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Integrating the organizational change literature: a model for successful change

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Abstract

Purpose – The purpose of this paper is to contribute a roadmap to the change management literature, and provide definitions for describing change types, change enablers and change methods. This paper also proposes aligning the change type with the change method to find the effect on the change outcomes. New researchers can use this paper to get an overview of the change management discipline along with the main concepts that help in understanding the different dimensions of and relationships between the change types and methods in the literature. Managers can use this paper to describe and classify their organizational change situation and select an implementation method for systematic change and for change management.

Design/methodology/approach – This framework is designed based on literature review and experts judgment.

Findings – The results of the research propose a hypothesis that describes the relationships between the change types and methods and how this relationship can affect the change outcomes.

Originality/value – The main contribution of this research paper is to connect three main knowledge areas of change types, change methods and change outcomes. These three areas are standalone subjects in several publications in the literature. Some researchers connected the change types and change methods, while other researchers connected the change methods and change outcomes. But connecting the change types, change methods and change outcomes remains a new research territory to explore.

Keywords Alignment, Change management, Organizational change, Systematic change

Paper type Research paper

1. Introduction

We are living today in a constantly growing global business environment, where change has become the norm for organizations to sustain their success and existence. Industrial and governmental organizations are constantly striving to align their operations with a changing environment (Ackoff, 2006; Burnes, 2004a; By, 2005; Hailey and Balogun, 2002; Kotter, 1996; Mintzberg, 1979; Moran and Brightman, 2001). Organizations and their leaders are also changing as a natural response to the shift in strategic importance, from effectively managing mass markets and tangible properties to innovation, knowledge management and human resources (Dess and Picken, 2000). Many approaches and methods have been suggested to manage change, yet organizations undergoing change vary significantly in their structure, systems, strategies and human resources.

Organizations need an integrated approach to drive systematic, constructive change and minimize the destructive barriers to change, as well as addressing the consequences of making the change. In implementing change, different definitions and methods have been proposed to manage change; however, organizations still report a high failure rate of their change initiatives. The literature provides many cases

on organizational change; yet, the success rate of change initiatives is < 30 percent (Balogun and Hope Hailey, 2004; Beer and Nohria, 2000; Grover, 1999). And more recent articles note the fact that this rate is not getting any better (Jacobs *et al.*, 2013; Jansson, 2013; Michel *et al.*, 2013; Rouse, 2011). Those failure rates indicate a sustained need for investigating and finding what factors increase the probability of successful organizational change and debatably imply a lack of a valid framework for organizational change (By, 2005; Rafferty *et al.*, 2013). Reasons behind organizational change failure have attracted only limited attention (Buchanan *et al.*, 2005). Dunphy and Stace (1993) argued that "managers and consultants need a method of change that is essentially a "situational" or "contingency" method, one that indicated how to vary change strategies to achieve "optimum fit" with the changing environment" (p. 905). When reviewing relevance and validity in the available methods, the literature shows a considerable disagreement regarding the most appropriate method to changing organizations (Bamford and Forrester, 2003). With the high variation between organizations undergoing change, a directive change approach or method would not be suitable for all situations as change methods should depend on the organizational context (Michel *et al.*, 2013; Nyström *et al.*, 2013). One-size-fits all methods frequently result in failing change (Kotter and Schlesinger, 2008).

Burnes and Jackson (2011) argue that even writers, who have addressed why change initiatives fail, recognize that reasons go beyond poor planning or lack of commitment to change: "The underlying cause is a clash of values between the organization and the approach to and type of change it has adopted" (p. 135). Conner (1998) believes that organizations have to realize that the drivers of change are all connected and affect each other; any change action has a chain reaction that impacts the whole organization.

Today, successful change management is a major topic for all organizations, and how to successfully achieve organizational change during economic crises is being asked by many organizations (Ashurst and Hodges, 2010). Many writers have suggested methods to implement change; nevertheless, in recent years, it has become more recognized that one or even two methods to change cannot cover the vastly different change situations (Burnes and Jackson, 2011). The growth in theories and methods dealing with change requires having a framework that integrates and categorizes the various methods (Goes *et al.*, 2000). Change methods need to be continuously evolving to align with the environmental factors.

This paper addresses the question: How can organizations align their change type with the most appropriate change method? This paper is divided into six sections. The first section introduces the need for change and the gaps this paper is addressing. The second section reviews and integrates the change literature history and the main authors that addressed change. The third section proposes and discusses a taxonomy to the change literature and discusses the different change types, enablers, methods and outcomes and explains how the alignment concept between the change types and methods. The fourth section discusses opportunities for future research. And the fifth section summarizes the paper with an overall conclusion.

The main contribution of this research to the scholarly literature is to connect the three main knowledge areas of change types, change methods and change outcomes. These three areas are stand-alone subjects in several publications in the literature. Some researchers connected the change types and change methods (Burnes, 2004a; By, 2005; Goes *et al.*, 2000; Meyer *et al.*, 1990), while other researchers connected the change methods and change outcomes (Beer and Nohria, 2000; Burnes, 2004a;

Miller, 1982; Mintzberg, 1979). But connecting the change types, change methods and change outcomes remained a new research territory to explore.

2. A review of the change literature history

This section provides a review of history of change as a discipline and reviews the primary authors that have addressed the different contributing disciplines of change such as: sociology and psychology; management and leadership; and engineering management (EM) and industrial engineering (IE). Figure 1 shows the change literature timeline along with the authors in each area.

As shown in Figure 1, research in change in the areas of psychology and sociology started with the Lewin studies in 1946 in organizational development (OD). Kurt Lewin was a humanitarian who thought that human conditions could only be enhanced by resolving social conflicts (Burnes, 2004b). Lewin is considered the intellectual father of the philosophies of OD, applied behavioral science, action research and planned change. Working during Second World War, Lewin focussed on how to change human behavior, spurring an entire generation of research addressing change and implementing it as a process (Schein, 1988). Lewin's theories inspired studies in the role of human behavior in organizational dynamics. Individuals' and groups' perspectives revealed how people react to organizational change. Figure 2 shows the different perspectives in OD.

As shown in Figure 2, each of the individual theories assumed it was able to translate the human actions correctly (Lovell, 1980; Pavlov, 1960; Skinner, 1974). Looking at group dynamics as part of OD is probably the oldest perspective (Schein, 1969). Group dynamics were identified and defined by Kurt Lewin in 1948; he believed that since organizational structure was becoming more team-based, individuals' behavior must be a function of the group environment and can only be seen and modified in terms of groups.

Supporters of the group dynamics perspective claim that change has to occur on a team level and should concentrate on changing and influencing the norms, roles and values of its members (Cummings and Huse, 1989; French and Bell, 1984). As a result of both perspectives, of individuals and groups, the open systems explanation of OD emerged; the open systems school looks at the organization from a broader perspective. As the name implies, this school views organizations as being open externally to the surrounding environment, and internally where various subunits interact with each other (Buckley, 1968; Scott, 1987). Lalonde (2011) argues that the open systems require ongoing change to adapt to the revolutionary environment and this creates a strategy of continuous learning that becomes integrated within the organizational culture. OD affects the organization by changing the individuals and altering the overall performance; consequently, change is a natural conceptualization of OD (Kezar, 2001). Weisbord and Janoff (2010) promote the idea of participation when discussing organization development and change by introducing "future research." They note that when issues involving people are explored, more creative energy is released, leading to projects that everyone identifies as significant and no one could accomplish alone. In the social studies area, the change management literature has been associated with OD studies. Moreover, it has been argued that change management is a proper replacement for OD as it includes both business and human needs (Worren et al., 1999).

First introduced in the early twentieth century, the discipline of management was introduced by Fayol as a part of general administration and has since emerged as a major focus of research. Fayol is also known for developing the 14 principles of
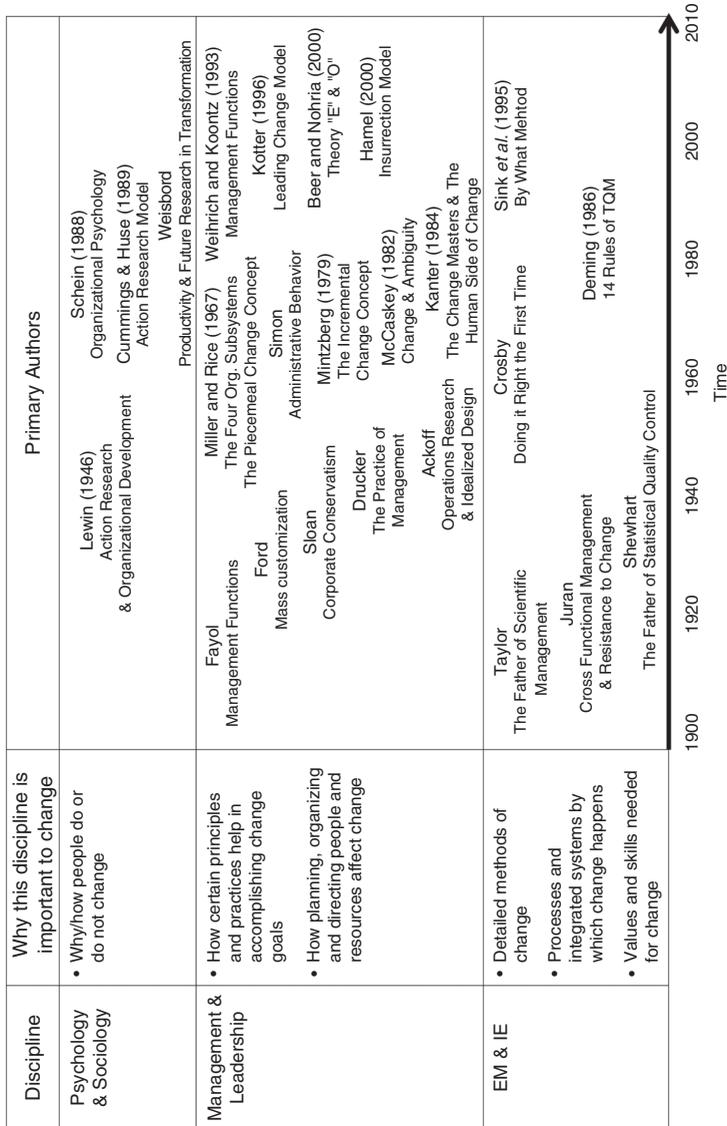
Discipline	Why this discipline is important to change	Primary Authors
Psychology & Sociology	• Why/how people do or do not change	Lewin (1946) Action Research & Organizational Development; Schein (1988) Organizational Psychology; Cummings & Huse (1989) Action Research Model; Weisbord Productivity & Future Research in Transformation
Management & Leadership	• How certain principles and practices help in accomplishing change goals • How planning, organizing and directing people and resources affect change	Fayol Management Functions; Ford Mass customization; Sloan Corporate Conservatism; Drucker The Practice of Management; Ackoff Operations Research & Idealized Design; Miller and Rice (1967) The Four Org. Subsystems The Piecemeal Change Concept; Simon Administrative Behavior; Mintzberg (1979) The Incremental Change Concept; McCaskey (1982) Change & Ambiguity; Kanter (1984) The Change Masters & The Human Side of Change; Weihrich and Koontz (1993) Management Functions; Kotter (1996) Leading Change Model; Beer and Nohria (2000) Theory "E" & "O"; Hamel (2000) Insurrection Model
EM & IE	• Detailed methods of change • Processes and integrated systems by which change happens • Values and skills needed for change	Taylor The Father of Scientific Management; Juran Cross Functional Management & Resistance to Change; Shewhart The Father of Statistical Quality Control; Crosby Doing it Right the First Time; Deming (1986) 14 Rules of TQM; Sink et al. (1995) By What Mehtod

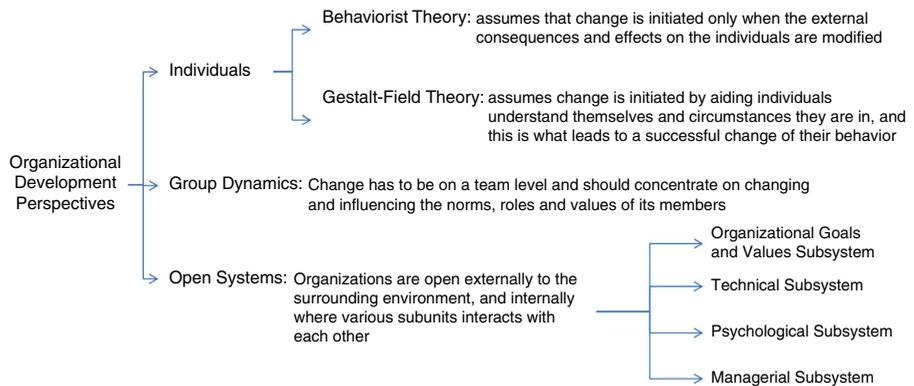Time: 1900   1920   1940   1960   1980   2000   2010

Figure 1.
Change management
timeline

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Figure 2.
Organizational
development
perspectives

management. In 1949, Fayol wrote a book titled *General and Industrial Management*
in which he discusses what he considered the most important 14 principles of
management and explains how managers should organize and interact with staff
(Fayol, 1950). Carter (1986) argues that most management textbooks recognize Fayol
as the father of the first theory of administration. Fayol also divided the functions of
administration or management into five elements: planning, organizing, commanding,
coordinating and controlling (Babcock and Morse, 2002).

In 1974, Drucker defined management as a process of accomplishing tasks with the
help of other people and resources (Drucker, 1974). Drucker argues that business has to
be managed by balancing the different organizational goals and objectives that became
a popular term in management called "management by objectives" (Drucker, 1986).
McFarland (1979) argues "management was originally a noun used to indicate the
process of managing, training, or directing" (p. 5). Mcfarland also defines management
as an administrative process and can be seen as a science or an art.

Weihrich and Koontz (1993) define five main functions of management:

(1) planning, which includes setting a mission and vision and prepare for future
actions;

(2) organizing, which involves creating a formal structure of people's roles in the
organization;

(3) staffing, which means employing people to fill in the positions on the
organizational structure;

(4) leading, which means having the authority to influence and direct employees to
willingly accomplish certain objectives or achieve common goals; and

(5) controlling, which involves following up and correcting employees'
performance to ensure they conform to the goals and objectives set.

Nicholas and Steyn (2008) define management as the execution of all of what is
important to accomplish a task or a system of tasks, or completing a project on time
and with the allocated resources. Ackoff and Emery (1972) discusses the importance
of systematic thinking in managing human behavior. Ackoff (2006) also stresses on the
importance of plans and procedures in providing guidance when managing change.
Authors in management also have proposed methods for managing change at an
incremental rate. Mintzberg (1979) and Miller (1982) define incremental change as an

approach in which organizations progressively alter a few elements or form new strategies. Miller (1982) argues that sometimes the most economical and cost effective change strategy is to adopt the semi-incremental approach with stable intervals punctuated occasionally by revolutionary periods of change. Managing change and its associated uncertainties can be is stressful and poses a lot of physical, emotional and psychological tolls (McCaskey, 1982).

Leadership can be defined as a process whereby a person influences and directs others to accomplish a certain objective or achieve a common goal (Northouse, 2007). Kouzes and Posner (1995) suggest that the five main leadership practices, or what they call the "exemplary leadership," are: "modeling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart" (p. 13). Soderholm (1989) argues that leadership is about the innovation of new ideas and new concepts that brings new desirable outcomes. The entrepreneurship, creativity and innovation embedded in leadership are very important to successfully managing change. In addition, Hamel (2007) believes that mobilizing talent, allocating resources, and formulating strategies are necessary for the organization's profitability and for maintaining the competitive advantage.

A leader is the person who makes sure that the organization is heading in the right direction (Winston, 2004). The continually changing business environment needs quick responses that only a leader can provide. And it is the leaders who have to make the right decisions at the right time to align the organization with the changing environment, and who motivate the people to work and implement the changes (Goleman, 2000; Haidar, 2006). In complex and ambiguous situations, managers have to deal with major uncertainties that arise; those who can successfully deal with this uncertainty distinguish themselves and become key people within the organization and gain great impact and authority (Thompson, 1967).

As defined by Griffith-Cooper and King (2007), change leadership refers to "a set of principles, techniques, or activities applied to the human aspects of executing change to influence intrinsic acceptance while reducing resistance" (p. 14). Change leaders are people with creative visions, who are able to foresee a new reality and how to get to it. Change leaders have to understand how their employees perceive change and ensure they accept the change and are ready for it. They have to motivate employee to take responsibility and be an active part of the change (Gioia *et al.*, 2013; van *et al.*, 2013). Kanter (1984) describes them as the architects or ultimate masters. Kanter (2000) suggests that the classic skills for change leaders are:

(1) "Tuning in to the environment.

(2) Challenging the prevailing organizational wisdom.

(3) Communicating a compelling aspiration.

(4) Building coalitions.

(5) Transferring ownership to a working team.

(6) Learning to preserve.

(7) Making everyone a hero" (p. 34).

Beer and Nohria (2000) identify two basic change theories for leading change: Theory E that is based on economic value, and Theory O that is based on organizational capability. Theory E represents the "hard" approach to change; its focus is the

shareholder value and usually involves using economic incentives, layoffs and downsizing. On the other hand, Theory O represents the "soft" approach; its focus is developing the organizational culture and people's capabilities and usually welcomes people's involvement, feedback and reflections. Acts of leadership enable the organization to respond to the changing environment by creating a vision and making prompt decisions in terms of resources and technologies (Ekvall and Arvonen, 1991; Masood *et al.*, 2006). Therefore, leaders have to be aware how to deal with the different perceptions and cultures when implementing change (Bayerl *et al.*, 2013). Leaders can be seen as change makers who guide the organizations into the desired future state or performance. Mahmood *et al.* (2012) argue, "Management and leadership are two overlapping terms which confuse many people. Leadership and management are complementary for each other and they go hand in hand" (p. 513).

Research on change in the fields of EM and IE began in 1911 with the early work of Frederick Taylor, the "father of management sciences." Taylor introduced the "Piece Rate System" that was concerned with improving the efficiency of shop-floor operations (Babcock and Morse, 2002). When implementing change, the values of EM and IE can be critical for change efforts to succeed.

EM is about applying engineering values and skills in coaching people and managing projects (Lannes, 2001). As per the US Department of Education Institute of Education Sciences: Classification of Instructional Programs, EM and industrial managements (IE) provide proper experience in financial management, industrial and human resources management, industrial psychology, management information systems, quality control and operations research. IE, as defined by the Institute of Industrial Engineering, involves the design, improvement and installation of integrated systems of people, materials, information, equipment and energy. IE draws upon specialized knowledge and skills in the mathematical, physical, and social sciences together with the principles and methods of engineering analysis and design, to specify, predict, and evaluate the results to be obtained from such systems. EM and IE are both important in order to manage change, and the inclusion of the human factor within them gives EM and IE a unique distinction among other engineering disciplines (Baker, 2009).

In IE, five authors provide insight into change methods: Shewhart, Deming, Juran, Crosby and Sink. Shewhart was the first to improve the traditional production process and introduced the scientific method to describe the process of mass production. Three steps were involved: specification, production and inspection (Shewhart and Deming, 1945). Shewart later revised this idea into a cyclical concept, developing what is now known as the Shewhart cycle. In the 1950s, Deming revived and modified Shewhart's cycle, incorporating additional problem-solving approaches; ultimately Deming developed the plan-do-study-act (PDSA) cycle. The PDSA cycle is one of the most popular problem solving methods and continues to be applied today (Moen and Norman, 2010).

Juran is considered one of the great authors in quality and management; he is well recognized for introducing the human element into quality (Bailey, 2007). Juran founded an institute in 1979 that offers benchmarking, consulting, and training services to implement programs that aim to improve business results. In 1986, Juran published the *The Quality Trilogy* that later was renamed *The Juran Trilogy*. *The Quality Trilogy* defines three management processes required by organizations to improve: quality planning, quality control and quality improvement (Juran *et al.*, 1962).

Juran promoted change and believed it eventually reduces the costs of waste within an organization (Juran, 1986).

Crosby has also been part of the quality management revolution. He popularized the idea that doing things right the first time in an organization, through simple preventive action, adds no cost to an organization and improves overall outcomes. Therefore, Crosby believed that quality is free (Crosby, 1979). In addition, Crosby (1984) emphasized the importance of management in improving the quality in an organization. He argued that it is possible to have zero defects in all types of organizations through serious and active involvement of management in problems solving and initiating solutions (Crosby, 1984).

Sink (1985) focussed his efforts on productivity basics and productivity management. He introduced evaluation strategies and techniques that can be used for developing measures in organizations. Sink and Tuttle (1989) introduced the "performance improvement planning process" and offered a roadmap for transforming an organization into what they called "the organization of the future" where organizational performance is improved using effective measurement systems. In addition, they recognized seven change performance measures: effectiveness, efficiency, quality, productivity, innovation, quality of work life and profitability and "budgetability." Next, Sink *et al.* (1995) presented methods and techniques to best implement change theories, including the principles of quality guru Deming. They provided a solid ground for organizations to master the implementation of improvement initiatives.

Since organizations undergoing change vary greatly in their structure, systems, strategies and workforce, this chapter proposes that the interconnection between the fields of: sociology/psychology, leadership/management and EM/IE. This intersection is necessary to understand and apply the various types of organizational change and change methods, and consequently for change to succeed. In summary, sociology/ psychology explains why and how people respond to change. Leadership/management provides principles and practices that help in planning, organizing and directing people and resources accomplishing change. And EM/IE provides detailed methods of change, processes and integrated systems by which change happens and values and skills that are needed for change. This understanding is necessary to better comprehend and manage change as well as the people and resources involved in the change process, ultimately leading to desired change outcomes.

3. Taxonomy of change literature
Reviewing the available change literature, this section proposes a taxonomy to classify the change literature. This taxonomy views the literature as covering four main areas: change type, change enablers, change methods and change outcomes. The proposed taxonomy of change is shown in Figure 3. The first element of the taxonomy is the change type that can be defined as the characteristics that describe the form of change and are grouped under two categories: scale of change and duration of change. Section 3.1 explains change types in further detail. The second element is the change enablers that can be defined as the factors that increase the probability of change success. Section 3.2 explains change enablers in further details. The third element is the change methods that can be defined as the actions taken to deal with change and are grouped into two categories: systematic change methods and change management methods. Section 3.3 explains change methods in further detail. And the fourth element consists of the change outcomes, defined as the results or consequences of change on the organization. Section 3.4 explains the change outcomes in further detail.
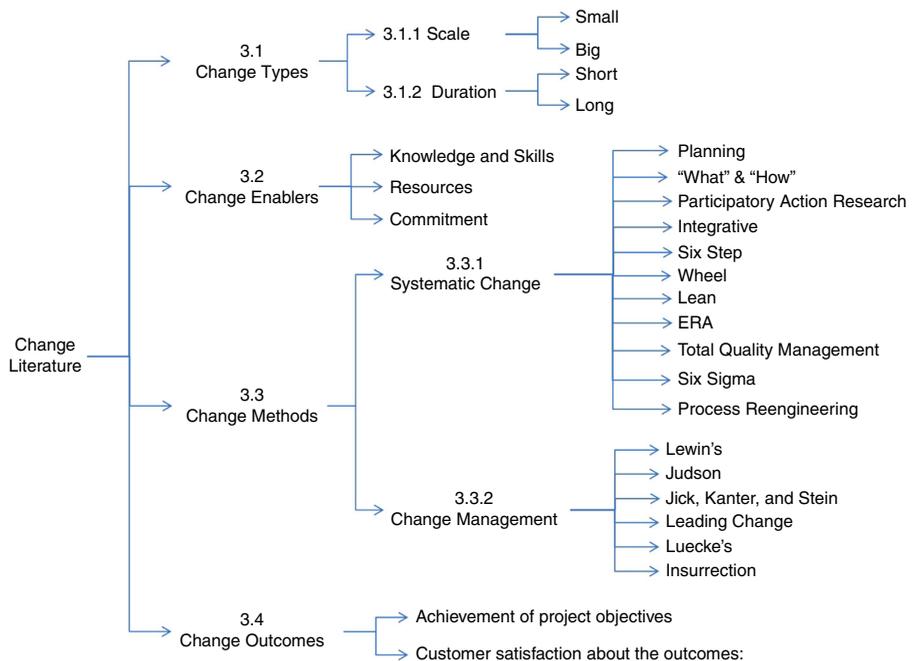
Figure 3.
Taxonomy to the
change literature

3.1 Change types

Change type can be defined as the essential characteristics that describe the kind and form of change and the qualities that make change what it is. This study proposes that when the change type is clearly identified, then a manager can choose the most appropriate method to promote change.

Moore (2011) notes that "understanding where your organization sits today and what processes it needs to improve, change or transform is the first step toward introducing business process change discipline" (p. 4). Meyer *et al.* (1990) classifies change types based on two dimensions. The first dimension is the level at which change is occurring: the organization's level vs the industry level. The second dimension is the type of change taking place: continuous change vs discontinuous change. Goes *et al.* (2000) classify change based on three dimensions. The first and the second dimensions, as in Meyer *et al.* method, are the level and type of change. The third identified dimension is the mode of change: deterministic and prescribed vs generative and voluntary in type. Such classifications and other organizational aspects have been considered when developing the change types in the taxonomy shown of this paper. Change types are grouped under two categories: scale of change and duration of change.

3.1.1 Change scale: small vs large. Change scale can be defined as the degree of change required to reach the desired outcome. Large scale change can be defined as a "holistic alteration in processes and behaviors across a system that leads to a step change in the outputs from that system" (p. 265) (Oldham, 2009). It engages all stakeholders in the change process and requires having strong collaboration and visionary leadership in order to succeed (Boga and Ensari, 2009; Boyd, 2009; Brigham, 1996; Margolis *et al.*, 2010; Oldham, 2009). Boyd discussed the effect of large scope

change on the organization. He believed that for such changes efforts to take place, it needs to be customized to align with specific departmental and units culture (Stock, 1993). Even with the numerous studies and theories tackling large scope change, there are contradicting results about its advantages.

Furthermore, Kotnour *et al.* discussed the importance of strategy, clear roles and aligning processes, resources and workforce to accomplish big change in the organization. Bennett and Segerberg (2012) also believed that large-scale change requires high levels of organizational resources.

Small scale change can be defined as minor in less significant change taking place at the organization. Small scale change is easier to initiate and manage, and does not require the level of leadership needed in big scale change (Boga and Ensari, 2009; Stock, 1993). Berwick and Berwick and Nolan argued that a steady and small scale change and improvement in healthcare can be a better approach when compared to large scale change to help pilot, evaluate, modify and implement quality improvement projects (Berwick, 1998; Berwick and Nolan, 1998).

3.1.2 Duration: short vs long term. Change duration can be defined as the time period over which change takes place. Long-term change can be challenging to an organization and requires strong leadership that actively involves employees throughout the change process (Harrison, 2011; Rachele, 2012; Schalk *et al.*, 2011). Human behavior needs to be taken into consideration when dealing with long-term change. Harrison argued that long-term change rarely, if ever, is achieved without powerful leaders (Harrison, 2011). Rachele believes that a method like participative action research can be an effective component of successful long-term change initiatives as it allows people to be involved in the change. People's involvement positively affects their attitude toward change as it values their past experiences which influences change success (Shields, 1999).

Short-term change has been recognized in the literature as being more successful when compared to long-term change (Shields, 1999; Ulrich, 1998). Organizations that predict small changes in conditions, and respond promptly to these changes, gain a competitive edge. Ulrich (1998) argues that the pace of response is what determines success in dealing with change; "winners will be able to adapt, learn and act quickly, losers will spend time trying to control and master change" (Chrusciel and Field, 2006, p. 130). Berwick (1998) suggests that short-term changes that take place in relatively small, ongoing processes can be rich opportunities to implement change and improvement initiatives, especially in complex systems.

3.2 Change enablers

Organizational change takes place over time; to increase the probability of success, it is important to plan for change, setting a clear timeframe and addressing the critical factors that affect change success (Chrusciel and Field, 2006; Kenny, 2006; Miller and Friesen, 1982).

Studies in the literature offer a broad range of definitions and examples of change enablers including: a stated vision and goals for the change direction, defined roles of employees involved in change, leadership guidance or commitment in involvement, training employees and having strong human resources to measure and evaluate performance (Ackerman *et al.*, 2001; Bridges and NetLibrary, 2003; Griffith-Cooper and King, 2007; Kenny, 2006; LaMarsh, 1995). Proper planning and analysis help identify the gap between where the organization is now and where it wants to be.

The organization needs to identify the environmental conditions required for the change plan to succeed (Hotek and White, 1999; Kotter, 1996). Weber and Weber (2001) argue that people's perception of organizational readiness for change can also affect change success. Organizational readiness for change has been defined as the "organizational members' change commitment and self-efficacy to implement organizational change" (Weiner, 2009, p. 68). The positive attitude and strong commitment to change are main outcomes of the readiness to change (Rafferty et al., 2013).

Anderson and Ackerman Anderson (2001) suggest that the main three aspects of a comprehensive change strategy are content, people and process. Content refers to the strategy, systems, technologies and work practices. Technology is key to drive change and plays a strategic role in facilitating change and making it part of the organizational culture (Bayerl et al., 2013). People refer to humans involved in the change, and their behavior when implementing change. This aspect has also been named as the personal dimension of change. The deeper the organizational change, the more important for people to alter their own values and perspectives to align to the overall organizational perspective (Moran and Brightman, 2001). van et al. (2013) argue that in order to increase the probability of change success, more attention needs to be given to the people. The third aspect of change is process which represents the actions and procedures carried out to implement change. Communication and regular meetings with employees facilitates implementing change (van et al., 2013). Therefore, the proper alignment between content, people and process is what leads to successful change.

Smith (2002) conducted a study to determine the major reasons behind organizational change failure and change success. A questionnaire was used to collect data, and the respondents were 210 managers from different industries and job-functions across North America. The questionnaire results identified the main factors affecting successful change as: "visible and sustained sponsorship, addressing the needs of employees, and having strong resources dedicated for the change" (Smith, 2002, p. 81). Smith (2002) also found that change initiatives should "align with business strategies, and all executive and departmental levels should be aligned in support of the change" (p. 82).

From reviewing previous studies in the literature, Kotnour (2011) found that a strategic, systematic orientation to change led to organization's retaining the necessary skills to successfully complete their work processes. However, without a systematic approach, results were negative. Typical negative results were losing institutional memory, knowledge, and skill to perform the work resulting in a decrease in quality, improvement/innovation lacking and an increase in employee burnout. Sink et al. (1995) offer nine integrated "fronts" for successful change to ensure positive results are achieved. These fronts have been grouped with other research findings to define what the organization needs to have in order to enable successful change and enhanced organizational performance. The three enablers are: knowledge and skills, resources and commitment, as shown in Figure 4.

3.3 Change methods
Change methods can be defined as the actions carried out by managers to deal with change and are grouped under two categories: first, systematic change methods and second, change management methods.

3.3.1 Systematic change methods. Systematic change methods involve a certain set of processes and tools to help the management team make a series of start, stop and continue decisions (Zook, 2007). Several systematic change methods have been

Figure 4.
Change enablers

proposed in the last 20 years; these methods share many processes such as: scouting
and diagnosing the current situation, planning and communicating change and finally
implementing and instilling the new changes. Change theories traditionally have
promoted incremental process adjustment and infrequent small transitions that are
mainly planned and steered by management (Thompson, 1967). More recent change
methods have become more systematic, cyclical and integrative, involving higher
scales of organizational change (Armenakis and Bedeian, 1999; Bullock and Batten,
1985; Galpin, 1996; Kolb and Frohman, 1970; Lippitt, 1958; Singh and Shoura, 2006).
Many authors have developed different systematic change methods; eleven
methods have been identified and subsequently divided under three main theories as
shown in Figure 5.

The planning method. Lippet, Walson and Wesley proposed the planning
method in 1958. This method involves a cyclical process that requires continuously
improving the change process by exploring the organizational situation after
stabilizing the change (Kolb and Frohman, 1970; Lippitt, 1958). This method consists of
seven consequential steps and involves exploring and diagnosing the organizational
situation, planning for the change actions that need to be taken, applying the change
and lastly stabilizing and evaluating the change.

"What" and "how" method. The "what" and "how" method was proposed by Conner
(1998) in his book *Leading at The Edge of Chaos*. Conner argues that change has to be
dealt with as a compound system consisting of multiple processes that can involve
chaos. His method emphasizes the importance of strong leadership to direct the change
by providing the overall vision and strategy and deciding on individuals'
tasks. Conner's method assumes that the future of business will be filled with chaos.
Therefore, this method stresses the role of leadership in having conscious competence
to successfully implement change (Conner, 1998).

Participatory action research (PAR). PAR gained popularity in the 1960s and
involves examining an issue systematically from the perspectives and lived
experiences of the people involved and affected by the resulting actions of change
(French, 1969; Helmich and Brown, 1972; Schein, 1969; Tichy, 1974). Planned action
research can be a very successful method for change as it gathers input from the people
undergoing change, making them feel more involved. And when employees feel that
change belongs to them, this holds them more responsible to ensure change succeeds.
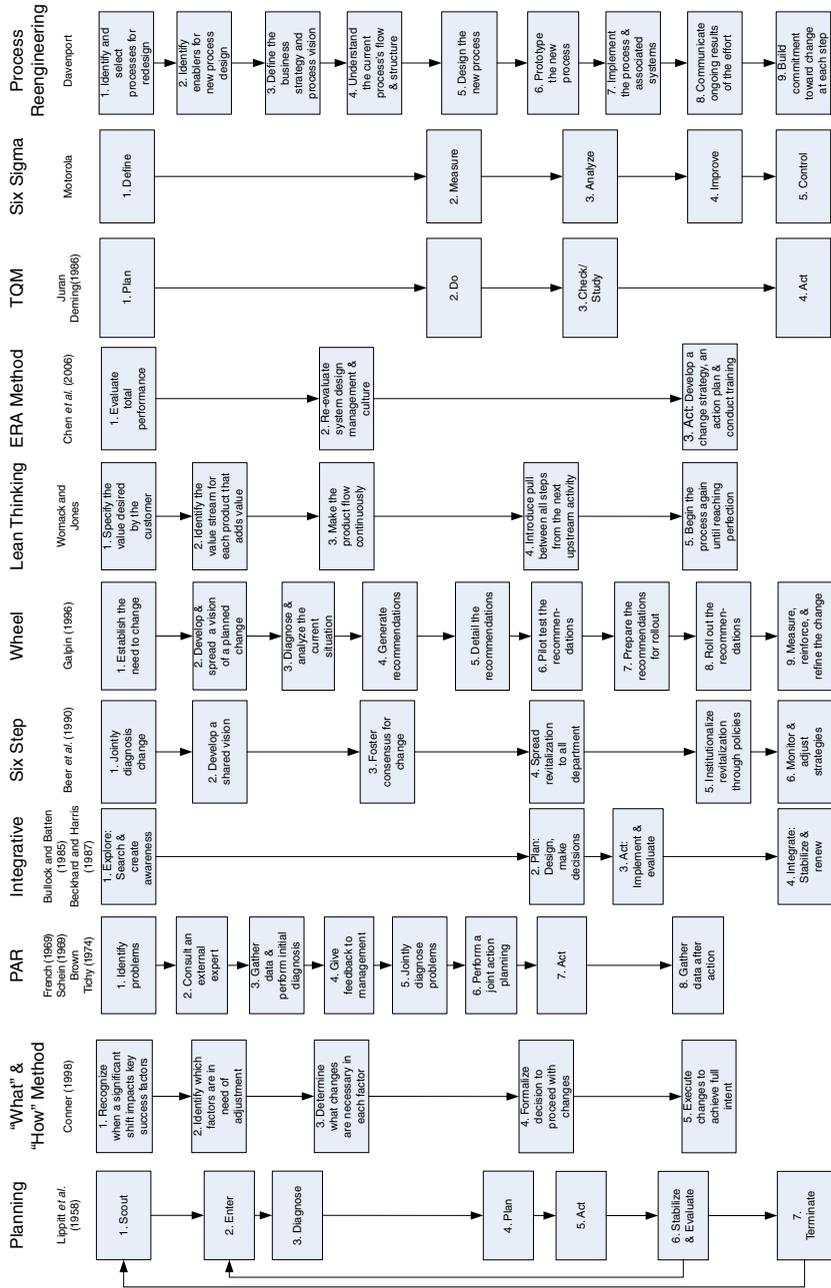The participative nature of action research was also addressed by Ackoff, 2006, who

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Figure 5.
Systematic change
methods

stressed how it can take in and involve people in organizations undergoing change. The involvement of people in processes, products and in problem solving eventually leads to cultural change.

The integrative method. In the 1980s, the integrative method interested many scholars of change research. As the name implies, this method integrates various methods and approaches in the literature into one comprehensive method to systematically deal with change (Bullock and Batten, 1985). Bullock and Batten (1985) and Beckhard and Reuben (1987) suggest that the integrative method of change includes exploring the organization and creating awareness, planning for the change, implementing and evaluating the actions taken and lastly integrating and stabilizing the applied change.

Six step. The six-step method was introduced by Beer, Eisenhardt and Spector in 1990. This method promotes the concept of "task alignment," which can be defined as "reorganizing employee roles, responsibilities, and relationships to solve specific business problems" (Beer *et al.*, 1990). According to these authors, the six-step method is best implemented in small departments and units where tasks are easily determined and can be modified to affect the overall corporate performance. As the name implies, the method consists of six steps and includes building commitment for change through actively involving people in identifying the problems, developing shared goals for the change and implementing the actual change. Beer, Eisenstat and Spector argue that this method encourages small changes that allow for individual learning and can reduce the resistance to change.

Wheel method. The wheel method was proposed by Galpin (1996) in his book *The Human Side of Change*. He proposed a method that consists of nine steps that form a wheel to effectively involve people in the technical change process. Galpin argues that most organizational change methods fail when people are not taken into consideration. The wheel method starts with establishing the need for change, carefully planning for the change process, implementing it and dealing with behavioral change at the organization (Galpin, 1996). Galpin acknowledges the importance of taking account of the organization's culture, policies, customs, norms and reward system when implementing change (Armenakis and Bedeian, 1999).

Lean thinking. Lean thinking became popular in the 1990s after being adopted by Toyota (Holweg, 2007). Lean production focusses on producing what is needed, when it is needed, with the minimum amount of materials, equipment, labor and space. Lean thinking originated with driving out waste so that all work adds value and serves the customer's needs. Womack and Jones (2003) suggest that the lean change method revolves around three fundamental areas: purpose, process and people. The history of lean change has evolved over more than a 100-year period of time, beginning with Frank Gilbreth who based his work on "speed work" in the early 1900s. Gilbreth used to analyze each task performed at his construction firm to eliminate unnecessary motions and he soon became one of the best-known contactors in the world (Babcock and Morse, 2002).

Evaluation, re-evaluation, and action (ERA) method. The ERA method was proposed by Chen, Yu, and Chang in 2006. This method is customer-oriented and consists of the three main phases noted in its name. The authors argue that when compared with other change models, "the ERA model provides a more detailed picture of how the micro-processes of change work in an organization" (Chen *et al.*, 2006, p. 1301). The first two phases involve analyzing the current organizational situation,

values and systems, identifying the customers' needs, then reanalyzing the organizational situation, values and systems. The third phase represents the actual implementation of change that involves developing a change strategy and a comprehensive action plan (Chen *et al.*, 2006).
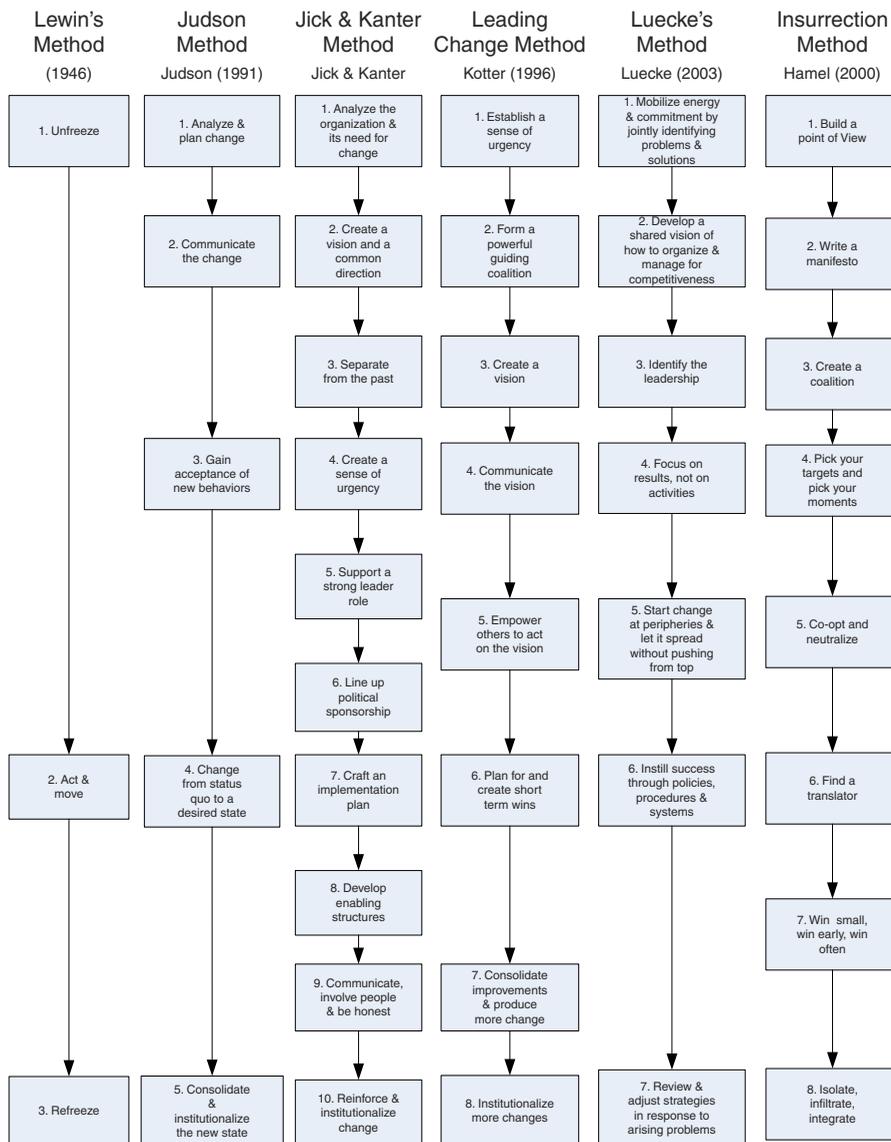
Total quality management (TQM). TQM gained popularity in the 1950s and later became what is known today as the PDCA cycle (acronym of Plan, Do, Check and Act). Juran was the first quality guru to identify the three main aspects of quality: planning, improvement and control cycle; in 1962, he provided methods and tools to achieve organizational excellence (Juran *et al.*, 1962). Deming, another famous quality guru, also provided a simple yet highly effective technique that serves as a practical tool for problem solving and carrying out continuous improvement in the workplace (Moen and Norman, 2010). The American Society for Quality calls this technique the Deming Cycle (PDCA cycle).

Six Sigma. Six Sigma was first implemented at Motorola in 1987; this method has positively affected their return on investment ever since (Gill, 1990; Mader, 2008). Schroeder *et al.* (2008) argue that, although Six Sigma has been enthusiastically adopted in the industry, little research can be found about this in the literature. Six Sigma employs highly structured cyclical steps to improve organizational performance and eventually achieve a maximum process incapability rate of 3.4 incidents per million opportunities (ReVelle, 2004). This method uses an approach called the DMAIC cycle that stands for: define, measure, analyze, improve and control. This cycle follows a methodology inspired by Deming's PDCA cycle (Linderman *et al.*, 2006).

Process reengineering. Process reengineering can be defined as a redesign tool that aims to achieve radical improvements and innovations in organizational processes using certain performance measures such as cost, quality, service and speed (Hammer and Champy, 1993). Reengineering is a "term coined by Michael Hammer in 1990 to describe the process of change that certain organizations were undertaking in order to achieve dramatic process improvements" (Browne and O'Sullivan, 1995). Business processes involve activities that aim to add value to services or products. These processes include the traditional processes such as sales and production and other internal processes that aim to improve and sustain other organizational functions (Pereira and Aspinwall, 1997).

3.3.2 Change management methods. Change management methods are broader and more conceptual when compared to systematic change methods. Change management methods tackle change on a large scale and include a range of intervention strategies (Worren *et al.*, 1999). These methods help management align the change initiative with the overall mission and the organizational strategy by proper planning and creating a vision that involves people in change (Grover, 1999). Change management processes assist in making change part of the organizational culture. Worren *et al.* (1999) note that the underlying theory and framework of change management include "principles and tools from sociology, information technology, and strategic change theories" (p. 180). Many authors have developed different change management methods; six of these are identified in Figure 6.

Lewin's method. In 1948, Lewin suggested that the change process start with unfreezing the current state of the organization by creating incentives, implementing the desired changes by selecting the right leadership style and ends with refreezing the state when the organizational desired change has been reached. Lewin stressed the need to include dialogue in solving problems, and believed that successful problem

Lewin's Method (1946)	Judson Method Judson (1991)	Jick & Kanter Method Jick & Kanter	Leading Change Method Kotter (1996)	Luecke's Method Luecke (2003)	Insurrection Method Hamel (2000)
1. Unfreeze	1. Analyze & plan change	1. Analyze the organization & its need for change	1. Establish a sense of urgency	1. Mobilize energy & commitment by jointly identifying problems & solutions	1. Build a point of View
	2. Communicate the change	2. Create a vision and a common direction	2. Form a powerful guiding coalition	2. Develop a shared vision of how to organize & manage for competitiveness	2. Write a manifesto
	3. Gain acceptance of new behaviors	3. Separate from the past	3. Create a vision	3. Identify the leadership	3. Create a coalition
		4. Create a sense of urgency	4. Communicate the vision	4. Focus on results, not on activities	4. Pick your targets and pick your moments
		5. Support a strong leader role	5. Empower others to act on the vision	5. Start change at peripheries & let it spread without pushing from top	5. Co-opt and neutralize
		6. Line up political sponsorship			
2. Act & move	4. Change from status quo to a desired state	7. Craft an implementation plan	6. Plan for and create short term wins	6. Instill success through policies, procedures & systems	6. Find a translator
		8. Develop enabling structures			7. Win small, win early, win often
		9. Communicate, involve people & be honest	7. Consolidate improvements & produce more change		
3. Refreeze	5. Consolidate & institutionalize the new state	10. Reinforce & institutionalize change	8. Institutionalize more changes	7. Review & adjust strategies in response to arising problems	8. Isolate, infiltrate, integrate

Figure 6. Change management methods

solving requires active participation of change agents in understanding the problem, finding a solution and implementing it. A little more than 50 years later, Burnes (2004b) notes that change methods stemming from Lewin's method from the 1940s are more focussed on revolving groups' conflicts and developing individuals.

Judson method. Judson (1991) proposed a method for implementing change that consists of five phases starting with analyzing the organization, planning for change, communicating it to people and finally reinforcing and institutionalizing it. Judson

identifies the expected barriers that might occur in each phase and what actions can be taken to minimize such barriers. He considers the resistance to change as the biggest barrier, which occurs not only to the employees who are directly affected by the change, but also to lower level managers who usually play an essential part in implementing change.

Kanter, Jick and Stein method. Kanter *et al.* (1992) developed a comprehensive method to implement change consisting of ten phases. Their method starts with analyzing the organizational situation, creating a plan and vision, implementing change with the support of strong leader and finally communicating and institutionalizing change. Jick, Kanter and Stein take into consideration many internal and external forces that might affect change as well as major processes involve, and they stress the importance of having "change agents"; people who are responsible for the formulation and implementation of the change (Ford *et al.*, 2008).

Leading change. Kotter proposed the leading change method in 1996. He designed a change method consisting of eight steps. Kotter (1996) promoted his method as holistic, noting that organizations could use his method to avoid failures in implementing change and increase their chances of success. Kotter identified the most common pitfalls that managers make in attempting to implement change and offered his change method to overcome these pitfalls. His method starts with establishing a sense of urgency by relating the for change to real potential crises, building a team trusted to support change, having a vision and strategy, communicating the vision, implementing the change and planning short term win, consolidation gains and constantly institutionalizing change.

Luecke method. In 1990, Luecke proposed a change method that carries his name. Luecke (2003) stressed the importance of accepting the need and urgency for change. He believed that seeing change as an opportunity and not as a threat allows it to succeed and sink deeply within the organizational culture. Luecke's method stresses the importance of strong leadership in supporting change and motivating employees to accept change. The method also addresses the different reactions of employees to change, which allows managers to help their employees accept change and its consequences. Luecke's method starts with joint identification of existing problems and their solutions, developing a shared vision, identifying leadership, implementing change and finally monitoring and adjusting strategies for any problem in the change process.

Insurrection model. Hamel proposed the insurrection model in 2000. Hamel argues that radical, nonlinear changes and innovations in an organization, that are different than the changes competitors are doing, are necessary to maintain success and competitive edge and create new wealth opportunities. Hamel (2000) developed eight steps for successful change that starts with having a strong plan, writing policies, creating a support team, implementing change and finally integrating the change and institutionalizing it in the organization. Hamel stresses that change has to be a continual cycle of "imagining, designing, experimenting, assessing, scaling innovative ideas" (Hamel, 2000).

3.4 Change outcomes
Change outcomes can be defined as the consequences of change on the organization. Measuring outcomes can contribute to OD and success if the measurement systems are properly developed and employed (Sink and Tuttle, 1989). Sink and Tuttle (1989) claim

that the best measurement systems are "a blend of the objective with the subjective, quantitative with quantitative, intuitive with explicit, hard with soft, and judgment with decision rules or even artificial intelligence" (p. 1). Measures provide management with new insights into why the system performs the way it does, where it can be improved and where the system is in control or out of control. Defining and setting the goals of performance measures are one of the most important decisions facing organizations as they are a function of the organizational strategy, and can only be achieved when the strategic objectives are clearly defined; performance measures help organizations evaluate the execution of objectives and management of operations by providing the needed information for making decisions (Gunasekaran and Kobu, 2007; Ittner and Larcker, 1998; Wouters and Sportel, 2005). Therefore, for measuring change, on must be clear on the change objectives.

This paper defines the change project outcomes as the ending result of the change project. A change project is deemed successful if it is completed within the predetermined objectives (i.e. completed within budget, within schedule, conforming to customer requirements and satisfies the main stakeholders) (Project Management Institute Inc., 2004; Kendra and Taplin, 2004; Nicholas and Steyn, 2008). The outcomes are classified under two main categories:

(1) Achievement of project objectives: the ability of the change project to be completed within the allocated cost: the expenditures in terms of resources vs the set budget for the change project, schedule: the duration or time required to achieve the change project deliverables vs the target duration, and technical performance: the ability to meet scope and requirements and achieve the end result.

(2) Customer satisfaction about the outcomes: the ability of the project outcomes to meet or exceed customers' expectations (customers refers to change team, organizational employees and change project sponsors).

3.5 Alignment
Since change affects all organizational aspects, including strategy, internal structure, processes, people's jobs and attitudes and overall culture, organizations need to realize that change can be neither quick or straightforward, but has to be more flexible and very well planned (Kanter *et al.*, 1992). To properly plan for change, this research proposes aligning the change type and change method to achieve the desired change outcomes.

Miller (1992) and Sabherwal *et al.* (2001) recognize the importance of alignment in effectively measuring outcomes and enhancing organizational performance. Bayerl *et al.* (2013) suggest that organizational change is created by aligning the organization's existing structure with the new change processes and patterns. Alignment is defined as the extent to which two or more organizational dimensions meet the predefined theoretical standard with mutual agreement (Hatvany *et al.*, 1982; Jarvenpaa and Ives, 1993; Sabherwal *et al.*, 2001). On the other hand, Kotnour *et al.* (1998) define organizational alignment as "organizations doing the right thing, the right way with the right people at the right time" (p. 19). Kotnour *et al.* also suggest two classifications of organizational alignment: external and internal. External alignment can be defined as matching the organization's products and services to the market and customer needs. External alignment shapes the internal alignment by defining the goals and core values and processes.

Venkatraman (1989) identifies different perspectives of organizational alignment or fit and notes the key characteristics of each, including underlying conceptualization, number of variables, measure of the fit or alignment and the analytical schemes to measure the alignment. In order to align two independent dimensions or variables with a high degree of specificity, Venkatraman suggested two alignment perspectives: matching and moderation:

(1) *Matching*: alignment in matching can be defined as finding a connection or link between two independent variables. Venkatraman (1989) notes that the effects of matching on dependent variable(s) are tested to highlight the connection and matching levels between the independent variables. Venkatraman (1989) concludes that the fit or interaction between two variables is developed without any interaction between them. The matching perspective can be investigated using deviation score analysis or analysis of variance.

(2) *Moderation*: alignment in moderation can be defined as finding a connection or link between two variables (dependent and independent variable) when a third predicting factor is involved. Venkatraman (1989) notes that, in the moderation perspective, the effect that an independent variable has on a dependent variable is reliant on the level of a third variable, termed here as the moderator. Venkatraman (1989) concludes that the fit or interaction between the predictor (independent) and the moderator is what affects the criterion variable (dependent). The moderation perspective can be investigated using multiple regression analysis.

This research paper aligns two independent variables, change type and the change method to find the effect on a third variable, the change outcome. Therefore, this research uses the "matching" perspective to analyze the alignment (Venkatraman, 1989). This research paper proposes aligning the change types with the most appropriate change method to achieve the desired change outcomes as shown in Figure 7.

Dunphy (1988) developed a situational model that aligns two dimensions: the scale of change and the style of leadership required to implement change. However, other change classifications need to be taken into consideration. Besides, while leadership is critical to implementing change, not following an appropriate method to implement change will mean the desired outcomes will not be achieved. Change enablers discussed in Section 3.2 are used to align change types with change methods. Each change type
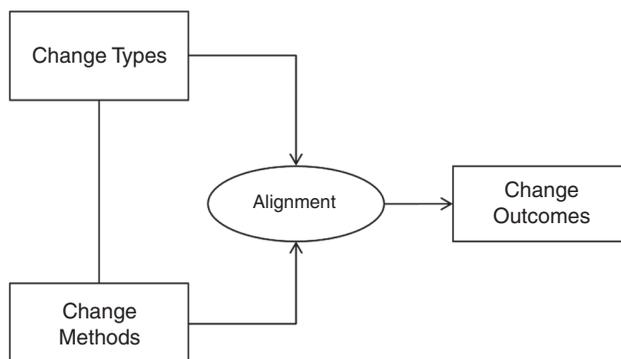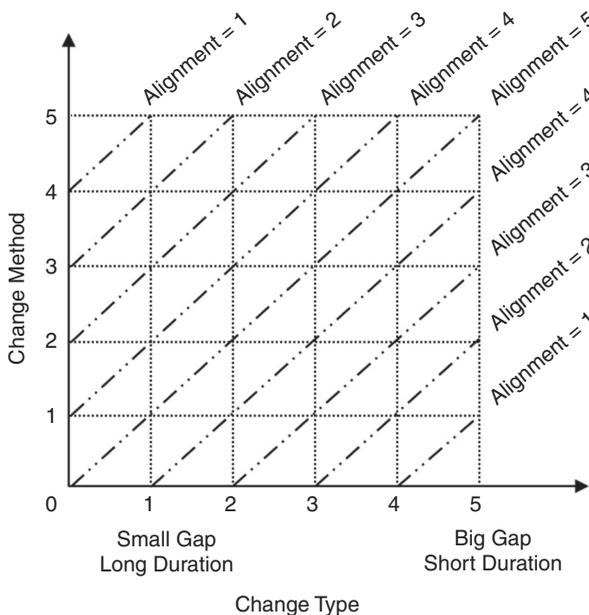
Figure 7.
The proposed alignment model

needs certain factors to succeed and these factors are mapped against the systematic change and change management methods to select the methods most likely to generate the desired outcome. The alignment matrix showing the relationship between change types and method is shown in Figure 8.

The values of the change type (X1) and the change method (X2) are specified as the positive axes of two dimensional coordinates, where X1 is the horizontal axis and X2 is the vertical axis. For the change type (X1) construct, the increased values indicate the increased level, where 1 means the lowest level (small gap and short duration) and 5 means the highest level possible (big gap and long duration). For the change method (X2), the increasing values indicate a better application of the change methods during the change project, where 1 means that the method was poorly applied and 5 means that the method was well applied. The alignment is determined by the distance between the line passing through the origin (0, 0) with the slope of 45 degrees at the point with the coordinates of the change type (X1) and change method (X2) meet. The diagonal line passing through the origin represents the highest alignment possible where the value of the change type equals the value of the change method. The graphical representation of the alignment as matching is given in Figure 8. The alignment is consequently calculated using the formula: Alignment = 5 − (|change type − change method|). This research paper suggests that the higher the value of the alignment, the higher the likelihood that change will succeed and result in satisfactory outcomes.

4. Future research
This research paper focussed on reviewing the change types and methods discussed in the literature. It is proposed in this paper that each change type requires a different method to be followed to reach the desired outcomes. Measuring change outcomes can

Figure 8.
The graphical
representation of
the alignment
between change
type and method

contribute to the OD and success if the measurement systems are properly developed and employed (Sink and Tuttle, 1989). Measures provide management with new insights into why the system performs the way it does, where it can be improved and when the system is in control or out of control.

Future research should extend the current suggested alignment between the change types and change methods and should investigate the relationships outlined in the proposed conceptual model. Hypotheses can be proposed to test the relationships between the change types, enablers, methods and outcomes. Different data collection methods (such as surveys or case studies) can be used to quantify and assess the alignment between the level of the change type, enablers and methods and how this alignment affects the change outcomes. Statistical processes such as exploratory factor analysis (EFA) can be applied to verify the variables of the conceptual model and explore the underlying factors in the model and make it more understandable. EFA is specifically useful when there are no previous explorations of the measure and no clear subscales explanation (Smith *et al.*, 2013). Standard multiple linear regressions can also be employed to test the hypotheses and investigate the strength of the relationships between the variables. Supplementary statistical analysis (e.g. confirmatory factor analysis and structural equation modeling) can be conducted in the future to establish cause and effect relationships and achieve a deeper understanding of the relationships between the model variables.

Large randomized samples can be used to test the developed conceptual model and assumptions where different change types are included to investigate the relationships in more detail and hence be able to generalize the context and conclusions of this research. Future research can investigate further the outcomes of change and may require focussing on the change project effects on the organization and on the performance of the change project itself by involving experts in measuring the outcomes.

Understanding the human side of change can also be studied and incorporated in future models analyzing change success. Other factors affecting change can be investigated including the organizational readiness for the change and the availability of required resources including the organization's technological systems.

5. Conclusion

This chapter reviewed the change literature and integrated the available methods for managing change. Organizations and their leaders are continuously changing as a response to the growing global business environment; however, the success rate of change initiatives is < 30 percent. This chapter critically reviewed the concept of having one change approach as the "silver-bullet." The numerous studies and opinions identified in the scholarly literature can be overwhelming and applying a method that is contingent and incorporates proven successful approaches is a step in the right direction. However, the probability of success varies from one organization to another as organizations undergoing change vary vastly in their structure, systems, strategies and human resources. Organizational change takes place over a period of time, and to increase the probability of success, it is important to plan for change, and address the critical factors that lead to successful. Moreover, it is important to adopt a structured methodological process to achieve the desired outcome. The methods reviewed in this chapter addressed several systematic change and change management methods, and regardless of the change method managers choose to adopt, the method has to be well aligned with the organizational change type.

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