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An Empirical Research in German
Small and Medium-Sized Enterprises



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Tim Fritzenschaft

Critical Success Factors of Change Management

An Empirical Research in German
Small and Medium-Sized Enterprises

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Hochschule Heilbronn
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Foreword

Since the 1990s the term 'change management' has become an omnipresent buzzword in management theory. These days, change projects are central tasks for managers in every type of organisation whether they are companies, public bodies or NGOs. Organisations and the people within these organisations have to change constantly to ensure a high degree of competitiveness and to progress towards long-term goals. The outcome and the success of change projects are crucial for further development. Various authors – particularly from the United States and the United Kingdom – have published extensively in the field of organisational change. Analysing change management projects and understanding failure to change has been of sustained interest for researchers in this field of management theory.

Within this research area various studies have been conducted covering project design, contextual elements and success factors. Empirical research is primarily used in studies analysing critical success factors of change projects. These critical success factors enhance the likelihood of successful change by minimising resistance to the project. However, most of the studies – some of them with a scientific background, some with a consultancy background – focus on large corporations in an international context. Studies with a focus on German small and medium-sized companies which are the backbone of the German economy barely exist.

By analysing critical success factors of change management in German small and medium-sized enterprises Mr Fritzschafft addresses this existing research gap. The overall objective of his study is to gain a better understanding for the reasons why change projects fail and to provide specific recommendations for small and medium-sized enterprises. The large-scale nationwide empirical research is based on a theoretical framework of change management and was conducted among 416 German small and medium-sized companies.

The online-based research was carried out in cooperation with the Oskar-Patzelt-Foundation ('Großer Preis des Mittelstands'). The analysis of the data provides interesting insights into the most common reasons for change, the success rate of change projects carried out and the assumed success factors of these projects.

The respondents of this survey identified a mixture of hard and soft factors to be responsible whether a change project will be successful or not. This is similar to the results of previous studies conducted among international corporations. However, there are some critical success factors which show a tendency to be more important for large, international corporations than for German small and medium-sized companies. One example is the factor 'support and commitment of the management' which is usually ranked highest in empirical researches among international corporations. For small and medium-sized enterprises in Germany this factor seems less important – maybe an indication that support and commitment of the management is much more visible in smaller companies.

The study of Mr Fritzenschaft is of high practical relevance as change management is a constant challenge not solely for large corporations. Managers in small and medium-sized enterprises should keep in mind that there is not one best way of leading change that will guarantee successful outcomes. This study is one of the first researches in change management in the German SME-sector and provides recommendations for managers how to deal with change initiatives and how to overcome resistance to change. The findings of this large-scale empirical study can help managers in small and medium-sized enterprises to increase the likelihood of successful change.

Prof. Dr. Roland Alter

Acknowledgments

In the first instance, I would like to express my gratitude to both first supervising professors at the University of Applied Sciences Heilbronn and the University of West London, Professor Dr. Roland Alter and Professor Dr. Cecile Lowe for their competent as well as systematic supervision. By their constructive and critical suggestions they both made essential contributions to ensure the success of this empirical research.

In particular, I would like to express my thanks to Professor Dr. Roland Alter who established the initial contact with the Oskar-Patzelt-Foundation. Furthermore, the discussions concerning the research questions and the questionnaire design which were on the one hand critical and on the other hand intensive helped to increase the validity of the outcome.

I should also like to thank the Oskar-Patzelt-Foundation, especially Petra Tröger and Dr. Helfried Schmidt. Without their commitment to the empirical research the project would have failed in the early beginning. Their feedback, database and contacts to the organisations have been crucial for this study.

Additionally, I would like to thank all people and organisations that have participated in this research. More than 400 respondents who have completed the online questionnaire as well as various statements and comments providing feedback contributed to the outcome of this empirical research.

Last but not least, I would like to thank my family and friends who have accompanied and supported me in all my years of studying.

Igersheim, December 2011

Tim Fritzenschaft

Abstract

Purpose – Change management is omnipresent in organisations as companies have to transform constantly. This applies not only to large corporations operating in an international context, but also to small and medium-sized enterprises. Yet executing a change project is accompanied by great challenges and most change initiatives are not entirely successful. Despite the fact that SMEs are the backbone of the German economy little empirical work has been done concerning change management in these companies. This empirical research however, explores the issue how SMEs can deal with resistance to change and what critical success factors of change management are most important in a transformation project.

Design/methodology/approach – The large-scale, nationwide empirical research has been carried out in cooperation with the Oskar-Patzelt-Foundation. More than 1200 small and medium-sized enterprises in Germany were asked to take part in the online survey. The data was conducted between August and September 2011 and more than 400 people mainly managers in higher hierarchical levels took part in the survey.

Findings – In contrast to other studies, the respondents of this empirical research identified a mixture of hard and soft factors to be responsible whether a change project will be successful or not. Factors such as 'support and commitment of the management' that are usually evaluated as most important are seen as less crucial for small and medium-sized enterprises. Furthermore, it can be proved that there is a significant positive correlation between the extent of employee participation and the overall outcome of an initiative.

Practical implications – Managers leading and managing change in small and medium-sized enterprises should be aware that there is no single tactic, approach or initiative that will guarantee successful outcomes. A combination of different variables depending upon internal and external factors is

responsible whether a project will be successful or not. However, this research demonstrates some general findings concerning critical success factors of change management in SMEs.

Originality/value – Understanding failure to change by dealing with resistance in an appropriate way is critical to ensure the competitiveness of an organisation. This is especially true for small and medium-sized enterprises with limited resources. Therefore, this research provides recommendations for increasing the likelihood of success in a transformation process.

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List of Abbreviations

BMWI	Bundesministerium für Wirtschaft und Technologie (Federal Ministry of Economics and Technology)
CEO	Chief Executive Officer
Cf.	Confer, 'compare'
CI	Confidence interval
Ed.	Editor / Edition
Eds.	Editors
E.g.	For example
Et al.	Et alii
H	Hypothesis
IT	Information technology
N	Number (of responses)
N/a	Not available
SMEs	Small and medium-sized enterprises

*"It must be remembered that there is nothing more difficult to plan,
more doubtful of success,
nor more dangerous to manage
than the creation of a new system.
For the initiator has the enmity of all
who would profit by the preservation of the old institution
and merely lukewarm defenders in those
who would gain by the new ones."*

Niccolò Machiavelli (1469-1527)

1. Introduction

In the last decades, change management has become an omnipresent task as companies implemented broad and far-reaching change projects. These days, change management can be referred to as a central task for managers as “organizations need to change constantly [...]”.¹ The fact that companies have to transform in order to survive and progress towards long-term goals is not questioned. Change occurs in every industry and every organisation regardless of the size of the company and can be considered as a component of corporate life.²

According to various authors such as Paton and McCalman³ or Burnes⁴, companies had to deal with change at all times nevertheless they argue that the scope, speed, impact and in particular the unpredictability are greater than ever before. Furthermore, organisations are described as never standing still, though the speed and dimension of change does vary from organisation to organisation and from time to time. Child even stated that “[...] change, paradoxically, has become an organizational norm.”⁵ Nowadays, change management is an integral part of leadership and a matter of course in everyday work.

Analysing the source of the transformation it can be determined that various reasons can lead to organisational change. Generally, organisational transformations can be described as heterogeneous as there are many types of change occurring both successively and concurrently. Some of the changes are predicted by the company, some not. Change takes place continuously for various reasons and it should be addressed at all times.⁶ However, every

¹ McKinsey (2011a), p. 1.

² Cf. Oltmanns/Nemeyer (2010), p. 20; Robbins/Finley (1996), p. 1.

³ Cf. Paton/McCalman (2008), p. 5 ff.

⁴ Cf. Burnes (2009), p. 1 ff.

⁵ Child (2005), p. 277.

⁶ Cf. Senior/Fleming (2006), p. 41 ff.

change initiative is unique and depends upon the company as well as the business environment.¹

The competence to manage and to lead change effectively is a critical success factor of an organisation's ability to compete successfully. To ensure success in the long-term new requirements have to be adopted in a reasonable period of time with consistent and appropriate adaptations. Achieving successful and significant change has become a matter of survival.² Therefore, change management is of great importance to every organisation and managing as well as leading change are essential tasks which have an impact on the company's future competitive position.

Though, managing as well as leading change are difficult tasks and organisational transformation is often done without success. In the last decades, numerous researches have been carried out to understand why such large numbers of initiatives fail. Most of the researches on this issue such as Maurer³ and Kotter⁴ in 1996, Senge et al.⁵ in 1999, Beer and Nohria⁶ in 2000 as well as McKinsey⁷ in 2008 imply that only one third of all change initiatives are implemented successfully. Further studies in this field over the last years reveal remarkably similar results. The success rate of organisational change initiatives varies from as low as 20% in a research carried out by Strebel⁸ in 1996 to just over 40% in a study carried out by IBM⁹ in 2008.

Nevertheless, this does not imply that most of the change initiatives are failing completely. However, organisational transformations frequently do not achieve all targets with regard to content, budget and time objectives. The change

¹ Cf. Beer/Nohria (2000), p. 134.

² Cf. Caggemini Consulting (2011a), p. 33.

³ Cf. Maurer (1996), p. 18.

⁴ Cf. Kotter (2011), p. 4.

⁵ Cf. Senge et al. (1999), p. 6.

⁶ Cf. Beer/Nohria (2000), p. 134.

⁷ Cf. McKinsey (2011a), p. 1.

⁸ Cf. Strebel (1996), p. 86.

⁹ Cf. IBM (2011a), p. 4.

project therefore may not be a complete failure but on the other hand is not entirely successful either.

Despite the great number of researches, articles and books on organisational transformation most change initiatives encounter problems for various reasons. Projects often take more time than expected, do not generate the desired output and the initiatives cost a lot of money, managerial time and causes emotional turmoil.¹

Therefore, it is important for every company and manager to be aware of critical success factors of change projects to reduce risks which accompany an organisational transformation. Although the large number of publications as well as researches there is not a single best way to manage and to lead change. As change initiatives are complex and involve many factors it is important that the project leader or the project team pays balanced attention to several soft as well as hard critical success factors regarding the change process. This approach usually increases the likelihood of success by minimising or overcoming resistance to change.²

¹ Cf. Kotter/Schlesinger (2008), p. 132.

² Cf. Grover et al. (1995), p. 110.

2. Objective of the Research

In general, academic researches conduce to systematic, methodical and comprehensible gain in new knowledge. This knowledge helps to prevent, solve or at least better control current and future practical problems. Academic research evaluates theories with regard to cause-effect relationships (causality) to provide recommendations for action.¹

The increasing importance of change management in the last decades led to a great number of researches which are addressed to the problem of unsuccessful change initiatives. Nevertheless, the question why some organisations are more successful in transforming than others is not easy and universal to answer. The literature and present studies provide a large number of different concepts, rules as well as approaches. In most cases, several factors influencing the success of a change project are identified by overcoming resistance to change. Yet there is no one best way of managing and leading change.

The aim of this dissertation is to investigate critical success factors of change management in successful small and medium-sized enterprises (SMEs) in Germany. The empirical research differs from other empirical investigations as most of the studies such as the researches carried out by Capgemini², IBM³, KPMG⁴ and McKinsey⁵ focus on large corporations in an international context.

This research however, focuses on the German 'Mittelstand' which is often referred to as the backbone of the German economy. The German 'Mittelstand' is characterised by roughly 3.7 million SMEs and self-employed professionals in the crafts, industry, tourism and retail business as well as the service

¹ Cf. Töpfer (2009), p. 2 ff.

² Cf. Capgemini Consulting (2011a); Capgemini Consulting (2011b).

³ Cf. IBM (2011a); IBM (2011b).

⁴ Cf. KPMG (2011).

⁵ Cf. McKinsey (2011a); McKinsey (2011b); McKinsey (2011c).

industry, representing 99.7% of all businesses in Germany, producing 38% of taxable turnover and providing approximately 60% of all jobs requiring social insurance contributions.¹ Since up to now, little empirical work has been carried out on change management among German SMEs with the exception of Vahs and Leiser² who surveyed in majority small and medium-sized enterprises in the area of Stuttgart in 2002.

The second criterion that distinguishes this empirical research from other investigations is the focus on successful organisations. The research explores the issue how the companies that have been successful over the last years approach change management projects. Are these companies more successful in transforming and what are the most important factors for small and medium-sized enterprises when it comes to change management?

The nationwide empirical research has been carried out in cooperation with the Oskar-Patzelt-Foundation, a foundation focusing on small and medium-sized enterprises in Germany. The overall objectives of the Leipzig-headquartered foundation are to improve the public image of SMEs and to indicate the public to the importance of SMEs for the German economy. Every year, the Oskar-Patzelt-Foundation awards prizes for outstanding performances to German small and medium-sized enterprises.³ These prizes are referred to as the most prestigious awards for German SMEs.⁴ All surveyed SMEs are nominated for these prizes in 2011 or have been awarded with prizes in recent years. The prerequisites for being nominated are: the company must demonstrate an outstanding economic performance, be innovative as well as adaptable and must create as well as preserve jobs.⁵

¹ Cf. BMWI (2011).

² Cf. Vahs/Leiser (2003).

³ Cf. Oskar-Patzelt-Foundation (2011a).

⁴ Cf. Kroker (2011).

⁵ Cf. Oskar-Patzelt-Foundation (2011b).

The purpose of the dissertation is to understand failure to change and to provide specific recommendations for SMEs. Therefore, the empirical research focuses on the following research questions:

- What have been the reasons for the surveyed SMEs to undergo broad and far-reaching transformations over the last five years?
- To what extent did the surveyed SMEs achieve set targets in the change initiative with regard to content, budget and time objectives?
- Which factors determine the outcome of a change project? Are there critical success factors in the different phases of a change project which can be identified in most change initiatives in small and medium-sized enterprises?
- Are there any differences between the results of this empirical research and other studies?

The principal objective is to construct practicable as well as comprehensible recommendations for managing and leading change initiatives successfully. According to the mentioned research questions following hypotheses are verified.

The hypotheses can be classified into four categories. Some of the hypotheses are set up by the author of this research and others are adopted from previous empirical researches. The adopted hypotheses are indicated and the authors are mentioned in brackets. A more thorough examination of the empirical researches can be found in chapter 4.4.3 'Key Findings of Other Empirical Researches'. The four categories and hypotheses (H) are:

1) Reasons for change:

- (H1-1) Change projects are ubiquitous in organisations. No differences can be observed between different industries or organisations having a different size (KPMG (2011)).

2) Success and failure in change projects:

(H2-1) Compared to other empirical researches (IBM (2011a)) the responding organisations of this survey show a higher success rate in implementing change projects. This is due to the fact that this survey was conducted among successful SMEs.

(H2-2) The most frequent objectives not achieved are budget-related goals. To meet objectives with regard to content and time, the budget of a change project is often exceeded (KPMG (2011)).

3) Critical success factors of change projects:

(H3-1) In change projects 'soft facts' are usually more important than 'hard facts' (IBM (2011a); Lucey (2008)).

(H3-2) Communication, employee participation and top-management commitment are the most important factors influencing the outcome of a change project (IBM (2011a); McKinsey (2011a)).

Communication:

(H3-3) Communication is in particular important in the beginning of a change project to mobilise and engage employees as well as to create a shared problem awareness (Beer/Eisenstat/Spector (2011); Lucey (2008)).

(H3-4) Change projects are more likely to succeed if timely communication is guaranteed (KPMG (2011); Vahs/Leiser (2003)).

(H3-5) Change projects are more likely to succeed if more communication channels (in particular personal channels) are used (Vahs/Leiser (2003)).

Employee participation:

(H3-6) Employee participation is in particular important in the beginning of a change project to create a sense of 'ownership'.

(H3-7) Change projects are more likely to succeed if affected employees are able to participate to the change project as early as possible (McKinsey (2011a)).

(H3-8) Change projects are more likely to succeed if affected employees are able to contribute their own ideas and thoughts to shape or cocreate the change initiative (McKinsey (2011b); Morgan/Zeffane (2003); Vahs/Leiser (2003)).

Top-management commitment:

(H3-9) Top-management commitment including acting in an exemplary manner is the most important task in a change project for the top-management. This behaviour is equally important in every phase of a change project (Beer/Eisenstat/Spector (2011); McKinsey (2011a)).

Financial and other rewards:

(H3-10) Financial and other rewards are in particular important in the implementation phase of a change project.

4) Organisational and personal willingness to change:

(H4-1) The fewer employees work in an organisation the higher the organisational willingness to change.

(H4-2) The more years an organisation is participating in the market the lower the organisational willingness to change.

(H4-3) Organisations that have implemented the last change project successful show a higher organisational willingness to change.

(H4-4) The willingness to change varies according to different hierarchical levels. Usually the top-management shows a higher personal willingness to change than employees in lower hierarchical positions (Capgemini Consulting (2011a)).

By analysing these research questions and testing these hypotheses this study evaluates the questions why some SMEs are more successful in transforming than others and what factors are increasing the likelihood for a successful change initiative. By doing so, the study aims to contribute to a better understanding of failure to change and to provide more contingent recommendations for implementing intended change successfully.

3. Methodology

As mentioned in the last chapter, the empirical research has been carried out in cooperation with the Oskar-Patzelt-Foundation, a foundation focusing on small and medium-sized enterprises in Germany. Overall 1219 SMEs were contacted for the nationwide survey, thereof 569 small and medium-sized enterprises that have been nominated for the prizes awarded by the Oskar-Patzelt-Foundation in 2011. Furthermore, 650 German SMEs that have been awarded with prizes in recent years were asked to take part in the survey.

All nominated as well as awarded companies have been remarkably successful in the markets and are characterised by outstanding performances. The contact details, in particular company names, email-addresses and contact persons, were provided by the Oskar-Patzelt-Foundation.

The data was collected between the 23rd August and the 16th September 2011 by a designed questionnaire. Before contacting the sample the questionnaire was reviewed in a pre-test and checked for completeness, intelligibility as well as the methodical approach to guarantee reliability and validity. Overall, the questionnaire consists of 20 questions covering following five topics:

- 1) Reasons for undergoing broad and far-reaching transformations over the last five years (one question).
- 2) Experiences from the last change project concerning 'internal communications', 'employee participation' and 'role of the top-management' (five questions).
- 3) Factors that are seen as critical success factors of change projects. The factors were divided into the three different phases of change project:

the unfreezing-phase, the changing-phase and the refreezing-phase (three questions).¹

- 4) Success and failure in the last change project concerning content, budget and time objectives (four questions).
- 5) Demographic information (seven questions).

The questionnaire was designed in German. The German questionnaire as well as an English translation can be found in the appendices.² Most questions used in the empirical research are closed single choice questions, closed multiple choice questions and questions using a one to five Likert-scale.³ Due to the complexity of change management projects most questions include an 'other' response option to enable respondents to add further thoughts.

The first question in the questionnaire served as a filter question. Participants who answered that they did not experienced a broad and far-reaching change project over the last five years had not to answer the section concerning the experiences from the last change project in the company (section 2) as well as the section concerning success and failure of the last change project (section 4). An additional slightly reworded question concerning the 'role of the top-management' was added. Therefore, respondents without a significant transformation over the last five years had to answer 12 questions.

As the large-scale, standardised empirical research was carried out nationwide it has been more practical to use a questionnaire than to gather data through interviews. Furthermore, using an online questionnaire offers the advantages of being less expensive and easier to handle. To conduct the empirical research the online platform [soscisurvey.com](https://www.soscisurvey.com) (social science survey), a free of charge platform for academic researches, has been used. A hyperlink to the questionnaire was sent to the contact person in the organisations by email.

¹ Cf. Lewin (1947), p. 5 ff.

² See appendices A/B.

³ Cf. Porst (2009); Kirchhoff et al. (2008); Bühner (2006); Mayer (2006).

Only one questionnaire was collected per organisation guaranteed by individual codes in the hyperlinks which allowed only one response. The contact persons in the organisations were mainly Chief Executive Officers (CEOs) as well as managers in higher hierarchical levels. Furthermore, the recipient of the email was asked in the invitation to the study if he or she is not the appropriate reference person to forward the email. Thereby it should be guaranteed that the responding people have experiences with organisational change projects.

The anonymity of personal data is guaranteed by the online platform. Respondents were able to provide their email-address to get the results of the empirical research. In this case the online platform separated the contact details and the data conducted in the survey.

After one reminder by email after 14 days 416 questionnaires had been answered, a response rate of 34.4%. Thereof 238 questionnaires had been answered by nominated companies and 178 questionnaires had been answered by awarded companies. The response rate of nearly 35% is remarkably high and indicates the importance as well as significance of change management among German SMEs. Furthermore, the quota of missing answers is very low. Nearly all questions had been answered, another aspect that indicates the importance of change management.

The emails sent to the organisations can be found in the appendices (the original German version as well as an English translation). The emails sent to the nominated SMEs can be found in the appendices C and D, the emails sent to the awarded SMEs can be found in the appendices E and F and the reminders can be found in the appendices G, H, I as well as J.

By this pre-checked online-survey approach and the large number of participants from companies having a different size and operating in various industries validity and reliability was guaranteed. Reliability or consistency of test results as well as validity as the degree to which a statistical test measures what the test is intended to measure are two fundamentally prerequisites for meaningful analysis.

The overall methodical approach of this dissertation can be described as a mixture between quantitative and qualitative analysis.¹ Quantitative data conducted by the empirical research as well as qualitative data from other studies, research papers and journal articles were used to answer the raised questions and to verify the hypotheses. To analyse and to evaluate the data statistically PAWS 19.0 (formerly SPSS) was used.²

The approach of this empirical research with regard to the hypotheses generated from previous studies and the literature, the online data collection as well as the statistical test used is comparable with other currently published dissertations using similar approaches. The following table provides an overview of three dissertations published in 2010 using a similar approach.

Table 1: Dissertations with Similar Approaches

Titel	Author	Year	University	Methodology	Approach
Macht und Vertrauen in Innovationsprozessen: Ein empirischer Beitrag zu einer Theorie der Führung	Diana E. Krause	2010	Dissertation - Technische Universität Berlin	Empirical research n=399	Generating hypotheses from theoretical approaches. Statistical analysis by means of descriptive statistics, single factor variance analyses (ANOVA/MANOVA), bivariate correlations and regression analyses.
Unternehmerische Orientierung und Unternehmenserfolg - Eine empirische Analyse	Gerald Schön-bucher	2010	Dissertation - Otto Beisheim School of Management Vallendar	Empirical research (online) n=550	Generating hypotheses from theoretical approaches and previous researches. Statistical analysis by means of factor variance analyses (variance-based, covariance-based). Use of several statistical test including regression analyses and t-tests.
Kundenbindung im gewerblichen Automobilmarkt - Eine empirische Kausalanalyse	Andreas Meyer	2010	Dissertation - Otto-Friedrich Universität Bamberg	Expert interviews followed by an empirical research (online) n=465	Development of an explanatory model that has been verified by the partial least squares technique (analysis of variance).

¹ Cf. Blaxter/Hughes/Tight (2006), p. 63 ff.

² More information concerning statistical tests can be found in the appendices.

Before analysing and evaluating the data statistically in chapter five, the structure of the sample is being outlined. Various German SMEs operating in different industries or having a different size (measured by the number of employees) have taken part in the survey. Most of the companies are operating in the market for more than ten years. The responding people were mainly Chief Executive Officers or managers in higher hierarchical levels and have been working for the companies for many years.

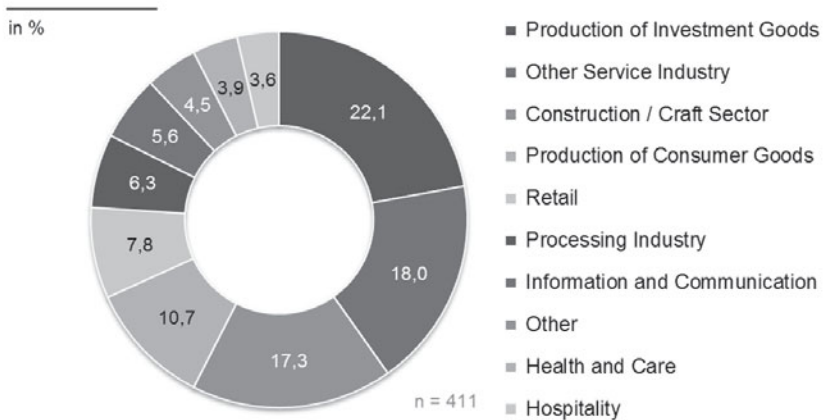


Figure 1: Demographics of the Sample: Industry Sectors

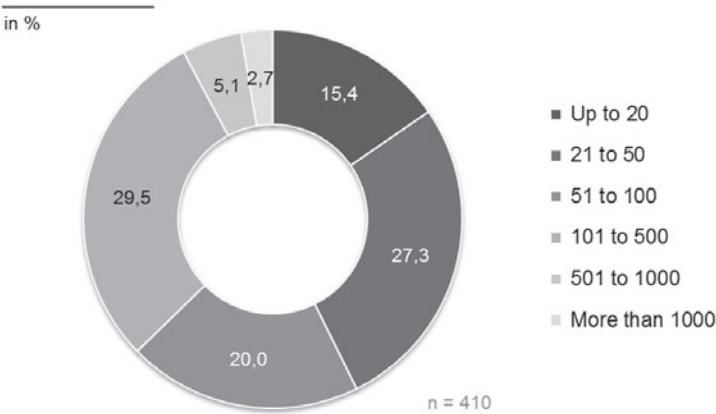


Figure 2: Demographics of the Sample: Number of Employees

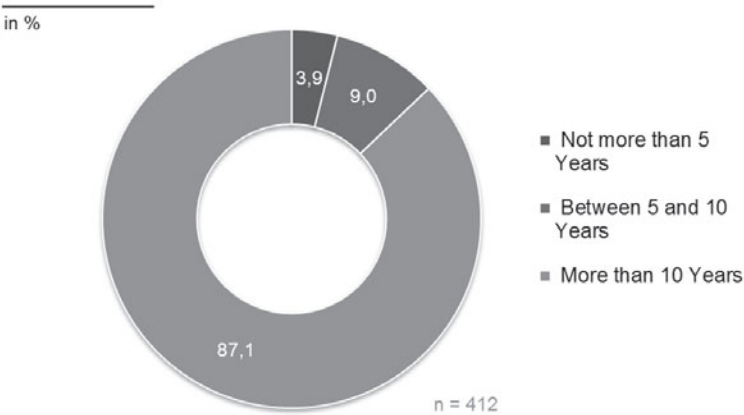


Figure 3: Demographics of the Sample: Number of Years Operating in the Market (Company)

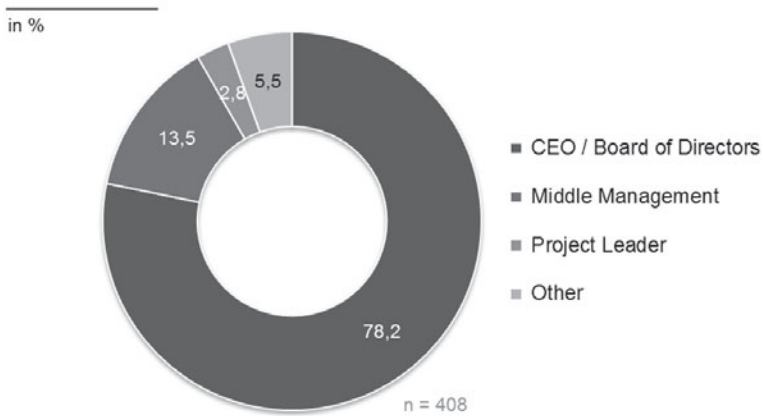


Figure 4: Demographics of the Sample: Job Role

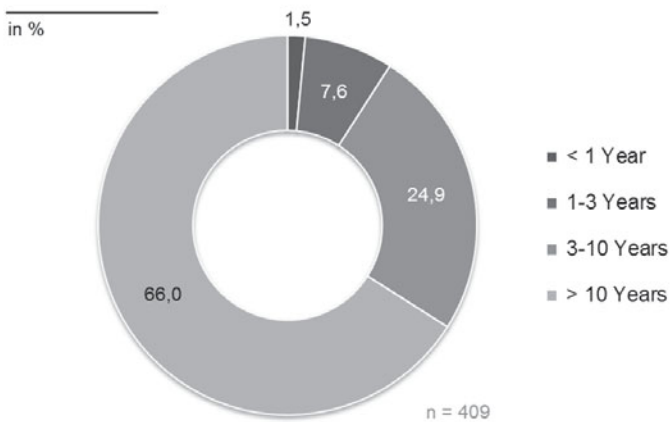


Figure 5: Demographics of the Sample: Number of Years Working for the Company

4. Literature Review on Change Management

Before analysing the research questions and verifying the hypotheses in chapter five the following sections provide a theoretical overview on change management, resistance to change and critical success factors of change initiatives identified by other researches. Furthermore, Lewin's three-step model of change is introduced as the empirical research of this study is based on the theory of Kurt Lewin.

4.1 Terminology

This first chapter outlines a general overview of characteristics of change projects to provide an appropriate framework for this empirical research. Moreover, both terms 'change management' and 'change project' are defined.

4.1.1 Term I: Change Management

Change management is a complex phenomenon without clear defined and rigid boundaries. A universal definition of the term 'change management' does not exist.¹ For this empirical research the following definition provides an appropriate framework:

Change management is about transforming an organisation from a present state to a desired future state. It subsumes all measures, tasks as well as activities in an organisation that are necessary to initiate and execute broad, cross-functional and with regard to content far-reaching changes in strategies, structures, systems, processes as well as behavioural patterns. The central concern of change management is to create readiness and willingness for

¹ Cf. Burnes (2009), p. 322.

change within the organisation. Understanding and acceptance among employees are essential elements.¹

In contrast, change management is not so much about drawing detailed blueprints of desired target situations or about the application of methods and procedures to set strategic objectives. Rather change management is about designing the path of change.

Change management primarily focuses inwards on the organisation as well as on the people within the company and can be described as a continuous process.² According to Hughes, change management attends “[...] to organisational change transition processes at organisational, group and individual levels” with “[...] the potential involvement of all employees in ongoing processes of changing, rather than necessarily a single heroic manager, although the amount of involvement may vary considerably at different hierarchical levels.”³

4.1.2 Term II: Change Project

A change project can be defined as a change management intention with set objectives and limited resources with regard to time, budget as well as workforce. Moreover, it differs from daily business as well as other projects and can usually be described as unique. Projects are defined by having a starting point and an end.

The terms ‘change project’ and ‘change initiative’ are used simultaneously in this dissertation. The overall objective of a change management project is a sustainable effective as well as efficient adaption of the structure and process organisation of a company.⁴ The difference between a change project and a

¹ Cf. Gattermeyer/Al-Ani (2001), p. 14 f.

² Cf. Lauer (2010), p. 3.

³ Hughes (2010), p. 4.

⁴ Cf. Oltmanns/Nemeyer (2010), p. 28.

change program is that a change program does not have a defined end. A generic term applying to both is 'change process'.¹

4.1.3 Characteristics of Change Projects

As mentioned before, organisations have to change in unprecedented and unanticipated ways in order to survive.² Change management is ubiquitous as organisations have to transform to adapt to new requirements. The characteristics of change initiatives however, depend upon several criteria. In general, change projects can be distinguished by:³

- 1) Deliberateness of change: planned or unplanned
- 2) Reason for change: proactive or reactive
- 3) Intensity of change: evolution or revolution, adoption or reconstruction

The first perspective distinguishes planned and unplanned changes. Planned changes are anticipated by the company. These changes are planned ahead of time and take place as intended. Unplanned or emergent changes though, arise spontaneously. These changes are not originally anticipated and not intended.⁴ The focus of this empirical research is on planned changes. Furthermore, changes whether planned or unplanned can be distinguished by two more criteria.

The second perspective distinguishes proactive and reactive changes. Proactive changes are initiated and designed by the company whereas reactive changes are often a response from a company to an external or internal event. In the second case the company perceives the need to change. Reactive changes occur due to changing factors in the business environment such as

¹ Cf. Greif/Runde/Seeberg (2004), p. 27 f.

² Cf. Burnes (2009), p. 166.

³ Cf. Pescher (2010), p. 8.

⁴ Cf. Orlikowski/Hofman (1997), p. 4.

actions taken by competitors. Yet the reasons to change can be complex and multilayered.¹

The third perspective distinguishes changes by their intensity. According to several researches, organisations change basically in two ways. Either they transform through drastic action or through evolutionary adaptation.² Beer and Nohria described the two different approaches as 'Theory E' – based on economic value – and 'Theory O' – based on organisational capability –.³ 'Theory E', which is similar to Kanter's, Stein's and Jick's 'bold stroke'⁴, is more fundamental as well as discontinuous. Changes are often caused by innovations in IT, technology or processes, shortage or abundance of resources or by rapid changes in the business environment. Change happens quickly and often involves noteworthy pain.

Organisational development by contrast, is evolutionary, incremental, gentle as well as decentralised and produces change over a longer period of time with less turmoil.⁵ Kanter, Stein and Jick described this second approach as 'long march'.⁶

Change initiatives are often classified by the intensity of change. A common framework dealing with different types of change is a model established by Balogun and Hope Hailey. The authors identified four different intensities of change:

¹ Cf. Pescher (2010), p. 8.

² Cf. Meyerson (2011), p. 40; Beer/Nohria (2000), p. 88 ff; Kanter/Stein/Jick (1992), p. 492 ff.

³ Cf. Beer/Nohria (2000), p. 88 ff.

⁴ Cf. Kanter/Stein/Jick (1992), p. 492.

⁵ Cf. Meyerson (2011), p. 40.

⁶ Cf. Kanter/Stein/Jick (1992), p. 492.

		End Result	
		Transformation	Realignment
Nature	Incremental	Evolution	Adaption
	Big Bang	Revolution	Reconstruction

Figure 6: Types of Change (Balogun/Hope Hailey)¹

4.2 Three-Step Model of Change

Several models describing a change project as a process and dividing it into different phases can be found in the change management literature. The most common and well-known model is the three-step model of change established by Kurt Lewin in 1947.² He identified three different phases in a change initiative: the unfreezing-phase, the changing-phase and the refreezing-phase. Other authors and their models are often oriented on the theory of Kurt Lewin. Likewise Nadler, Tushman and O'Reilly³ identified three phases in a change project. On the other side Krüger⁴ as well as Burke⁵ identified five different phases in a change initiative whereas Kotter⁶ identified eight steps to successful change. Moreover, Kanter, Stein and Jick⁷ suggested ten commandments for executing change and Doppler and Lauterburg⁸ identified twelve different phases in a change project.

¹ Cf. Balogun/Hope Hailey (2004), p. 20.

² Cf. Lewin (1947), p. 5 ff.

³ Cf. Nadler/Tushman/O'Reilly (1989), p. 536 ff.

⁴ Cf. Krüger (2009), p. 70.

⁵ Cf. Burke (2003), p. 296 ff.

⁶ Cf. Kotter (2011), p. 5 ff.

⁷ Cf. Kanter/Stein/Jick (1992), p. 383.

⁸ Cf. Doppler/Lauterburg (1994), p. 96.

This dissertation is oriented on the three-step model of change established by Kurt Lewin. As already mentioned, the questions in the questionnaire concerning critical success factors of change projects had been divided into the three phases 'unfreezing', 'changing' and 'refreezing' as most change initiatives undertaken by organisations follow this linear approach.¹ The theoretical model is illustrated in the following sections.

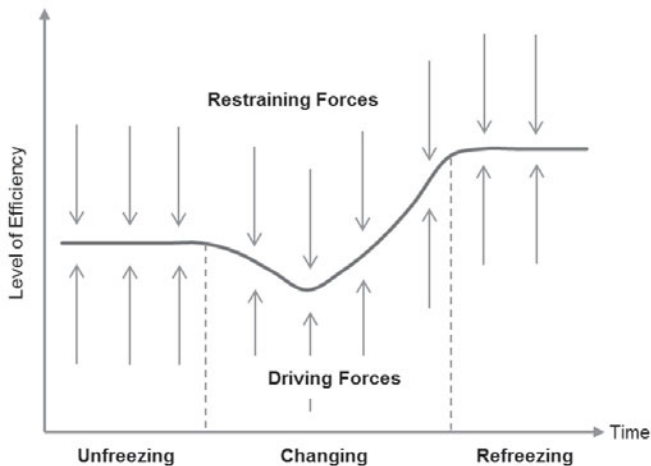


Figure 7: Three-Step Model of Change (Lewin)²

The first phase is named unfreezing-phase. The state of the changing organisation can be described as a quasi-stationary equilibrium caused by equal driving and restraining forces. These equal forces, originated internally or externally, sustain the equilibrium and are referred to as 'the forces of inertia'. Whereas driving forces are more often based on logic and data, restraining forces are more often based on emotions.³ Before an organisation can change successfully these forces need to be destabilised or unfrozen. Therefore,

¹ Cf. Burnes (2009), p. 337.

² Cf. Lewin (1947), p. 5 ff.

³ Cf. Thompson/Martin (2005), p. 817.

people have to be shaken up and prevailing habits, behaviours as well as ways of thinking have to be questioned.¹ This first phase is about creating awareness for the need of change and to make people ready for the transformation. Grover et al. described it as creating “[...] a climate for change.”² At this point in time creating readiness and willingness for change at all levels are essential tasks.³ These two tasks are also central elements in the 3W-model established by Wilfried Krüger:

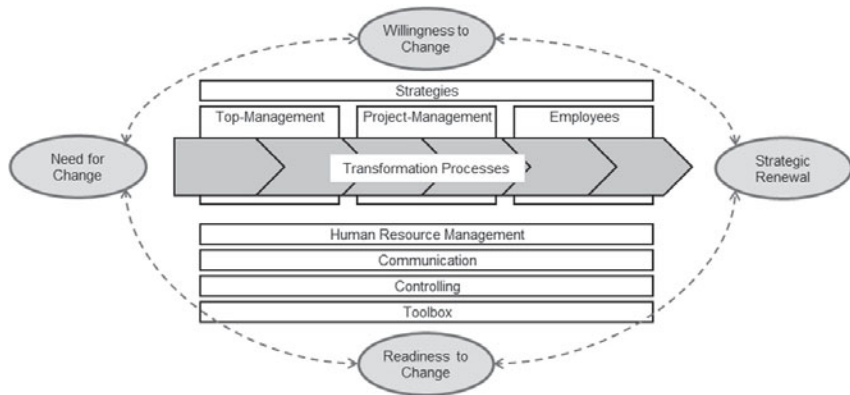


Figure 8: 3W-Model (Krüger)⁴

According to Schein, three steps are required to achieve sustaining and successful unfreezing. First the validity of the status quo has to be disconfirmed, second dissatisfaction about the existing ways of working has to be created as well as a feeling of survival anxiety or guilt and third psychological safety has to be provided. By applying this approach forces pushing for change are strengthened and/or forces maintaining the current situation are weakened.⁵

¹ Cf. Senior/Fleming (2006), p. 349.

² Grover et al. (1995), p. 112.

³ Cf. Balogun/Hope Hailey (2004), p. 139.

⁴ Cf. Krüger (2009), p. 28.

⁵ Cf. Schein (1996), p. 30.

Creating readiness and willingness for change is the prerequisite to discard old habits, behaviours as well as ways of thinking before adapting to the new situation successfully.¹

The second step is the moving or changing-phase. In this phase the intended changes are carried out through a selected range of mechanisms and levers.² The organisation is moved towards the desired future state. New strategies, structures as well as systems are established and new types of behaviour and ways of working emerge.³

The third and last phase is named refreezing-phase. After executing the change this phase is about stabilising the organisation by creating a new quasi-stationary equilibrium. New habits, behaviours and ways of thinking are integrated into every-day-business. In this phase commitment to the change is achieved. New ways of working are institutionalised as well as cemented and a higher level of efficiency is reached. The organisation has to ensure at this point in time that people are not backsliding into old ways of doing things.⁴ In this day and age, the refreezing-phase is often rather short as organisations need to transform constantly and change is a permanent challenge.⁵ Therefore, refreezing can also be described as the on-going process of continuous development.⁶

The three-step model of change established by Lewin is a straightforward linear model dividing a change initiative into three different phases. Nevertheless, every linear model faces the problem of simplifying a more complex and interdependent reality. Yet the linear approach is widely spread when it comes to change management.⁷ A linear approach represents a practical starting point

¹ Cf. Senior/Fleming (2006), p. 349.

² Cf. Balogun/Hope Hailey (2004), p. 140.

³ Cf. Senior/Fleming (2006), p. 349.

⁴ Cf. Senior/Fleming (2006), p. 350 f.

⁵ Cf. Krüger (2009), p. 22.

⁶ Cf. Krüger (2009), p. 81.

⁷ Cf. Camall (2007), p. 77.

for this dissertation and the empirical research as it describes a change project holistically from a macro level perspective. Everyone leading and managing change has to be aware of driving and restraining forces. The critical success factors of change management discussed in chapter four and five help effective managers to strengthen driving and to weaken restraining forces.

4.3 Resistance to Change

Resistance to change is an important aspect to consider when analysing critical success factors of change management. In general, change projects attract some kind of resistance. Conflicts, disagreement and struggles concerning the desired future state are common within organisations or in the companies' business environments.¹ Therefore, managing and leading change implies dealing with resistance. If resistance to change is not recognised, disregarded and not overcome change initiatives are bound to fail.² The results are serious delays, severe blockades and expensive failures. Dealing with resistance in a constructive and open-minded manner is a central element of change management.³ However, it is fundamental to approach resistance to change from an employee's perspective. Coghlan writes concerning this "resistance is viewed generally from the perspective of those promoting change and there is need to understand resistance from the defenders' position."⁴ The critical success factors identified in the empirical research have the task to prevent or at least minimise resistance to change.

4.3.1 Characteristics of Resistance

Before analysing resistance to change in depth, it is essential to define the term. According to Mabin, Forgeson and Green, resistance to change can be defined as "[...] a fundamental block to change, and a prime reason why

¹ Cf. Kim/Mauborgne (2011), p. 60; Mohr et al. (2010), p. 178 f; Atkinson (2005), p. 15 ff; Maurer (1996), p. 24.

² Cf. Cacaci (2006), p. 25 f.

³ Cf. Doppler/Lauterburg (1994), p. 202.

⁴ Coghlan (1993), p. 11.

change does not succeed or get implemented.” Furthermore, they described resistance to change as “[...] ubiquitous in nature.”¹ Lines added that “[...] resistance towards change encompasses behaviours that are acted out by change recipients in order to slow down or terminate an intended organisational change.”² Resistance to change, originating from within the company or from the business environment, is an expression of hesitation which arises as a reaction or response to a change situation and an attempt to maintain the status quo of an organisation. Following table outlines different symptoms of resistance:

Table 2: Symptoms of Resistance (Doppler/Lauterburg)³

	Verbal (Talking)	Non-Verbal (Behaviour)
Active (Attacking)	Disagreement <ul style="list-style-type: none"> - Counter Argumentation - Criticism - Threats - Polemic - Inflexible Formalism 	Commotion <ul style="list-style-type: none"> - Unrest - Disputes - Intrigues - Rumours - Formation of Groups
Passive (Escaping)	Avoiding <ul style="list-style-type: none"> - Silence - Trivialisation - Daffing - To Make Fun of the Project - Discussing Irrelevant Issues 	Listlessness <ul style="list-style-type: none"> - Inattention - Fatigue - Absenteeism - Internal Emigration - Illness

Resistance to change can even occur if a comprehensible need for the transformation is communicated and the change project is planned with foresight.⁴ Every change initiative encounters restraining forces which are responsible for discrepancies between the real transformation and the transformation as it

¹ Mabin/Forgeson/Green (2001), p. 169 f.

² Lines (2004), p. 198.

³ Cf. Doppler/Lauterburg (1994), p. 205.

⁴ Cf. Paton/McCalman (2008), p. 52.

was planned originally. Resistance to change often reaches a powerful level and scuppers a change initiative.¹ But what are the reasons why people resist change?

4.3.2 Reasons for Resistance

It is indispensable to take a holistic perspective when analysing reasons for resisting change. Both hard and soft factors of an organisation have to be taken into consideration. Especially soft factors are often ignored or not recognised whereas these factors are crucial whether a change initiative will succeed or fail. These hard and soft factors of an organisation affecting a change project can be seen in the figure 'Change-Iceberg'. The iceberg-model is a common form of outlining formal or in other words hard and informal or in other words soft aspects of an organisation. Formal aspects are on the top of the iceberg and are 'above the surface'. These parts are easy to identify. Formal aspects of a change initiative are tasks, structures, processes and objectives (content, budget and time).² In contrast, informal parts are 'below the surface' at the bottom of the iceberg. This illustrates that informal aspects are not easy to identify. Three different levels of informal aspects affecting resistance to change can be distinguished.

¹ Cf. Mohr et al. (2010), p. 172.

² Cf. Kaune (2004), p. 28 ff.

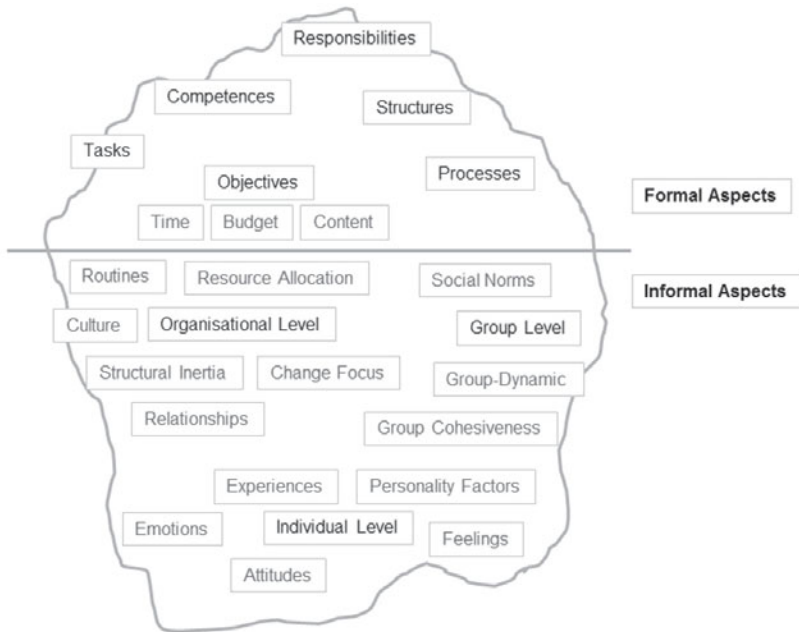


Figure 9: Change-Iceberg (Kaune)¹

The first level is the organisational level. Organisational resistance occurs due to structural inertia and routines, a limited change focus as well as the threat of existing power-relationships and/or resource allocations.² Moreover, organisational culture as well as leadership culture can affect the change initiative. Culture is an important aspect to consider in change management and must not be ignored.³

The second level of informal aspects affecting a change initiative is the group level. The group level is also an important part to consider as aspects such as

¹ Cf. Kaune (2004), p. 28.

² Cf. Robbins (2003), p. 558 ff.

³ Cf. Paton/McCalman (2008), p. 46.

social norms, group cohesiveness and group-dynamic processes can influence the outcome of a change project.¹

The third and often referred to as the most important aspect is the individual level.² On the individual level it is absolutely essential to consider people's attitudes, feelings and emotions. Furthermore, personality factors and attitudes based on previous changes have to be taken into account.³ Besides, every transformation arouses fears⁴ such as fear of a shift in power, fear of becoming redundant, fear of financial losses, fear of failure and fear of the unknown.⁵ In addition, affected people often have to learn new skills or have to join a new team which indicates extra work and breaking with old habits as well as patterns. The psychological aspect that people tend to adhere to processes as well as behavioural patterns that they already know, understand and can control causes resistance to change.⁶ The following table provides a summary of factors causing resistance to change on the individual level:

¹ Cf. Carnall (2007), p. 120.

² Cf. Calish/Gamache (1981), p. 22.

³ Cf. Carnall (2007), p. 120.

⁴ Cf. Mohr et al. (2010), p. 178 f.

⁵ Cf. Robbins (2003), p. 558 ff.

⁶ Karp (2006), p. 6.

Table 3: Factors Causing Resistance to Change¹

Cause	Outline
Fear of the unknown	Being uncertain about the nature of change, feeling that you do not know what is going on and what the future is likely to hold
Loss of control	Feeling that the change is being done to you, not by you, worrying that you have no say in the situation and the events taking place
Loss of face	Feeling embarrassed by the change and viewing it as a testimony that the way you have done things in the past was wrong, consider the change as personal criticism
Loss of competency	Feeling that existing skills and competencies will no longer be of any use after the change
Need for security	Worrying what your role will be after the change
Poor timing	Being caught by surprise with the change that has been sprung on you, or being asked to change at a time when you already feel overworked
Force of habit	Not liking to change existing ways of doing things, feeling comfortable in existing routines and habits, having a low tolerance for change
Lack of support	Lacking important support from direct supervisors and/or organisation, not having the correct resources to properly implement the change
Lack of confidence	Lacking in personal confidence that things, once changed, really will be better
Lack of understanding	Lacking in understanding, you do not understand why things have to change, the need for change is not obvious to you
Lingering resentment	Being recalcitrant because of a lack of respect for the people involved and/or because anger over the way you have been treated during past change efforts

In most cases, attitudes, feelings and emotions, the so-called 'human elements' or 'people issues', are more important than either data or logic. Managers leading and managing change have to comprehend behavioural, psychological as well as emotional blocks accompanying a change initiative.² In particular emotions are often ignored and disregarded whereas this is one of the most important aspects to consider. Emotions are responsible whether a change project will be successful or not.³ This is also verified by Krüger⁴ as

¹ Cf. Kotter/Schlesinger (2008), p. 132 ff; Mabin/Forgeson/Green (2001), p. 170; Kirkpatrick (1993), p. 31.

² Cf. Calish/Gamache (1981), p. 21 f.

³ Cf. Doppler et al. (2002), p. 63.

⁴ Cf. Krüger (2009), p. 168.

well as Kotter and Cohen¹. One of the key findings of Kotter and Cohen is that managers have to take emotions seriously. Whereas negative emotions such as anxiety, confusion, frustration and fatigue have to be weakened, positive emotions such as enthusiasm, confidence as well as feelings of momentum have to be fostered. Negative attitudes, feelings and emotions are a bar to successful change in many cases. However, there are two major difficulties analysing and diagnosing informal aspects causing resistance to change.

First of all, not all resistance to change occurs for obvious reasons. Kegan and Lahey for example identified in their research a hidden phenomenon, the so-called ‘competing commitment’, which causes resistance to change. In this case, affected people do not fight the transformation. They even hold a sincere commitment to the change. Nevertheless, these people do not change at all. This can be due to personal fears and weaknesses or because of different projects competing with each other.² Kegan and Lahey called this phenomenon “[...] personal immunity to change”, as people are not changing although they do not have negative attitudes concerning the change.³ Kotter and Schlesinger added that an employee “[...] might begin actively to resist the change for reasons even he [the employee, editor’s note] does not consciously understand.”⁴

The second aspect hampering the analysis and diagnosis of informal aspects causing resistance to change is that these aspects are not easy to identify and often are not expressed openly. People are resisting change although they have committed to the change. Therefore, Krüger distinguished between evinced and lived willingness for change.⁵ Willingness as well as readiness for change imply acceptance and are essential parts for a successful

¹ Cf. Kotter/Cohen (2002), p. 8.

² Cf. Kegan/Lahey (2011), p. 77 ff; also Maurer (2011), p. 33.

³ Kegan/Lahey (2011), p. 77.

⁴ Kotter/Schlesinger (2008), p. 134.

⁵ Cf. Krüger (2009), p. 30 f.

transformation.¹ The phenomenon of evinced and lived willingness for change can be seen in the following figure established by Krüger:

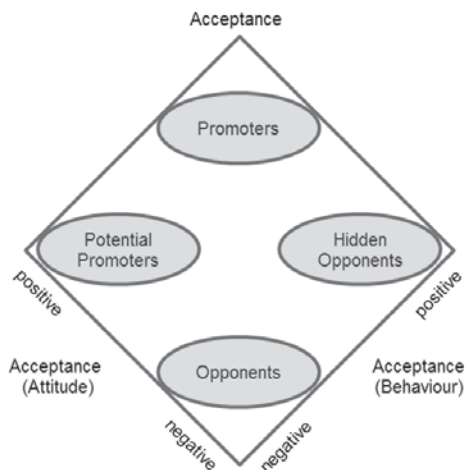


Figure 10: Dimensions of Accepting Change (Krüger)²

4.3.3 Emotional Phases of a Transition

As mentioned above, resistance to change occurs in every change initiative. According to Lewin's three-step model of change, resistance can be identified in all three phases. Hayes divided resistance to change into seven phases of emotional reactions.³ This model helps to understand why people are resisting change and how managers can approach this phenomenon. Every employee affected by the change has to pass through each of the seven phases. The smoother and quicker the better as cost-sensitive friction losses are

¹ Cf. Krüger (2009), p. 161.

² Cf. Krüger (2009), p. 161.

³ Cf. Hayes (2002), p. 151.

minimised.¹ The model established by Hayes is similar to the 'coping cycle' outlined by Carnall² as well as Balogun and Hope Hailey³.

The first phase is called 'shock-phase'. If there have been little warnings for the upcoming changes people initially experience shock when they first come across the need for change.⁴ Employees feel overwhelmed and the emotional state often can be characterised as frozen as well as paralysed. They are unable to plan and think constructively and are in a state of immobilisation. Anxiety and panic are common feelings during this first phase. Employees often focus on what they might lose. In this early stage it is important to prepare people for the upcoming changes and to create willingness as well as readiness for change.⁵

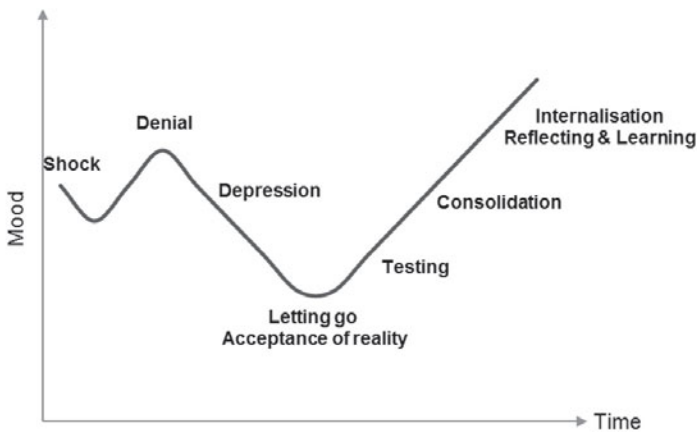


Figure 11: Emotional Phases of a Transition (Hayes)⁶

¹ Cf. Oltmanns/Nemeyer (2010), p. 33.

² Cf. Carnall (2007), p. 240 ff.

³ Cf. Balogun/Hope Hailey (2004), p. 140 ff.

⁴ Cf. Balogun/Hope Hailey (2004), p. 141.

⁵ Cf. Hayes (2002), p. 151.

⁶ Cf. Hayes (2002), p. 151.

The second phase is named 'denial-phase'. Usually the initial response of people to an upcoming change is to deny the need for change. In this phase employees' behaviours can be characterised as paralysed.¹ They shut their eyes from reality and are not moving towards the desired future state.² Employees cling to the past and try to proceed as usual. Most of their activities as well as energy are dedicated to known and familiar tasks and processes. Resistance to change reaches its peak as employees are refusing to consider the need for change.³

The third phase is referred to as 'depression-phase'. The implementation of changes forces people to change. They are not able anymore to proceed as usual. New tasks, roles as well as processes are being implemented and the reality of the transformation becomes obvious.⁴ Feelings of depression and frustration are common as people have to decide how to deal with this new situation. Employees often are afraid of losing control of the situation and try to defend the present state of the organisation.⁵

The fourth phase is called 'discarding-phase'. Employees finally accept the new situation and begin to let go the past. They are accepting reality and look forward to the desired future state of the organisation.⁶ A process of discarding emerges and employees recognise that the change is necessary as well as unavoidable.⁷

The next phase is the 'testing-phase'. Employees are now actively participating to the change process.⁸ They are trying to work out new ways of coping with the changing situation. The process can be described as trial-and-error or mutual adaptation. Learning and modifications are usual attributes of this fifth

¹ Cf. Carnall (2007), p. 240 ff.

² Cf. Balogun/Hope Hailey (2004), p. 141.

³ Cf. Hayes (2002), p. 151 f.

⁴ Cf. Hayes (2002), p. 152.

⁵ Cf. Carnall (2007), p. 242.

⁶ Cf. Hayes (2002), p. 152.

⁷ Cf. Carnall (2007), p. 242 f.

⁸ Cf. Hayes (2002), p. 152.

phase. Changes are now being implemented step-by-step. As soon as the first employees reach this phase more and more employees are following. These first ones often serve as a catalyst for the transformation.¹

The sixth phase is named 'consolidation-phase'. Employees start to develop an understanding why some processes as well as behaviours work and others do not. The changes are implemented and new ways of working are step by step adopted as new norms.²

The seventh and last phase in this model is called 'internalisation-phase'. At this stage employees have tried, modified and accepted new processes as well as behaviours. These new ways of working are integrated into everyday work and become part of the normal behaviour.³

The important aspect to notice concerning the seven emotional phases of a transition is that this process can be managed.⁴ As mentioned above, every employee affected by a change initiative has to go through all seven phases. Otherwise the change project will encounter serious resistance and a successful implementation is not guaranteed. However, responsible managers can facilitate employees' passage through the transition by taking into account different critical success factors influencing the outcome of a change project.

4.3.4 Dealing with Resistance

As outlined in the previous chapters, dealing with resistance to change is an essential task for managers. In most researches and in the literature resistance to change is seen as a problematic aspect. Therefore, resistance has to be managed and overcome. It is usually seen as an undesired aspect of a change project. Yet resistance can be used in a positive, proactive way.⁵ This approach is outlined by Ford and Ford in their research article 'Decoding

¹ Cf. Carnall (2007), p. 243.

² Cf. Hayes (2002), p. 152.

³ Cf. Balogun/Hope Hailey (2004), p. 142.

⁴ Cf. Hayes (2002), p. 154.

⁵ Cf. Maurer (1996), p. 33 ff.

Resistance to Change'. Therefore, resistance to change must not be overcome. Used in a positive way, for example to test and hone change strategies or to openly discuss possibilities, dealing with resistance is more important than overcoming it. If resistance to change is understood as feedback it is a vital resource for improving the clarity as well as quality of objectives and strategies in a change initiative.¹ Thus, resistance to change can be used as a "[...] powerful ally in facilitating the learning process."² Using this resource in an appropriate way the likelihood of successfully implementing a change project is enhanced and results are improved.³

Dealing with resistance to change requires identifying the sources of resistance. However, there is neither one particular source for opposing change nor one best way to deal with it.⁴ Resistance to change often occurs in different and unpredicted ways. One change can lead to a variety of reactions among different employees in an organisation. In many cases, emotional conflicts arise from the process of dealing with changes and not from the transformation as such.⁵ That is why it is not only advisable for managers to try to assess how employees might react to the upcoming changes and to take resistance seriously, they also have to pay attention to some general critical success factors of managing as well as leading change. By using these approaches, tactics and initiatives managers can increase the likelihood of successfully implementing a change project.

4.4 Critical Success Factors of Change Management

The expression 'critical success factor of change management' is a generic term which is generally used by practitioners and academics for a limited list of different variables, conditions as well as characteristics that are expected to

¹ Cf. Ford/Ford (2009), p. 99 ff.

² Atkinson (2005), p. 15.

³ Cf. Ford/Ford (2009), p. 100 ff.

⁴ Cf. Hughes (2010), p. 165.

⁵ Cf. Camall (2007), p. 3.

have a serious direct or indirect impact on the outcome of an organisational transformation.¹ As a result of the increasing importance of organisational transformation and the high failure rates when implementing change, a lot of empirical researches, journal articles as well as change management literature have been published during the last decades focusing on critical success factors of change initiatives. Researches carried out by academics and practitioners such as John P. Kotter², Rosabeth M. Kanter³ or Marit Gerhardt⁴ often follow a linear approach when analysing critical success factors of change management. Usually a mixture of 'hard' and 'soft' factors is identified to be responsible for successful transformation whereas 'soft' factors in most cases outweigh the 'hard' aspects. All these approaches, tactics and initiatives can act as a guideline for managers to improve results of change management projects.

Furthermore, researches carried out by organisations mainly working in the consultancy industry are addressing the phenomenon of unsuccessful change projects. Researches conducted by companies such as Capgemini⁵, IBM⁶, KPMG⁷ as well as McKinsey⁸ verify that the likelihood for a successful change project can be increased by using specific approaches, tactics and initiatives. These research findings as well as articles published in journals and change management textbooks provide the basis for this dissertation.

In the following chapters two different models are outlined. Firstly, Kotter's model of 'eight steps to successful change' is introduced. Secondly, Gerhardt's model 'twelve success factors in change processes' is outlined. Furthermore, in the third chapter, nine empirical researches are summarised.

¹ Cf. Greif/Runde/Seeberg (2004), p. 49.

² Cf. Kotter (2011), p. 5 ff.

³ Cf. Kanter/Stein/Jick (1992), p. 383.

⁴ Cf. Gerhardt/Frey/Fischer (2008), p. 18.

⁵ Cf. Capgemini Consulting (2011a); Capgemini Consulting (2011b).

⁶ Cf. IBM (2011a); IBM (2011b).

⁷ Cf. KPMG (2011).

⁸ Cf. McKinsey (2011a); McKinsey (2011b); McKinsey (2011c).

These nine researches are introduced and hypotheses as well as key findings of these researches that are relevant for this dissertation are presented.

4.4.1 *Eight Steps to Successful Change (Kotter)*

John P. Kotter is one of the most cited authors when it comes to change management. The now retired professor of the Harvard Business School in Boston identified eight steps that are increasing the chances of successful implementing a change initiative. According to Kotter, it is essential for leaders transforming a company to work through these eight steps in the right order.¹

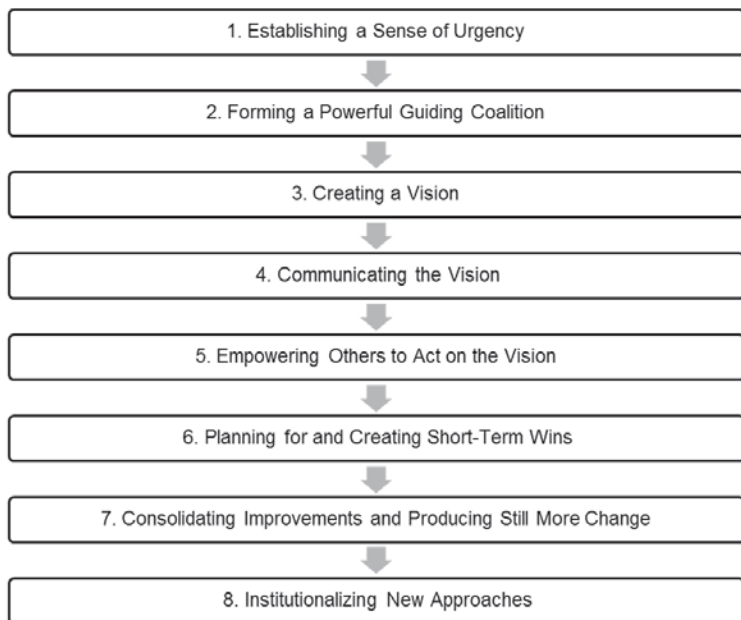


Figure 12: Eight Steps to Successful Change (Kotter)²

¹ Cf. Kotter (2011), p. 4 ff.

² Cf. Kotter (2011), p. 4 ff.

The first step in Kotter's model is to establish a sense of urgency. The status quo of the organisation has to be questioned and affected people have to be driven out of their comfort zones. According to Kotter, this aspect is often underestimated. Another pitfall in this early phase is to become paralysed by the risks accompanying a change initiative. The need for change must be perceivable and the information has to be communicated broadly as well as dramatically. This first step is often described as creating a 'burning platform'. Creating a sense of urgency is essential as starting a transformation requires motivated people who need to know the reasons why the upcoming change is inevitable.

The second step in this model is to form a powerful guiding coalition. It is crucial to bring together a critical mass of people with shared commitment. The change team, usually working outside the normal hierarchy, is the driving force behind the change initiative. The team members have to be credible as well as authentic and have to have the appropriate expertise as well as leadership qualities. Furthermore, the team has to have enough formal and informal power to lead the change project.

The third step is about creating a vision to lead the change effort. The vision must not be too complicated or vague and clarifies aspects concerning the desired future state of the organisation. Moreover, strategies should be developed for realising the vision.

The fourth step is to communicate this vision and the developed strategies. New behaviours and ways of working have to be taught by the example of the guiding coalition. Consistent behaviour is absolutely essential. The new vision and strategies should not be undercommunicated. Therefore, Kotter suggests using every possible communication channel.

The fifth step of Kotter's model is to empower others to act on the vision. Systems and structures undermining the new vision have to be removed. Likewise powerful employees resisting the change should be dealt with. New behaviours and ways of working should be supported by encouraging employees in

risk taking and by supporting non-traditional activities, ideas as well as actions. The more people work on the change initiative the better the results.

The sixth step is to plan for and create short-term wins. Performance improvements have to be defined and have to be visible. As change initiatives often take a long time it is important to set, meet and celebrate short-term goals to sustain momentum. Employees that have been contributed to these improvements should be recognised and rewarded.

The seventh step is to consolidate improvements and produce more change. The increased credibility from the successful transformation should be used to create further changes. Aspects undermining the new vision such as systems, structures and policies should be changed. In this phase it is essential not to declare victory too soon.

The eighth and last step of this model is to institutionalise new approaches and anchor changes in the organisation's culture. Therefore, managers should connect the changes to corporate success. New behaviours as well as ways of working have to become social norms and shared values.

This model established by Kotter in 1996 is one of the best-known models of critical success factors of change management. It provides a first overview on some critical success factors of change management which will be discussed in depth in chapter five.

4.4.2 Twelve Success Factors in Change Processes (Gerkhardt)

Another model providing an overview on critical success factors of change management is a model established by Marit Gerkhardt in 2007. According to Gerkhardt, a change project should be managed by working through the following twelve factors.¹

¹ Cf. Gerkhardt/Frey/Fischer (2008), p. 18 ff.

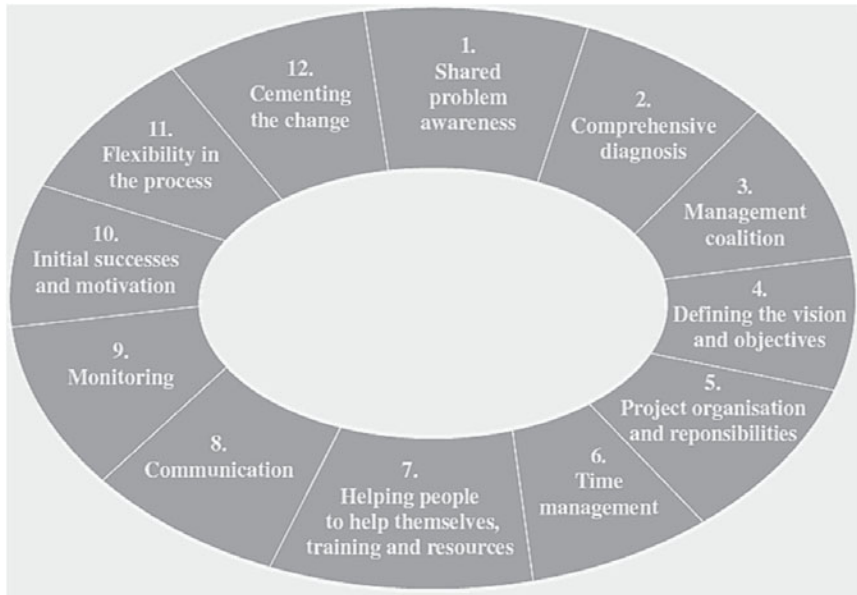


Figure 13: Twelve Success Factors in Change Processes (Gerkhardt)¹

Step one 'shared problem awareness' and step two 'comprehensive diagnosis' are comparable to Kotter's first phase. According to Gerkhardt, a shared awareness of the problem and a comprehensive diagnosis of the status quo are essential for successful change. All people affected by the change should be incorporated into the analysis of the current situation of the organisation. Furthermore, to overcome resistance to change it is inevitable that people understand why they have to change. Thus, the necessity and urgency of the change must be clear to all affected people.

The next step, as in Kotter's model, is to build a broad management coalition. Not only should the top-management be included in this coalition. It is also important to include responsible employees from the lower management levels.

¹ Cf. Gerkhardt/Frey/Fischer (2008), p. 18.

All people in the management coalition act as multipliers. This team is the driving and supporting force of the change initiative. Therefore, characteristics such as commitment, credibility and trust are essential.

The fourth step is to define the vision and objectives. As mentioned above, the vision has to be clear, comprehensible and easy to communicate so that affected people are aware of the desired future state of the organisation.

The next two steps are about project organisation and time management. The project organisation has to be professional including trained employees as well as clearly defined roles and responsibilities. Additionally, a change initiative has to be planned and executed systematically. A realistic time framework should be established which enables responsible people to a better control of the process.

Thereafter, the required resources for executing the change such as time, budget and people have to be available. Furthermore, training and qualification should be provided. Affected people have to have the chance to participate and contribute in the change project.

The eighth step 'communication' is again similar to Kotter's model. According to Gerhardt, communication is of great importance. Using all available communication channels as early as possible in the change project is crucial. The communication should be regular, interactive, open, clear and lively to create trust among the affected people.

The next two steps are 'monitoring' as well as 'initial successes for motivations'. A continuously monitoring of the change initiative helps to identify if the project is moving into the right direction. Therefore, not only 'hard facts' should be taken into account. 'Soft facts' are also of importance and can be measured as well as monitored. As change projects often take a long period of time to get implemented initial successes are responsible for maintaining the required level of energy and motivation among employees which is another similarity to Kotter's model.

The eleventh step is to ensure flexibility in the process. As the implementation can take a long time, further renewed changes can occur which then have to be taken into account.

The last step, once more similar to Kotter's last phase, is about 'cementing the change'. The new behaviours as well as ways of working should be consolidated, cemented and become the normal way of doing things.

4.4.3 Key Findings of Other Empirical Researches

Besides theoretical models, as outlined in the previous chapters, a large number of empirical researches have been published in the last decades. The following table provides an overview on hypotheses and key findings of other empirical researches which are relevant for this study. Empirical researches carried out by Beer/Eisenstat/Spector, Lucey, Morgan/Zeffane, Vahs/Leiser as well as Capgemini, IBM, KPMG and McKinsey are outlined. Findings and hypotheses concerning critical success factors of change management from these researches used in this dissertation are presented. The hypotheses of this dissertation can be found in chapter two 'Objective of the Research'.

Table 4: Key Findings of Other Empirical Researches

	Beer / Eisenstat / Spector	Lucey	Morgan / Zeffane
	"Why Change Programs Don't Produce Change" ¹	"Why is the failure rate for organisation change so high?" ²	"Employee involvement, organizational change and trust in management" ³
Publication (year)	Harvard Business Review (1990)	Management Services (2008)	The International Journal of Human Resource Management (2003)
Year of data collection	1990	2002	1996
Respondents (response rate)	6 companies - hundreds of people (n/a)	9 change management experts*	2001 companies - 19.000 people (n/a)
Surveyed countries	Unknown	-	Australia
Surveyed companies	Large companies	-	Small, medium and large companies
Surveyed people	Top-management + employee level	* e.g. Kanter, Kotter and Lewin	Top-management + employee level
Hypothesis	A joint diagnosis of business problems is essential to start a change project.	Communication and a clear vision are the two most important factors in the unfreezing phase.	Change has a negative impact on trust in management.
Key finding	The hypothesis is confirmed by the authors. A clearly defined, shared problem awareness mobilises the initial commitment that is necessary to start a change initiative.	The hypothesis is confirmed by the experts. Communication and a clear executive vision are the two most important aspects to consider.	The hypothesis is confirmed by the empirical data. However, the effects vary depending on the employee involvement. More involvement (or participation) has a positive impact on trust and therefore increases the likelihood of successful change. Furthermore, direct communication with the top-management has a positive impact on trust (CI99%).
Hypothesis	The top-management is an important element to consider in a change project. Without commitment and support of the top-management a change project will fail.	Hard factors such as responsibilities, resources and project-management are the most essential factors in the changing phase.	
Key finding	The hypothesis is confirmed by the authors. Commitment and support of the top-management are crucial elements in every change initiative. Consistent behaviour is essential.	The hypothesis is confirmed by the experts. The absence of dedicated and full resourced teams as well as a lack of structured methodology and project-management are the biggest challenges.	

¹ Cf. Beer/Eisenstat/Spector (2011).

² Cf. Lucey (2008).

³ Cf. Morgan/Zeffane (2003).

	Vahs / Leiser	Capgemini Consulting	IBM
	"Change Management in schwierigen Zeiten" ¹	"Change Management Studie 2010" ²	"Making Change Work" ³
Publication (year)	Textbook (2003)	Report (2010)	Report (2008)
Year of data collection	2002	2009	2008
Respondents (response rate)	265 (23%)	116 (10%)	1532 (n/a)
Surveyed countries	Germany (Stuttgart)	Austria, Germany, Switzerland	Worldwide
Surveyed companies	Small, medium, and large companies	Large companies	Large companies
Surveyed people	Top-management	Top-management	Top-management + project-managers
Hypothesis	Change projects are more likely to succeed if affected employees are able to participate to the change initiative.	The willingness to change varies according to different hierarchical levels.	Most change projects encounter problems and are not fully successful with regard to content-, time, and budget-related objectives.
Key finding	The hypothesis is confirmed by the statistical data (CI 99%). Change projects in which affected employees are able to participate show a higher success rate.	The hypothesis is confirmed by the empirical data. Willingness to change usually increases with the hierarchical level of people.	The hypothesis is confirmed by the empirical data. Only 41% of the change projects met all objectives with regard to content, time, and budget.
Hypothesis	Change projects are more likely to succeed if honest and timely communication is guaranteed.		"Soft facts" or "people issues" are more important in a change project than "hard facts".
Key finding	The hypothesis is confirmed by the statistical data (CI 95%). Honest and timely communication increases the chances of a successful change initiative.		The hypothesis is confirmed by empirical data. "Soft facts" are more challenging and more important for successful change (the first six out of ten identified factors are soft factors).
Hypothesis	Personal communication channels are more important than impersonal channels.		The most important critical success factors are "soft factors". Participation, communication, and top-management commitment are the most essential elements.
Key finding	The hypothesis is confirmed by the authors. Especially face-to-face communication is crucial in a change project.		The hypothesis is confirmed by the empirical data. The most important critical success factors are: 1) Top-management commitment 2) Employee participation 3) Honest and timely communication

¹ Cf. Vahs/Leiser (2003).

² Cf. Capgemini Consulting (2011a).

³ Cf. IBM (2011a).

	KPMG	McKinsey	McKinsey
	"Ziele definieren - sicher ankommen" ¹	"Creating organizational transformations" ²	"What successful transformations share" ³
Publication (year)	Report (2009)	Report (2008)	Report (2010)
Year of data collection	2008	2008	2010
Respondents (response rate)	101 (25%)	3199 (n/a)	2512 (n/a)
Surveyed countries	Germany	Worldwide	Worldwide
Surveyed companies	Large companies	Large companies	Large companies
Surveyed people	Top-management	Top-management	Top-management
Hypothesis	Change projects are omnipresent as nearly every company has to change in order to survive.	One factor increasing the likelihood for a change project to be successful is a visible, involved, and engaged top-management.	Change projects are more likely to succeed if affected employees are able to contribute their own ideas and thoughts to shape or cocreate the change initiative.
Key finding	The hypothesis is confirmed by the empirical data. 85% of the respondents have experiences in far reaching change processes. No differences can be observed between different industries and different company sizes.	The hypothesis is confirmed by the empirical data. Change projects in which the top-management is visible, involved, and engaged have a higher success rate.	The hypothesis is confirmed by the empirical data. Change projects in which affected employees are able to contribute show a higher success rate.
Hypothesis	Most change projects encounter problems and are not fully successful with regard to content-, time, and budget-related objectives.	Change projects are more likely to succeed if affected employees are able to participate to the change initiative as early as possible.	
Key finding	The hypothesis is confirmed by the empirical data. But to meet objectives concerning content and time, often budgets are exceeded.	The hypothesis is confirmed by the empirical data. If affected employees are able to participate to the change initiative in the beginning of the project the likelihood of success is increased.	
Hypothesis	One factor increasing the likelihood for a change project to be successful is to plan communication carefully.	The most important critical success factors are "soft factors". Participation, communication, and top-management commitment are the most essential elements.	
Key finding	According to the empirical data the hypothesis has to be rejected. No correlation is found between communication and the success rate. However, not only is it important to communicate, more important is how to communicate.	The hypothesis is confirmed by the empirical data. The most important critical success factors are: 1) Communication 2) Participation and involvement 3) Executive sponsorship	

¹ Cf. KPMG (2011).

² Cf. McKinsey (2011a).

³ Cf. McKinsey (2011b).

5. Empirical Research

In the following chapters the results of the empirical research are outlined. To begin with, the reasons why the surveyed companies had to change are analysed (in case they had to change). Thereafter, success and failure of these change projects are evaluated. The focus of the analysis is on the third chapter concerning critical success factors of change management. The most significant critical success factors for SMEs in each of the three different phases – unfreezing, moving as well as refreezing – are presented and discussed. In the fourth chapter, factors such as ‘support and commitment of the management’, ‘communication’, ‘participation’ as well as ‘financial and other rewards’ influencing the outcome of a change project in more than one phase are compared and the distribution in the different phases is evaluated. Furthermore, the research questions as well as the hypotheses concerning critical success factors are analysed. Moreover, this fourth chapter deals with organisational as well as personal willingness to change and investigates factors influencing it.

5.1 Reasons for Change

As mentioned earlier, change management is omnipresent in organisations as companies have to transform constantly in order to survive. In an empirical research carried out by KPMG in 2008 85% of the surveyed companies stated that they have experiences with broad and far-reaching change projects. According to this study, no significant differences could be identified between different industries or companies having a different size.¹ Therefore, following hypothesis is tested:

¹ Cf. KPMG (2011), p. 8.

(H1-1) Change projects are ubiquitous in organisations. No differences can be observed between different industries or organisations having a different size.

The hypothesis is confirmed by the statistical data. More than 91% of the respondents and therefore 380 out of 416 companies had to undergo at least one significant change process in the last five years. This outcome is similar to the result of the KPMG research and indicates that change is not a subject solitary affecting large corporations. This remarkably high number of change projects demonstrates that change management is a central task even for small and medium-sized enterprises to be successful in the market. Change is a permanent challenge for every company.

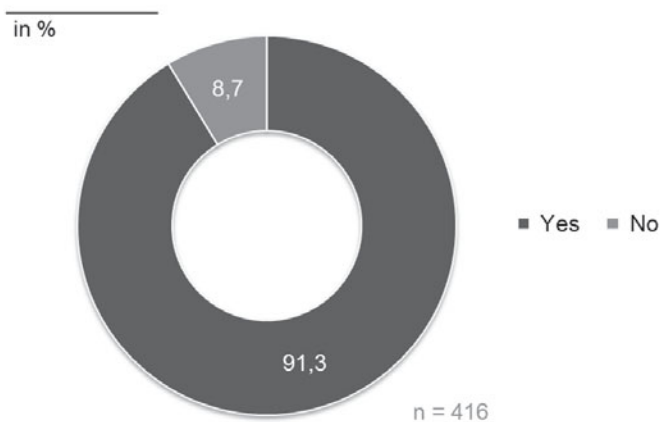


Figure 14: Empirical Research: Experiences with Significant Change Processes in the Last Five Years

Moreover, no statistically significant differences can be identified between industries or companies having a different size. Nonetheless, some tendencies can be observed between different industry sectors. Whereas all respondents working in the education, hospitality as well as information and communication

sector had to undergo at least one broad and far-reaching change process in the last five years, only 86% of the respondents working in the construction and craft sector as well as in other service industries had to change radically. However, the differences are statistically not significant.¹ There might be sectors that are changing at a higher speed, yet the statistical evaluation indicates that change is a subject in every industry. Furthermore, no correlations can be observed with regard to the size of the company as well as the company's age.² Both variables do not have an influence on the need for change. Change and therefore change management is an omnipresent task affecting every industry as well as nearly every company.

But what have been the reasons for the surveyed companies to undergo significant change processes in the last five years? The respondents were able to select several options.

¹ Statistical test: one-sample t-test. No significant differences between the means. See appendix K for more information.

² Statistical test: linear regression. No correlation between the age as well as the size of the company and the need for change. See appendix L for more information.

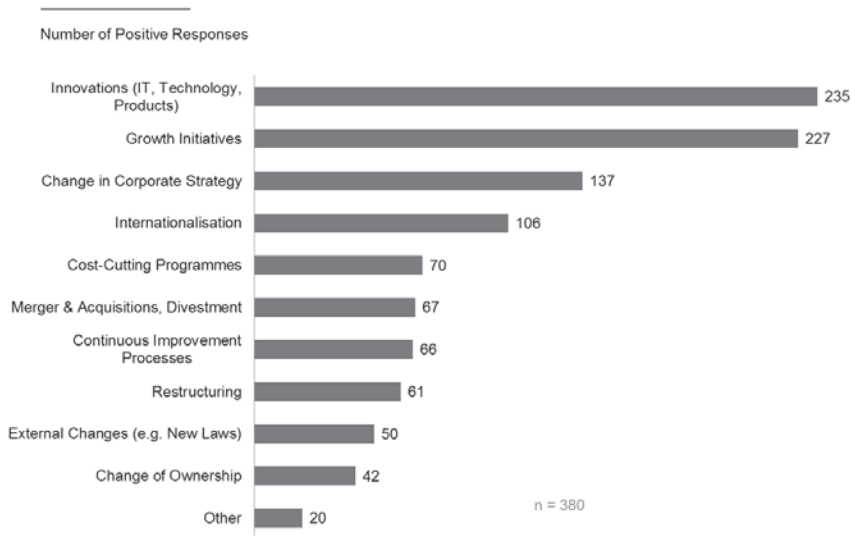


Figure 15: Empirical Research: Reasons to Undergo Significant Change Processes in the Last Five Years

The reasons for change and thereof the objectives that companies are trying to achieve through a change initiative can be of great variety. Anyway, the results of this survey demonstrate interesting aspects. The top four answers are 'innovations' ticked by 62% of all participants, 'growth initiatives' ticked by 60%, 'change in corporate strategy' ticked by 36% as well as 'internationalisation' ticked by 28%. Compared to other empirical researches such as studies carried out by Capgemini or KPMG this is a surprising result. Whereas 'restructuring' and 'cost-cutting programmes' are the top answers given by the surveyed companies in the Capgemini¹ study it is 'restructuring' as well as 'merger and acquisition' in the KPMG² research. These reasons are not the top answers in this empirical research. However, the aspect that this study has

¹ Cf. Capgemini Consulting (2011a), p. 14.

² Cf. KPMG (2011), p. 22.

been carried out among successful SMEs in Germany explains why the top four answers can be overall classified as 'positive reasons'. The development of new products, processes and markets as well as the growth of the company are characterising successful companies nominated or awarded by the Oskar-Patzelt-Foundation.

In most cases, the companies had to undergo one or more change processes for multiple reasons in the last five years. Some of the reasons are not precisely and distinctly to differentiate. Therefore, one change initiative can have several causes. Most of the respondents identified multiple reasons concerning change processes in the last five years.

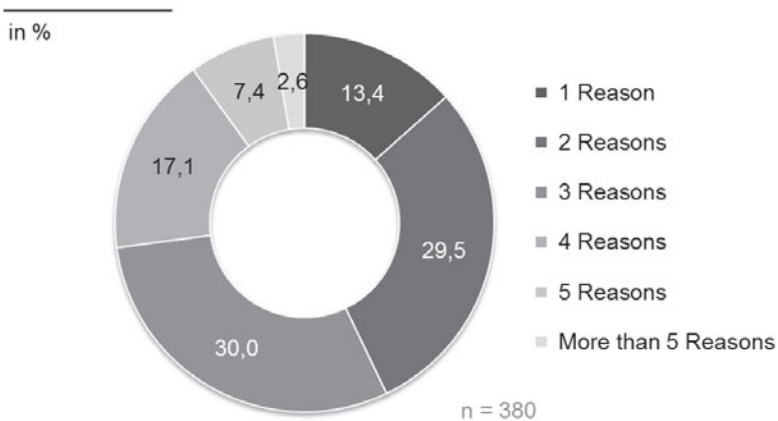


Figure 16: Empirical Research: Number of Reasons for Significant Change Processes in the Last Five Years

5.2 Success and Failure in Change Projects

Despite the fact that the majority of companies have experiences with broad and far-reaching change processes most change initiatives encounter problems. Managing as well as leading corporate transformation is a difficult task and is often done without success. As mentioned before, a large number of researches imply that only 20 to 40% of all change projects are managed successfully.¹ As this empirical research was carried out among successful German SMEs following hypothesis ought to be verified:

(H2-1) Compared to other empirical researches the responding organisations of this survey show a higher success rate in implementing change projects. This is due to the fact that this survey was conducted among successful SMEs.

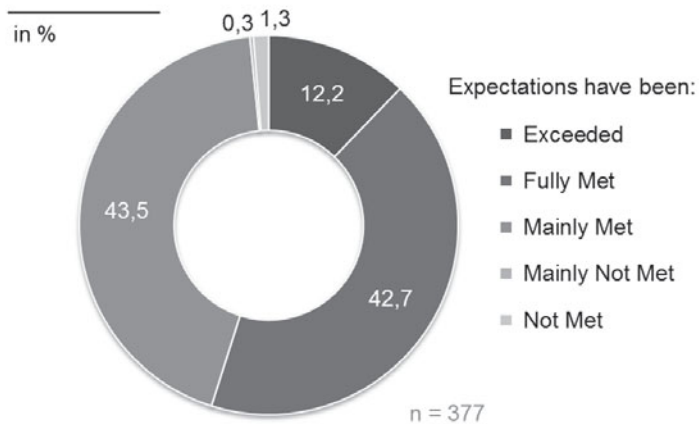


Figure 17: Empirical Research: Success of the Last Change Project

¹ Cf. IBM (2011a), p. 4; Kotter (2011), p. 4; McKinsey (2011a), p. 1; Beer/Nohria (2000), p. 134; Senge et al. (1999), p. 6; Maurer (1996), p. 18; Strebel (1996), p. 86.

Analysing the result of the last change project noticeably 12.2% of the respondents answered that their expectations concerning the outcome of this change initiative have been exceeded. Further 42.7% of the surveyed companies reported that the expectations have been fully met. If success in change projects is defined as meeting or exceeding all objectives and therefore expectations, 54.9% of all participants' change initiatives have been successful. In contrast, 45.1% of the participants' change projects have not met all objectives and expectations and can be classified as not entirely successful. The hypothesis can be confirmed as nearly 55% of the participants' change projects have fully met or even exceeded objectives and expectations.

As pointed out, this does not imply that the other 45% of the change initiatives have failed completely. Yet organisational transformations frequently do not achieve all targets with regard to content, budget and time-related objectives. The change project thus may not be a complete failure but on the other hand is not entirely successful either. Therefore, following hypothesis, based on findings of a KPMG¹ research, is tested:

- (H2-2) The most frequent objectives not achieved are budget-related goals. To meet objectives with regard to content and time, the budget of a change project is often exceeded.

¹ Cf. KPMG (2011), p. 26 f.

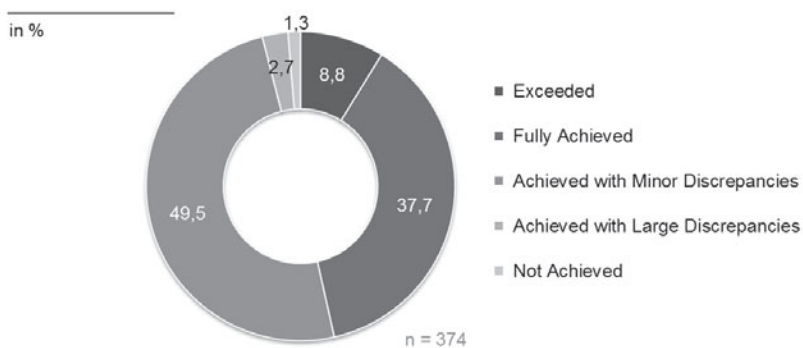


Figure 18: Empirical Research: Achievement of Content-Related Objectives in the Last Change Project

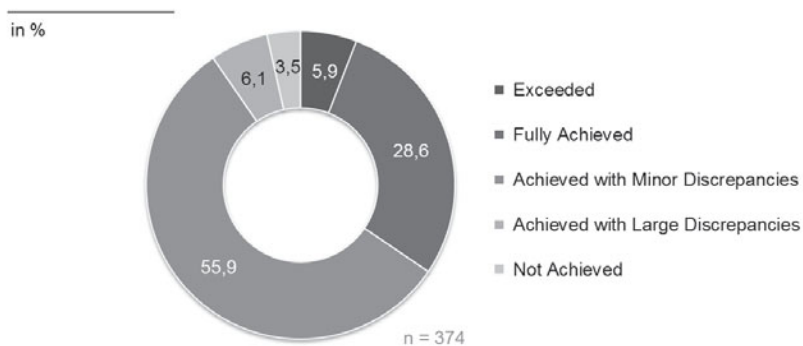


Figure 19: Empirical Research: Achievement of Budget-Related Objectives in the Last Change Project

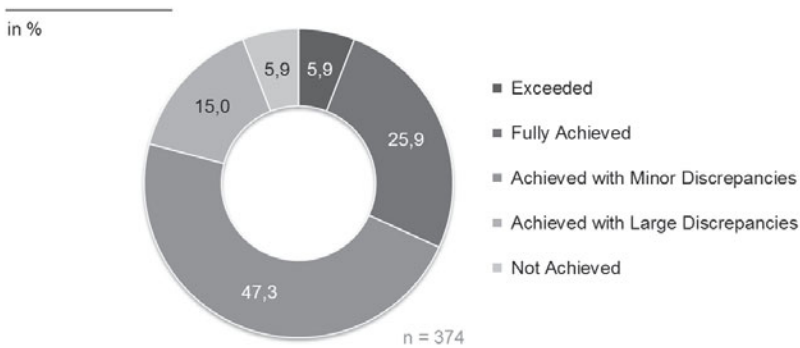


Figure 20: Empirical Research: Achievement of Time-Related Objectives in the Last Change Project

The statistical analysis does not confirm the hypothesis. However, there are statistically significant differences between the levels of achievement for the three different objectives.¹ Content-related objectives show the highest level of achievement. The second highest level of achievement can be observed for budget-related objectives. The goals with the lowest level of achievement are time-related. Whereas nearly 47% of all participants fully met or exceeded content-related objectives, only 35% fully met or exceeded budget-related objectives and 32% fully met or exceeded time-related goals.

These results are interesting from several points of view. It is not only evidenced that time-related objectives are the objectives most frequently not met. Furthermore, it is remarkable that 55% of the participants evaluated the last change project as successful (see Figure 17: Empirical Research: Success of the Last Change Project). The single scores concerning content, budget and time-related objectives are significant lower. This result implies that respondents assess the level of success differently. If they are asked to evaluate the

¹ Statistical test: one-sample t-test. There are significant differences between the means. See appendix M for more information.

overall change project they tend to rate change initiatives as more successful. In contrast, if they are asked to evaluate different single objectives the outcome of the projects is evaluated lower and more differentiated evaluations are possible. This phenomenon also can be seen in the following diagram:

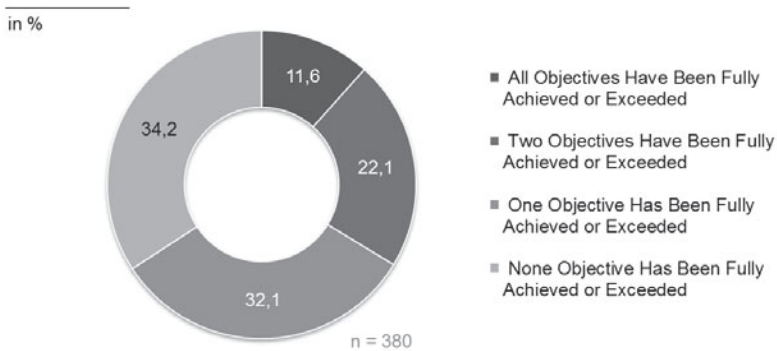


Figure 21: Empirical Research: Achievement of Content, Budget and Time-Related Objectives

Only 11.6% of all change projects fully achieved or exceeded objectives with regard to content, budget and time. Further 22.1% of the initiatives did at least not meet one set objective. This means that in nearly nine out of ten change initiatives set objectives, at least in one field, are not met. This fact demonstrates that managing and leading change is a great challenge even for successful small and medium-sized enterprises. The critical success factors discussed in the following chapters can help to increase the likelihood of successful change.

5.3 Critical Success Factors of Change Management

The critical success factors of change management discussed and evaluated in the following chapters are based on a perusal of articles, empirical researches as well as textbooks. A thorough review of the relevant literature on change management was undertaken to identify critical success factors before designing the questionnaire. The analysis is, like the questions in the questionnaire, divided into the three different phases of a change initiative identified by Kurt Lewin.

Most authors and empirical researches identify several critical success factors to minimise resistance to change. Nevertheless, there is not one best way of managing and leading change. As organisational change involves a transformation to a desired future state that includes a time and context that remain unknown, there is no universal theory of corporate change. Therefore, managing and leading change successfully cannot be seen as a single, standardised process. The authors of a McKinsey report stated that “[...] companies should use a range of tactics in conjunction to engage their employees as early as possible. They ought to base their tactics on the type of transformation they are planning and the methods to which their employees will respond best.”¹ Managers leading as well as managing change successfully are aware of different critical success factors and create an optimal framework for corporate transformations. But as Bevan emphasised “[...] no single element [...] or even several of them can guarantee a successful outcome. The absence of even one will certainly lead to difficulties and absence of more than one will cause the challenges to grow exponentially.”² Successful transformations are often based on several approaches and tactics which “[...] tend to complement and reinforce one another.”³

¹ McKinsey (2011a), p. 7.

² Bevan (2011), p. 5.

³ McKinsey (2011b), p. 1.

However, even if there are tactics that promote successful outcomes this does not imply that they work for every company. The problem of generalisation has to be taken into consideration. Factors ensuring successful outcomes in one case do not have to lead to success in another case.¹ Theoretical explanations are always simplifications and the outcome of a change project depends on the measures taken to manage and to lead change which are depending on the context, the situation and the constellation. Moreover, the outcome depends on how these measures are carried out.²

But which factors are seen as most critical by the surveyed companies in the different phases? For each phase the respondents of the survey were asked to evaluate the importance of each critical success factor on a scale from zero (not important) to four (very important). The highest ranked factors are discussed in depth in the following chapters.

5.3.1 Phase I: Prepare and Create Readiness for Change

The first phase of a change project 'prepare and create readiness for change', or as Lewin referred to as 'unfreezing', is often seen as the most important phase as it provides the foundation for the whole change project. Without particular attention to this phase change initiatives are often bound to fail.³ This phase is critical as the biggest mistakes are being made in the beginning⁴ and the danger of failure is highest.⁵ This is also emphasised by Lucey who noted that "[...] a transformation [that] starts to fail at this stage, [...] is almost certain to be unsuccessful." Furthermore, he added that "[...] there needs to be much more thought and preparation given to the unfreeze stage to prepare all staff and create a sound platform for change. More time needs to be spent on

¹ Cf. Greif/Runde/Seeberg (2004), p. 22.

² Cf. Greif/Runde/Seeberg (2004), p. 164 f.

³ Cf. Mohr et al. (2010), p. 55 f.

⁴ Cf. Capgemini Consulting (2011a), p. 19.

⁵ Cf. Krüger (2009), p. 171.

engaging the staff prior to the start of the transition, as this is the key to embedding and sustaining the change.”¹

The critical success factors of this phase were divided into two categories in the survey. The first category comprises aspects usually carried out on the management level. The second category comprises aspects that affect or involve employees. The respondents of the survey were asked to evaluate the factors from a managerial point of view.

The factor seen as most important on the management level in this first phase is ‘to define objectives / vision’ (3.7). This is then followed by ‘analysing and understanding situation / environment’ (3.6). On the employee level it is seen as crucial that managers ‘create a shared problem awareness’ (3.5) as well as that they ‘communicate upcoming changes’ (3.5). Rather unimportant are factors such as ‘providing financial and other rewards’ (2.2) as well as ‘consultation of employee representatives’ (2.4). The last factor mentioned is presumably evaluated as not important as most SMEs do not have employee representatives. In the statistical analysis a tendency can be detected that the consultation of employee representatives is more important in larger companies (measured by the number of employees).

¹ Lucey (2008), p. 17.

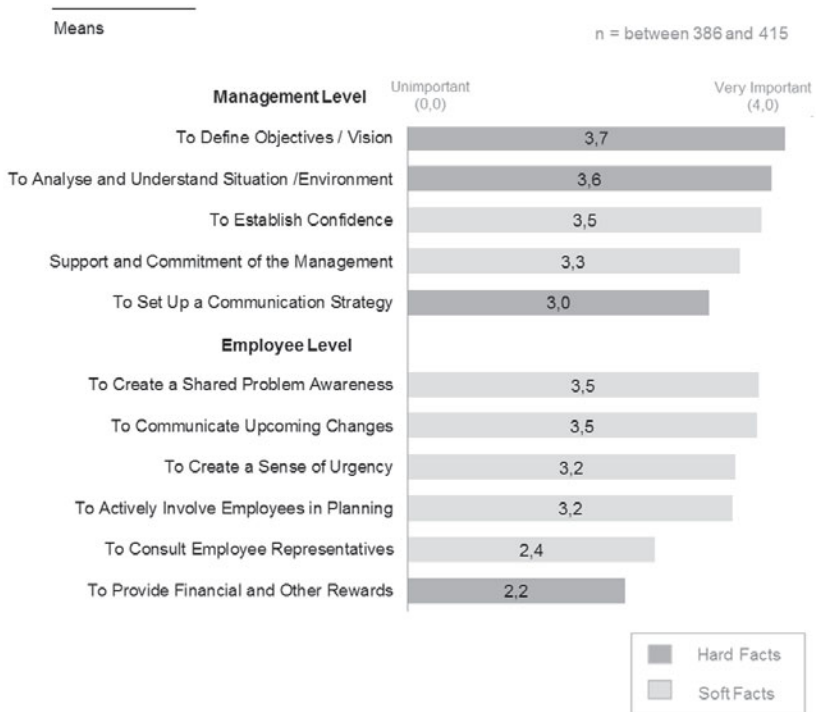


Figure 22: Empirical Research: Critical Success Factors in the First Phase 'Prepare and Create Readiness for Change'

5.3.1.1 To Define Objectives / Vision

According to the respondents of this survey, the most important factor in the first phase of a change project is 'to define objectives and to establish a vision'. To establish an effective vision is one prerequisite for successful change initiatives. The vision helps people who are affected by the change to understand how the desired future state of the organisation will look like and why they have to change. Without a clear vision people do not know how the company will operate in the future. The vision statement provides a rational

explanation for the upcoming changes in roles, relationships and responsibilities.¹ Showing people how the changes will affect the organisation and their daily work, managers can increase hope and remove fears.²

Furthermore, a vision provides a clear and focused understanding of the company's philosophy, purpose as well as strategic intentions. As Paton and McCalman stated a vision should be "[...] based on a thorough understanding of the operating environment and organisation capabilities, [it] sets the context for strategic developments, organisational cultures, management approaches and lays the foundation of the desired means of sustaining competitive advantage."³ An effective vision does not only provide an understanding why the change is necessary and how it is related to business objectives, it also provides values that allow affected people to identify with the company.⁴ The vision has to be expressed in such way that all people affected by the change understand it and can relate to it. Therefore, a vision statement should be clear and concise but yet comprehensible as well as imaginable.⁵ Moreover, a vision should be compelling, inspiring and challenging but yet realistic as well as attainable.⁶ An effective vision stimulates interest and creates excitement. Furthermore, the vision has to be communicated regularly and must be memorised by the affected people.⁷ As identified by Collins and Porras in their empirical research it is important for organisations to take time to discuss the topics of the vision before writing the vision statement. Moreover, it is essential to communicate the new vision within the company as well as to external stakeholders.⁸

¹ Cf. Beer/Eisenstat/Spector (1990), p. 82.

² Cf. Heifetz/Linsky (2011), p. 69.

³ Paton/McCalman (2008), p. 48.

⁴ Cf. Beer/Eisenstat/Spector (1990), p. 85.

⁵ Cf. Mueller (2009), p. 72; Stolzenberg/Heberle (2009), p. 14.

⁶ Cf. Mohr et al. (2010), p. 129.

⁷ Cf. Balogun/Hope Hailey (2004), p. 133 f.

⁸ Cf. Collins/Porras (2005), p. 219 ff.

A detailed description of how to develop and implement a vision can be found in Stolzenberg and Heberle 'Change Management: Veränderungsprozesse erfolgreich gestalten - Mitarbeiter mobilisieren'.¹

Similar aspects have to be taken into consideration when defining objectives. The set objectives should be, besides the characteristics mentioned for an effective vision, measurable and in line with the overall strategy.² Setting clear and ambitious targets that are communicated widely increase the likelihood of success of a change initiative. According to Isern, Meaney and Wilson, this is the most important step in a change project. If none clear vision is established and no objectives are defined a change initiative is bound to fail.³ However, setting clearly defined goals and establishing a vision is often a problem for organisations as shown by McKinsey in a study carried out in 2008.⁴

Employee participation in defining the vision and setting objectives is another important issue which has to be taken into account. The more extensive employees are able to contribute to the development of the vision and the objectives the more commitment can be observed and more commitment usually leads to better results in the change initiative.⁵ Nevertheless, not all employees can participate in this process (maybe except in organisations having only a few employees). The involvement of people often depends upon the scope of the change.⁶ It is important for managers to find the right balance concerning participation. The basic principle is that the more employees are participating to establish a vision and to define objectives the less communication efforts are needed to communicate the messages (and vice versa).⁷ Involving people with different points of views as well as promoters of power such as top-managers or widely accepted people within the organisation represent a

¹ Cf. Stolzenberg/Heberle (2009), p. 13 ff.

² Cf. Galpin (1996), p. 87 f.

³ Cf. Isern/Meaney/Wilson (2009), p. 8.

⁴ Cf. McKinsey (2011a), p. 3.

⁵ Cf. Beer/Eisenstat/Spector (1990), p. 84.

⁶ Cf. Galpin (1996), p. 5.

⁷ Cf. Stolzenberg/Heberle (2009), p. 15.

practical as well as effective starting point to develop a vision and to set objectives.¹

5.3.1.2 To Analyse and Understand Situation / Environment

The factor ranked second on the management level by the respondents is 'to analyse and understand the situation and the business environment'. Sequenced chronologically this step usually takes place before establishing a vision and setting objectives. Burke noted that managers should monitor the business environment continuously and collect as much information as possible. Furthermore, he added that it is inevitable for every company to read the business environment accurately and to react accordingly. The manager's responsibility is to prepare the organisation for the upcoming changes by analysing the gathered information before starting a change initiative.² Preparation and planning are important factors for successful corporate change however in some cases it can be essential not to plan every detail of a process. As Miles stated "preparation is important, but not at the expenses of motion. And motion is critical, because it allows you to accrue small victories that entice the undecided to come on board."³

5.3.1.3 To Create a Shared Problem Awareness

The most important factor on the employee level in the first phase of a change project is 'to create a shared problem awareness'. A joint diagnosis of the business problems helps affected people to make sense of the upcoming changes. Communicating the need for change and convincing employees that changes are inevitable often pose a big challenge for managers in particular when business is good.⁴ But a common understanding of the business problems is essential to mobilise commitment among employees before starting a

¹ Cf. Mohr et al. (2010), p. 67 f; Stolzenberg/Heberle (2009), p. 16.

² Cf. Burke (2008), p. 252.

³ Miles (2010), p. 72.

⁴ Cf. Kim/Mauborgne (2011), p. 52.

change initiative.¹ Lawson and Price identified that if affected people believe in the overall purpose of a change project and not only have a rational understanding of it, they will be glad to change personal behaviours to achieve the set objectives. Cognitive dissonance would be the result of resisting change even if they see the overall purpose. Nevertheless, affected people need to understand their roles in the change process and have to believe that the outcome of the change is worthwhile. Only in this case, employees will be motivated and enthusiastic about carrying out the transformation.²

To create a shared problem awareness and to illustrate business problems managers should according to different authors not rely solely on numbers such as key performance indicators. A much more effective approach is to put employees face-to-face with the current problems. People feel the urgency and the necessity for change most effectively when they see or experience the source of the problem.³ As soon as the affected employees determine that the new ways of working are more effective, they will implement the new approaches and institutionalise them.⁴ A critical mass of people is required to support the upcoming changes before the change process can transform the entire organisation.⁵ The critical mass is an important aspect when changing an organisation as the success of a change initiative depends upon the undecided people. To win over the uncommitted people is often essential to make a change project successful.⁶ One important aspect to create a shared problem awareness is the internal and external communication process. The importance of communication is discussed in the following chapter.

¹ Cf. Beer/Eisenstat/Spector (2011), p. 116.

² Cf. Lawson/Price (2003), p. 31 ff; also Lewis/Romanaggi/Chapple (2010), p. 15.

³ Cf. Kim/Mauborgne (2011), p. 54; Karp (2006), p. 13; Beer/Eisenstat/Spector (1990), p. 80.

⁴ Cf. Beer/Eisenstat/Spector (2011), p. 119.

⁵ Cf. Kim/Mauborgne (2011), p. 52.

⁶ Cf. Heifetz/Linsky (2011), p. 67.

5.3.1.4 To Communicate Upcoming Changes

The factor ranked second on the employee level in the first phase 'prepare and create readiness for change' is 'to communicate upcoming changes'. According to several authors as well as researches, this is one of the most important factors when planning, implementing and consolidating change. If managers leading and managing change do not plan the communication process carefully the change initiative will hardly succeed.¹

Communication can be defined as a transmission of information for a particular purpose between a sender and a receiver in a certain context. The context is determined through the message, the timing as well as the communication channels used.² Managers have to bear in mind that the message sent is not always the same as the message received. Different needs and concerns among the various recipients of the message require the development of sophisticated processes as well as strategies to guarantee that the message is received consistently.³ Feedback, reliability, transparency and trust are the four central elements of change communication.⁴ In particular trust is important in communication processes.⁵ In the following sections the most important aspects of change communications to increase trust in management and therefore enhance readiness as well as willingness to change are summarised.

Message

The purpose of a message sent in the communication process is not only to inform affected people on the informative level about the need for change, the change process and the desired future state of the organisation. The message has also educational and emotional functions.⁶ According to Garvin and Roberto, it is essential to find the right balance between optimism and realism for a

¹ Cf. Kienbaum (2011), p. 1 ff; Hughes (2010), p. 150; Werkman (2009), p. 668.

² Cf. Krüger (2009), p. 312.

³ Cf. Atkinson (2005), p. 17.

⁴ Cf. Maaß-Emden (2007), p. 59 ff.

⁵ Cf. Petersen (2011), p. 127.

⁶ Cf. Lies/Schoop (2011), p. 18.

change message and to position every message carefully.¹ Aiken and Keller furthermore suggest to use the so-called 'construction based approach' which will increase the effectiveness of the message. Using this approach the message includes four dimensions: discovery (discover the best of what is), dreaming (imaging what might be), designing (talking about what should be) and destiny (creating what will be). By not entirely focusing on what is wrong in the current organisation, the message will not invoke blame and create resistance to change. Rather the message will motivate, engage and commit people.² Moreover, the message should be consistent, clear, realistic as well as honest and has to be linked to the overall purpose of the change project.³ Concerning the message, three principles can act as a guideline for managers leading and managing change:⁴

- a) The message should be customised as there are different internal and external groups of recipients. To ensure understanding the message has to be encoded in an appropriate way according to the knowledge and skills of the recipients.
- b) The message has to be communicated in an appropriate way. This implies body language as well as the chosen words and communication channels.
- c) The content of the message must be consistent. Especially managers have to take into consideration that they act as an example.

The last aspect mentioned illustrates that different levels of communicating a message can be identified. Whereas the overt communication such as the message and the communication channels is visible, the covert

¹ Cf. Garvin/Roberto (2011), p. 19.

² Cf. Aiken/Keller (2009), p. 104.

³ Cf. Duck (1998), p. 61; Galpin (1996), p. 39.

⁴ Cf. Paton/McCalman (2008), p. 50 f.

communication such as attitudes is more informal. Nonetheless, both aspects are essential parts in the communication process.¹

Timing

Timing is another critical aspect when communicating a change project. In some cases it can be crucial not to inform all affected people in the first phase of a change initiative. However, in most cases timely communication is an important aspect which increases the likelihood of successful change. As Kirkpatrick noted “managers should be known for communicating news in advance, whether the news is good or bad. Giving priors notice builds managers’ credibility and reduces rumors.”² Rumors can have a negative impact on the whole change project. Not communicating a message in the beginning does not mean that no communication takes place. Not sending a message is also a message and will lead to rumors. This secrecy leads to fears, destroys trust and creates resistance to change which is difficult to overcome as people often assume scenarios that are more negative and much worse than reality.³

Communication Channels

The choice of communication channels which will be used to communicate the message is the third important aspect to consider. As already mentioned, the audience of the message is not homogenous involving internal individuals at different hierarchical levels and external stakeholder that will react to the upcoming change in several ways. Therefore, an appropriate choice of personal and impersonal communication channels is essential.⁴ The choice often depends upon the type of change and the involvement.

¹ Cf. Dobson (2000), p. 18 f.

² Kirkpatrick (1993), p. 30.

³ Cf. Dobson (2000), p. 20; Duck (1998), p. 59.

⁴ Cf. Croft/Cochrane (2005), p. 18.

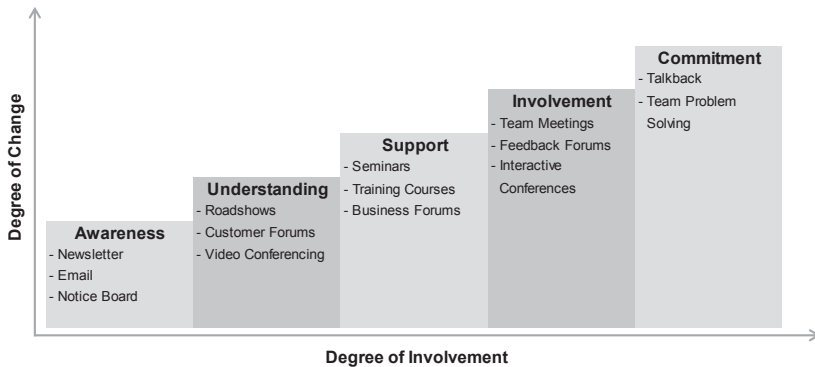


Figure 23: Matching Communication Channels to Objectives (Quirke)¹

Generally, managing and leading change requires the use of personal communication channels. Impersonal mass communication is efficient but does not motivate and commit affected people. Change communication has to be a two way process and the personal dialogue is indispensable. Using face-to-face channels is a key factor for successful corporate transformation.² Affected people can provide feedback as they are able to express personal opinions, fears and thoughts on the change initiative.³ Personal channels do not imply speaking to each affected person individually as this is in most cases not possible due to time constraints and limited resources.⁴ But it means that employees are in a responsive loop. They have to be engaged and listened to. The dialogue with the affected employees should be used to generate new ideas as they have different perspectives on the upcoming change.⁵ Providing feedback, asking questions, generating understanding as well as overcoming

¹ Cf. Quirke (2008), p. 158.

² Cf. IBM (2011b), p. 9; Wagner (2008), p. 75.

³ Cf. Croft/Cochrane (2005), p. 18; Kirkpatrick (1993), p. 32.

⁴ Cf. Schwabe (2008), p. 67.

⁵ Cf. Werkman (2009), p. 667; Schwabe (2008), p. 68; Kaune (2004), p. 24.

resistance and fears are characteristics of effective communication channels.¹ If it is not possible to communicate on person with all affected people the use of multipliers should be considered. Employees from different departments and hierarchical levels can be prepared to spread the change message.² The change message should be repeated consistently through various communication channels as it takes time for the affected people to hear, understand and finally believe it.³

By communicating openly and using several communication channels managers encourage discussions, create consensus as well as commitment and ensure a shared understanding why the company has to change.⁴ As Hall, Rosenthal and Wade stated “managers must give employees sound reasons for and explanations of the new design, a forum for voicing concerns, and feedback to show those concerns are being heard.”⁵ Open and honest communication helps to create trust in management and therefore increases the chances for successful change.⁶

A detailed description of how to develop and implement a communication strategy can be found in Stolzenberg and Heberle ‘Change Management: Veränderungsprozesse erfolgreich gestalten - Mitarbeiter mobilisieren’.⁷

5.3.2 Phase II: *Execute Change*

The second phase of a change project after analysing, preparing and planning the change initiative is about executing or implementing the change.

¹ Cf. Kirkpatrick (1993), p. 32.

² Cf. Wagner (2008), p. 76.

³ Cf. Hughes (2010), p. 155; Duck (1998), p. 62; Galpin (1996), p. 40.

⁴ Cf. Hall/Rosenthal/Wade (1993), p. 131.

⁵ Hall/Rosenthal/Wade (1993), p. 131.

⁶ Cf. Morgan/Zeffane (2003), p. 68.

⁷ Cf. Stolzenberg/Heberle (2009), p. 65 ff.

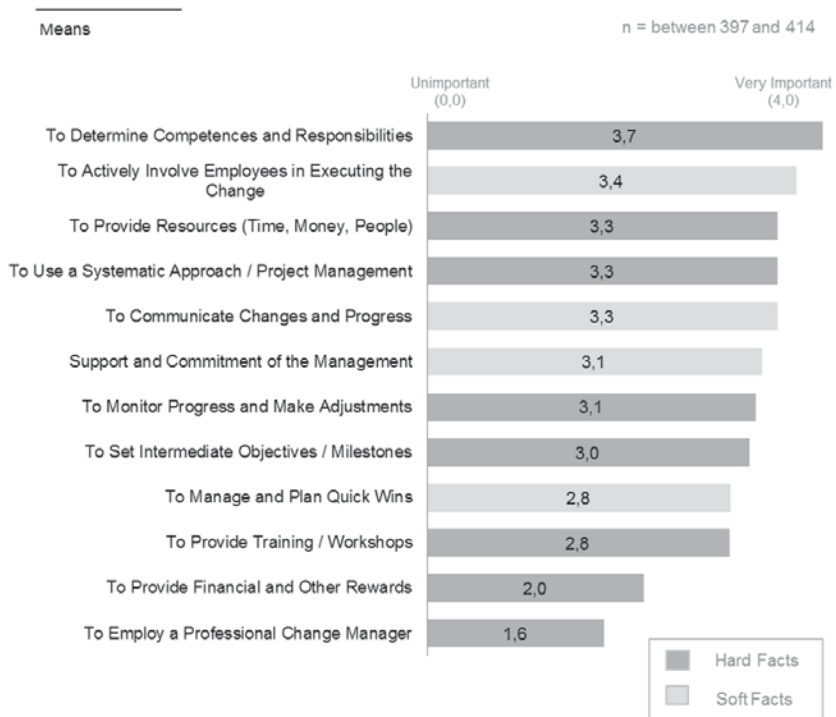


Figure 24: Empirical Research: Critical Success Factors in the Second Phase 'Execute Change'

According to the responding SMEs, the most important factor in this second phase is 'to determine competences and responsibilities' (3.7). This is then followed by the factors 'to actively involve employees in executing the change' (3.4), 'to provide resources (time, money, people)' (3.3) and 'to use a systematic approach / project management' (3.3). Three out of the first four factors are 'hard factors'. This result is remarkably as generally 'soft factors' are seen as more important in change initiatives. A detailed and more thorough analysis concerning 'hard factors' as well as 'soft factors' can be found in chapter 5.4.1. Similar to the first phase the factor 'to provide financial and other rewards'

(2.0) is evaluated as rather unimportant. The factor classified as most unimportant is 'to employ a professional change manager' (1.6) which is presumably more important in larger corporations.

5.3.2.1 To Determine Competences and Responsibilities

The factor evaluated as most important when executing change is 'to determine competences and responsibilities'. Managers leading and managing change set a framework for the implementation by defining clear and precise tasks, competences as well as responsibilities. By doing so, employees and managers are aware of their tasks with all related rights and duties.¹ Furthermore, they know about their role in the change initiative and who is in charge of the project.² Clearly defined responsibilities in terms of technical and leadership responsibilities are important. In general, accompanied by determining tasks, competences and responsibilities is the process of target agreement. Not only managers but also employees need to know what they have to achieve and how it is measured.³

5.3.2.2 To Actively Involve Employees in Executing the Change

'To actively involve employees in executing the change' is the factor ranked second in the second phase of a change project. Whereas the participation-factor can be found at the lower end of the ranking in the first phase, it seems as participation is in particular important in the implementation phase. According to different authors and researches, participation is besides communication and top-management commitment one of the most important factors to consider in a change project.⁴ The more extensive affected people are able to contribute to a change project the higher the trust in the management and therefore the better the outcomes of a change initiative. As shown by Morgan and Zeffane employees who are not consulted and are not able to contribute

¹ Cf. Kessler/Winkelhofer (2004), p. 39 ff.

² Cf. Sirkin/Keenan/Jackson (2011), p. 101.

³ Cf. Kessler/Winkelhofer (2004), p. 39 ff.

⁴ Cf. McKinsey (2011a), p. 4; Mueller (2009), p. 73.

to a project are significantly losing trust in management.¹ A study carried out by McKinsey in 2008 furthermore indicates that the earlier employees are able to participate to a change project the higher the likelihood of success.²

According to Glew et al., participation can be defined as “[...] a conscious and intended effort by individuals at a higher level in an organization to provide visible extra role or role-expanding opportunities for individuals or groups at a lower level in the organization to have a greater voice in one or more areas of organizational performance.”³ Participation is also referred to as employee involvement, engagement, empowerment or participative decision making.

Employee participation can have several benefits for an organisation. Firstly, employee involvement in the decision making process can have a positive impact on the decision quality as different points of views are considered and a broader array of knowledge as well as skills is used. The requirement therefore is that the people who should participate have the needed expertise to ensure a meaningful contribution to the change initiative.⁴ Secondly, participation leads to sustaining commitment and identification with the project. If affected employees are not able to contribute to a change initiative resistance to change is likely to emerge.⁵ It is important for managers to ensure real participation which is characterised as proactive in all phases of a change project.⁶ If affected people are able to participate to and influence a change initiative they are generally more enthusiastic as well as committed to execute the change. Moreover, participation creates ownership⁷ and prevents the occurrence of the so-called ‘not-invented-here-syndrome’.⁸ As Robbins et al. stated “it’s difficult for individuals to resist a change decision in which they participated.”⁹

¹ Cf. Morgan/Zeffane (2003), p. 66.

² Cf. McKinsey (2011a), p. 4.

³ Glew et al. (1995), p. 402.

⁴ Cf. Lines (2004), p. 193; Dunphy (2000), p. 123 ff.

⁵ Cf. Lines (2004), p. 193.

⁶ Cf. Lies/Volejnik/Mörbe (2011), p. 83 ff; Karp (2006), p. 11.

⁷ Cf. Kirkpatrick (1993), p. 30.

⁸ Cf. Doppler/Lauterburg (1994), p. 70 f.

⁹ Robbins et al. (2009), p. 487.

Nevertheless, managing the participation process carefully is essential to ensure meaningful outcomes. Managers leading and managing change have to find the right balance concerning employee participation. Not every detail of a change project can be decided in a participative approach as this would be enormously time consuming. If changes have to be executed immediately involving all affected people can simply take too long. A practicable balance should ensure commitment as well as timely action.¹

5.3.2.3 To Provide Resources (Time, Money, People)

The factor seen as third most important in this phase is 'to provide resources (time, money, people)'. Most change projects are characterised by limited financial and human resources as well as by time restrictions.² People involved in a change initiative often have to work on change projects in addition to their day-to-day business. If a full-time change team is put together finding the required people can be a problem, as managers from different departments often try not to release their key employees for a change project. Whether the team is working full or part-time on a change initiative it is not only essential to have enough people from different departments working on the project, it is also crucial to have the necessary know-how to meet all operational requirements.³ If the necessary know-how is non-existent internally organisations have the opportunity to provide training or workshops and to use external consultants. Organisations have to ensure in every change initiative that sufficient resources are available. Sufficient resources will ensure flexibility in the decision-making and in the implementation. Moreover, sufficient resources will increase the acceptance for the changes as the importance and seriousness of a change project is emphasised. However, limited resources are often a more serious problem for small and medium-sized enterprises than for large

¹ Cf. Kotter/Schlesinger (2008), p. 135; Price Waterhouse Change Integration Team (1997), p. 156 ff.

² Cf. Vahs/Leiser (2003), p. 39.

³ Cf. Dobson (2000), p. 8.

corporations which explains why this factor is ranked very high in this survey in comparison to other empirical researches.¹

5.3.3 Phase III: Consolidate Change

The third and last phase of a change project is 'to consolidate change' or as Lewin referred to as 'refreezing the status quo'.

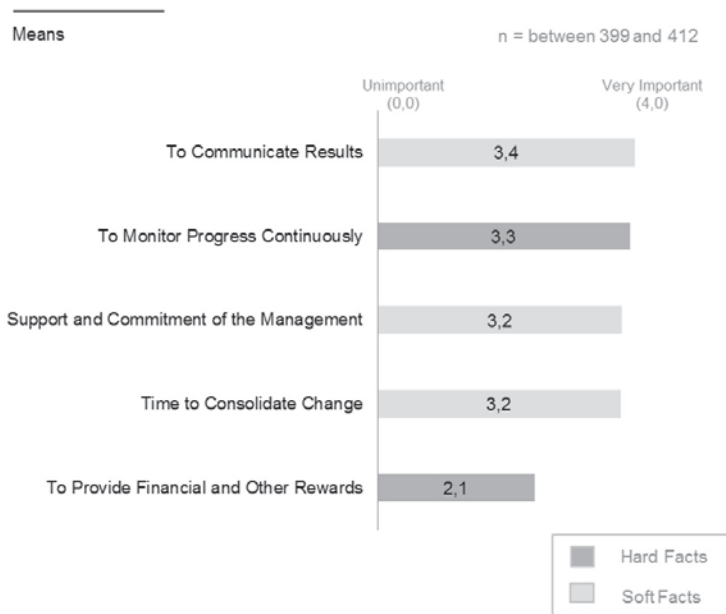


Figure 25: Empirical Research: Critical Success Factors in the Third Phase 'Consolidate Change'

In the last phase of a change project it is crucial to ensure that affected people are not backsliding into dysfunctional routines and habitual patterns. Cementing the new ways of working and thinking is essential.² The factor seen as

¹ Cf. Vahs/Leiser (2003), p. 39 ff.

² Cf. Garvin/Roberto (2011), p. 21.

most important by the respondents of this survey is 'to communicate results' (3.4). This is then followed by the factors 'to monitor progress continuously' (3.3) as well as 'support and commitment of the management' (3.2). Similar to the first and second phase the factor 'to provide financial and other rewards' is evaluated as rather unimportant.

5.3.3.1 To Communicate Results

The analysis of the data shows that communication is in particular seen as important in the first and the last phase of a change project. In the first phase communicating the upcoming changes helps to prepare the employees for the transition. In the third and last phase it is seen as important to communicate the outcome of a change initiative. By communicating the results of a transformation, managers can formally close a change project which is important to cement the new ways of working and thinking. In general, ceremonial activities combined with communicating results are an effective way to institutionalise change.¹ The communication principles discussed in chapter 5.3.1.4 have to be considered in this last phase too. A detailed comparison of the communication-factor in the three different phases of a change project can be found in chapter 5.4.2 'Phase Comparison'.

5.3.3.2 To Monitor Progress Continuously

The factor ranked second in the last phase of a change project is 'to monitor progress continuously'. After implementing the change it is essential for managers leading as well as managing the transformation to monitor the refreezing of the status quo carefully and continuously.² Results should be measured regularly so that upcoming problems and resistance could be addressed timely. By monitoring the process of institutionalisation carefully managers can react to problems prompt and make adjustments if necessary. To ensure

¹ Cf. Karp (2006), p. 18.

² Cf. Krüger (2009), p. 340.

successful outcomes the monitored results have to be shared with the affected people to sustain commitment.¹

5.3.3.3 Support and Commitment of the Management

The factor seen as third most important in the last phase of a change project is 'support and commitment of the management'. As already mentioned, top-management commitment is often seen as one of the most critical factors in change management.² However, as Kotter noted "leading change is both absolutely essential and incredibly difficult."³ This point of view is also supported by Karp who stated that "leading change is one of the most difficult leadership tasks."⁴ Leadership issues are not solely depending on the top-management. Rather every person acting formally or informally as a leader in a transformation process has an impact on the outcome of a change project.⁵ An empirical research carried out by McKinsey in 2008 outlines that change initiatives in which leaders were involved more intensively have a higher likelihood to succeed.⁶

Support and commitment of the top-management are essential for a change project to be successful. By investing time and energy on the top-level of an organisation, employees' commitment will increase significantly. If the top-management is not supporting and backing a change initiative employees are unlikely to change existing behaviours as well as ways of working.⁷ To demonstrate commitment consistent behaviour, integrity and authenticity are crucial elements on the top-management level. Consistent behaviour and acting in an exemplary manner demonstrates the seriousness of a change initiative. Empty phrases and announcements will not have the desired impact. The set

¹ Cf. Beer/Eisenstat/Spector (2011), p. 119.

² Cf. Kotter (2011), p. 4; McKinsey (2011a), p. 4.

³ Kotter (2011), p. 4.

⁴ Karp (2006), p. 3.

⁵ Cf. Karp (2006), p. 4.

⁶ Cf. McKinsey (2011a), p. 4.

⁷ Cf. Sirkin/Keenan/Jackson (2011), p. 102.

objectives have to be reflected in the behaviour of the top-management.¹ An engaged, reliable top-management ensuring an open communication and employee participation as well as acting in an exemplary manner sets the appropriate framework for organisational transformations. As Krüger outlined the top-management should act as a promoter or enabler for change.² Another key element for successful change is trust. Trust is a fundamental requirement which enables employee participation and promotes energy as well as commitment among affected people. As identified by Morgan and Zeffane in their empirical research, change has a significant negative influence on trust in management. Yet if the top-management is communicating with the affected people in an open and honest way, ensuring timely information as well as employee participation the fall in trust can be minimised and the likelihood of success can be increased.³

Using the terms 'managing' and 'leading' throughout the dissertation, both terms should be differentiated at this point. The term 'management' can be defined as a function that is an element of a company's formal structure and is often associated with different interrelated kinds of activities such as planning, budgeting, organising, staffing, controlling as well as problem solving.⁴ Management is often described as short-term oriented whereas leadership is seen as a creator of change which energises, motivates and inspires affected people by establishing a future oriented direction of the organisation.⁵ The following table provides a summary of key distinguishing features:

¹ Cf. Beer/Eisenstat/Spector (2011), p. 120 f.

² Cf. Krüger (2009), p. 40.

³ Cf. Morgan/Zeffane (2003), p. 55 ff.

⁴ Cf. Senior/Fleming (2006), p. 249 f; Kotter (1990), p. 4.

⁵ Cf. Kotter (1990), p. 4 f.

Table 5: Management and Leadership (Burnes)¹

Managers	Leaders
Focus on the present	Focus on the future
Maintain status quo and stability	Create change
Implement policies and procedures	Create a culture based on shared values
Remain aloof to maintain objectivity	Establish an emotional link with followers
Use the power of their position	Use personal power

According to different authors such as Kotter² and Burke³, both aspects are essential to achieve significant sustaining change. Efficient management and visionary leadership are two characteristics of an effective top-management.

Nevertheless, visionary leadership and effective management as well as open communication and employee participation do not guarantee success in a change project. Argyris outlines that in some cases the top-management believes that they are employing participative approaches which are not recognised by the affected people. It is important to consider that there can be discrepancies between the communicated concept by the management and the perceived action by the employees.⁴ Furthermore, conflicts as well as political in-fights on the management level can influence the outcome of a change initiative and should be considered.⁵

¹ Cf. Burnes (2009), p. 491.
² Cf. Kotter (1990), p. 7.
³ Cf. Burke (2003), p. 291.
⁴ Cf. Argyris (1991), p. 99 ff.
⁵ Cf. Oltmanns/Nemeyer (2010), p. 13.

5.4 Statistical Analyses and Review of Hypotheses

In the following chapters, the research questions concerning critical success factors of change management are answered and the hypotheses are verified. Statistical data and analyses relating to the individual questions can be found in the appendix.

5.4.1 *Hard and Soft Critical Success Factors*

According to several authors and researches such as studies carried out by IBM¹ and McKinsey² in 2008, soft factors are usually evaluated as being more important in transforming an organisation than hard factors. In the research conducted by IBM the six factors ranked highest are soft factors. The most important aspect is 'top-management commitment'. This is then followed by 'employee involvement' as well as 'honest and timely communication'. Similar results are identified by the authors of the McKinsey research. Burnes also stated that the most important aspects to consider are 'communication' as well as 'involvement'.³ Nevertheless, not all authors agree on that point. Lucey for example identified that in particular in the changing-phase of an organisational transformation hard factors are more important than soft factors.⁴ The importance of hard factors is also emphasised by Sirkin, Kennan and Jackson in their article 'The Hard Side of Change Management'. According to their research, companies have to pay attention to the hard factors of change first as otherwise change initiatives will fail before soft factors can be employed.⁵ To investigate this issue following hypotheses are verified:

(H3-1) In change projects 'soft facts' are usually more important than 'hard facts'.

¹ Cf. IBM (2011a), p. 15.

² Cf. McKinsey (2011a), p. 6.

³ Cf. Burnes (2009), p. 459.

⁴ Cf. Lucey (2008), p. 11 ff.

⁵ Cf. Sirkin/Keenan/Jackson (2011), p. 100.

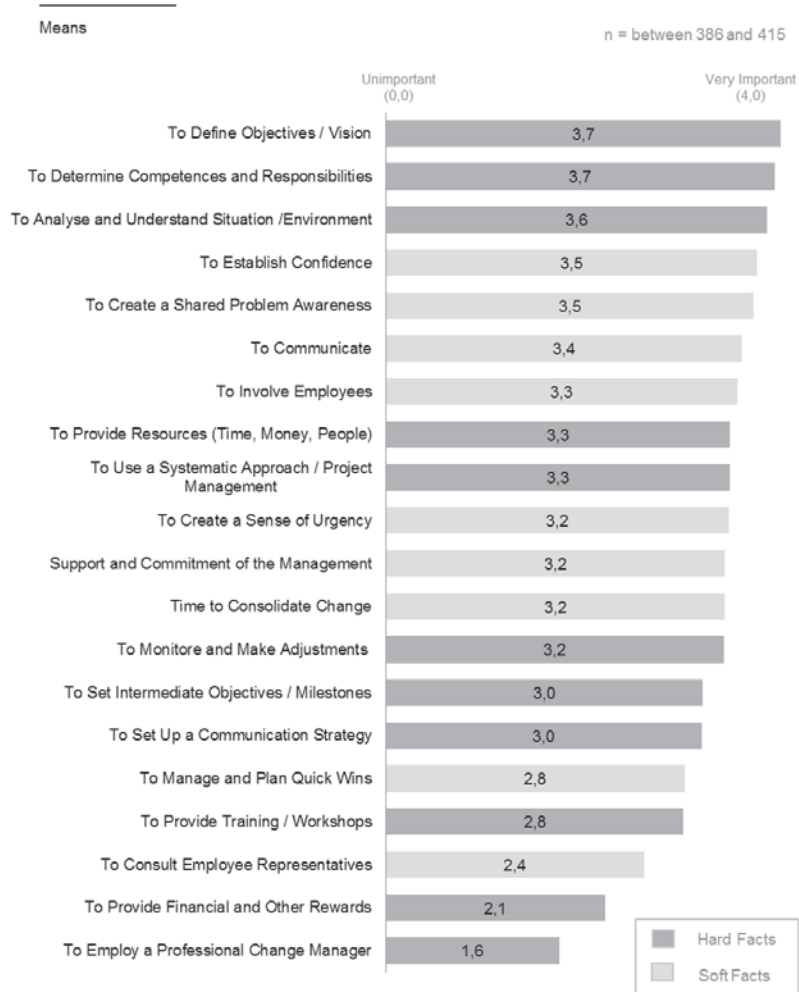


Figure 26: Empirical Research: Overall Ranking of Critical Success Factors¹

¹ The average is used for factors that have been included in more than one phase. These factors are: 'communication', 'participation', 'support and commitment of the management', 'financial and other rewards' as well as 'monitoring'.

(H3-2) Communication, employee participation and top-management commitment are the most important factors influencing the outcome of a change project.

Both hypotheses have to be rejected as the top three ranked factors are hard factors. According to the respondents of this empirical research, the most important aspect in a change project is 'to define objectives and a vision'. This is then followed by the factors 'to determine competences and responsibilities' as well as 'to analyse and understand situation and environment'. Communicating the change is ranked sixth, employee participation seventh and support and commitment of the management eleventh. This indicates that hard factors often pose bigger challenges for SMEs than soft factors. In large corporations the required framework and basic conditions for change often already exist. They have more experiences in analysing the business environment carefully as well as in defining objectives and a vision. Tasks, competences and responsibilities are often determined more clearly.

On the other hand, communication, participation as well as support and commitment of the management are easier to handle in small and medium-sized enterprises. This also can be a reason why these factors are seen as less important. This assumption is also confirmed by the statistical analysis of the data. Therefore, the sample is split into two groups of companies. The first group includes organisations employing 50 and less people, the second group includes companies employing more than 50 persons. Comparing the overall ranking of critical success factors of these two groups, significant differences can be identified. As expected, support and commitment of the management is seen, in each of the three phases, as significantly more important in companies employing more than 50 people. Furthermore, communicating the upcoming changes is ranked significantly higher among the second group. Further factors ranked significantly different are 'to consult employee representatives', 'to employ a professional change manager' as well as 'to set intermediate objectives and milestones'. These aspects are ranked as more important by

organisations having more employees. Nevertheless, the overall ranking of both groups is remarkably similar.¹

The key finding concerning the overall ranking of critical success factors of change management is that the three factors seen as most important by the responding SMEs are hard factors. Nonetheless, both hard and soft factors are important in change projects. The consultation of employee representatives, the provision of financial and other rewards as well as the employment of a professional change manager are rather unimportant for small and medium-sized enterprises.

5.4.2 Phase Comparison

In the following chapters, factors influencing a change project in more than one phase are compared with regard to their importance in each phase.

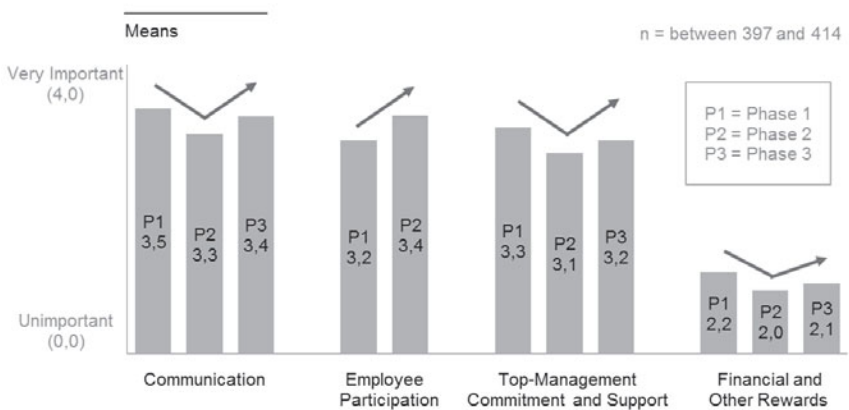


Figure 27: Empirical Research: Phase Comparison of Critical Success Factors

¹ Statistical test: independent-sample t-test. There are significant differences between the means. See appendix N for more information and for a comparison of the overall ranking of the two groups.

5.4.2.1 Communication

Concerning the overall ranking of critical success factors the aspect ‘communication’ is ranked sixth. By analysing the importance of this factor in each single phase, it can be seen that communication is evaluated as most important in the first phase ‘prepare and create readiness for change’. This is then followed by the third and second phase. The scores of the three phases are statistically significant different.¹ Therefore, following hypothesis has to be confirmed:

(H3-3) Communication is in particular important in the beginning of a change project to mobilise and engage employees as well as to create a shared problem awareness.

With regard to creating a shared problem awareness which is ranked fifth in the overall ranking, communication is in particular essential in the beginning of a change initiative. This is also recognised by the surveyed companies and can be seen in the following figure:

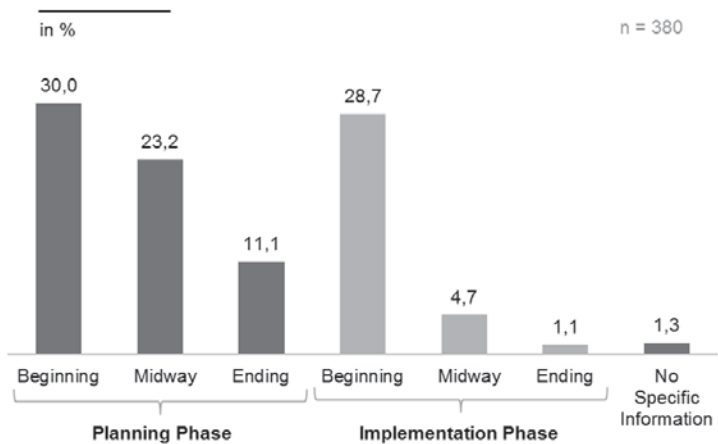


Figure 28: Empirical Research: Time of Communicating the Last Change Project

¹ Statistical test: one-sample t-test. There are significant differences between the means. See appendix O for more information.

Most of the responding organisations communicated the last change project in the planning phase. Nearly two-thirds of the companies informed affected people before starting to execute the initiative. Almost one-third of the organisations started the communication process in the beginning of the planning phase. In 93% of the cases, affected people had been informed after the beginning of the implementation phase. This indicates that communication is an important and essential task for managers leading as well as managing change. Especially in the beginning, communication is of great importance to mobilise and engage affected people.

Hence the question arises, if change projects are more successful by communicating timely. Following hypothesis is tested:

(H3-4) Change projects are more likely to succeed if timely communication is guaranteed.

The statistical analysis¹ reveals no significant correlation between the time of communicating the last change project and the outcome of this initiative. There are some tendencies (e.g. the earlier the transformation is communicated in the planning phase the better the result) but none of them is statistically significant.² This finding is similar to the result of a KPMG research. Likewise, in this research no correlation between the time of communicating a change project and the likelihood of success was detected.³

¹ Note on reading the table (this will be the same for the following correlation tables): read from left to right (line by line). For example: Of all responding organisations communicating the last change project in the beginning of the planning phase (first line) 12% have exceeded, 50% have fully met, 37% have mainly met, 0% mainly not met and 1% not met set objectives. The average level of achieving set objectives for this group is 2.27 (between fully met and mainly met).

² Statistical test: linear regression. There is no correlation between the time of communicating and the outcome of a change project. See appendix P for more information.

³ Cf. KPMG (2011), p. 38.

Table 6: Empirical Research: Correlation between Time of Communicating and Success of the Last Change Project

	Exceeded	Fully Met	Mainly Met	Mainly Not Met	Not Met	Mean (1=Exceeded, 5=Not Met)
Planning Phase	Beginning 12% ■■■■	50% ■■■■■■■■■■ ■■■■■■■■■■	37% ■■■■■■■■■■ ■■■■■■■■■■	0%	1% -	2.27
	Midway 13% ■■■■	35% ■■■■■■■■■■ ■■■■■■■■■■	52% ■■■■■■■■■■ ■■■■■■■■■■	0%	0%	2.40
	Ending 5% ■■	38% ■■■■■■■■■■ ■■■■■■■■■■	57% ■■■■■■■■■■ ■■■■■■■■■■	0%	0%	2.52
Implementation Phase	Beginning 13% ■■■■	48% ■■■■■■■■■■ ■■■■■■■■■■	34% ■■■■■■■■■■ ■■■■■■■■■■	1% -	4% ■■	2.34
	Midway 24% ■■■■	12% ■■■■ ■■■■	65% ■■■■■■■■■■ ■■■■■■■■■■	0%	0%	2.41
	Ending 0%	75% ■■■■■■■■■■ ■■■■■■■■■■	25% ■■■■ ■■■■	0%	0%	2.25
No Specific Information	20% ■■■■	20% ■■■■	60% ■■■■■■■■■■ ■■■■■■■■■■	0%	0%	2.40

However, not only is it important to communicate even more important is how to communicate. Therefore, following hypothesis is verified:

(H3-5) Change projects are more likely to succeed if more communication channels (in particular personal channels) are used.

The following figure outlines the communication channels used by the responding organisations in the last change project.

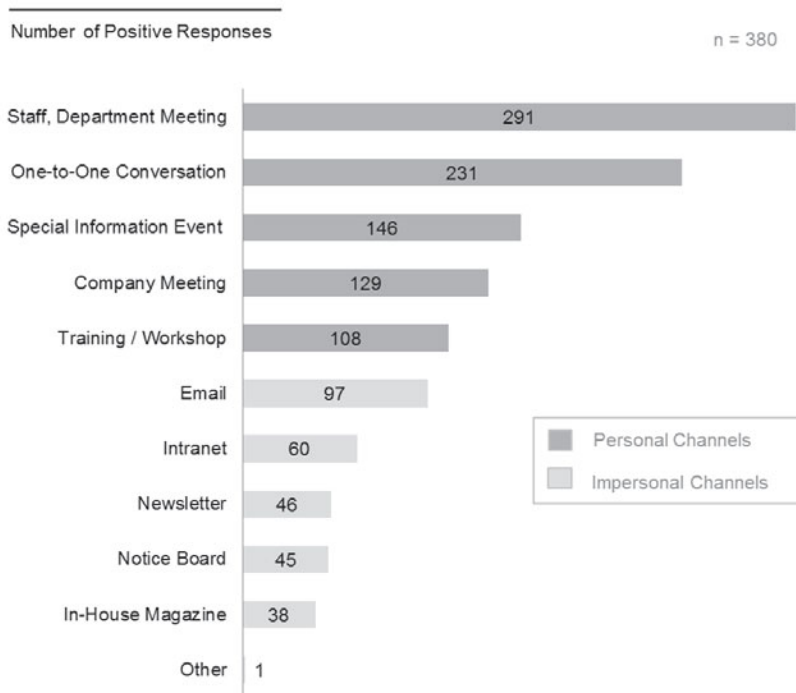


Figure 29: Empirical Research: Communication Channels Used in the Last Change Project

The communication channels most frequently used are 'staff, department meetings' applied by 77% of all respondents, 'one-to-one conversations' applied by 61% as well as 'special information events' applied by 38%. Personal

communication channels, ensuring feedback and fostering commitment, are used more frequent than impersonal channels.

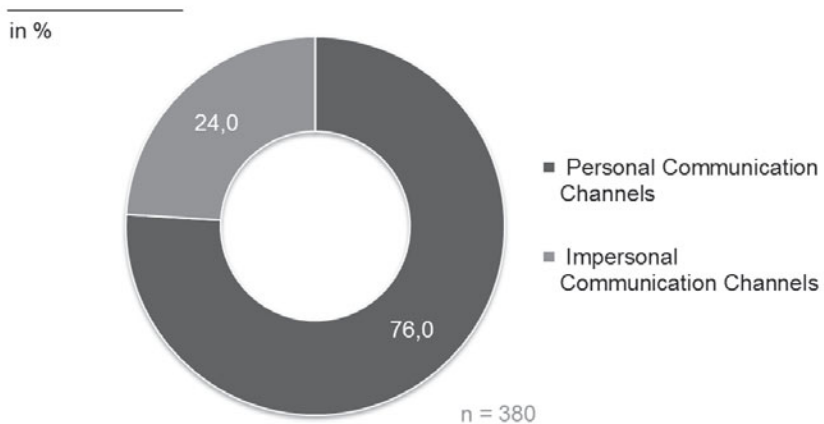


Figure 30: Empirical Research: Use of Personal and Impersonal Communication Channels

More than three-fourths of all communication channels used in the last change projects are personal channels. Furthermore, all personal communication channels are used more often than every single impersonal channel. This indicates the great importance of face-to-face conversation to build understanding among affected people. Moreover, most companies used more than one channel to ensure a broad dissemination of the change message.

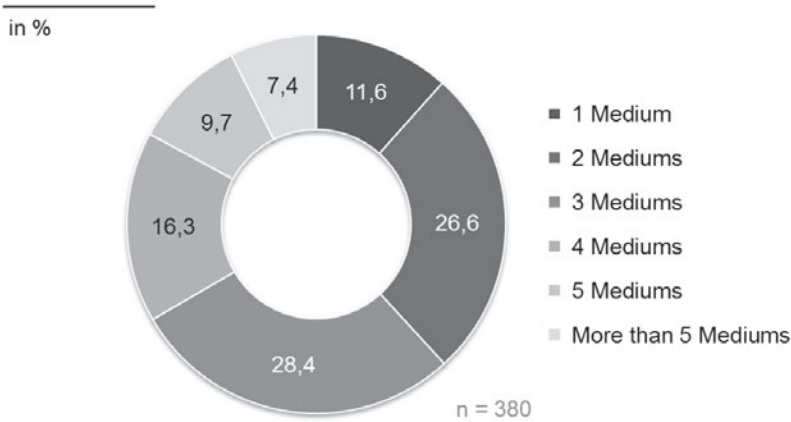


Figure 31: Empirical Research: Number of Communication Channels Used to Communicate the Change Message

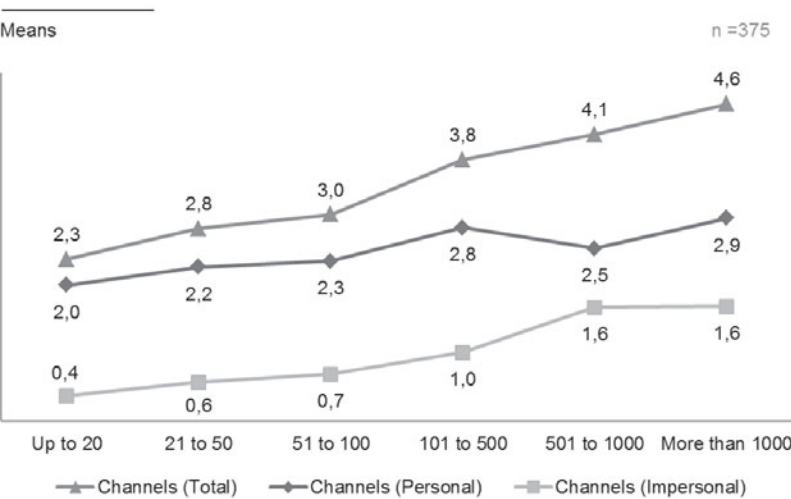


Figure 32: Empirical Research: Correlation between Company Size and Number of Communication Channels Used

Analysing the number of communication channels used in the last change project with regard to the company size (measured by the number of employees) it can be seen that the more employees work for an organisation the more communication channels are used.

Whereas organisations employing up to 20 people are using on average 2.3 channels to communicate a change project, companies having more than 1000 employees are using on average 4.6 channels. The more employees work for an organisation the more communication channels are used (statistically significant).¹ In particular impersonal channels are more important in larger companies. Whereas organisations employing up to 20 people are using on average 0.4 impersonal channels, companies employing more than 1000 people are using on average 1.6 impersonal channels. This indicates that personal communication is especially necessary and easier to handle in smaller organisations. The larger a company, the more efficient and therefore necessary is the use of some impersonal communication channels. The impersonal channels most frequently used are email-communication and the intranet.

Yet with regard to the third hypothesis concerning internal communications, the question has to be answered whether change projects are more likely to succeed if more communication channels are used.

¹ Statistical test: linear regression. There is a correlation between the number of employees and the number of communication channels used. See appendix Q for more information.

Table 7: Empirical Research: Correlation between Number of Communication Channels Used and Success of the Last Change Project

	Exceeded	Fully Met	Mainly Met	Mainly Not Met	Not Met	Mean (1=Exceeded, 5=Not Met)
1 Medium	12% ■■■	48% ■■■■■■■■■■	38% ■■■■■■■■■■	0%	2% ■	2,33
2 Mediums	18% ■■■■	41% ■■■■■■■■■■	42% ■■■■■■■■■■	0%	0%	2,24
3 Mediums	10% ■■■	40% ■■■■■■■■■■	46% ■■■■■■■■■■	1% ■	3% ■■	2,46
4 Mediums	7% ■■	46% ■■■■■■■■■■	48% ■■■■■■■■■■	0%	0%	2,41
5 Mediums	16% ■■■■	43% ■■■■■■■■■■	38% ■■■■■■■■■■	0%	3% ■■	2,30
More than 5 Mediums	7% ■■■	46% ■■■■■■■■■■	46% ■■■■■■■■■■	0%	0%	2,39

This third hypothesis has to be rejected as no significant correlation can be identified.¹ Using more communication channels does not ensure a successful outcome of the change project. As outlined, the number of communication channels used depends rather on the size of the organisation.

5.4.2.2 Participation

Concerning the overall ranking of critical success factors the aspect 'employee participation' is ranked seventh. Employee involvement usually creates a sense of 'ownership' which increases the commitment to the change and enhances the likelihood for a successful transformation. Therefore, following hypothesis has to be verified:

(H3-6) Employee participation is in particular important in the beginning of a change project to create a sense of 'ownership'.

According to the responding organisations, employee participation is significantly more important in the implementation phase than in the planning phase.² Whereas the first phase of a change project is about analysing the business environment, defining a vision, setting objectives and creating a shared problem awareness which is strongly connected to the communication issue, the second phase is about implementing the change. The tasks in the first phase are often carried out on the management level. This seems especially true for small and medium-sized enterprises. Employee participation thus is seen as more critical in the second phase. Therefore, the hypothesis has to be rejected.

¹ Statistical test: linear regression. There is no correlation between the number of communications channels used and the outcome of a change project. See appendix R for more information.

² Statistical test: one-sample t-test. There are significant differences between the means. See appendix S for more information.

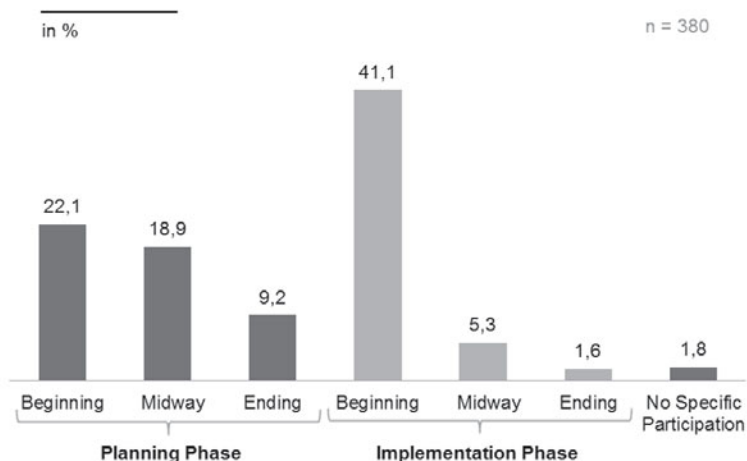


Figure 33: Empirical Research: Time of Involving Affected People in the Last Change Project

Whereas communication is seen as more important in the planning phase and nearly two-thirds of the companies had informed affected people before starting to implement the last project, involving affected people took place at a later point in time. According to the data, about half of the organisations involved affected people in the planning phase, the other half in the execution phase. The highest score can be observed in the beginning of the implementation phase. Hence the question arises, if change initiatives are more likely to succeed by involving employees as early as possible.

(H3-7) Change projects are more likely to succeed if affected employees are able to participate to the change project as early as possible.

Table 8: Empirical Research: Correlation between Time of Involving Affected People and Success of the Last Change Project

	Exceeded	Fully Met	Mainly Met	Mainly Not Met	Not Met	Mean (1=Exceeded, 5=Not Met)
Planning Phase	Beginning 17% ■■■■	43% ■■■■■■■■	40% ■■■■■■■■	0%	0%	2.23
	Midway 10% ■■	42% ■■■■■■■■	49% ■■■■■■■■	0%	0%	2.39
	Ending 3% ■	37% ■■■■■■■■	60% ■■■■■■■■	0%	0%	2.57
Implementation Phase	Beginning 12% ■■■	48% ■■■■■■■■	37% ■■■■■■■■	1% 	3%	2.36
	Midway 16% ■■■■	26% ■■■■■■■■	58% ■■■■■■■■	0%	0%	2.42
	Ending 50% ■■■■■■■■	0%	50% ■■■■■■■■	0%	0%	2.00
No Specific Participation	0%	43% ■■■■■■■■	57% ■■■■■■■■	0%	0%	2.57

Analysing the data statistically no significant correlation between the time of involving affected people and the success of the last change project can be identified. Therefore, the hypothesis must be rejected.¹ Another aspect to consider concerning employee participation is the extent to which affected people were able to contribute their own ideas and thoughts to shape or cocreate a change project. For that reason, this third and last hypothesis concerning employee participation has to be tested:

(H3-8) Change projects are more likely to succeed if affected employees are able to contribute their own ideas and thoughts to shape or cocreate the change initiative.

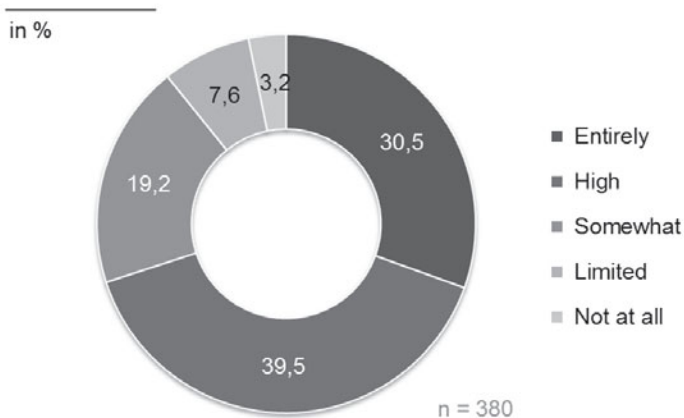


Figure 34: Empirical Research: Extent to Which Employees Were Able to Contribute Their Own Ideas and Thoughts to Shape or Cocreate the Last Change Project

In most of the transformation projects carried out by the responding SMEs affected employees were able to contribute a wide range of own ideas and

¹ Statistical test: linear regression. There is no correlation between the time of involving affected people and the outcome of a change project. See appendix T for more information.

thoughts. Just 30% of the respondents answered that employees were only able to contribute ‘somewhat’, ‘limited’ or even ‘not at all’. Yet does the extent of employee involvement affect the outcome of a change project?

Table 9: Empirical Research: Correlation between Amount of Involvement and Success of the Last Change Project

	Exceeded	Fully Met	Mainly Met	Mainly Not Met	Not Met	Mean (1=Exceeded, 5=Not Met)
Entirely	17% ■■■■	51% ■■■■■■■■■■	31% ■■■■■■■■	0%	0%	2,14
High	11% ■■■	41% ■■■■■■■■	47% ■■■■■■■■■■	0%	1% 	2,39
Somewhat	8% ■■■	34% ■■■■■■■■	55% ■■■■■■■■■■■■	1% 	1% 	2,54
Limited	14% ■■■■	34% ■■■■■■■■	41% ■■■■■■■■■■	0%	10% ■■■	2,59
Not At All	0%	50% ■■■■■■■■■■	50% ■■■■■■■■■■	0%	0%	2,50

This hypothesis is confirmed by the statistical data.¹ The more extensive employees are able to contribute to a change initiative the better the overall outcome of a change project. This indicates that participation is an important aspect to consider. Whereas the timing of participation is less important, the extent of involvement influences the outcome of an organisational transformation. Ensuring that affected people can contribute their own ideas and thoughts mobilises employees and builds commitment to the change.

5.4.2.3 Support and Commitment of the Management

The third factor analysed, influencing the outcome of a change project in more than one phase is 'support and commitment of the management'. This factor is ranked eleventh in the overall ranking. This is a remarkably result as support and commitment of the management is according to other authors² and researches³ usually seen as one of the most important aspects in a change project. Therefore, following hypothesis is verified:

(H3-9) Top-management commitment including acting in an exemplary manner is the most important task in a change project for the top-management. This behaviour is equally important in every phase of a change project.

The respondents of this empirical research ranked the aspect 'support and commitment of the management' as most important in the first phase of a change project. This is then followed by the third and the second phase. All differences between the phases are statistically significant.⁴ As a result, the hypothesis has to be rejected. Support and commitment is not seen as equally important in every phase of a change project. Instead, it is in particular evaluated as important in the planning phase. Preparing the organisation as well as

¹ Statistical test: linear regression. There is a correlation between the amount of involvement and the outcome of a change project. See appendix U for more information.

² Cf. Beer/Eisenstat/Spector (2011); Isern/Meaney/Wilson (2009).

³ Cf. Capgemini Consulting (2011a); McKinsey (2011a).

⁴ Statistical test: one-sample t-test. There are significant differences between the means. See appendix V for more information.

the affected people for the upcoming changes and creating readiness as well as willingness for change are important aspects with regard to the top-management. By showing support and commitment in the beginning of a change project the top-management can foster the commitment among affected people. The main tasks of the top-management are in the planning phase. This also can be seen in the following figure outlining the tasks of the top-management in a change project:

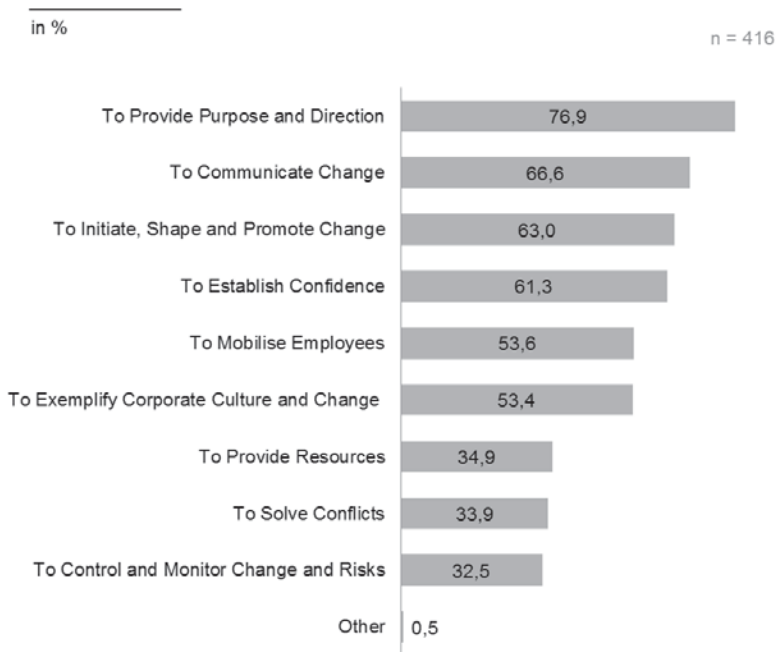


Figure 35: Empirical Research: Main Tasks of the Top-Management in a Change Project

The main tasks of the top-management are 'to provide purpose and direction' indicated by 77% of all respondents, 'to communicate change' indicated by 67% and 'to initiate, shape and promote change' indicated by 63%. The highest ranked factors are crucial in the planning phase of an organisational

transformation. This can be an explanation why the aspect 'support and commitment of the management' is evaluated as most important in this phase.

5.4.2.4 Financial and Other Rewards

The fourth and last factor analysed with regard to the importance in the three different phases is 'to provide financial and other rewards'. According to several authors¹ and researches², providing financial and other rewards such as higher wages, gain sharing, paid time off, promotions, extensions of responsibilities as well as more autonomy is an important aspect to consider in a change project. According to Lawson and Price, employees are less likely to adapt to new behaviours as well as ways of working consistently if no rewards reinforce this new situation.³ The reward system should be connected to the performance measurement system. Furthermore, a reward system should be appropriate, motivating and fair. It has to be ensured that the granted rewards are meaningful to the rewarded people.⁴ According to a research carried out by KPMG in 2008, rewards whether financial or non-financial, must not be underestimated. Most of the participating organisations stated that they do not see rewards as a critical success factor and therefore do not use special rewards in change initiatives. Nevertheless, the authors of the KPMG study identified that the provision of financial and other rewards in a change situation increases the likelihood of a successful transformation.⁵ The reward system should ensure motivation as well as morale and enhance enthusiasm to carry out the change.⁶ According to Lawler, "[...] compensation systems [...] can be a powerful motivator of change, because they can create dissatisfaction with the existing performance of the organization and can offer the prospect of

¹ Cf. Thompson/Martin (2005); Lawler (2000).

² Cf. KPMG (2011).

³ Cf. Lawson/Price (2003), p. 31 f.

⁴ Cf. Mueller (2009), p. 74.

⁵ Cf. KPMG (2011), p. 37.

⁶ Cf. Lewis/Romanaggi/Chapple (2010), p. 14.

increased rewards.”¹ Thus, reward systems can increase the willingness to change.

However, in the overall ranking of critical success factors of change management this factor is ranked nineteenth out of twenty factors. This indicates that financial and other rewards are rather unimportant in small and medium-sized enterprises. Some comments by the responding organisations support the view on rewards expressed by Thompson and Martin. They stated that “rewards are an important motivator, but it is important to appreciate that an individual may feel rewarded by things other than money or promotion.”² Several respondents indicated that in particular non-financial rewards or benefits are seen as important. Creating and ensuring a distinctive team spirit was mentioned several times. Nevertheless, following hypothesis concerning the factor ‘to provide financial and other rewards’ has to be verified:

(H3-10) Financial and other rewards are in particular important in the implementation phase of a change project.

This last hypothesis concerning critical success factors of change management has to be rejected. Despite the overall low importance, financial and other rewards are significantly evaluated as more important in the planning phase. Whereas the score of the first phase is significantly different to the scores of the second and third phase, the difference between the second and third phase is not statistically significant.³

5.4.3 *Willingness to Change*

The last aspect analysed in this empirical research is willingness to change. As mentioned in chapter 4.2, willingness to change is an important aspect to consider in a change project and it is strongly interrelated with the identified critical success factors of change management. In general, it is described as

¹ Lawler (2000), p. 327.

² Thompson/Martin (2005), p. 229.

³ Statistical test: one-sample t-test. There are significant differences between the means. See appendix W for more information.

essential in the first phase 'to prepare and create readiness for change'. Willingness to change at all hierarchical levels is often the prerequisite for a successful transformation.¹ Nevertheless, not only in the beginning of a change initiative willingness to change has to be ensured. By paying balanced attention to the identified hard and soft critical success factors managers leading and managing an organisational transformation can increase the likelihood for successful change by strengthen willingness to change. Yet the question arises, if there are further factors influencing the willingness to change.

Therefore, the participants were asked to evaluate the organisational as well as their personal willingness. This evaluation of course is very subjective. Nevertheless, some basic conclusions can be drawn from the statistical data.

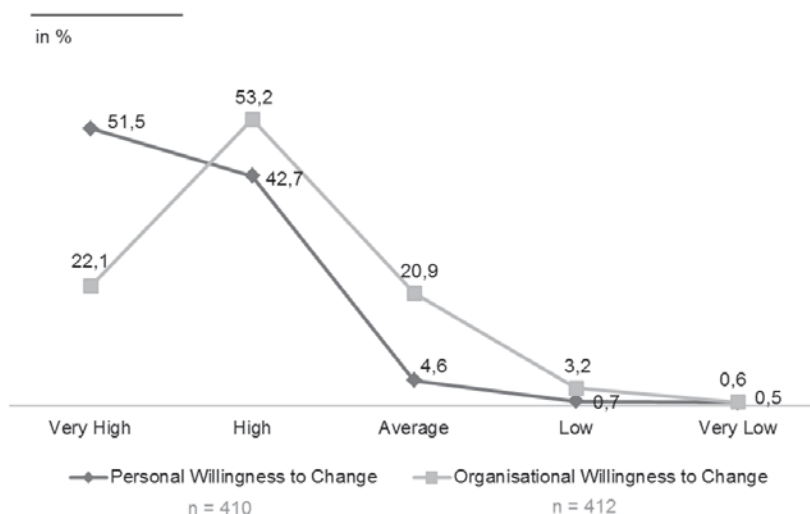


Figure 36: Empirical Research: Evaluation of Organisational and Personal Willingness to Change

¹ Cf. Balogun/Hope Hailey (2004), p. 139; Grover et al. (1995), p. 112.

Most of the respondents of this survey evaluated their personal willingness to change as very high. Indeed, more than 94% of all participants stated that their willingness to change is either high or very high. The organisational willingness was often assessed as lower. Whereas 54% of the respondents evaluated personal and organisational willingness to be at the same level 39% evaluated their personal willingness as higher and 7% as lower compared to the organisational willingness. In the following chapters, the hypotheses concerning personal and organisational willingness to change are verified.

5.4.3.1 Organisational Willingness to Change

The organisational willingness to change describes the willingness of the organisational system to adapt to new constraints. The evaluation of the organisational willingness is very subjective and vaguer than the evaluation of the personal willingness to change. The participants can only estimate the personal willingness to change of each individual affected by the transformation which results in the organisational willingness. Nevertheless, following hypotheses are tested.

(H4-1) The fewer employees work in an organisation the higher the organisational willingness to change.

This hypothesis is confirmed by the statistical data.¹ There is a significant correlation between the size of the company measured by the number of employees and the organisational willingness to change. The more employees work for a company the lower the willingness to change. This result is not surprising. Larger companies are usually described as being less flexible and changes are more difficult to implement. Furthermore, more people and thus more potential people resisting to change are affected by the transformation. For that reason, the prerequisites for successful changing an organisation are often better in small and medium-sized enterprises than in large corporations.

¹ Statistical test: linear (multiple) regression. There is a correlation between company size (number of employees) and organisational willingness to change. See appendix X for more information.

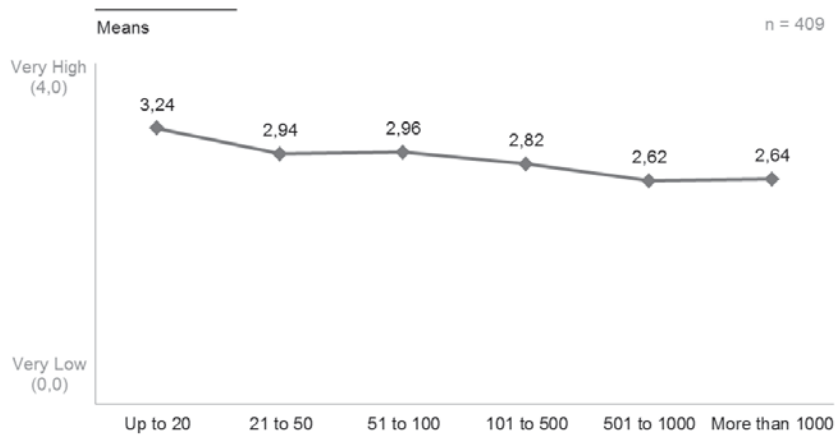


Figure 37: Empirical Research: Correlation between Company Size (Number of Employees) and Organisational Willingness to Change

The second hypothesis concerning organisational willingness to change refers to the company's age.

(H4-2) The more years an organisation is participating in the market the lower the organisational willingness to change.

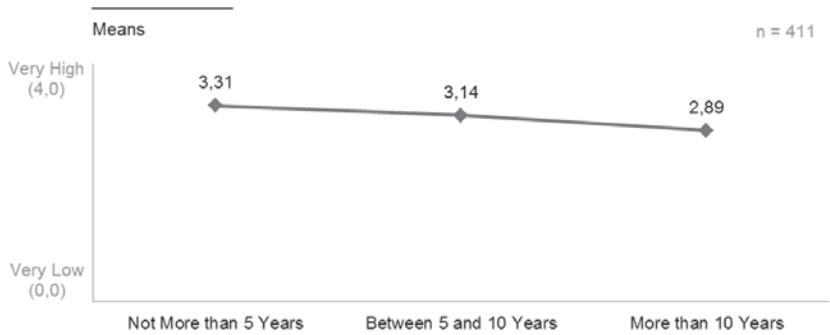


Figure 38: Empirical Research: Correlation between Company Age (Number of Years Operating in the Market) and Organisational Willingness to Change

This second hypothesis is also confirmed by the statistical data.¹ The more years a company is operating in the market the lower the organisational willingness to change. Again, this result is not unexpected. After years of operating in the market routines and habitual patterns have emerged. Processes are solidified and the psychological aspect that people tend to adhere to behaviours as well as ways of working which they know, understand and can control influences the organisational willingness to change. Therefore, the prerequisites for successful managing and leading change are often better in companies not operating in the market for many years.

The third hypothesis that is verified with regard to organisational willingness to change is:

(H4-3) Organisations that have implemented the last change project successful show a higher organisational willingness to change.

This third hypothesis is also confirmed by the statistical data.² Organisations that have implemented the last change project more successful show a higher organisational willingness to change. Participants working for organisations that have exceeded set objectives in the last change initiative evaluated the organisational willingness to change on average between very high and high (3.26). In contrast, participants working for organisations that have not met set objectives in the last change project evaluated the organisational willingness to change on average between low and average (1.80). However, the statistical analysis does not reveal if the responding organisations have been more successful in the last change project due to a higher organisational willingness to change or if the higher organisational willingness to change is a result of being more successful. Yet it can be assumed that both factors are interrelated. A successful change initiative increases credibility as well as trust in

¹ Statistical test: linear (multiple) regression. There is a correlation between company age (number of years operating in the market) and organisational willingness to change. See appendix X for more information.

² Statistical test: linear (multiple) regression. There is a correlation between the outcome of the last change project and organisational willingness to change. See appendix X for more information.

management and creates acceptance for further changes. In contrast, unsuccessful change projects enhance resistance to change, destroy trust in management and therefore hamper further change initiatives.

Table 10: Empirical Research: Correlation between Outcome of the Last Change Project and Organisational Willingness to Change

	Very High	High	Average	Low	Very Low	Mean (4=Very High, 0=Very Low)
Exceeded	37% 	52% 	11% 	0%	0%	3,26
Fully Met	30% 	51% 	16% 	2% 	0%	3,09
Mainly Met	15% 	53% 	26% 	5% 	1% 	2,77
Mainly Not Met	0% 	0% 	100% 	0%	0%	2,00
Not Met	0% 	40% 	20% 	20% 	20% 	1,80

5.4.3.2 Personal Willingness to Change

Besides the organisational willingness the participants of this empirical research were asked to evaluate their personal willingness to change. According to a research carried out by Capgemini in 2010, the personal willingness to change varies according to different hierarchical levels.¹ For that reason, following hypothesis is verified:

(H4-4) The willingness to change varies according to different hierarchical levels. Usually the top-management shows a higher personal willingness to change than employees in lower hierarchical positions.

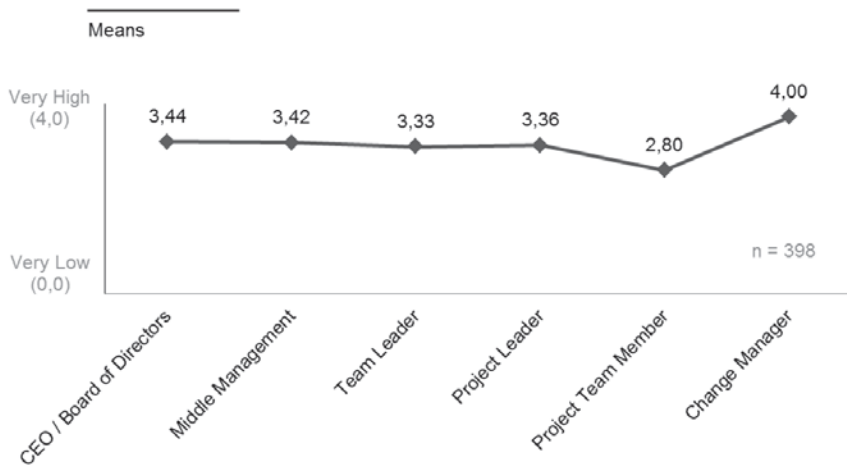


Figure 39: Empirical Research: Correlation between Hierarchical Level and Personal Willingness to Change

¹ Cf. Capgemini Consulting (2011a), p. 48.

The hypothesis is partially confirmed by the statistical data.¹ Whereas the results of the study conducted by Capgemini demonstrate significant differences in the personal willingness to change this empirical research shows only little significant deviations. According to the authors of the Capgemini research, the first management level usually shows a significantly higher willingness to change than the second management level. This empirical research however, evinces differences only with reference to project team members. Respondents belonging to this group evaluated their personal willingness to change as significantly lower than respondents belonging to the 'CEO / Board of Directors' or 'Middle Management' group. Due to the fact that only a small number of participants are team leaders, project leaders, change managers or project team members the other differences are statistically not significant. Consequently, the hypothesis is only partially confirmed.

Nonetheless, this result indicates that the acceptance of change decreases down the hierarchy. Whereas top-managers evaluated their willingness to change between high and very high, project team members assessed their willingness between average and high. This result is similar to the outcome of the Capgemini research. Whereas the top-management is often in favour of organisational transformations, affected employees working at lower levels in the hierarchy frequently fight the changes. They often have to adapt to new ways of behaviour as well as ways of working and have to carry out the transformation. Furthermore, they often do not see the need for change and do not understand the necessity. By paying attention to the identified critical success factors of change management managers at higher hierarchical levels can increase the willingness to change of each affected employee. This increasing personal willingness will enhance the organisational willingness to change and therefore improve the likelihood of successful transforming a company.

¹ Statistical test: independent-sample t-test. There is a significant difference between the means. See appendix Y for more information.

6. Conclusion and Recommendations

Change management is ubiquitous in organisations as companies have to transform constantly in order to survive. This phenomenon identified by several authors as well as studies is also confirmed by this empirical research. Most of the responding organisations underwent a broad and far-reaching change project in the last five years. After all, no discrepancies can be identified between different industries or companies having a different size. The need to change to ensure the chance to operate successfully in the market in the future is omnipresent. As a result, managing and leading organisational transformation are essential disciplines for all Chief Executive Officers as well as managers to be successful in the twenty-first century. This applies not only to large corporations but also to small and medium-sized enterprises in Germany. As this research was carried out among successful SMEs most of the indicated change initiatives have been caused by innovations and organisational growth.

Nonetheless, and this is another similarity to the results of previous studies, most change projects are not entirely successful. By analysing content, budget and time-related objectives it is remarkable that not even 12% of all change initiatives achieved all set objectives with regard to these three different dimensions. As this empirical research was conducted among successful companies the question arises, if other organisations that have been less successful in the last years are even more unsuccessful in executing change projects.

Yet to increase the likelihood of success managers leading and managing a transformation have to pay balanced attention to several hard and soft critical success factors of change management. By doing so, the probability of problems occurring, in particular resistance to change decreases significantly. As people are the key to change the outcome of any transformation highly depends on the readiness as well as willingness of the affected people.

Therefore, creating the right framework for change is an important aspect, nevertheless as Eaton noted “creating the right environment is not something that can be done overnight because you are dealing with beliefs and assumptions that may have been ingrained within the organisation over many years.”¹

Analysing the critical success factors of change management with regard to the three different phases of an intended change project it can be noted that the results of this empirical research are different compared to the outcomes of other studies. This of course can be due to the fact that this research was carried out among small and medium-sized enterprises and not as the vast majority of studies among large corporations. Whereas generally soft factors are evaluated as most important in a change initiative the participants of this survey identified a balanced mixture of hard and soft factors to be responsible whether a transformation will be successful or not.

According to the respondents, the most important aspect in the first phase of a change project is to define a vision statement and to set objectives. Furthermore, it is seen as essential to analyse the situation as well as the business environment. Afterwards, the identified problems have to be communicated to create a shared or common understanding of the need for change. The focus in this first phase is on factors that help to prepare the organisation and the affected people for the upcoming changes as well as to increase the readiness and willingness for change. In contrast, the emphasis of the second phase is more on hard factors. To determine responsibilities and competences, to provide sufficient resources as well as a systematic approach or project management are three out of the top four evaluated factors. Moreover, employee participation is seen as essential in this phase. Whereas communication is in particular evaluated as important in the first as well as in the third phase, employee participation is seen as more critical in the implementation phase. In the last phase of a change project the respondents assessed communication,

¹ Eaton (2010), p. 39.

monitoring as well as support and commitment of the management as most important.

The analysis of the critical success factors also reveals some aspects that are seen as rather unimportant for small and medium-sized enterprises. The consultation of employee representatives, the provision of financial and other rewards as well as the employment of a professional change manager are not evaluated as crucial in a change initiative. It can be assumed and in some cases the statistical data represents a tendency that the importance of these factors increases with the size of the company.

Furthermore, the statistical analysis of the data outlines that there is a positive correlation between the extent to which affected employees were able to contribute to a change project and the overall success of this initiative. The more extensive employees were able to shape or cocreate a transformation the better the outcome. Nonetheless, all other hypotheses analysed with regard to their impact on the result of a change project do not show a significant correlation. Therefore, the time of involving affected people as well as the time and the extent of communication are essential to consider still no correlation is detected. This indicates that managers leading and managing change especially should pay attention to the extent of employee participation. Creating a sense of ownership and overcoming the so-called 'not-invented-here-syndrome' are essential in every change project.

However, even if no further significant correlations can be verified some tendencies are perceptible. All factors evaluated in the three different phases of a change project can have an impact on the outcome of an initiative. The importance of each critical success factor depends upon the organisation, the business environment as well as the situation. As identified in this research there are different adjustment levers a manager has to consider. The broad distribution of critical success factors of change management indicates that there is no single, standardised tactic, approach or initiative that will lead to success. Rather it is a combination of different critical success factors

depending upon internal and external circumstances, executed in an appropriate way. Therefore, a universal list of steps that have to be undertaken to guarantee a successful outcome does not exist. What is important and crucial in one organisation can have a lower impact in another company.

Yet this empirical research demonstrates some general findings concerning critical success factors of change management in small and medium-sized enterprises. There are remarkable differences to studies carried out among large, international corporations. Especially hard factors seem to be more challenging for smaller firms. Besides, managers leading and managing organisational transformations in SMEs should particularly pay attention to the extent to which affected people can participate. Therefore, they enhance the readiness as well as willingness to change within the organisation and increase the likelihood of success. However, as outlined in the last chapter, the organisational and personal willingness to change not solely depend upon the use of these factors. The organisational age and size as well as the hierarchical level have to be taken into account. Moreover, the outcome of the last change project influences the attitudes of affected people to further changes. A successful change initiative fosters the willingness for change. Both aspects are mutually reinforcing each other. Therefore, it is of great importance for managers to take the company's history with regard to organisational transformation into consideration before executing a change project.

This empirical research as one of the first studies concerning critical success factors of change management in small and medium-sized enterprises can serve as a basis for further investigations. Interesting aspects could be comparisons over time, researches comparing the evaluation of the importance of different critical success factors with regard to different hierarchical levels or the comparison with another sample of organisations which have not been operating successfully in the market the last years.

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Appendix

Appendix A:

Questionnaire (German)

Veränderungsprojekte in erfolgreichen mittelständischen Unternehmen

Ihr Unternehmen gehört zu den herausragenden mittelständischen Unternehmen in Deutschland und wurde dieses Jahr für den „Großen Preis des Mittelstandes“ nominiert. Hierzu gratulieren wir recht herzlich. Im Rahmen einer Studie an der Hochschule Heilbronn, in Kooperation mit der Oskar-Patzelt-Stiftung, untersuchen wir Veränderungsprojekte in mittelständischen Unternehmen. Zu dieser Studie, die nur wenige Minuten in Anspruch nimmt, würden wir Sie gerne einladen.

1. Aus welchen Anlässen kam es in Ihrem Unternehmen in den vergangenen fünf Jahren zu signifikanten Veränderungen? (Mehrfachnennungen möglich)

- | | |
|--|---|
| <input type="checkbox"/> Änderung der Unternehmensstrategie | <input type="checkbox"/> Eigentümerwechsel |
| <input type="checkbox"/> Wachstumsinitiativen | <input type="checkbox"/> Restrukturierung |
| <input type="checkbox"/> Innovationen (IT, Technik, Produkte) | <input type="checkbox"/> Kostensenkungsprogramme |
| <input type="checkbox"/> Internationalisierung | <input type="checkbox"/> KVP / Sonstige Verbesserungsinitiativen |
| <input type="checkbox"/> Externe Veränderungen (z. B. neue Gesetze) | <input type="checkbox"/> Sonstiges: _____ |
| <input type="checkbox"/> Fusion, Kauf / Verkauf von Unternehmen (-steilen) | <input type="checkbox"/> Keine signifikanten Veränderungen in den vergangenen fünf Jahren |

2. Bezug nehmend auf das letzte Veränderungsprojekt in Ihrem Unternehmen würden wir Sie bitten, folgende Fragen aus den Bereichen ‚Mitarbeiterkommunikation‘, ‚Mitarbeitereinbindung‘ und ‚Rolle des Managements‘ zu beantworten.

2.1 Zu welchem Zeitpunkt wurden die betroffenen Mitarbeiter über das Veränderungsprojekt informiert?

Planungsphase			Durchführungsphase			Keine spezielle Information
Beginn	Mitte	Ende	Beginn	Mitte	Ende	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.2 Zu welchem Zeitpunkt wurden die betroffenen Mitarbeiter aktiv in das Veränderungsprojekt einbezogen?

Planungsphase			Durchführungsphase			Keine spezielle Einbindung
Beginn	Mitte	Ende	Beginn	Mitte	Ende	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.3 In welchem Umfang konnten betroffene Mitarbeiter ihre eigenen Ideen und Gedanken einbringen, um das Veränderungsprojekt zu gestalten oder zu beeinflussen?

Umfangreich ☐ ☐ ☐ ☐ ☐ ☐ Gar nicht

Anstehende Veränderungen kommunizieren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Finanzielle und sonstige Anreize setzen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Falls Sie weitere Faktoren in dieser Phase für erfolgskritisch betrachten, können Sie diese hier angeben: _____

3.2 Erfolgsfaktoren in der zweiten Phase ‚Veränderung durchführen‘:

	Sehr wichtig			Unwichtig	
Zuständigkeiten & Verantwortungsbereiche festlegen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ressourcen bereitstellen (Zeit, Geld, Mitarbeiter)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Milestones / Zwischenziele setzen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Einsatz eines professionellen Change Managers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unterstützung, Commitment durch das Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Systematisches Vorgehen und Projektmanagement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Training und Qualifizierung anbieten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mitarbeiter in der Umsetzung aktiv einbinden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Veränderungen und Fortschritt kommunizieren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Frühzeitig Erfolge vermelden („Quick wins“)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Begleitende Kontrolle und Anpassung	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Finanzielle und sonstige Anreize bieten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Falls Sie weitere Faktoren in dieser Phase für erfolgskritisch betrachten, können Sie diese hier angeben: _____

3.3 Erfolgsfaktoren in der dritten Phase ‚Veränderung verfestigen‘:

	Sehr wichtig			Unwichtig	
Zeit um Veränderung zu verfestigen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unterstützung, Commitment durch das Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ergebnisse der Veränderungen kommunizieren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kontinuierliche Kontrolle und Anpassung	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Finanzielle und sonstige Anreize bieten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Falls Sie weitere Faktoren in dieser Phase für erfolgskritisch betrachten, können Sie diese hier angeben: _____

4. Wie würden Sie den Erfolg des letzten, abgeschlossenen Veränderungsprojektes in Ihrem Unternehmen einordnen? Bitte betrachten Sie für Ihre Einschätzung den gesamten Planungs- und Umsetzungszeitraum einschließlich der Zeit, bis die Veränderung nachhaltig wirksam wurde:

4.1 Die inhaltlichen Ziele (z. B. Kostenreduktion, Mitarbeiterabbau, etc.) des Veränderungsprojektes wurden hierbei:

- | | |
|---|--|
| <input type="checkbox"/> Übertroffen | <input type="checkbox"/> Mit nennenswerten Abweichungen erreicht |
| <input type="checkbox"/> Vollständig erreicht | <input type="checkbox"/> Nicht erreicht |
| <input type="checkbox"/> Mit geringen Abweichungen erreicht | |

4.2 Die Budgetvorgabe des Veränderungsprojektes wurde hierbei:

- | | |
|--|---|
| <input type="checkbox"/> Unterboten | <input type="checkbox"/> Mit nennenswerten Abweichungen eingehalten |
| <input type="checkbox"/> Vollständig eingehalten | <input type="checkbox"/> Nicht eingehalten |
| <input type="checkbox"/> Mit geringen Abweichungen eingehalten | |

4.3 Die geplante Zeit für das Veränderungsprojekt wurde hierbei:

- | | |
|--|---|
| <input type="checkbox"/> Unterboten | <input type="checkbox"/> Mit nennenswerten Abweichungen eingehalten |
| <input type="checkbox"/> Vollständig eingehalten | <input type="checkbox"/> Nicht eingehalten |
| <input type="checkbox"/> Mit geringen Abweichungen eingehalten | |

4.4 Wie würden Sie das Ergebnis des gesamten Veränderungsprojektes beschreiben? Die Erwartungen wurden hierbei:

- | | |
|--|--|
| <input type="checkbox"/> Übertroffen | <input type="checkbox"/> Im Wesentlichen nicht erfüllt |
| <input type="checkbox"/> Vollständig erfüllt | <input type="checkbox"/> Nicht erfüllt |
| <input type="checkbox"/> Im Wesentlichen erfüllt | |

5. Abschließend würden wir Sie bitten, noch einige wenige Fragen über sich und Ihr Unternehmen zu beantworten.

5.1 In welcher Branche ist Ihr Unternehmen tätig?

- | | |
|---|---|
| <input type="checkbox"/> Herstellung von Investitionsgütern | <input type="checkbox"/> Gastgewerbe |
| <input type="checkbox"/> Herstellung von Konsumgütern | <input type="checkbox"/> Banken und Versicherung |
| <input type="checkbox"/> Baugewerbe und Handwerk | <input type="checkbox"/> Gesundheit / Pflege / Soziales |
| <input type="checkbox"/> Transport und Logistik | <input type="checkbox"/> Bildung |
| <input type="checkbox"/> Information und Kommunikation | <input type="checkbox"/> Andere Dienstleistungen |
| <input type="checkbox"/> Handel | <input type="checkbox"/> Sonstiges: _____ |

5.2 Wie viele Angestellte beschäftigt Ihr Unternehmen?

- | | |
|-------------------------------------|--|
| <input type="checkbox"/> Bis 20 | <input type="checkbox"/> 101 bis 500 |
| <input type="checkbox"/> 21 bis 50 | <input type="checkbox"/> 501 bis 1000 |
| <input type="checkbox"/> 51 bis 100 | <input type="checkbox"/> Mehr als 1000 |

5.3 Seit wie vielen Jahren ist Ihr Unternehmen in dieser Form auf dem Markt tätig?

- ☐ Nicht länger als 5 Jahre ☐ Länger als 10 Jahre
☐ Zwischen 5 und 10 Jahren

5.4 Wie schätzen Sie die Veränderungsbereitschaft in Ihrem Unternehmen ein?

Sehr hoch ☐ ☐ ☐ ☐ ☐ Sehr gering

5.5 Seit wie vielen Jahren sind Sie in dem Unternehmen tätig?

- ☐ < 1 Jahr ☐ 3-10 Jahre
☐ 1-3 Jahre ☐ > 10 Jahre

5.6 Welche dieser Funktionen bekleiden Sie im Unternehmen?

- ☐ Geschäftsführer / Vorstand ☐ Projektteammitglied
☐ Mittleres Management ☐ Change Manager
☐ Gruppenleiter ☐ Sonstiges: _____
☐ Projektleiter

5.7 Wie schätzen Sie Ihre persönliche Veränderungsbereitschaft ein?

Sehr hoch ☐ ☐ ☐ ☐ ☐ Sehr gering

Vielen herzlichen Dank für Ihre Teilnahme.

Falls Sie Anmerkungen oder Hinweise haben, können Sie diese gerne nachfolgend äußern oder dem Ansprechpartner der Studie per Email zukommen lassen.

Appendix B:

Questionnaire (English)

Change projects in successful small and medium-sized enterprises

Your company belongs to a group of outstanding German SMEs and has been nominated for the "Großen Preis des Mittelstandes" this year. Congratulations for being nominated. We are currently conducting an empirical research at the University of Applied Sciences Heilbronn in cooperation with the Oskar-Patzelt-Foundation and are surveying small and medium-sized enterprises concerning change projects. We would like to invite you to take part in this survey. It will only take a few minutes to answer the questions.

1. What have been the reasons for your company to undergo significant change processes in the last five years? (Multiple answers possible)

- | | |
|---|--|
| <input type="checkbox"/> Change in corporate strategy | <input type="checkbox"/> Change of ownership |
| <input type="checkbox"/> Growth initiatives | <input type="checkbox"/> Restructuring |
| <input type="checkbox"/> Innovations (IT, technology, products) | <input type="checkbox"/> Cost-cutting programmes |
| <input type="checkbox"/> Internationalisation | <input type="checkbox"/> Continuous improvement processes |
| <input type="checkbox"/> External changes (e.g. new laws) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Merger & acquisitions, divestment
(whole or parts of the company) | <input type="checkbox"/> No significant changes in the last five years |

2. With regard to the last change project in your company, we would like you to answer following questions concerning 'internal communications', 'employee participation' and 'role of the top management'.

2.1 At which point in time were affected employees informed about the change project?

Planning phase			Implementation			No specific information
Beginning	Midway	Ending	Beginning	Midway	Ending	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.2 At which point in time were affected employees able to contribute to the change project?

Planning phase			Implementation			No specific participation
Beginning	Midway	Ending	Beginning	Midway	Ending	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.3 To what extent were affected employees able to contribute their own ideas and thoughts to shape or cocreate the change project?

Entirely ☐ ☐ ☐ ☐ ☐ Not at all

If there are other critical success factors in this phase please indicate here: _____

3.2 What are success factors in the second phase 'execute change':

	Very important			Unimportant	
To determine competences and responsibilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To provide resources (time, money, people)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To set intermediate objectives / milestones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To employ a professional change manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Support and commitment of the management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To use a systematic approach / project management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To provide training / workshops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To actively involve employees in executing the change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To communicate changes and progress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To manage and plan quick wins	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To monitor progress and make adjustments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To provide financial and other rewards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If there are other critical success factors in this phase please indicate here: _____

3.3 What are success factors in the third phase 'consolidate change':

	Very important			Unimportant	
Time to consolidate change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Support and commitment of the management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To communicate results of the change initiative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To monitor progress continuously/make adjustments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To provide financial and other rewards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If there are other critical success factors in this phase please indicate here: _____

4. How would you describe the success of the last completed change project in your organisation? Please consider the whole period of time from the planning phase up to and including the time till the change came into operation:

4.1 Content-related objectives (e.g. cost reduction, workforce reduction, etc.) of the change project have been:

- | | |
|--|--|
| <input type="checkbox"/> Exceeded | <input type="checkbox"/> Achieved with large discrepancies |
| <input type="checkbox"/> Fully achieved | <input type="checkbox"/> Not achieved |
| <input type="checkbox"/> Achieved with minor discrepancies | |

4.2 Budget-related objectives of the change project have been:

- | | |
|--|--|
| <input type="checkbox"/> Exceeded | <input type="checkbox"/> Achieved with large discrepancies |
| <input type="checkbox"/> Fully achieved | <input type="checkbox"/> Not achieved |
| <input type="checkbox"/> Achieved with minor discrepancies | |

4.3 Time-related objectives of the change project have been:

- | | |
|--|--|
| <input type="checkbox"/> Exceeded | <input type="checkbox"/> Achieved with large discrepancies |
| <input type="checkbox"/> Fully achieved | <input type="checkbox"/> Not achieved |
| <input type="checkbox"/> Achieved with minor discrepancies | |

4.4 How would you describe the overall success of the change project? Expectations have been:

- | | |
|-------------------------------------|---|
| <input type="checkbox"/> Exceeded | <input type="checkbox"/> Mainly not met |
| <input type="checkbox"/> Fully met | <input type="checkbox"/> Not met |
| <input type="checkbox"/> Mainly met | |

5. Finally we would like you to answer a few questions concerning yourself and your company.**5.1 In which industry does your company operate?**

- | | |
|---|---|
| <input type="checkbox"/> Production of consumer goods | <input type="checkbox"/> Hospitality |
| <input type="checkbox"/> Production of investment goods | <input type="checkbox"/> Bank and insurance |
| <input type="checkbox"/> Construction and craft sector | <input type="checkbox"/> Health and care |
| <input type="checkbox"/> Transport and logistic | <input type="checkbox"/> Education |
| <input type="checkbox"/> Information and communication | <input type="checkbox"/> Other service industry |
| <input type="checkbox"/> Retail | <input type="checkbox"/> Other: _____ |

5.2 How many employees does the company have?

- | | |
|------------------------------------|---|
| <input type="checkbox"/> Up to 20 | <input type="checkbox"/> 101 to 500 |
| <input type="checkbox"/> 21 to 50 | <input type="checkbox"/> 501 to 1000 |
| <input type="checkbox"/> 51 to 100 | <input type="checkbox"/> More than 1000 |

5.3 For how many years does the company operate in the market as it is today?

- | | |
|---|---|
| <input type="checkbox"/> Not more than 5 years | <input type="checkbox"/> More than 10 years |
| <input type="checkbox"/> Between 5 and 10 years | |

5.4 How do you assess the willingness to change in your company?

- Very high ☐ ☐ ☐ ☐ ☐ ☐ Very low

5.5 For how many years do you work for the company?

- | | |
|------------------------------------|-------------------------------------|
| <input type="checkbox"/> < 1 year | <input type="checkbox"/> 3-10 years |
| <input type="checkbox"/> 1-3 years | <input type="checkbox"/> > 10 years |

5.6 What is your job role in the company?

- | | |
|---|--|
| <input type="checkbox"/> CEO / Board of directors | <input type="checkbox"/> Project team member |
| <input type="checkbox"/> Middle management | <input type="checkbox"/> Change manager |
| <input type="checkbox"/> Team leader | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Project leader | |

5.7 How do you assess your own willingness to change?

Very high ☐ ☐ ☐ ☐ ☐ Very low

**Thank you very much for your participation in the study.
We are looking forward to your remarks and suggestions.**

Appendix C:

Cover Letter I (German)



Heilbronn, den 23. August 2011

Sehr geehrte(r) <Anrede> <Vorname, Nachname>,

Ihr Unternehmen gehört zu den herausragenden mittelständischen Unternehmen in Deutschland und wurde dieses Jahr für den „Großen Preis des Mittelstandes“ nominiert. Hierzu gratulieren wir recht herzlich. Im Rahmen einer Studie an der Hochschule Heilbronn, in Kooperation mit der Oskar-Patzelt-Stiftung, untersuchen wir Veränderungsprojekte in mittelständischen Unternehmen. Zu dieser Studie, die nur wenige Minuten in Anspruch nimmt, würden wir Sie gerne einladen.

Die Studie wird Aussagen ermöglichen im Hinblick auf:

- Erfolg und Misserfolg bei Veränderungsprojekten im Mittelstand
- Erfolgsfaktoren, welche den Ausgang des Veränderungsprojektes beeinflussen

Die Ergebnisse der Studie stellen wir Ihnen nach Abschluss des Projektes selbstverständlich kostenfrei zur Verfügung. In Bezug auf Ihre Angaben garantieren wir Ihnen absolute Anonymität.

Die Befragung richtet sich an Personen, die Führungsverantwortung in Veränderungsprojekten übernehmen (z. B. Geschäftsführung, Projektleiter, Change Manager) beziehungsweise in den Veränderungsprozess einbezogene Mitarbeiter (z. B. Projektteammitglied). Für den Fall, dass Sie hierzu nicht der entsprechende Ansprechpartner sind, würden wir uns über eine Rückmeldung oder Weiterleitung der Email freuen.

Nachfolgend finden Sie den Link, der Sie zur Online-Befragung führt: Das Tool ist bis einschließlich 06. September 2011 freigeschaltet: [<Link>](#)

Vielen herzlichen Dank für Ihre Unterstützung,

mit freundlichen Grüßen

Prof. Dr. Roland Alter

Hochschule Heilbronn, Betriebswirtschaft und Unternehmensführung

Wissenschaftlicher Beirat der Oskar-Patzelt-Stiftung

Projektverantwortung im Rahmen einer Master-Thesis:

Tim Fritzenschaft

Hochschule Heilbronn, Unternehmensführung / Business Management

tim.fritzenschaft@web.de

CC: Dr. Helfried Schmidt, Oskar-Patzelt-Stiftung

Appendix D:

Cover Letter I (English)



Heilbronn, 23rd August 2011

Dear <title> <first name, surname>,

Your company belongs to a group of outstanding German SMEs and has been nominated for the "Großen Preis des Mittelstandes" this year. Congratulations for being nominated. We are currently conducting an empirical research at the University of Applied Sciences Heilbronn in cooperation with the Oskar-Patzelt-Foundation and are surveying small and medium-sized enterprises concerning change projects. We would like to invite you to take part in this survey. It will only take a few minutes to answer the questions.

This study enables to draw conclusions concerning following topics:

- Success and failure in change projects in small and medium-sized enterprises
- Success factors that influence the outcome of a change project

On completion of the project we certainly make the results, free of charge, available for your company. For your personal data anonymity will be guaranteed.

The empirical research is aimed at people who are in charge of change management projects in their companies (e.g. managers, project leaders, change managers) respectively employees involved in change projects (e.g. project team members). If you are not the suitable contact person we would appreciate a feedback or forwarding the email.

Following you find the link to the online survey. The tool will be active until the 06th September 2011: [<link>](#)

Thank you for your participation.

Yours sincerely,

Prof. Dr. Roland Alter

University of Applied Sciences Heilbronn, Business Management

Scientific Advisory Board Oskar-Patzelt-Foundation

Project responsibility (master-thesis):

Tim Fritzenschaft

University of Applied Sciences Heilbronn, Business Management

tim.fritzenschaft@web.de

CC: Dr. Helfried Schmidt, Oskar-Patzelt-Foundation

Appendix E:

Cover Letter II (German)



Heilbronn, den 23. August 2011

Sehr geehrte(r) <Anrede> <Vorname, Nachname>,

Ihr Unternehmen gehört zu den herausragenden mittelständischen Unternehmen in Deutschland und wurde in den vergangenen Jahren durch die Oskar-Patzelt-Stiftung ausgezeichnet. Hierzu gratulieren wir recht herzlich. Im Rahmen einer Studie an der Hochschule Heilbronn, in Kooperation mit der Oskar-Patzelt-Stiftung, untersuchen wir Veränderungsprojekte in mittelständischen Unternehmen. Zu dieser Studie, die nur wenige Minuten in Anspruch nimmt, würden wir Sie gerne einladen.

Die Studie wird Aussagen ermöglichen im Hinblick auf:

- Erfolg und Misserfolg bei Veränderungsprojekten im Mittelstand
- Erfolgsfaktoren, welche den Ausgang des Veränderungsprojektes beeinflussen

Die Ergebnisse der Studie stellen wir Ihnen nach Abschluss des Projektes selbstverständlich kostenfrei zur Verfügung. In Bezug auf Ihre Angaben garantieren wir Ihnen absolute Anonymität.

Die Befragung richtet sich an Personen, die Führungsverantwortung in Veränderungsprojekten übernehmen (z. B. Geschäftsführung, Projektleiter, Change Manager) beziehungsweise in den Veränderungsprozess einbezogene Mitarbeiter (z. B. Projektteammitglied). Für den Fall, dass Sie hierzu nicht der entsprechende Ansprechpartner sind, würden wir uns über eine Rückmeldung oder Weiterleitung der Email freuen.

Nachfolgend finden Sie den Link, der Sie zur Online-Befragung führt: Das Tool ist bis einschließlich 06. September 2011 freigeschaltet: [<Link>](#)

Vielen herzlichen Dank für Ihre Unterstützung,

mit freundlichen Grüßen

Prof. Dr. Roland Alter

Hochschule Heilbronn, Betriebswirtschaft und Unternehmensführung

Wissenschaftlicher Beirat der Oskar-Patzelt-Stiftung

Projektverantwortung im Rahmen einer Master-Thesis:

Tim Fritzenschaft

Hochschule Heilbronn, Unternehmensführung / Business Management

tim.fritzenschaft@web.de

CC: Dr. Helfried Schmidt, Oskar-Patzelt-Stiftung

Appendix F:

Cover Letter II (English)



Heilbronn, 23rd August 2011

Dear <title> <first name, surname>,

Your company belongs to a group of outstanding German SMEs and has been awarded by the Oskar-Patzelt-Foundation in recent years. Congratulations for being awarded. We are currently conducting an empirical research at the University of Applied Sciences Heilbronn in cooperation with the Oskar-Patzelt-Foundation and are surveying small and medium-sized enterprises concerning change projects. We would like to invite you to take part in this survey. It will only take a few minutes to answer the questions.

This study enables to draw conclusions concerning following topics:

- Success and failure in change projects in small and medium-sized enterprises
- Success factors that influence the outcome of a change project

On completion of the project we certainly make the results, free of charge, available for your company. For your personal data anonymity will be guaranteed.

The empirical research is aimed at people who are in charge of change management projects in their companies (e.g. managers, project leaders, change managers) respectively employees involved in change projects (e.g. project team members). If you are not the suitable contact person we would appreciate a feedback or forwarding the email.

Following you find the link to the online survey. The tool will be active until the 06th September 2011: [<link>](#)

Thank you for your participation.

Yours sincerely,

Prof. Dr. Roland Alter

University of Applied Sciences Heilbronn, Business Management

Scientific Advisory Board Oskar-Patzelt-Foundation

Project responsibility (master-thesis):

Tim Fritzenschaft

University of Applied Sciences Heilbronn, Business Management

tim.fritzenschaft@web.de

CC: Dr. Helfried Schmidt, Oskar-Patzelt-Foundation

Appendix G:

Cover Letter I - Reminder (German)



Heilbronn, den 07. September 2011

Sehr geehrte(r) <Anrede> <Vorname, Nachname>,

Vor wenigen Wochen erhielten Sie eine Einladung zur Studie „Veränderungsprojekte im Mittelstand“, die an der Hochschule Heilbronn, in Kooperation mit der Oskar-Patzelt-Stiftung durchgeführt wird. Sie wurden zu dieser Studie ausgewählt, da Ihr Unternehmen zu den herausragenden mittelständischen Unternehmen in Deutschland gehört und dieses Jahr für den „Großen Preis des Mittelstandes“ nominiert ist. Hierzu gratulieren wir recht herzlich.

Über Ihre Teilnahme an der Studie, die nur wenige Minuten in Anspruch nimmt, würden wir uns sehr freuen.

Die Studie wird Aussagen ermöglichen im Hinblick auf:

- Erfolg und Misserfolg bei Veränderungsprojekten im Mittelstand
- Erfolgsfaktoren, welche den Ausgang des Veränderungsprojektes beeinflussen

Die Ergebnisse der Studie stellen wir Ihnen nach Abschluss des Projektes selbstverständlich kostenfrei zur Verfügung. In Bezug auf Ihre Angaben garantieren wir Ihnen absolute Anonymität.

Die Befragung richtet sich an Personen, die Führungsverantwortung in Veränderungsprojekten übernehmen (z. B. Geschäftsführung, Projektleiter, Change Manager) beziehungsweise in den Veränderungsprozess einbezogene Mitarbeiter (z. B. Projektteammitglied). Für den Fall, dass Sie hierzu nicht der entsprechende Ansprechpartner sind, würden wir uns über eine Rückmeldung oder Weiterleitung der Email freuen.

Nachfolgend finden Sie den Link, der Sie zur Online-Befragung führt: Das Tool ist bis einschließlich 16. September 2011 freigeschaltet: [<Link>](#)

Falls Sie bereits an der Studie teilgenommen haben, bitten wir Sie dieses Schreiben zu entschuldigen und bedanken uns noch einmal für Ihre Teilnahme.

Vielen herzlichen Dank für Ihre Unterstützung,

mit freundlichen Grüßen

Prof. Dr. Roland Alter

Hochschule Heilbronn, Betriebswirtschaft und Unternehmensführung

Wissenschaftlicher Beirat der Oskar-Patzelt-Stiftung

Projektverantwortung im Rahmen einer Master-Thesis:

Tim Fritzenschaft

Hochschule Heilbronn, Unternehmensführung / Business Management

tim.fritzenschaft@web.de

CC: Dr. Helfried Schmidt, Oskar-Patzelt-Stiftung

Appendix H:

Cover Letter I - Reminder (English)



Heilbronn, 07th September 2011

Dear <title> <first name, surname>,

A few weeks ago we invited you to take part in your empirical research “Change Projects in Small and Medium-Sized Enterprises”. This research is conducted at the University of Applied Sciences Heilbronn in cooperation with the Oskar-Patzelt-Foundation. You have been selected to take part in this survey as your company belongs to a group of outstanding German SMEs and has been nominated for the “Großen Preis des Mittelstandes” this year. Congratulations for being nominated.

We would appreciate your participation. It will only take a few minutes to answer the questions.

This study enables to draw conclusions concerning following topics:

- Success and failure in change projects in small and medium-sized enterprises
- Success factors that influence the outcome of a change project

On completion of the project we certainly make the results, free of charge, available for your company. For your personal data anonymity will be guaranteed.

The empirical research is aimed at people who are in charge of change management projects in their companies (e.g. managers, project leaders, change managers) respectively employees involved in change projects (e.g. project team members). If you are not the suitable contact person we would appreciate a feedback or forwarding the email.

Following you find the link to the online survey. The tool will be active until the 16th September 2011: [<link>](#)

If you have already participated in the study we apologise for this reminder and thank you very much for your participation.

Thank you for your participation.

Yours sincerely,

Prof. Dr. Roland Alter

University of Applied Sciences Heilbronn, Business Management

Scientific Advisory Board Oskar-Patzelt-Foundation

Project responsibility (master-thesis):

Tim Fritzenschaft

University of Applied Sciences Heilbronn, Business Management

tim.fritzenschaft@web.de

CC: Dr. Helfried Schmidt, Oskar-Patzelt-Foundation

Appendix I:**Cover Letter II - Reminder (German)**



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Sehr geehrte(r) <Anrede> <Vorname, Nachname>,

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Projektverantwortung im Rahmen einer Master-Thesis:

Tim Fritzenschaft

Hochschule Heilbronn, Unternehmensführung / Business Management

tim.fritzenschaft@web.de

CC: Dr. Helfried Schmidt, Oskar-Patzelt-Stiftung

Appendix J:

Cover Letter II - Reminder (English)



Heilbronn, 07th September 2011

Dear <title> <first name, surname>,

A few weeks ago we invited you to take part in your empirical research "Change Projects in Small and Medium-Sized Enterprises". This research is conducted at the University of Applied Sciences Heilbronn in cooperation with the Oskar-Patzelt-Foundation. You have been selected to take part in this survey as your company belongs to a group of outstanding German SMEs and has been awarded by the Oskar-Patzelt-Foundation in recent years. Congratulations for being awarded.

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This study enables to draw conclusions concerning following topics:

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Thank you for your participation.

Yours sincerely,

Prof. Dr. Roland Alter

University of Applied Sciences Heilbronn, Business Management

Scientific Advisory Board Oskar-Patzelt-Foundation

Project responsibility (master-thesis):

Tim Fritzenschaft

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CC: Dr. Helfried Schmidt, Oskar-Patzelt-Foundation

Appendix K:

Statistical Analysis I

Question: Did your company have to undergo a significant change project the last five years? Are there any differences between different industry sectors?

Coding: 1 = yes, 2 = no

Industry Sector	Mean	N	Std. Deviation
Production of consumer goods	1,05	44	0,211
Production of investment goods	1,07	91	0,250
Construction / craft sector	1,14	71	0,350
Transport and logistic	1,11	9	0,333
Information and communication	1,00	23	0,000
Retail	1,09	32	0,296
Hospitality	1,00	15	0,000
Health and care	1,06	16	0,250
Education	1,00	3	0,000
Other service industry	1,14	74	0,344
Others	1,29	7	0,488
Processing industry	1,04	26	0,196
Total	1,09	411	0,283

Statistical test: One-sample t-test (split file by industry, test value: 1.09, 90% confidence interval)

One-Sample T-Test						
Industry Sector	Test Value = 1.09					
	t	df	Sig. (2-tailed)	Mean Difference	90% Confidence Interval	
					Lower	Upper
Production of consumer goods	-1,402	43	,168	-,045	-,10	,01
Production of investment goods	-,920	90	,360	-,024	-,07	,02
Construction / craft sector	1,223	70	,225	,051	-,02	,12
Transport and logistic	,190	8	,854	,021	-,19	,23
Retail	,072	31	,943	,004	-,09	,09
Health and care	-,440	15	,666	-,028	-,14	,08
Other service industry	1,128	73	,263	,045	-,02	,11
Sonstiges:	1,061	6	,329	,196	-,16	,55
Processing industry	-1,340	25	,192	-,052	-,12	,01

No statistics are computed for variables with none standard deviation.

Result: There are no significant differences to the mean of 1.09. There is none industry significant more or less affected than the average.

Appendix L:

Statistical Analysis II

Question: Is there a correlation between the size of the company (number of employees) and the need for change?

Statistical test: Linear regression (90% confidence interval)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,037	,001	-,001	,280

a. Predictors: (Constant), Employees

Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	90,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1,109	,034		32,253	,000	1,052	1,166
	Employees	-,008	,011	-,037	-,751	,453	-,026	,010

a. Dependent Variable: No significant change process in the last five years

Result: There is no correlation.

Question: Is there a correlation between the age of the company (number of years operating in the market) and the need for change?

Statistical test: Linear regression (90% confidence interval)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,016	,000	-,002	,279

a. Predictors: (Constant), Number of years operating in the market

Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	90,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1,058	,085		12,469	,000	,918	1,197
	Years operating in the market	,010	,030	,016	,326	,745	-,039	,058

a. Dependent Variable: No significant change process in the last five years

Result: There is no correlation.

Appendix M:

Statistical Analysis III

Question: Are there differences in the level of achievement of the three different objectives (content, budget and time)?

Coding: The objectives have been: 1 = exceeded, 2 = fully achieved, 3 = achieved with minor discrepancies, 4 = achieved with large discrepancies, 5 = not achieved

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Content-related objectives	374	2,50	,749	,039
Budget-related objectives	374	2,73	,806	,042
Time-related objectives	374	2,89	,933	,048

Statistical test: One-sample t-test (test value: 2.727, 90% confidence interval)

One-Sample Test

	Test Value = 2.727					
	t	df	Sig. (2-tailed)	Mean Difference	90% Confidence Interval	
					Lower	Upper
Content-related objectives	-5,858	373	,000	-,227	-,29	-,16
Budget-related objectives	,007	373	,995	,000	-,07	,07
Time-related objectives	3,387	373	,001	,163	,08	,24

Result: There are significant differences between the three means. Content-related objectives are significantly achieved more frequent than budget-related goals. The objectives most difficult to meet are time-related.

Appendix N:

Statistical Analysis IV

Question: Are the critical success factors ranked differently according to the company size (group1 = 50 and less employees, group2 = more than 50 employees)?

2 Groups (Number of Employees)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	50 and less employees	175	42,1	42,7	42,7
	More than 50 employees	235	56,5	57,3	100,0
	Total	410	98,6	100,0	
Missing	System	6	1,4		
Total		416	100,0		

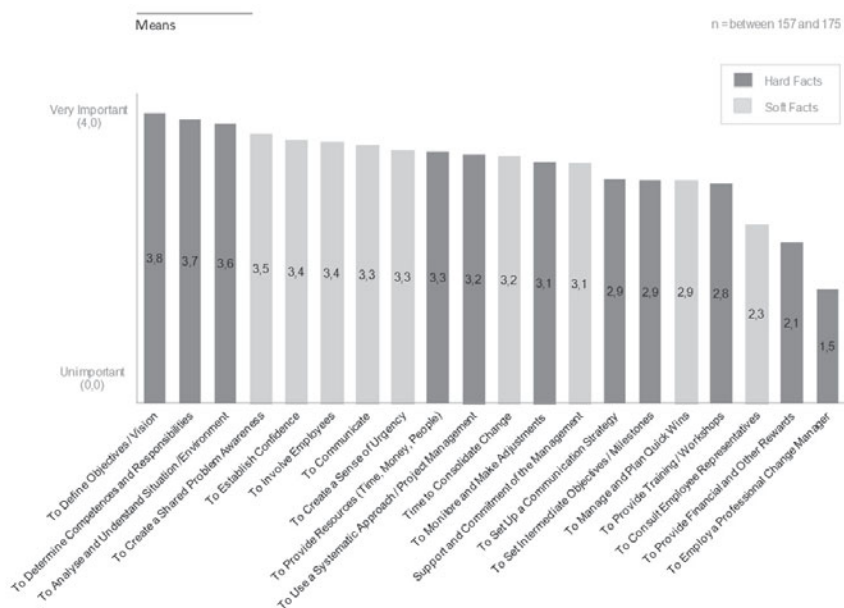
Statistical test: Independent-sample t-test (90% confidence interval)

Independent Samples Test

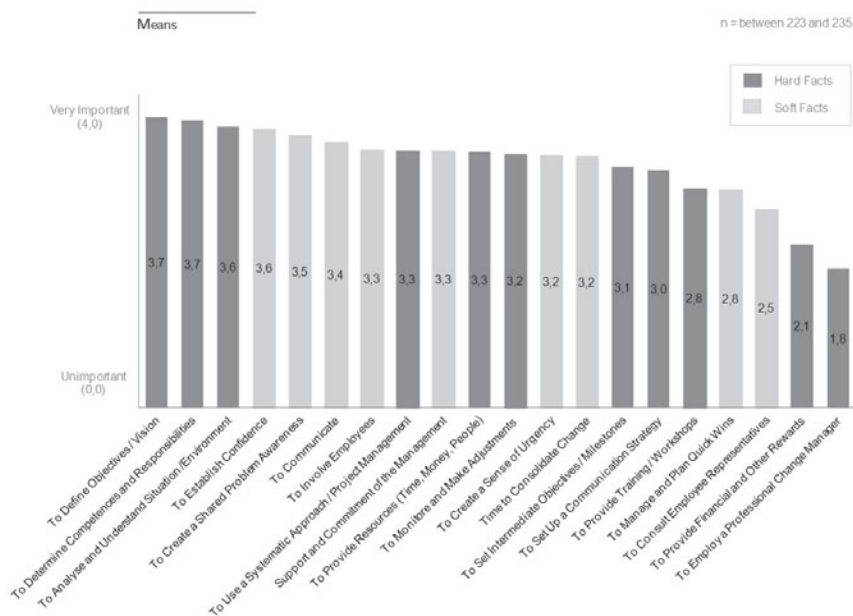
		Sig.	Sig. (2-tailed)	Mean Difference	Std. Error Difference	90% Confidence Interval	
						Lower	Upper
To Analyse and Understand Situation /Environment	Equal variances assumed	,237	,738	,020	,060	-,079	,120
	Equal variances not assumed		,745	,020	,062	-,082	,123
To Define Objectives / Vision	Equal variances assumed	,669	,504	,035	,052	-,051	,121
	Equal variances not assumed		,514	,035	,053	-,053	,123
Support and Commitment of the Management	Equal variances assumed	,007	,039	-,149	,072	-,267	-,030
	Equal variances not assumed		,046	-,149	,074	-,271	-,026
To Set Up a Communication Strategy	Equal variances assumed	,425	,104	-,135	,083	-,271	,002
	Equal variances not assumed		,108	-,135	,084	-,273	,003
To Establish Confidence	Equal variances assumed	,000	,055	-,143	,074	-,265	-,020
	Equal variances not assumed		,064	-,143	,077	-,269	-,016
To Create a Shared Problem Awareness	Equal variances assumed	,325	,828	,016	,074	-,105	,137
	Equal variances not assumed		,831	,016	,075	-,108	,140
To Create a Sense of Urgency	Equal variances assumed	,506	,644	,035	,076	-,090	,160
	Equal variances not assumed		,640	,035	,075	-,088	,158
To Consult Employee Representatives	Equal variances assumed	,113	,057	-,230	,121	-,430	-,031
	Equal variances not assumed		,062	-,230	,123	-,434	-,027
To Actively Involve Employees in Planning	Equal variances assumed	,725	,775	,025	,086	-,118	,167
	Equal variances not assumed		,773	,025	,086	-,117	,166
To Communicate Upcoming Changes	Equal variances assumed	,007	,028	-,151	,069	-,264	-,038
	Equal variances not assumed		,034	-,151	,071	-,268	-,034
To Provide Financial and Other Rewards	Equal variances assumed	,050	,650	,044	,097	-,115	,203
	Equal variances not assumed		,657	,044	,099	-,119	,207
To Determine Competences and Responsibilities	Equal variances assumed	,777	,892	,008	,056	-,085	,100
	Equal variances not assumed		,891	,008	,055	-,084	,099
To Provide Resources (Time, Money, People)	Equal variances assumed	,457	,879	-,010	,068	-,123	,102
	Equal variances not assumed		,880	-,010	,069	-,124	,103
To Set Intermediate Objectives / Milestones	Equal variances assumed	,129	,017	-,192	,080	-,325	-,060
	Equal variances not assumed		,019	-,192	,081	-,326	-,058
To Employ a Professional Change Manager	Equal variances assumed	,033	,006	-,305	,110	-,486	-,125
	Equal variances not assumed		,006	-,305	,111	-,488	-,122
Support and Commitment of the Management	Equal variances assumed	,582	,009	-,224	,085	-,363	-,084
	Equal variances not assumed		,010	-,224	,087	-,367	-,081
To Use a Systematic Approach / Project Management	Equal variances assumed	,081	,351	-,070	,075	-,193	,054
	Equal variances not assumed		,363	-,070	,077	-,197	,057
To Provide Training / Workshops	Equal variances assumed	,330	,578	,047	,084	-,092	,186
	Equal variances not assumed		,578	,047	,084	-,092	,186

To Actively Involve Employees in Executing the Change	Equal variances assumed	,401	,088	,118	,069	,004	,231
	Equal variances not assumed		,086	,118	,069	,005	,231
To Communicate Changes and Progress	Equal variances assumed	,513	,809	,018	,074	-,104	,140
	Equal variances not assumed		,810	,018	,074	-,105	,140
To Manage and Plan Quick Wins	Equal variances assumed	,843	,311	,101	,099	-,063	,265
	Equal variances not assumed		,313	,101	,100	-,064	,265
To Monitor Progress and Make Adjustments	Equal variances assumed	,691	,166	-,105	,076	-,230	,020
	Equal variances not assumed		,172	-,105	,077	-,232	,021
To Provide Financial and Other Rewards	Equal variances assumed	,158	,805	-,024	,098	-,186	,138
	Equal variances not assumed		,808	-,024	,100	-,189	,140
Time to Consolidate Change	Equal variances assumed	,590	,802	-,018	,070	-,133	,098
	Equal variances not assumed		,802	-,018	,070	-,133	,098
Support and Commitment of the Management	Equal variances assumed	,183	,012	-,190	,075	-,313	-,066
	Equal variances not assumed		,012	-,190	,075	-,314	-,065
To Communicate Results	Equal variances assumed	,411	,353	-,060	,064	-,166	,046
	Equal variances not assumed		,358	-,060	,065	-,167	,047
To Monitor Progress Continuously	Equal variances assumed	,254	,085	-,119	,069	-,232	-,005
	Equal variances not assumed		,091	-,119	,070	-,234	-,003
To Provide Financial and Other Rewards	Equal variances assumed	,283	,728	-,034	,097	-,193	,126
	Equal variances not assumed		,732	-,034	,098	-,196	,128

Overall ranking of group1 (50 and less employees):



Overall ranking of group2 (more than 50 employees):



Result: There are significant differences between the two groups. The second group evaluated following factors as more important (statistically significant):

- Support and commitment of the management (in all three phases)
- To communicate upcoming changes
- To establish confidence
- To consult employee representatives
- To set intermediate objectives and milestones
- To employ a professional change manager
- To monitor progress continuously

Appendix O:

Statistical Analysis V

Question: Is the factor 'communication' evaluated differently in the three phases?

Coding: Importance of critical success factors on a one to five Likert-scale

One-Sample Statistics

	N	Mean	Std. Deviation	Mean
To Communicate Upcoming Changes	412	4,45	,684	,034
To Communicate Changes and Progress	406	4,25	,732	,036
To Communicate Results	412	4,39	,642	,032

Statistical test: One-sample t-test (test value: 4.39, 90% confidence interval)

One-Sample Test

	Test Value = 4.39					
	t	df	Sig. (2-tailed)	Mean Difference	90% Confidence Interval	
					Lower	Upper
To Communicate Upcoming Changes	1,825	411	,069	,061	,01	,12
To Communicate Changes and Progress	-3,753	405	,000	-,136	-,20	-,08
To Communicate Results	-,129	411	,898	-,004	-,06	,05

Result: There are significant differences between the three means. The difference between every single phase is statistically significant. Therefore, communication is seen as most important in the first phase. This is then followed by the third phase. The lowest score can be observed for the second phase.

Appendix P:

Statistical Analysis VI

Question: Is there a correlation between the time of communicating a change project and the outcome of a change initiative?

Statistical test: Linear regression (90% confidence interval)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,037	,001	-,001	,749

a. Predictors: (Constant), Time of Communication

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	90,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	2,307	,080		28,710	,000	2,175	2,440
	Time of Communication	,019	,027	,037	,723	,470	-,025	,064

a. Dependent Variable: Outcome of a Change Project

Result: There is no correlation.

Appendix Q:

Statistical Analysis VII

Question: Is there a correlation between the number of employees working for an organisation and the number of communication channels used to communicate a change project?

Statistical test: Linear regression (90% confidence interval)

Test 1: Communication channels (total)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,387	,150	,147	1,425

a. Predictors: (Constant), Employees

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	90,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1,804	,182		9,918	,000	1,504	2,104
	Employees	,463	,057	,387	8,106	,000	,369	,557

a. Dependent Variable: Number of Communication Channels used (total)

Test 2: Communication channels (personal)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,261	,068	,066	1,026

a. Predictors: (Constant), Employees

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	90,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1,763	,131		13,463	,000	1,547	1,979
	Employees	,215	,041	,261	5,232	,000	,147	,283

a. Dependent Variable: Number of Communication Channels used (personal)

Test 3: Communication channels (impersonal)**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,331	,109	,107	,925

a. Predictors: (Constant), Employees

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	90,0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	,029	,118		,249	,804	-,165	,224
Employees	,251	,037	,331	6,764	,000	,190	,312

a. Dependent Variable: Number of Communication Channels used (impersonal)

Result: There are significant correlations. The number of communication channels (total, personal, or impersonal) used to communicate a change initiative depends upon the number of employees working for a company. Nevertheless, the correlations are rather weak which can be seen in the r-square scores.

Appendix R:

Statistical Analysis VIII

Question: Is there a correlation between the number of communication channels used in a change project and the outcome of a change initiative?

Statistical test: Linear regression (90% confidence interval)

Test 1: Communication channels (total)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,047	,002	,000	,749

a. Predictors: (Constant), Number of Channels used (total)

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	90,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	2,286	,088		26,009	,000	2,141	2,431
	Number of Channels used (total)	,023	,025	,047	,910	,364	-,019	,064

a. Dependent Variable: Outcome of a Change Project

Test 2: Communication channels (personal)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,002	,000	-,003	,750

a. Predictors: (Constant), Number of Channels used (personal)

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	90,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	2,362	,096		24,710	,000	2,204	2,519
	Number of Channels used (personal)	-,002	,037	-,002	-,042	,967	-,062	,059

a. Dependent Variable: Outcome of a Change Project

Test 3: Communication channels (impersonal)**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,078	,006	,003	,747

a. Predictors: (Constant), Number of Channels used (impersonal)

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	90,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	2,313	,049		47,557	,000	2,233	2,393
	Number of Channels used (impersonal)	,059	,039	,078	1,507	,133	-,006	,125

a. Dependent Variable: Outcome of a Change Project

Result: There are no significant correlations. The number of communication channels used (whether personal, impersonal or the total number) does not influence the outcome of a change project.

Appendix S:

Statistical Analysis IX

Question: Is the factor 'participation' evaluated differently in the first and second phase?

Coding: Importance of critical success factors on a one to five Likert-scale

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
To Actively Involve Employees in Planning	414	4,21	,865	,043
To Actively Involve Employees in Executing the Change	410	4,43	,689	,034

Statistical test: One-sample t-test (test value: 4.213, 90% confidence interval)

One-Sample Test

	Test Value = 4.213					
	t	df	Sig. (2-tailed)	Mean Difference	90% Confidence Interval	
					Lower	Upper
To Actively Involve Employees in Planning	-,010	413	,992	,000	-,07	,07
To Actively Involve Employees in Executing the Change	6,282	409	,000	,214	,16	,27

Result: There are significant differences between the two means. To actively involve employees in executing the change is seen as significant more important than to actively involve employees in planning the change initiative.

Appendix T:

Statistical Analysis X

Question: Is there a correlation between the time of involving employees in a change project and the outcome of a change initiative?

Statistical test: Linear regression (90% confidence interval)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,053	,003	,000	,748

a. Predictors: (Constant), Time of Involvement

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	90,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	2,277	,088		25,796	,000	2,131	2,423
	Time of Involvement	,027	,026	,053	1,022	,308	-,017	,071

a. Dependent Variable: Outcome of a Change Project

Result: There is no correlation.

Appendix U:

Statistical Analysis XI

Question: Is there a correlation between the amount of employee involvement in a change project and the outcome of a change initiative?

Statistical test: Linear regression (90% confidence interval)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,192	,037	,034	,735

a. Predictors: (Constant), Amount of Involvement

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	90,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	2,896	,147		19,753	,000	2,654	3,138
	Amount of Involvement	-,139	,037	-,192	-3,797	,000	-,199	-,079

a. Dependent Variable: Outcome of a Change Project

Result: There is a significant correlation. The more extensive affected employees are able to contribute their own ideas and thoughts to shape or cocreate a change initiative, the higher the likelihood of successful outcomes.

Appendix V:

Statistical Analysis XII

Question: Is the factor 'support and commitment of the management' evaluated differently in the three phases?

Coding: Importance of critical success factors on a one to five Likert-scale

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Support and Commitment of the Management	403	4,28	,708	,035
Support and Commitment of the Management	397	4,11	,826	,041
Support and Commitment of the Management	399	4,22	,734	,037

Statistical test: One-sample t-test (test value: 4.22, 90% confidence interval)

One-Sample Test

	Test Value = 4.22					
	t	df	Sig. (2-tailed)	Mean Difference	90% Confidence Interval	
					Lower	Upper
Support and Commitment of the Management	1,713	402	,087	,060	,00	,12
Support and Commitment of the Management	-2,574	396	,010	-,107	-,17	-,04
Support and Commitment of the Management	,015	398	,988	,001	-,06	,06

Result: There are significant differences between the three means. The difference between every single phase is statistically significant. Therefore, support and commitment of the management is seen as most important in the first phase. This is then followed by the third phase. The lowest score can be observed for the second phase.

Appendix W:

Statistical Analysis XIII

Question: Is the factor 'financial and other rewards' evaluated differently in the three phases?

Coding: Importance of critical success factors on a one to five Likert-scale

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
To Provide Financial and Other Rewards	410	3,15	,966	,048
To Provide Financial and Other Rewards	407	3,01	,977	,048
To Provide Financial and Other Rewards	406	3,06	,967	,048

Statistical test: One-sample t-test (test value: 3.064 and 3.154, 90% confidence interval)

One-Sample Test

	Test Value = 3.064					
	t	df	Sig. (2-tailed)	Mean Difference	90% Confidence Interval	
					Lower	Upper
To Provide Financial and Other Rewards	1,880	409	,061	,090	,01	,17
To Provide Financial and Other Rewards	-1,017	406	,310	-,049	-,13	,03
To Provide Financial and Other Rewards	,001	405	,999	,000	-,08	,08

One-Sample Test

	Test Value = 3.154					
	t	df	Sig. (2-tailed)	Mean Difference	90% Confidence Interval	
					Lower	Upper
To Provide Financial and Other Rewards	-,007	409	,994	,000	-,08	,08
To Provide Financial and Other Rewards	-2,874	406	,004	-,139	-,22	-,06
To Provide Financial and Other Rewards	-1,875	405	,061	-,090	-,17	-,01

Result: There are some significant differences between the three means. The factor is ranked statistically significant as more important in the first phase than in the second and third. Nevertheless, the difference of the means of the second and third phase is not statistically significant.

Appendix X:

Statistical Analysis XIV

Question: Is there a correlation between

- a) the size of the company (number of employees)
 - b) the company age (number of years operating in the market)
 - c) the outcome of the last change project
- and the organisational willingness to change?

Statistical test: Linear regression (90% confidence interval)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,186	,034	,032	,775

a. Predictors: (Constant), Employees

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	90,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	4,263	,096		44,624	,000	4,105	4,420
	Employees	-,115	,030	-,186	-3,810	,000	-,165	-,065

a. Dependent Variable: Organisational Willingness to Change

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,133	,018	,015	,781

a. Predictors: (Constant), Years Operating in the Market

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	90,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	4,562	,237		19,248	,000	4,171	4,952
	Years Operating in the Market	-,224	,083	-,133	-2,714	,007	-,360	-,088

a. Dependent Variable: Organisational Willingness to Change

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,284	,081	,078	,761

a. Predictors: (Constant), Outcome of the Last Change Project

Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	90,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	4,662	,130		35,922	,000	4,448	4,876
	Outcome of the Last Change Project	-,301	,053	-,284	-5,723	,000	-,388	-,214

a. Dependent Variable: Organisational Willingness to Change

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,343	,118	,111	,748

a. Predictors: (Constant), Employees, Years Operating in the Market, Outcome of the Last Change Project

Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	90,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	5,363	,263		20,378	,000	4,929	5,797
	Outcome of the Last Change Project	-,284	,052	-,268	-5,466	,000	-,369	-,198
	Years Operating in the Market	-,166	,083	-,100	-2,007	,045	-,302	-,030
	Employees	-,093	,031	-,150	-3,010	,003	-,143	-,042

a. Dependent Variable: Organisational Willingness to Change

Result: There are significant correlations. Each of these factors influences the organisational willingness to change.

a) The more employees work for a company, the lower the organisational willingness to change.

b) The more years a company operates in the market, the lower the organisational willingness to change.

c) The better the outcome of the last change project, the higher the organisational willingness to change.

Nevertheless, these three variables only explain about 12% of all cases. The factors do influence the organisational willingness to change significantly however, there are other factors to consider as well (e.g. to pay attention to the identified critical success factors of change management).

Appendix Y:

Statistical Analysis XV

Question: Are there differences in the personal willingness to change according to different hierarchical levels?

Statistical test: Independent-sample t-test (90% confidence interval)

Group Statistics					
	Function	N	Mean	Std. Deviation	Std. Error Mean
Personal Willingness to Change	CEO / Board of Directors	317	4,44	,685	,038
	Project team member	5	3,80	1,095	,490

Independent Samples Test									
		Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	90% Confidence Interval Lower Upper
Personal Willingness to Change	Equal variances assumed	,669	,414	2,068	320	,039	,645	,312	,131 1,159
	Equal variances not assumed			1,312	4,049	,259	,645	,491	-,399 1,689

Result: There is a significant difference in the means. Respondents belonging to the 'CEO / Board of Directors' group show a significant higher personal willingness to change than respondents belonging to the 'project team members' group. Yet due to the small number of respondents belonging to other groups such as the 'project team member' group this is the only statistically significant difference.