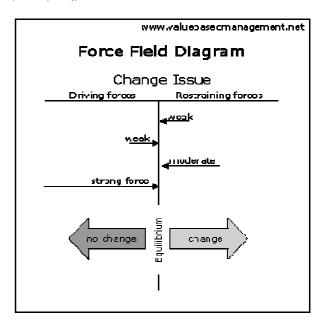


Fig. 1. Force Field Diagram.

his model. Hence, forces result, which catalyze or oppose to change.

The restraining forces, in the context of the Force Field Diagram (Fig. 1) shell be analyzed and measured in order for the change agent to know with what force, tools and measures to act in order to plan, implement and monitor the change.

In the given context we find it appropriate to submit our research to Lewin's opinion: "If you truly want to understand something, try to change it."

Change is defined as a transitory state, which acts and manifests itself on the enterprise due to triggering factors. "A triggering factor of the change is any disorganizing pressure, from insight or outside of the enterprise, which indicates that systems, configuration, procedures, rules and other aspects of the structure and of the organizational processes are no longer accurate and effective" [15].

Because of the above-mentioned reason and through adopting the idea of today scientific researches [16–19] it was considered the view about change management as a dynamic equilibrium of opposite forces, acting in a complex system, valid and appropriate.

Our work concluded after a research on the origins of the change in an enterprise [20 and 21], that its triggering factors can be observed firstly on the micro and macro dimension and second in the four interrelated environments in which the enterprise acts and strives for sustainability: society, politics, technology and economy.

The triggers of the change in an enterprise originate, as our research concluded, from its four environments and two dimensions:

This approach allows the quantification of the status-quo of the enterprise in terms of composite indicators relevant and characteristic for the change triggers. These change indicators are under continuous supervision of the change agents accomplishing the monitoring and control activity of the change management process. Hence, the last decisive element of the change management, modeling activity is met through quantification of the enterprises' status-quo.

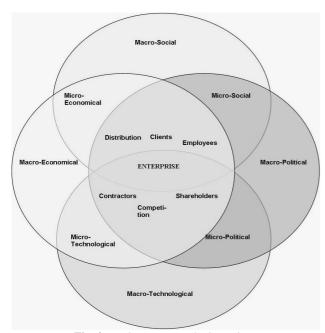


Fig. 2. Environments and Dimensions

5. CONCLUSIONS

The intention in the paper was to contribute to the scientific research literature on the change management doctrine. It is considered that the originality of this paper is put into light through the attempt to underline the need and the method of the quantification of the enterprises' status-quo in order to achieve excellence in the process of change management.

We stress the stages and fundamental decisions characteristic for the change management practice in an enterprise and we extract the main elements that have to be defined in order to start modeling the change.

The view of the enterprise as a complex system in a dynamic balance is put forward as a result of the tendencies of the modern, contemporary research activities with implications in the chaos and complexity theories.

Change is about techniques, processes, synergies with other sciences but most of all the management of change is about people who through their will to resist or to applauded change are decisive factors for the success of the change implementation.

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