Managing Organizational Change and Commitment in a Global IT Company

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Abstract

The main objective of this study is to investigate how the employee commitment to a change and the implementation quality affect achieving the goals and succeeding in an organizational change initiative. The secondary objective is to identify factors hindering the commitment of the employees to changes.

The study is conducted in two parts in a large information technology company providing complex IT solutions and services. The first part, the pilot study, focuses on identifying factors hindering the employee commitment to a change. The results of the pilot study are utilized in content validation for the main study.

The main study focuses on measuring the relationship between employees’ level of commitment during different phases of the change process, change process quality in each of the phases, their importance, realization level of the different goals set for the initiative and the final success of the change initiative. The results indicate that the employee commitment to a change seems to have a significant impact on the change process quality, but not necessarily on the final success of a change initiative.

1. Introduction

At present, a large number of companies offering products and services in information technology (IT) field are struggling in the middle of a severe global financial crisis. Many of these companies are forced to change their organizational structures, business models and strategies to maintain their competitiveness and to survive the harsh economic conditions. Consequently, there is a growing interest for understanding the concepts of an organizational change and change management in IT industry, too.

Organizational change and change management have been studied widely during the last decades [3,7,15,27]. One of the major reasons behind such a high interest and continuous enthusiasm for understanding organizational change and its management stems from the dynamic nature of the surrounding environment of modern companies. Changes in today’s IT business environment are inevitable and the challenges associated with organizational change are constantly becoming more complex. In IT field, it is not only the changing platform technologies and the architectural directions that are changing, but also the client’s business models and constantly evolving requirements for IT products and services that shape the IT industry in a radical way.

The existence of change in the surrounding environment of IT organizations is, however, widely known. The importance of studying organizational change from different perspectives has been well-understood in many organizations before this exceptional financial crisis. The results of a global executive-level study in 2008 [12] indicated that as much as 83 % of 1500 interviewed global executives expected a substantial change to take place in the next three years. The high number illustrates an increase of 20 % from the results of the same global study conducted two years earlier. At the same time, however, only 61 % of the same executives thought that they had the sufficient knowledge, skills and capabilities to manage the change successfully. This alarming situation has led to a phenomenon called the change gap. The change gap refers to a situation, where the challenges associated with an organizational change are expected to evolve faster than the knowledge and the skills to manage it.

Hence, studying the different aspects of an organizational change as well as developing improved ways to manage the change successfully might not only help IT organizations in revising and implementing new business models and strategies, but in the present, exceptional circumstances, it might even determine their future and survival. An important question is, whether research can keep up with the pace of the accelerated, more intense change in technology and in the surrounding environment of organizations.

Organizational change research has been traditionally divided into two major theoretical branches, the theory of change and the theory of changing [4]. The first one concentrates on describing the change process and on the dynamics by which a change occurs in an organization, whereas the theory of changing refers to how to get a change completed in an organization. Lewin’s [17] model for organizational change and Schein’s [28] interpretation of Lewin’s model are good examples of descriptive models of the organizational change process.

Lewin’s model and Schein’s interpretation for organizational change have been inspiring research also in the other theoretical branch, the theory of changing. Kotter
2. Theoretical background

The theoretical background of this study stems mainly from two wide areas of organization theories and organizational behaviour theories. These theoretical areas are complemented with theories on individual changes and reactions during organizational change process.

2.1. Organizational change

The surrounding environment, opportunities and needs of organizations are constantly changing. Change can be driven by for example the market, technology and society pressures. Consequently, responding to new challenges and adapting to the changes of the environment requires organizations to change as well. The subject of organizational change can be for example organizational structures, strategies or business models.

Current organizational change theories break mainly into two branches. According to Bennis [4] the field is divided into the theory of change and the theory of changing, while Porras and Robertson [26] divide the theories in change process theories and implementation theories. In general, the theories of changing and the implementation theories describe how to get a change process completed in an organization. The theories of change, or the change process theories, refer to the dynamics by which change occurs in an organization. In this study, the focus is in both theoretical branches. The borderline between the areas is wavering and describing organizational change and change management processes is difficult concentrating solely on either the theory of change or the theory of changing. Moreover, both branches have valuable aspects and theories to contribute to this study.

Depending on current theoretical perspective, organizational change has been defined in many different ways. In organization theory, it is defined simply as “the adoption of a new idea or behaviour by an organization” [7, p. 291]. In organizational behaviour literature, on the other hand, organizational change is defined as “the act of varying or altering conventional ways of thinking or behaving” [33, p. 345]. Perhaps one of the most complete definitions that take various theoretical perspectives into consideration is presented by Struckman and Yammarino [31, p. 10]: “Organizational change is a managed system, process, and/or behavioral response over time to a trigger event”.

In the current literature [7, 25], different types of organizational change have been divided by for example the scope and the depth, as well as the planning state of the organizational change. McNamara [19] classifies organizational change into the following four dichotomies:

1) Organization-wide versus subsystem change
2) Radical versus incremental change
3) Remedial versus developmental change
4) Unplanned versus planned change

In this study, the concept of organizational change refers to initiatives that are closely comparable with the concept of organization development. These initiatives are planned, organization wide, managed from the top and aiming at increasing organizational effectiveness. The
focus in this study is in organizational change in the for-profit organizations. Hence, organizational change in public sector and not-for-profit organizations is outside the boundaries of this study.

Organizational change can be seen as a social theory punctuated equilibrium paradigm, which has its roots in evolutionary biology [10]. In social sciences, the paradigm suggests that social systems, including all organizations and companies, spend extended periods of time in a stable state, i.e. in an equilibrium, which is shaken occasionally with transformation or revolutionary and radical change [2, 9]. During the equilibrium state, only incremental change is possible in an organization because of the stabilizing forces. This phenomenon is called the deep structure and it is an essential part of the punctuated equilibrium theory. The deep structure refers to the chosen organizational practices, structure, internal processes and other activity patterns that hold a focal position in an organization and its organizational culture. Consequently, during the revolutionary periods, the stabilizing forces are shaken and the deep structure is broken down allowing change to take place [9]. Finally, the deep structure constitutes around the new equilibrium and freezes the occurred changes and new behaviour.

Another perspective to organizational change emphasizes the weak relationship between intended and realized organizational change. Intended change is only one element among many affecting the outcome of the realized change. Hence, it is very hard to predict the actual realization of any organizational change initiative in advance.

The theoretical background of organizational change process stems from an assumption in organization theory claiming that individual members of an organization seek stability, and that change is regarded as uncomfortable and risky [16, 17, 28]. Consequently, to enable organizational change, the perceived risk of the consequences of staying unchanged must be higher than the perceived risk of changing. Based on this assumption, organizational change literature has a wide variety of models in different shape and size depicting organizational change process. Many of these models divide the organization change process in various steps depending on the breadth and scope of the model, i.e. whether the model covers the actions during the change implementation process or also the planning and the follow-up phases.

One of the best known and earliest models describing organizational change process is social psychologist Lewin’s Unfreeze-Change-Freeze-model [16, 17]. The leading thought of his model is that all organizations are systems, which are stabilized by different internal forces. In order to change this system, the stabilizing forces must be first questioned and reduced. Only after shaking the stability, can organizational change take place. Consequently, after the change has taken place, the system stabilizes automatically around the new equilibrium.

Schein [28] evaluated and developed Lewin’s [17] model further to address the problems of modern organizational change and to divide Lewin’s stages of organizational change in more concrete sub-processes according to his own findings. Schein’s interpretation of the classic change model can be divided in three main phases: becoming motivated to change, moving to new state and making the change permanent.

2.2. Individual change

The organizational change theories and models presented above illustrate change process on a higher, organizational level. In many organizational change initiatives, however, it is the individual employee who is required to change his/her behaviour above all. Kotter [14] and Cummings and Worley [6], for example, suggest that changes in employees’ perceptions, attitudes, motivation and commitment are critical factors during organizational change process. However, the very same studies give no detailed information on how the individual change actually happens or how it might affect succeeding in organizational change initiatives.

In practice, the challenges associated with the individual changes have been recognized at least to some extent. A global executive study [12] claimed that the majority of organizational change challenges are people and individual related.

While many individual change studies rely on Lewin’s model for organizational change, there are also studies that approach the subject from a different angle and focus on the emotional changes of an individual during an organizational change process. Kübler-Ross [15] identifies and explains the five stages of grief, which are based on the changes in the feelings of terminally ill patients. The five stages identified are: Denial - Anger - Bargaining - Depression - Acceptance.

Kübler-Ross’s model has been widely utilized and modified to fit different purposes. Perlman and Takacs [24], for example, adopted the model to fit organizational change process. They found out that the stages presented in the original stages of grief are closely similar to what employees encounter during an organizational change process over time. They extended “the emotional rollercoaster” to ten different phases and provided one of the most extensive models of individual change.

The important message of these models and theories is that individual employees follow different emotional paths during an organizational change process and that individuals’ emotional stages do not follow any particular order. This might become an additional challenge for change practitioners while planning and executing organizational change initiatives.

2.3. Commitment and organizational change

The last theoretical concept of this study concentrates on organizational commitment and commitment to change.

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The concept of employee commitment is considered as an important factor between success and failure in organizational change initiatives in a number of studies [8, 11, 13, 20]. These studies often conclude that in successful change management, employees must be made committed to change and committed to the outcome of the change effort [6]. However, the means to enhance the level of commitment to change is often left with very little emphasis.

Organizational commitment has divided researchers in roughly two camps. The first one concludes that the research findings do not support the link between commitment and employee performance [18]. The other group still strongly believes in the association between the two [22]. In spite of the divided thoughts and the criticism, the linkage between other organizational consequences, such as protecting company assets, sharing company's beliefs, goals and values, investing freely in achieving the desired outcomes and even breaking the rules for the greater good of the company, have been presented in multiple studies [5, 20, 30].

Along the years of research, organizational commitment has also divided researchers by the approach into two schools of thought: attitudinal and behavioural commitment [22]. Salancik [27] defines commitment as a binding of an individual to behavioural acts. Mowday [22] claims that there is no clear agreement on the nature of commitment, but concepts such as loyalty, attachment and allegiance are often used instead. To clarify the definition, Meyer and Allen [20] suggest that commitment takes three forms: Affective commitment, normative commitment and continuance commitment. Affective commitment refers to an employee's positive emotional attachment with, and involvement within an entity. This entity can be an organization, a supervisor, a project or even a colleague in the same team that bears importance to the employee. Normative commitment refers to the feelings of obligation to remain connected with an entity and it is also known as moral commitment. Meyer and Allen [20] emphasize that due to the nature of moral commitment towards an entity it is only a temporary state and lost as soon as the moral obligation -or the debt - is fulfilled. Continuance commitment refers to the awareness of the total costs derived from leaving an entity or an organization.

While the interest in understanding how change is experienced by an individual in an organization and how organizational commitment affects organizational change is constantly growing, lately also the importance of commitment to change has been emphasized by some studies [11, 32]. According to Herscovitch and Meyer [11] and Turner Parish et al. [32], commitment to change is even a better predictor of behavioural support for organizational change than is organizational commitment.

While there are many definitions for commitment and even today researchers have divided opinions of the concept of organizational commitment, Herscovitch and Meyer [11, p. 476] define commitment to chance simply as “a force that binds an individual to a course of action deemed necessary for the successful implementation of a change initiative”. They split commitment to change in three forms: 1) affective commitment to change, 2) normative commitment to change and 3) continuance commitment to change. The meanings of these forms are also comparable with the original one’s identified by Meyer and Allen [21].

The antecedents of commitment to change are somewhat lightly studied if compared with the antecedents of organizational commitment in general. Perhaps the most complete research so far is conducted by Turner Parish et al. [32]. They combine the strategy and the role related antecedents found by Noble and Mokwa [23] with employee-manager relationship and job motivation. The approach of Turner Parish et al. [32] is broader compared with Meyer and Allen’s [21] separation of antecedents by the form of commitment, because Turner Parish et al. [32] present affective commitment, normative commitment and continuance commitment to change in the same model, describing the development of these forms of commitment through one set of antecedents. The four antecedents for commitment to change, introduced by Turner Parish et al. [32], are:

- Fit of the organizational change with strategic vision
- Quality of relationship with manager
- Job motivation and
- Role autonomy.

Fit of the organizational change with strategic vision refers to Noble and Mokwa’s [23] antecedent explained as the degree to which the currently implemented strategy is seen as congruent with the overall direction of the organization. Quality of the relationship with the manager refers to satisfaction, commitment and trust in the relationship between an employee and a manager. Job motivation refers simply to positive perceptions and attitudes towards one’s job. Role autonomy shows positive relation only with affective commitment to change. In the study of Turner Parish et al. (2008), role autonomy refers to employees’ freedom of choice and initiation of their actions.

Generally the studies on commitment to change have a snapshot-type approach to commitment. Conner and Patterson [5] argue that development of commitment to change can be illustrated as a causal model of phases that an organization must go through on the way to higher levels of commitment and in order to succeed in organizational change initiatives.

3. Pilot study

This section introduces the case company and the background of the case as well as presents the pilot study, its methods and results. The goal of the pilot study was to identify reasons hindering employee commitment to change. The results were also utilized in the content validation in the conceptual model of the main study.
3.1. Case context

XYZ Corporation is a global provider of information technology services and solutions. The business model of XYZ Corporation combines information technology know-how with in-depth industry expertise from various business areas into complex solutions that create business benefits and value for the customers.

In Finland, XYZ Ltd (later XYZ-F), a subsidiary of XYZ Corporation, is a fairly large information technology service provider concentrating on the local business-to-business markets. Around 60% of the revenue comes from traditional IT and consulting services. The remaining 40% comes from IT product sales.

XYZ-F’s Business Services Branch (later BSB) plans and executes complex business and application management transformation engagements. Through the wide range of consulting and technology services, BSB helps companies in developing new business models and strategies and in optimizing business performance to deliver higher value for the customers. The services offered by the BSB cover the whole life cycle of the change projects of business and data management. BSB conducts change initiatives as projects or outsourced services. At present, the unit employs a couple of hundred IT consultants and professionals. In addition, the BSB has its own sales force and shared advisory functions to support and enable business engagements with clients.

In early 2007, the board of directors of XYZ Finland decided to launch an internal program to implement the strategy of XYZ Corporation better on the local level and to improve the market position and the market share in IT services in Finland. The key objective of the program was to grow the net sales significantly over the next three years.

Two years after the launch, the program was considered a partial success. It exceeded the annual targets assigned for the program in three areas: improving profitability, improving customer satisfaction and in improving employee satisfaction. The main objective, growing the net sales significantly, was not met to the planned extent. Part of the reason was external. In 2008 the financial crisis influenced heavily on companies’ IT investments and it was very seldom that IT companies kept the growth targets at that time. Nevertheless, the alarming numbers indicated to the board of directors that there were some serious issues stalling the growth of the company and that something was to be done.

Consequently, by the end of 2008, the board of directors and the internal change project team decided that new, radical actions had to be planned and implemented immediately to re-direct the company back on the original growth track. The heart of the organizational change initiative was the implementation of a new sales-to-delivery method. The new method was designed to create better value for the customers by increasing the level of internal cooperation, changing the mindset from sales to design and delivery and by clarifying the internal processes throughout the life cycle of different projects.

3.2. Results of the pilot study

The first part of the research process included conducting a pilot study to identify possible factors hindering employees’ commitment to change. The empiric data of the pilot study was collected with focused interviews with several employees in different positions of the Business Service Branch. The interviewees were chosen using stratified random sampling and they represented various job roles from sales, solution design and solution delivery areas. Approximately one fourth on the interviewees had managerial responsibilities and the remaining majority represented consultants, IT specialists and sales representatives.

All of the chosen employees were interviewed twice during the pilot study process. The first round of interviews was conducted during the spring 2009, right before the company-wide training of the new method began. The objective of the first round of interviews was to identify possible reasons to resist the upcoming change, based on the employees’ current level of knowledge and understanding about the change initiative and the new method.

The second round of interviews took place a few months later, after the first training sessions had finished. It was expected that the opinions, perceptions, attitudes and possible resistance to change would be stronger after the interviewees had been trained for the new method and informed of how it would impact their daily work. Hence, the objective for the second round of interviews was to find out the possible changes in perceptions, opinions and attitudes compared with the ones presented during the first round of interviews.

After the two rounds of interviews, the collected material was analyzed carefully to identify possible themes or patterns between the answers of the interviewees.

According to the interviews, there were multiple issues that might affect the outcome of the change initiative by decreasing the level of employee commitment to change and by affecting the organizational change process indirectly. These issues were increased stress level and work load, conflicting goals, lack of managerial commitment to change, lack of clear continuation plan and lack of sharing responsibilities clearly.

From commitment to change perspective, the possible factors affecting commitment to change can be linked to the findings and the antecedents presented by Turner Parish et al. [32]. It appeared that the presence of continuance commitment to change was rather evident compared to other forms of commitment. Almost one third of the interviewees mentioned monetary compensations and incentives as decisive factors affecting their level of commitment and support to change.

One of the first issues identified in the interviews was the conflict between the personal goals, operational
business unit goals and the goals set for this change initiative. The personal goals were in line with the operational business unit goals, which, however, were set in a way that they did not support the main target of increasing the level of co-operation. This was perceived as the biggest single reason hindering employee commitment to change and affecting the change initiative in a harmful way.

Some of the identified issues were also linked with job motivation. The above mentioned conflicts between the personal goals and the goals set for the change initiative affected also employees’ job motivation as the employees were told to do something else than what they were being affected also employees’ job motivation. The above mentioned conflicts between the personal goals and the goals set for the change initiative affected also employees’ job motivation.

The third antecedent, the quality of relationship with the manager, was brought up through an important issue identified during the second round of interviews: approximately half of the interviewees perceived that their managers were not committed to this change and they mainly acted compliant because of their position. A few of them also thought that this salient behaviour affected employees’ attitudes towards change and consequently led to lower level of commitment. The conflict between personal goals and the change vision could not be linked with the quality of relationship with the manager, as the interviewees thought that their direct managers were more or less just messengers of the corporation policy and were not responsible for the conflicting goals.

The level of employee commitment to change is not, however, the only area affected by the identified issues. These issues have also an indirect impact on the change process, the goal realization level and eventually on the success of the change initiative. As the employee commitment to change is affected by these issues, the low level of commitment might decrease the change process quality and eventually affect reaching the goals set for the change initiative. In this case, this risk is rather significant as the identified issues were perceived very important and they are directly linked to the different elements of the framework.

4. Main Study

The objective of the main study was to investigate the relationship and the causality between the employee commitment to change, change process quality, goal realization level and the final success in the whole organizational change initiative.

To answer these questions and to analyze the success of the change initiative in the case company, a specific research tool was developed for measurement and analysis purposes.

4.1. A framework for success in organizational change

The theoretical framework used in this study combines the key elements from the studies of commitment to change with the theories and models of organizational change and change management discussed in the earlier sections. It consists of four key elements, the level of commitment, change process quality, realized goals and final success (Figure 1). The framework describes how success in organizational change develops through these elements and how they are connected to each other. These elements and their connections are discussed next in more detail.

![Figure 1 – Theoretical framework for success in organizational change](image-url)
more accurate information about the quality of an individual change activity inside a phase. Comparing the quality and importance of a phase reveals, whether right things are made and whether there is a balance between the importance and the quality in the critical phases and activities.

The third element of the framework is the realized goals. This refers both to the realization level and the importance of goals set for the change process. Similarly to the process quality element, comparing the realization level and the importance of a goal set for the change process reveals whether there is right balance between goal importance and its realization level. For example, if a goal is realized fully, but its importance to the final success of the organizational change is very minimal, the change process is imbalanced emphasizing wrong issues.

The last element in the theoretical framework is the final success measure of organizational change. This single measurement of success can be compared against the realized goals. The realization level of goals is connected to the final success.

4.2. Research hypotheses and instrument

The hypotheses and the data collection instrument of this study were based on the theoretical framework described in Figure 1. The framework required, however, to be concretized with the case and the results from the pilot study. In the concretized framework the number of change process phases was set to three. This was in line with Schein’s [28] interpretation of Lewin’s [17] model for organizational change and also according to the change plan in the case company. The different phases of the change process and the main activities planned inside them were:

**Phase 1: Setting the base for change**
1) Increasing knowledge and awareness about the upcoming change through e.g. auditorium launch sessions and intranet newsletters.
2) Creating the vision for the change.
3) Communicating the reasons for the change.

**Phase 2: Empowering and educating**
1) Increasing the level of commitment and acceptance through high-level and specialized training.
2) Developing the method further to fit better the needs of different business units.
3) Involving employees to identifying and lowering possible obstacles to change.

**Phase 3: Expanding and harvesting success**
1) Communicating constantly about the sales-to-delivery-method – keeping the heat on.
2) Expanding success by publishing success stories about the sales-to-delivery-method.
3) Encouraging people to start using the sales-to-delivery-method.

There were three main goals for the change initiative in this model according to the change implementation plan within the case company. The goals for the change process were defined as follows:

**Goal 1:** Improving the co-operation between sales, solution design and delivery personnel.
**Goal 2:** Standardizing and simplifying internal sales processes.
**Goal 3:** Increasing the quality of the proposals.

The single measurement of success stayed unchanged from the original framework.

**Hypotheses:**

**H1:** Higher commitment to change leads to better change process quality.
**H2:** Higher change process quality leads to higher level of goal realization.
**H3:** Higher realization level of goals leads to higher level of final success.

The actual research instrument was designed with a commercial web survey tool. The sample in the main study included 88 persons, who were chosen using the stratified random sampling method. Consequently, the survey was sent to 23 employees representing the business consultants of the BSB, another 20 for Application Design Specialists and the remaining 45 for specialists focusing on application management. In addition to background questions, the questionnaire included 25 main questions.

4.3. Results

The collected quantitative data was analyzed thoroughly using different statistical analysis methods including linear regression analysis. The key figures from the three phases are presented in Table 1. The results show that the perceived average quality of the first phase was 3.02 (on a scale from 1-5) whereas the quality of the other phases was significantly lower. Equally, the level of commitment to change was 3.08 during the first phase but significantly lower at the other phases of the change process. Generally, all phases were perceived rather important.

The most important goal according to the perceptions of the respondents was improving the level of co-operation between sales and solution delivery personnel (Goal 1). This was also the main direct goal of the change initiative according to the change implementation plan of the case company. This goal was given an importance value of 4.56 out of five, which indicates that the respondents found this goal extremely important. The realization level was given only a value of 2.30, which indicates that the change initiative did not succeed in increasing the level of co-operation significantly.
The second most important goal according to the perceptions of the respondents was simplifying and standardizing internal sales processes (Goal 2). This was also the secondary objective of the change initiative. This goal was given an importance value of 4.36, which is only slightly lower than the importance of the main goal indicating that the respondents considered that simplifying and standardizing internal processes was very important. The perceived realization level of this goal remained low at 2.32 indicating that the change initiative did not succeed in standardizing and simplifying the internal sales-to-delivery processes significantly.

The final regression analysis was related to the hypothesis H2. The results from the multivariate regression analysis are shown in the following three equations.

\[ Q_1 = 1.310 + 0.555 \times C_1 \quad (R^2 = 0.431) \]
\[ Q_2 = 1.139 + 0.474 \times C_2 \quad (R^2 = 0.319) \]
\[ Q_3 = 1.197 + 0.501 \times C_3 \quad (R^2 = 0.385) \]

Where,

- \( Q_i \) = Quality of phase \( i \), \( i = 1,2,3 \)
- \( C_i \) = Commitment to phase \( i \), \( i = 1,2,3 \)

These results indicate that if the level of commitment increases in a phase, the process quality in the respective phase increases as well. This was also assumed in H1.

### 4.3.2. Realization functions

The second set of regression analyses were related to hypothesis H2. The results from the multivariate regression analysis are shown in the following three equations.

\[ G_1 = -0.628 + 0.542 \times Q_1 + 0.435 \times Q_2 + 0.197 \times Q_3 \quad (R^2 = 0.449) \]
\[ (P = 0.283, 0.001, 0.008, 0.137) \]
\[ G_2 = 0.699 + 0.574 \times Q_1 + 0.263 \times Q_2 - 0.124 \times Q_3 \quad (R^2 = 0.469) \]
\[ (P = 0.158, 0.000, 0.053, 0.261) \]
\[ G_3 = 0.304 + 0.479 \times Q_1 + 0.199 \times Q_2 + 0.190 \times Q_3 \quad (R^2 = 0.279) \]
\[ (P = 0.629, 0.005, 0.162, 0.270) \]

Where,

- \( G_j \) = Realization level of goal \( j \), \( j=1,2,3 \)
- \( Q_i \) = Quality of phase \( i \), \( i = 1,2,3 \)

For the first realization function, the results of the multivariate regression analysis indicate that \( Q_3 \) was the most significant variable explaining almost 35% of the changes in the \( G_1 \). For the second function, the results indicated that almost 47% of the changes in goal realization level can be explained by the changes in the explanatory variables. The stepwise regression indicated that \( Q_1 \) was the most significant variable again explaining almost 40% of the changes in the \( G_2 \) whereas adding the variable \( Q_2 \) to the function increased the squared coefficient of multiple correlation by 5%. Adding \( Q_3 \) increased the \( R^2 \) only by 1.5% indicating that it had, once again, least impact on the realization level of Goal 2. For the third realization function the results of the multivariate regression analysis indicated that almost 28% of the changes in goal realization level can be explained by the changes in the explanatory variables. The stepwise regression indicates that \( Q_1 \) was again the most significant variable explaining almost 24% of the changes in the \( G_3 \) whereas adding the variables \( Q_1 \) and \( Q_2 \) to the function increased the squared coefficient of multiple correlation by only 4%.

Generally, the results indicate that there exists a partially strong relationship between the change process quality and the goal realization level.

### 4.3.3. Success function

The final regression analysis was related to the hypothesis H3. In this analysis, the realization levels of

### Table 1 Key figures of the phases

<table>
<thead>
<tr>
<th>Phase</th>
<th>Mean</th>
<th>Std.dev</th>
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<tr>
<td>Commitment</td>
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<td>0.877</td>
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<tr>
<td>Importance</td>
<td>4.080</td>
<td>0.778</td>
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<tr>
<td><strong>Activities</strong></td>
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<td></td>
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<tr>
<td>Stating the reason</td>
<td>3.180</td>
<td>0.629</td>
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<tr>
<td>Creating vision</td>
<td>3.100</td>
<td>0.614</td>
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<tr>
<td>Communicating credibility</td>
<td>3.180</td>
<td>0.825</td>
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<td><strong>Phase 2</strong></td>
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<td>Commitment</td>
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<td>Importance</td>
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<tr>
<td><strong>Activities</strong></td>
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</tr>
<tr>
<td>Commitment</td>
<td>2.460</td>
<td>0.862</td>
</tr>
<tr>
<td>Importance</td>
<td>3.960</td>
<td>0.638</td>
</tr>
<tr>
<td><strong>Activities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communicating continuously</td>
<td>2.540</td>
<td>0.762</td>
</tr>
<tr>
<td>Using managers as good examples</td>
<td>2.300</td>
<td>0.814</td>
</tr>
<tr>
<td>Encouraging change</td>
<td>2.340</td>
<td>0.823</td>
</tr>
</tbody>
</table>

The least important goal according to the results was improving the quality of business proposals. In spite of using the word “least”, this goal was given an importance value of 4.3 on average, which indicates that the respondents found this goal also very important. The realization level was slightly higher in comparison with the other goals with the value of 2.5. The value indicates, however, that the change initiative did not succeed in improving the quality of business proposals in the BSB significantly. The change initiative in XYZ-F was given a final success measure of 2.38 on average.

Next, the linear regression analysis was used in estimating the quality, realization and success functions.

### 4.3.1. Quality functions

The first regression analyses were related to the hypothesis H1. In this analysis, the level of commitment to change was the independent variable and the level of process quality was the dependent variable. The quality functions are:
different goals were independent factors and the final success measure was the dependent factor.

\[ S = 0.731 + 0.332 \times G_1 + 0.178 \times G_2 + 0.190 \times G_2 \times \quad (R^2 = 0.580) \]
\[ (P = 0.004 \quad 0.006 \quad 0.036 \quad 0.149) \]

Where,

- \( S \) = Final success measure
- \( G_j \) = Realization level of goal \( j \), \( j=1,2,3 \)

The results from the multivariate regression analysis indicate that the squared coefficient of multiple correlation was very high indicating that 58% of the changes in the final success measure can be explained by the changes in the explanatory variables. The stepwise regression indicates that \( G_1 \) was the most significant variable explaining almost 52% of the changes in the \( S \) whereas adding the variable \( G_3 \) to the function increased the squared coefficient of multiple correlation by slightly less than 4.5%. Adding \( G_2 \) increased the \( R^2 \) only by 2% indicating that it had least impact on the realization level of \( S \).

Unfortunately, the good quality values given to the first phase cannot be seen in the final success measure. It seems that the good beginning for the change faded away after the first phase was over. This is supported by the decreasing trend of employee commitment to change and the findings of Conner and Patterson [5] claiming that a change initiative can fail on any stage of the development of individual commitment to change, regardless of earlier success.

It seems that the significant part of the decrease in the level of employee commitment to change and the change process quality took place between the first and the second phase. This was also the same place, where the actual, concrete steps of change were supposed to be taken and the main responsibility of the change initiative was given to the business units. Perhaps some radical actions could still have turned the change initiative into success. Within the Business Service Branch, however, the decline in the level of commitment and in the change process quality continued throughout the change process resulting in a poor final success measure.

5. Discussions and conclusions

The main objective of this study was to investigate how employee commitment to change and the implementation quality of different change process phases affect achieving the goals and succeeding in an organizational change initiative and, consequently, to provide empirical support for the very few studies focusing on employee commitment to change and organizational change. The secondary objective of this study was to identify factors hindering employee commitment to change.

The interviews in the pilot study revealed that the employees in the case company had mostly negative perceptions and opinions about the upcoming change initiative and very low expectations about the success of the implementation of the new sales-to-delivery method. Consequently, the level of commitment to change was hindered by multiple factors. First of all, one of the main issues hindering employee commitment to change was a perceived conflict between the goals of the change initiative and the current operational objectives of the business unit and the personal goals of the employees. Another important issue, which was identified during the interviews, was the excessive and increasing workload and stress level. This hindered employee commitment to change significantly, as they perceived that they had no time to participate in the activities supporting the change. The third critical factor hindering employee commitment to change was the perception of the low level of commitment on the managerial level.

All the identified issues had high potential to cause serious threat for the final success of the change initiative. While the issues mainly affected the level of commitment to change, they could have also affected indirectly the change process quality and the realization level of different goals set for the change initiative. These important findings of the pilot study were also used in validating the content for the main study.

The results of the main study indicated that there was a strong, positive relationship between the change process quality and the level of employee commitment to change. While the higher level of commitment to change led to higher change process quality, it could not be verified that it directly affected the success level of the whole change initiative. Instead, the results indicated that commitment to a less relevant change process phase hardly had any correlation with the final success measure.

The results concerning the realization level of different goals indicated that there was a partially strong and positive relationship between the change process quality and the realization level of different goals. The results illustrated high correlation between the process quality in the second and the third change process phase and the realization level of different goals.

There could have been many different reasons behind these results. First of all, even though the first phase, creating a vision and defining the reasons to change was emphasized in the majority of the organizational change management literature presented in this study [6, 28], these actions might have been relevant only in order to advance to the next phase of the change initiative. However, in this study, the more concrete phases of change had significantly higher coefficients of determination perhaps, because the actual change was being made within those phases.

Another reason might be that during the first phase, the employees were only required to commit to the change on the mental level. On the second phase, however, the commitment to change became more concrete and the employees were expected to start working together to
reach the shared goal of improved co-operation and the new sales-to-delivery processes.

Finally, the results of the study indicated that there was a strong relationship between the goal realization level and the final success measure. Improving the co-operation between the sales, solution design and delivery personnel was perceived very important among the employees, whereas the other two goals were perceived less important. The high coefficient of determination of the first goal indicated that this was also perceived as the main goal of the change initiative.

Unfortunately, the realization levels of different goals and the final success measure remained at a low level. In spite of a good beginning, as the change process continued, the level of commitment, change process quality as well as the goal realization levels dropped. One of the reasons for this could be related to the change of responsibility from the change team to the business units after the first phase.

This case study underlined also how important the role of committed managers is in organizational change initiatives. While this study concentrated mainly on the employee level commitment to change, a corresponding study investigating the relationship between managers’ commitment to change and the success in organizational change initiatives would be highly beneficial.

6. References