

# Effective Change Management for Project Success

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**Abstract:** Change management applies a structured approach to effectively transition individuals, business processes and organizations from the current to the desired future state. On an example of a corporate business project, the paper analyses three types of business changes that most often occur as a consequence of large-scale projects: changes in the functionality of equipment and systems, changes in regular business procedures, and changes in the organizational structure. The changes presented in the paper are caused by a powerful business requirement, accompanied by new equipment and devices, new rules, new positions and new individuals. The main activities pertaining to change management analyzed include drafting an activity plan, assessing the impact of change on business, communicating with all levels of business hierarchy, monitoring the implementation of all parts of the change, and planning and controlling the necessary educational and training programmes for all project participants and business users. The paper ends with the comparison of three basic ways of change management: mechanical management with strict adherence to previously defined procedures, experiential management with active action, and intuitive management with occasional participation in project management.

**Key words:** changes, projects, change management

## 1. Introduction

We live in an age of great changes and great projects. Changes are inevitable and are noticeably intensifying, the complexity of the resulting projects increases to the level of chaos, and change management proves to be an essential part of projects. The significance of change management is becoming so great that it implies that the way change is implemented directly affects the competitiveness of the company. The driving force of changes can be divided into external and internal factors. Some of the examples of external factors are market, technology, laws and regulations/directives, and the examples of internal factors are corporate strategy, workforce, technology and equipment.

An example of change presented in this paper is the case of a corporate project initiated due to EU Directive 2014/40/EU [1], which requires the tobacco industry to drastically increase the level of traceability, i.e., no

later than 20 May 2019, all unit packets of tobacco products will be required to be marked with a unique identifier in order to record and monitor their every movement in the EU, from the production line in the factory, through logistics warehouses to the final sales destination. A traceability system which would enable an easy transfer of all relevant data, ensure their safe storage and guarantee full data access to the competent inspection authorities is requested. Due to the enormous additional amount of data, the necessary speed of its processing and the set requirement for 100% compliance with the TPD directive [1], the change is so great that it can be seen as disruptive. It significantly covers all the main business activities: planning, production, storage, distribution and sales:

- For factories, i.e., the production part of the corporation, this requirement represented a tectonic change; a lot of new equipment was installed, the production process was updated and corrected, new knowledge and skills were required from all members of the production team, from line operators, through mechanics, electricians and

automation engineers, all the way to shift managers, line managers and process managers;

- Work processes have undergone a drastic change in warehouse, distribution and sales business activities, and the new equipment has included modern hand-held devices for scanning products during the entry/exit of goods and the control of hierarchical records;
- A completely new process of planning the purchase of the necessary unique digital codes for marking unit packages of products was included in the production planning process.

If we look at the global part of a company's business (business in the EU), this project represented a big challenge primarily for the IT unit: a combination of a third-party software, software as a service and cloud computing was developed, of huge internal development which was all connected with production lines in factories and a large central ERP system through interfaces.

At the local business level (a single country business operations), the project introduced a plethora of new digital equipment, primarily programmable laser printers for marking unit packages and ultra-fast cameras capable of reading and analysing the correctness of pre-printed unit codes. Unit packages are packed in several hierarchical levels of the product itself, whereby the packaging of each "upper" level is additionally marked with special printers and checked with additional cameras. All this is accompanied by a multitude of interfaces and integration messages that are sent directly (online) to large databases where they are again processed and analysed.

## 2. Basic Assumptions

While change management is mostly based on communication, educational and training programmes, it is the duty of a change manager to prepare communication and educational and training plans. Namely, it is not enough only to understand why the change is necessary; people must be able to do new

things that they have never done before, i.e., they need training.

### 2.1 Change Manager Versus Project Manager

There are several important differences between a project manager and a change manager. The project manager's job is primarily to manage a series of tasks, resources and activities, within a certain time and agreed budget, in order to create a unique product, service and result. On the other hand, the job of a change manager is a relatively unknown role; their job is to ensure that the benefits that are predicted as a result of the project will actually happen. The change manager takes care of what could possibly go wrong, from a person's perspective, and one of their important tasks is to ensure that the necessary and agreed educational and training programmes will be fully implemented, and that the company at the end of the project will actually become the owner of all new processes (which is an almost impossible mission if projects with so-called disruptive changes were to be done without a change manager).

### 2.2 Change Manager

Since the role of a change manager is closely related to communication, it is their job to define what will be communicated, how it will be communicated, which communication channels will have the best effects and how people will communicate with the management. That is why the basic prerequisites for being a good change manager could be summarised as follows:

- Relevant business experience
- Free and open communication with all corporate levels
- Willingness to work behind the scenes (let others take credit)
- Ability to be a good coach, mentor and adviser

A change manager has to be persistent, boring, provocative and optimistic in their job at the same time. They have to be ready to share things nobody wants to hear and remain persistent in explaining the need for

the implementation of project requirements. They must master the ability to influence others in order to successfully implement change and be able to negotiate with high-ranking managers in order to obtain the necessary support and cooperation.

Key information, such as introductory explanations, current status information and additional explanation, if necessary, has to be repeatedly shared with the employees. Since making mistakes is a normal part of doing something new, we can conclude that more disruptive the change, the greater and plentiful were the mistakes. That is why a change manager must prepare the company for such a situation. Employees want to know how they will need to work and behave under new circumstances. That is why it is necessary to constantly communicate with them and provide them with all possible help so that they become trustful and acceptant of new circumstances as soon as possible.

### 2.3 The Role of Change Manager in the Project

A change manager can assume two possible roles within a project, i.e., model A and model B:

- Model A) Change manager works in parallel with the project manager; the change manager reports to the sponsor and the programme committee independently of the project manager; the change manager participates in all programme board meetings and has direct access to all corporate levels.
- Model B) The change manager as a part of a project team; they report directly to a project manager; they do not attend the meetings of a programme committee and have no access to high management levels.

The advantage of model A is freedom of action, increased influence and active contribution to project management. The disadvantage of this model is the possible conflict between the project manager and the change manager. The advantage of model B is precisely the clear hierarchy (which prevents the afore-mentioned conflicts), while its disadvantages are

the lack of influence, passive approach and limited action.

The presented project in this paper shows that the project management and the change management are organised on two levels: corporate (at the level of operations within the EU) and local (at the level of operations of all EU member states), whereby the project at the corporate level is called programme. Regarding positioning, the change manager at the corporate level is defined according to model A, whereas all local change managers are defined according to model B. Such positioning of local change managers has repeatedly proven to be a good choice, as it ensured the necessary degree of autonomy of local project managers.

## 3. Change Management Life Cycle

Once the initial details of the project are defined and the basic project team is established, activities that aim to establish which change items are taking place are initiated. This is followed by the analysis and elaboration of their impact on business operations, drafting of a communication plan, and finally planning and implementation of educational and training programmes.

### 3.1 Fit-Gap Analysis

A Fit-Gap Analysis compares the start point and the end point of the project, thus defining all the gaps that need to be resolved. The outcome of the gap analysis is the understanding of gaps between the current and future state, and is therefore a necessary part of the change management process. The steps of the gap analysis process are:

- Interactive guided workshops
- Keeping scores in simple tables to show gaps
- Identifying necessary change items
- Prioritising items
- Defining problems and risks

The gap analysis result represents the basis for the next step of the process: a deeper specification of

change items and the analysis of their impact on business operations. The content of a fit-gap Excel document include:

- Unique change item identifier
- Name and description of each change item
- Business unit: marketing, operation, sales
- Categories of change items: Fit, Fit with Process change, Gap
- Gap type: configuration, data, improvement, interface, process variant
- Benefit of change item implementation
- Total impact if not implemented
- The owner of a change item

An important result of the gap analysis is the correct categorisation of all change items. Below is an example to better illustrate the importance of this information:

- Fit: the process of internal destruction of a certain amount of products (the EU directive does not require specifying exactly which packages were destroyed).
- Fit with change: the process of creating new products (changing certain specifications so that they comply with the EU directive).
- Gap: the process of taking samples from production and sending them to laboratories outside the factory (the EU directive requires tracking of all individual product packages if they are leaving the factory).

### 3.2 Change Impact Assessment

A Change Impact Assessment (CIA) is a procedure that analyses the impact and implications/consequences of the subject major change on all aspects of business, and serves as a basis for decision-making and planning related to the change itself. Once a change is properly defined, it is important to conduct a full impact assessment. CIA is at the heart of the change management process and when it is done correctly, it enables a clear view of all risks and requirements for business continuity. The CIA is created in multi-day isolated workshops, with the

mandatory presence of the key people from central and local business. The content of the document features:

- Categories of change items: Fit, Fit with Process change, Gap
- Description of the change item: current and future state
- Overall impact/effect: high/medium/low
- Implementation benefit
- Risks for a successful implementation
- Action plan for change implementation

### 3.3 Presentation of Defined and Elaborated Changes to Stakeholders

The participation of stakeholders is the key success factor of the entire change process. Through their participation, the change manager establishes the momentum of the entire project. The change manager must be persistent in maintaining daily communication with the stakeholders. All stakeholders in the business operations must be recognised and included in the communication process. Excluding certain stakeholders poses a significant risk for the success of the project. Each team works better if the necessary level of clarity around individual and joint responsibilities related to the respective tasks is achieved. This conclusion can also be applied to communication activities as part of change management, and for this purpose a RACI-X communication responsibility matrix is defined.

Table 1 shows the example of a communication RACI-X summary table for local level of the project used in this paper. Given that the positioning of the change manager is defined in accordance with model B, it is clear that the (X) project manager is solely responsible for communication with the general director of local operations. The change manager is only informed (I) about this communication, and is responsible (R) for communication with the directors of other units and the local publications department.

**Table 1 Example of a RACI-X communication matrix.**

Business Function	Operations manager	Production manager	Logistic manager	Production line lead	Warehouse manager	Transport manager	Other managers	Manufacturing super-users	Logistic super-users	Internal publications
Project function										
Project Manager	X	A	A	I	I	I	C	I	I	C
Change Manager	I	C	C	C	C	C	R	C	C	R
Manufacturing process lead	C	R		R			I	R		I
Logistic process lead	C		R		R	R	I		R	I

The meanings of individual letters are as follows: R – Responsible, A – Accountable, C – Consulted, I – Informed, X – Exclusively responsible.

Fig. 1 shows a recommendation for mapping possible stakeholders related to the project [5]. The mapping was done with regard to two characteristics, their role in the organisation and their interest in relation to the subject project/change.

*3.4 Drafting of a Communication Plan*

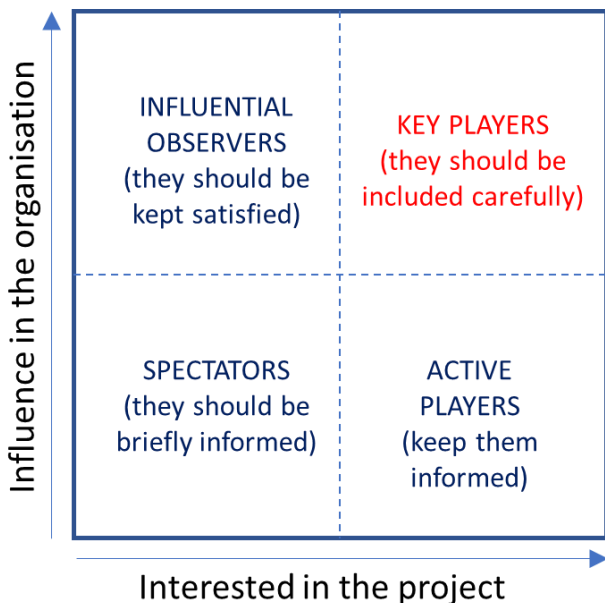
Communication is at the heart of all successful change initiatives. That’s why understanding different communication approaches and when to use them makes the difference between success and failure of communication efforts and success of implementing

the change itself. The change manager should categorise the information recipients and clearly identify their information needs.

The examples of communication channels include e-mail, printed local news, large notice boards, TV monitors with messages and presentations, intranet, info portals, workshops and presentation sessions with a panel discussion, to name a few. It is necessary to use as many different channels as possible, because each of them can convey different messages in different ways, i.e., affect recipients differently. Preparing a good communication plan means carefully determining the target audience, key messages, main activities, defined responsibility and time of execution.

*3.5 Monitoring Implementation*

The most difficult part of projects that fall within the area of high complexity and chaos is balancing between maintaining regular operations and disruptive project requirements. In the case of the project discussed in this paper, there was a constant conflict between the need to maintain continuous production, i.e., not to lose its importance in the corporate production network, and the need to install and put into operation new equipment on all production lines on time. The impression is that without continuous communication and emphasizing the importance of the project for the future of the factory and the importance of timely completion of the project, the project is simply doomed to fail. The representatives of the project team attended all regular business meetings and



**Fig. 1 Mapping of stakeholders according to their role and interest in the project [2].**

agreements every day, and the change manager continuously visited the production plant and talked informally with the workers.

Communication activities that were agreed and implemented at the local level were:

- Daily and weekly project meetings
- Daily business meetings (production, logistic, ...)
- Informative presentations to all interested business levels
- Full-day isolated workshops with business stakeholders
- Regular field tours (production, warehouse, offices)
- Mandatory introductory presentations for new operators and technicians
- Publication of news in the factory bulletin
- Independent monitoring and publication of project parameters

### 3.6 A Communication Activity Example

An interesting example is an all-day workshop led by a change manager, with twenty stakeholders from production unit and selected members of the project team. From the point of view of change management, a certain disruption in the cooperation between the business operations and the project team was observed, and with the approval of the chief operations director, a full-day workshop was held in completely isolated conditions with the aim of familiarisation of the participants with the sole aim of improving internal communication.

It was estimated that the participants would benefit from a change of point of view of the project itself, and they were given the opportunity to try unexpected archetypal roles (king, prince, shaman, visionary, pioneer, gambler, wise man ...). At the very beginning of the workshop, the participants drew cards with basic archetypes and, from that moment on, they had the task of observing and commenting on the current project situation exclusively from the role defined by their

drawn card. The conclusions from the afore-mentioned workshop are classified into three groups, and some of them are presented below:

- New proposals for improving work on change management: Changing the training strategy, Active participation in improving communication between certain business units.
- New requirements for the management: Carrying out a new assessment of the required number of people working on the production lines (given the enormous increase in the complexity of the production process), Putting more effort into recruiting new people for critical positions.
- New obligations of all workshop participants: Spending more time managing people instead of managing processes, Intensifying the work on process standardization, Intensifying the work on planning own activities, Listening more to interlocutors and giving them more attention.

The goal of the workshop was fulfilled; the communication between the production unit and the project team has improved. The agreed conclusions were later presented to the director of operations, who partially accepted the requests addressed to the management: recruitment intensified and soon produced results.

### 3.7 Modus operandi of a Change Manager

The way the change manager works is related to the complexity of the project. Fig. 2 shows a possible division of projects with regard to the degree of technological innovation and the degree of advancement of the idea [3]:

There are three common types of modus operandi of a change manager:

- Neutral change management with monitoring of standard methodology
- Experiential change management with active participation in the work of the project team

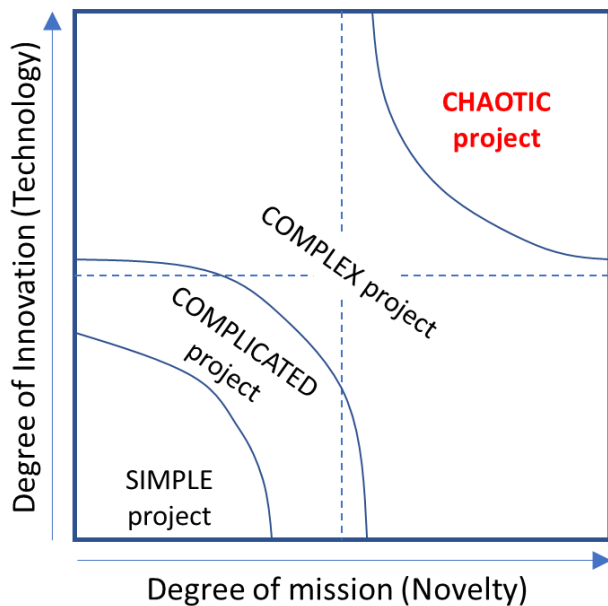


Fig. 2 Project categorization from simple to chaotic [3].

- Intuitive change management with occasional participation in the project management

The first method is satisfactory in the case of simple projects. However, with such projects, the question arises whether there is even a need for the position of a change manager.

The second method is used for complex projects, when the position of a change manager proves to be necessary, and a person with relevant experience on similar projects is regularly appointed to the position. If necessary, the change manager actively participates in regular project activities (e.g., preparation of testing or supervising of individual implementation phases).

The third method is applied to the so-called chaotic projects when intuition often proves to be the only possible way of management [3], given that there are no previous experiences. The change manager helps the project manager by partly taking over the coordination of the work of the project team.

As for the project that is used as an example in this paper, it can be, without a doubt, classified as a chaotic project. The reality of that chaotic project caused by a disruptive change confirmed the standpoints from Ref. [3]: in some moments, only intuition can lead to making right decisions. At the time of writing of the

paper, the project has not yet been completed, but a final judgment on the impact of the implemented communication activities on the completion of this specific project can still be given. Everything that was done during the project, from Fit-Gap and CIA workshops, through introductory presentations for new operators to the preparation of documentation for the final supervisory check, undoubtedly contributed to the quality of the project: it is already known that it will be completed in full and on time. All factories, all warehouses and all processes will, on 20 May 2019, be fully compliant with the EU TPD Directive.

#### 4. Conclusion

The era of disruptive changes requires a different way of thinking and a willingness to face the unknown and unpredictable circumstances. Large investments in new technologies must be accompanied by increased investment in people, and projects controlling such investments must be prepared and monitored differently. Project management alone is no longer enough — it is necessary to manage the changes themselves, especially the impact of changes on people. Communication, educational and training programmes, and the selection of people for individual tasks are taken to a completely new level, and change managers become key members of a project team of successful projects. Their positioning in the hierarchical structures of projects becomes a very important issue, and it is recommended to carefully assess how much independence should be assigned to a change manager, with a clearly defined way of communicating with stakeholders using the RACI-X matrix. All change items should be identified and their impact on business operations should be further analysed, which should then be used as a basis for drafting a communication, educational and training plan. And finally, after all the preparations are done and all the plans are drafted, there is nothing else left to do then to keep communicating.

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