

MANAGEMENT OF CHANGE AND THE NECESSITY FOR IMPLEMENTATION OF NEW IT TECHNOLOGIES IN A COMPANY

Daniela Carmen Lascu*

daniela@lascu.com

Abstract: *The present article underlines the significant importance of the human being and its adaptation to new conditions (application of change management) in case of a new IT technology implementation in a company.*

Even if major management changes of paradigm can be observed, the road to a management based on efficiency and not only on economic rationality is still a long one. Because of the market pressure and necessity of project cost reduction, the IT implementation is done quickly and this fact is causing high support costs after the Go Live of the project.

Change Management is a prerequisite for an IT implementation project. The support offered to the employees during all project phases, for ensuring a good understanding of the issues can be seen like a survival kit for the project.

These changes must be followed, evaluated and monitored and in case of failure, it has to be reacted immediately. Failure is caused by lack of knowledge in employee's behavior or by the inadequate vision of the management related to change.

Avoidance of failure can be accomplished by the detailed organization of change management application inside the project phases.

Keywords: *change of paradigm, change management, IT technology, project budget, project scope, employees motivation*

Taking into consideration the implementation necessity of economic software products in companies with a view to successful carrying on of the processes of offering, production, sale, administration or human resources, it is necessary to grant a significant importance to the human factor in the accomplishment of such activities.

For the present article, we take into account some principal considerations, related to the investigated phenomenon and for the substantial part of our intention, we will concentrate upon the way a change management imposed like a necessary one, for an exemplary case: implementation of new IT technologies in a company.

The fact that the accelerated dynamic of the post industrial civilization has been accompanied even by radical mutations in the content and management methods is an incontestable truth for the domain of social and economic sciences.

* Ph.D, Student -"Academy of Economic Studies", Bucharest; Senior SAP Consultant at "Eurocopter GmbH", Donauwörth, Germany.

There are lots of authors who consider that no major change in the rationality of the economic, social, politic or even moral processes would have been possible without changes of paradigm in management.

In this sense, the philosopher of morality Alasdair MacIntyre did not hesitate to formulate a hypothesis. Here is a synthesis of it:

The capitalist society in times of postmodernism is very dynamic and among other changes, it modifies as well the human typology of success, the representative ones. In this way, in an emotional and relativist climate, oriented in the direction of efficiency, even a behavioral one, the manager becomes the most important person. This one is joined by the therapist and by the esthete.¹

Such an appreciation is relevant as well for our application: the new IT technologies represent the vanguard of the economic rationality and the spearheaded of the actual human life rationalization.

These technologies can be developed or improved only by a flexible management, which has the capability to deal with changes. This type of management can't be promoted without an adequate added value formation of the new management rules and of the exemplary person: the manager.

What can be noticed? Between the structural determinants of the personality and the cultural ones, there is rupture - says Zygmunt Bauman, a polish-British philosopher - which can be explained as follows: The behavior of the manager in a company which is functioning according to the principles of the economic rationality comes in an inevitable way into conflict with traditions, skills and way of living of a person which is ready to circumvent or to false some coordinates of the management based on efficiency.²

At the same time, like La Ruc, Tone Hosmer proposed in his work "*The Ethics of Management*", that it has to be imposed that each management of change has to examine alternative means for getting rational decisions, even more in times where moral dilemma are existing. These alternative issues could be: the economic analysis, based on the impersonal market forces; legal analysis, based on impersonal social forces or even the ethic analysis, founded on personal moral values.³

In order to save time, implementation planning of IT technologies is made quite rapidly; the assigned budget for such projects is often reserved, mainly only for the technical modifications but not for their acceptance at human level in the company.

In the case of the management of change which is nothing else but the "psychological and intellectual preparation" of labor force is not seriously considered, enormous negative influences will be felt both on short term system implementation and occurrence of various problems caused by system correlated with the human factor, on long term.

¹ MacIntyre, Alasdair, *Tratat de Morala. Dupa virtute*, Bucharest, Humanitas Publishing, 1998, pg.55-56. This is the translation of the Romanian edition of *After Virtue, A Study in Moral Theory*, Notre Dame University Press USA, 1981.

² This idea has become well known due to a scientific communication session from Evian, held in 1965 but has been forgotten in the mean time.

³ Hosmer, La Rue Tone, *The Ethics of Management*, Irwin Illinois, USA, 1987, pg.8.

But how could any intervention be made through a solid management of change during each stage of technological platform implementation for the carrying on of economic processes?

Application of this type of management and its calculation as an extremely necessary additional cost should be already made within the business plan, prepared for the start of the project. Taking into consideration several factors (fear of the unknown, age of employees, professional or intellectual training of those who will work with the system), as well as the phases felt by the employees during the carrying on of an IT implementation (shock to the new, ignorance, feeling of loss of confidence, creativity, preparing to face the risk, requirement to fulfill work, acceptance of new situation, etc.), complexity of implementation of an IT technology for economic carrying on and its maintenance after implementation will be decreased. Obviously it should be taken into consideration that the implementation time will be longer; but the advantages are obvious and computable both within the project and after its completion.

Therefore, before initiation of project implementation of a new technology in company, implementation issues of the management of change should be considered. Responsible people to initiate, implement and follow up the activities within this process of change are only those leading the company.

When we are talking about a management of change, this idea or this type of management represents a suspect and unreal method for the leading people of the company – consisting of practical people who successfully developed their professional training by technical methods and not by abstract methods and rarely based upon sociological or psychological observation.

The idea of management of change filters the basic aspects of modern management of complexity and transforms them into an innovative management of change. Analyzing the projects in which administration or management has failed, personnel was not given the opportunity to understand thoroughly the benefit and purpose of the implemented projects, the motivation of this management failure type is obvious: lack of proper understanding of current situation regarding the sociological, psychological and economic constellation in relation to macro politics and current economic situation.⁴

Most of the times, management cannot be separated from old paradigms and it is based upon strictly hierarchical management principles containing a certain severity. The ideas and structures in which managers learned and developed themselves many years ago are now emerging without leaving any space to the current vision which is so necessary within a technological change in the company – necessity due to both current economic situation complexity and speed with which technological development is advancing today.

In the last decades, development of various activity branches has taken place very rapidly and it is felt in enormous steps. The question is how many times the human being succeeded to make such steps in the last decades during its development and evolution – steps that are due, of course, to his own actions. Man succeeded to increase at maximum the technical possibilities or those due to

⁴ Glazinski, Bernd, *Innovatives Change Management*, Wiley-VCH Verlag, 2007, pg.15.

his relentless desire for knowledge. The explosion of performance, knowledge and globalization that took place in the last 100 years is unique in development history of human being.⁵

For this reason, understanding and acceptance of changes is more than necessary for progress, notwithstanding its type.

With a view to prepare the change process, the company should take into consideration certain criteria:

1. Precise identification of project purpose,
2. Awareness of the phases of change process,
3. Maintenance of necessary steps for the guarantee of success of the management of change.

1. Precise identification of project purpose

The first criteria refer to detailed knowledge of implementation project purpose by all parties involved in product use after Go Live. When company management starts the implementation of a new technology, it is necessary that the consequences, implications and transformations of the processes in that company be clear and transparent. This transparency should be further transferred, hierarchically, so that future product users to be informed in time of what is going to be implemented. In this case, responsibility belongs to company management.

2. Awareness of the phases of the change process

The second criteria necessary for change process preparation refer to knowledge and awareness of the phases, which company personnel will go through in case of a change. Talking about the personnel, we refer to all hierarchical levels in company, directly or indirectly involved in the use of new technological product, which is going to be implemented.

Opposition of employees who enter in a direct relation with the product represents the first phase of the changing process. Along with change advising, feelings of anxiety and agitation arise and they could not be yet exactly justified. Irrespective of how the change advice is made in this first phase, it is not clearly understood what happens or is going to happen.

In the second phase, the personnel effectively undertake the signal of change of something directly related to their work. Opposition increases.

Routine, desire of not being detached of already known things, respectively old and obsolete technological products, fear of the unknown or potential consequences, even loss of job are emerging (in this phase, necessity of first criterion occurs: clear and detailed communication of the future processes which can decrease at minimum the fear of employees).

Emergence of the third phase, that of latency, sometimes even of shock, needs more than ever the communication forces and the diplomacy of the management people in order to give to the employees the possibility of understanding the reasons of the necessary changes. Opposition decreases and

⁵ Glazinski, Bernd, *Innovatives Change Management*, Wiley-VCH Verlag, 2007, pg.65.

this state of fact might become “dangerous” for project steps. Here we should take into account that management people themselves are “suffering” because of this change and the impartiality of change communication to relevant personnel could be obviously lost. For this reason, sometimes it is recommended that a company bring outside consultancy for support in the changing process. Consultancy has obviously the disadvantage not to know exactly all details of the activities or employees history in the company, but it has the advantage to be able to be clear and direct.

The fourth phase is dominated by discussions based on the development of the previous phase. Opposition increases again; action signs, contradictory analysis of arisen situations appears, everyone is willing to keep their well-known working procedures.

This fourth phase directly leads to the living of the fifth phase, that is the escalation of problems, sometimes even intentional misunderstanding of the advantages of a new technological product implementation, appearance of conflicts between hierarchical levels; the results given by the new product being in the testing period are questioned; a certain skepticism arises and, at the same time, it can be noticed how the last resources are used in action to maintain the old products. Opposition reaches here the maximum point.

Finally, we can talk about the sixth organization phase, many times present after the testing of the product. Now the real benefit of the new product can be noticed, opposition really decreases. Users (re) discover the well-known working processes transformed in a new technology much more successful. Acceptance appears and there is an open way for application in production of new technological platforms.

Phases are the same and theoretically they are fully lived by company manpower. What is different is the depth degree of each phase and company risk to remain caught too long in one of the above-mentioned steps. There is also the risk that it will not get out from this change process, not even after Go Live; thus it can remain in the latency phase or in the phase of problem escalation. As Bernd Glazinski mention in his work “Innovatives Change Management”, in 58% of the cases where the change process has been initiated, such process has not been finalized and the issues occurred during the change have taken a latent stage leading to demotivation, fluctuation, undefined processes and logistics and obviously to minimizing of companies efficiency.

3. Maintenance of necessary steps for success guarantee of the management of change

Taking into consideration the above mentioned phases and risks, we can go to the third criteria, that of company preparation for change management implementation. Here there should be defined certain stages which have to be considered in order to ensure the success of this process.

Analysis of change situation, as a first step in the change process, refers to the detailing of the change process. What is going to be changed and how much? We are talking here about a complete change – for example the implementation of SAP technological platform in a company which gets into touch with this

product for the first time – or, another example, a partial change, an adjustment (the company is working for a long time with SAP product, now only a new module is introduced that is WM – camp administration).

Purpose definition of change process represents the second step necessary to be covered. This analysis occurs from the result of the first phase and obviously it comprises the company culture or experience degree of the company regarding such changes.

The third step means planning of the milestones, which have to be followed. It is necessary that such planning to be made together with the responsible people for change process – objectivity is a very important characteristic in this phase.

The fourth step means effective performance of the above mentioned measures and it should be developed under the supervision of implementation group of change process and at the same time it should be controlled.

The fourth step interpenetrates with the fifth one; this one deals with monitoring of the results obtained by application of change management.

Further to monitoring of results, their maintenance occurs of course. The sixth step, respectively the one of administration for the obtained results should be already developed when going from the testing step into the Go Live one.

After the Go Live process, the transparency and proper logistic of processes should be maintained; motivation of manpower should be part of the maintenance plan. Thus the change process will be not assigned to failure.

Failure reasons for change management

The analysis of reasons for a management failure is as important as the analysis of success criteria of change management.

Failure probability is much lower when there the factors which lead to the success of this type of management are known, as well as the reasons of such failure.

Consequently the following reasons could be noticed:

Organization of change processes is not made taking into account the knowledge level of manpower involved or their psychological level; many employees are not prepared to accept the change and offer resistance, so they are not prepared to accept the adjustment process. As a result of various analyses of market competition, company's necessities, company's management decides to implement a new technological platform. Further to the official decision and discussions held with the implementation group, at a certain moment, the decision is announced to the people who will work with that system. The implementation group draws up a standard implementation plan of the change process, not taking into consideration the effective or actual stage of knowledge of the manpower. We assume here a certain behavior and professional good level for the start of change process.

Now implementation plan of change management fails if it is not previously adapted to the real necessities of the users of future technological product. This adaptation can take place only by detailed discussions with users.

*Management concerns change processes as a linear control theme using the top-down strategy which manpower should submit to.*⁶ The management “mixes” sometimes application of change management with spread of directives in the company. Thus, discussions are organized and there are planned activities which people have only the “obligation” to accept and comply with their fulfillment. Change management has nothing to do with this method that represents a failure of this activity and implicitly a complete demotivation of future users of technological product.

Management overpasses too easily over ethical principles, empathy, without understanding the reasons why people show opposition to in the company, reasons more or less personal of manpower.

Acting in the way mentioned above, management of many companies does not take into account that some time it is necessary until people to be involved in change process are able to show acceptance and understanding to the change, which is going to take place. In case such understanding process takes place, people are able to involve themselves actively in the change process.

Probably also because of so many actions necessary during a process of new technology implementation, the importance of ethical principles is minimized in the change process – but exactly in this case, ethical principles are very important, like they are mentioned in the study “*Business Ethics*” of Dan Crăciun, Vasile Morar, Vasile Macoviciuc. Communication in time of company problems and objectives, setting the social climate in the company, fulfillment of good manners rules, personnel involvement in various decisions, supervision of employee’s behavior⁷ and last but not least the respect and understanding for the private sector – there are few ethical principles which should be taken into consideration in change management. Playing with them will generate discontent, demotivation, fear of losing the job and implicitly recalcitrant attitude to any probable change.

During the change process, information (communication) transfer is not taken into account in detail with reference to planned technological change to all parties directly or indirectly involved in this change, as well as complex of themes which should be analyzed for the success of change management.

Behavior necessary for settling the problems, behavior in case of conflicts, management and conduct, consistency, decisions, behavior with clients, suppliers, partners, transfer of messages taking into account certain rules of the company – all these criteria interfere and contribute to the success of change management application, not only within the IT projects, but also generally, during all changes necessary in the company.

Change management correlated with project stages

In the next paragraphs we will explain in which project stages the change management is more or less necessary to be implemented, indirectly following the idea that new technology application does not have much time which can be

⁶ Glazinski, Bernd, *Innovatives Change Management*, Wiley-VCH Verlag, 2007, pg. 16.

⁷ Crăciun, Dan, Vasile, Morar, Vasile, Macoviciuc, *Business Ethics*, Paidea Publishing, 2005, pg. 526, 527.

used to detail change administration at each step of the project.

As we mentioned from the beginning, planning of change management application upon project initiation is vital both for the success of change process finalization and for project good progress, avoiding demotivated and unprepared employees to work with the new product.

In programming the section of the technological platform, change management occurs only marginally, in case the product is developed with the support offered by outside consultants. If we are talking about inside programmers, this type of management should be seriously taken into consideration in this stage as well; programmers need in their turn to get used not only with company's requirements and programming as such, but also with the idea to have and show an enormous responsibility for the performed work.

In the product testing section, change management has again an important place. Fear to be replaced one day by technology reaches now the maximum level. People notice now the obvious change of their way to carry on their current activity. Sale contracts are in the system and not only on paper. Only by few computer commands, an offer "turns into" a contract or invoice. Which is personnel value anymore?

Now comes the influence of such change management to explain to people that logistic of such system cannot work without employees' mental and professional capacity.

Relations with clients or suppliers or even with own company management gain only in rapidity and efficiency. Human communication, empathy being at the basis of interpersonal relationships, large spectrum of knowledge held by those who communicate could be never replaced. This is the most important issue which company management should transfer to its people. By these actions, management motivates the employees to learn a system that grant to those who use it an enormous advantage in the field or professional knowledge and at the same time, efficiency and transparency of economic processes grows in the company, by successful implementation of the technological platform. Without the employee's work and experience, such implementation could not be possible.

REFERENCES

1. Bauman, Zygmunt, (2004), *Globalization and its social effects*, Bucharest, Antet Publishing.
2. Bauman, Zygmunt, (2000), *Postmodern Ethics*, Timișoara, Amacord Publishing.
3. Brătianu Constantin, (2006), *Strategic Management*, Craiova, Universitaria Publishing.
4. Burciu Aurel, (2004), *Comparative Management*, Bucharest, EDP Publishing.
5. Cârstea, Gheorghe, (2010), *The Modern Approach to Industrial Maintenance Management*, published in *Informatica Economica*, vol.14.
6. Crăciun, Dan, Vasile Morar, Vasile Macoviciuc, (2005), *Business Ethics*, Paideia Publishing.

7. Glazinski, Bernd, (2007), *Innovatives Change Management*, Wiley-VCH Verlag.
8. MacIntyre, Alasdair, (1998), *After Virtue. A Study in Moral Theory*, Humanitas Publishing.
9. Naftanaila, Ion, (2010), Ideas and discussions based on the *International Conference of Modern Approaches in Organizational Management and Economy*, done by the Academy of Economic Studies in cooperation with the Management Academic Society in Romania (SAMRO) and the National Council of Small and Medium Sized Private Enterprises in Romania (CNIPMMR), Bucharest.
10. Nicolescu, Ovidiu, Ion Popa, (2012), *Strategy and Strategic Management*, Pro Universitaria Publishing.
11. Nicolescu, Ovidiu, Ion Plumb, Mihai Pricop, Ion Vasilescu, Ion Verboncu (Coord.), (2004), *Modern approaches in the management and the economy of the company*, Vol I-IV, Bucharest, Economica Publishing.
12. Popa, Ion, Cosmin, Dobrin, (2008), *The premises of strategic management*, in *Economy and local administration*.