

The change of change: change management 1.0–5.0

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Abstract

Purpose – The purpose of this article is to explain what “change management” is and how it has evolved. In some cases, change management is criticized as a “tautology.” However, this view is contrasted by a broad change management debate, which raises the question of where “change” begins if every form of management were “change,” i.e. a tautology. It also asks why change management is described as “linear and plannable” on the one hand but “messy” on the other.

Design/methodology/approach – If these different views are not to be marked as true or false in principle, there are situations or phases in which they may apply or were temporary. Therefore, in the following, an ordering literature reflection along temporal phases will be carried out to work out differences or developments in change management.

Findings – If change management is arranged chronologically, focal points emerge with phases of change management 1.0–5.0. They show a “tautological change phase” (Change 1.0), which is later followed by a “messy phase” (Change 3.0). The eras are basically shaped by the evolving opportunities and demands of value creation.

Originality/value – The breadth and depth of the change management debate is divided into time- and principle-driven phases from Change Management 1.0 to 5.0, which centrally depend on evolving requirements and opportunities for value creation. Smart Management looks ahead to the era of digital-autonomous, self-controlling change management 5.0.

Keywords Change management, Change 1.0, Change 5.0, Smart change management

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1. Introduction

This section includes the research problem, questions and applied methodology with the problem statement.

1.1 Problem

Typical definitions of corporate change are as follows: Change management is the planned transformation of companies. This understanding is referred to in Anglo-American literature using terms such as “strategic change,” “organizational change,” “corporate change” or “business transformation” (Vahs and Weiland, 2020, p. 18). What sounds clear and simple already leads to criticism when it comes to the concept of planning. On the one hand, the need for change management is unpredictable and reactive, as management reacts to discontinuities. On the other hand, change is considered a rationally planned approach to coping with profound change (By, 2005). Beyond this, it is chaotic-creative: “Since the need for change often is unpredictable, it tends to be reactive, discontinuous, *ad hoc* and often

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triggered by a situation of organizational crisis” (By, 2005, p. 370). In addition, artificial intelligence-driven transformation is becoming more and more an automated process in a world with emergent and self-organizing processes (Madsen *et al.*, 2025). “[...] changing organizations is as messy as it is exhilarating, as frustrating as it is satisfying, as muddling-through and creative a process as it is a rational one” (Palmer *et al.*, 2017, p. 4). Fundamental critics point out that the expression “change management” is a tautology since any kind of management is a manner of planned action based on deviation analysis (Sturdy and Grey, 2003).

1.2 Research questions and method

Against this background, this article asks the following research questions:

- RQ1. Which “principle-driven change eras” are to be identified, to justify the different views on change sometimes as “tautological,” sometimes as “planned” or “messy”?
- RQ2. To what extent is change management to be understood as a tautology to the conventional concept of management?
- RQ3. To what extent is change management “plannable” and/or “messy”?
- RQ4. To what extent is change an “AI-driven” process?

To answer these questions, an exemplary-conceptualizing reflection on literature is applied. It is conceptualized by ordering selected change approaches. The order leads to its temporal arrangement, which also emphasize criteria-shaped eras of change management. This results in change versions that are part of a multitude of historicizing 1.0–4.0 debates, currently such as “Industry 4.0.” They are currently popular for explaining developments and priorities in management in a simplified way (Lies, 2024).

2. Overview of change management

There are many reviews and overviews of change management available (e.g. By, 2005; Carnall, 2007; Cooke, 1999). Earlier approaches were rather characterized by specific fields of action: Lean management or total quality management were criticized with regard to their isolated focal points (Vahs, 2023). Today’s term “change management” emerged around the mid-1990s. It refers to the holistic, far-reaching changes of organizations, from strategies, structures, systems to the associated behaviors. This holistic approach can be understood as a critique of technical–processual business process reengineering (AI-Ani and Gattermeyer, 2001). Change has also displaced the term organizational development, because “change” emphasizes an active-planning claim over “development” and at the same time offers space for different approaches, e.g. strategy, business processes, and mentalities (Doppler and Lauterburg, 2014).

To characterize and classify change management models, they are differentiated into categories using different factors (see Table 1; e.g. Armenakis and Bedeian, 1999; Burnes, 2017; Carnall, 2007; Errida and Lotfi, 2021; Whelan-Berry and Somerville, 2010).

These categories and factors can be found in different constellations in evolving organization, markets, customer needs, technologies and other dimensions. It will be shown that over time there has been a shift from “rational-linear-analytical” to “relational-emergent-creative.” To understand the development and the changes in change management, it is helpful to understand management as a framework for “change” and value creation as a core activity of (change) management.

Table 1. Categories and factors of exemplary change management approaches

Categories & factors	Exemplary change management approaches
Factor- and category-researching models	• Cracking the code of change (Beer & Nohria)
Linear process models	• 12 categories with 74 factors (Errida & Lotfi) • Steps (Kotter)
Focused models	• ADKAR (Prosci) • Six Sigma
Framing models	• Just-in-time • Business process and excellence • Change readiness
Methodical approaches	• Change willingness (Krüger) • Change leadership
Activity, skill or technique-related approaches	• ACCO (Comelli & von Rosenstiel) • Change communication • Change psychology • Digital change • AI driven change
Scope related	• Smart changes • Incremental-ongoing approaches
Logic related	• Revolutionary-disruptive approaches • Inside in • Inside out
Affected views, orders or systemic levels	• Outside in • Within / out of the box • Holistic models • Micro-meso-macro approaches
Critical issues and goal approaches	• Managing systemic “fits” (Nadler & Tushman) • Performance • Power • Resistance
Paradigm-related change	• Commitment • Rational • Relational • Planned • Emergent

3. Value creation 1.0–5.0

Value creation is the core objective of corporations and economy as a whole. That means value creation operates also beyond markets if just the stakeholder debate is mentioned. A value is an enduring belief that a specific mode of conduct or end state of existence is personally and socially preferable to alternative modes (Rokeach, 1979). Value creation is a company’s sales minus materials and supplies (Redlich and Moritz, 2018).

The traditional understanding of value creation 1.0 is supposed to be an autonomous process. New technologies, especially social media and artificial intelligence, have opened

new opportunities and also requirements of stakeholders in production and services (customers), but also concerning management and leadership (employees, managers). The value chain is evolving and becoming part of a value network driven by customers, employees and other stakeholders (Leviäkangas and Öörni, 2020). The conventional “value chain” became the “value network”: from linear to multidimensional value creation (Allee, 2000).

The valuation is therefore no longer only related to market outcomes but also to the way in which value is created. A value only has value when others attach to it – and not only the producing company. This leads to the “4.0 idea” that values are actually joint ventures (Wikström, 1996). This is precisely where the emergence of resistance or “change readiness” is incorporated, which centrally shapes the requirements of change management. The following stages of value creation can be distinguished (Lies, 2024):

Stage 0: Values-in-products. – Traditional economy is shaped by an economy by a trade-off between economic and stakeholder values. Value creation focuses on internal competencies represented by the traditional value chain (Kelleci, 2022).

Stage 1: Values-in-utility – Customized products and services create tailored or personalized customer value. Market outcomes are focused to meet consumer needs (Kelleci, 2022).

Stage 2: Values-in-exchange – Relationships instead of transaction shape the meaning of market success. The measurement of value shifts from outcomes to the evaluation of the exchange relationship (Vargo and Lusch, 2004).

Stage 3: Values-in-access – Access-based value creation is based on a platform business strategy, or platforms that involve customers in the process of shared value creation and shape the idea of a “sharing economy” (Kelleci, 2022). Interaction is the paradigm of value creation here which also opens the processes of corporations and develops them beyond the factory (Reichwald and Piller, 2009).

Stage 4: Values-in-participation – This is where the idea of value creation as joint ventures becomes clear. This pattern of value creation is rooted in the common good economy, which aims to create distributed or inclusive value for society as a whole. In participatory management practices value emerges materially through social practices and values (Kelleci, 2022).

Stage 5: Automated value creation – This era is currently emerging as part of Stage 4. In the future, semiautomated value creation will be completely self-directed by means of AI (Davenport and Kirby, 2016).

From the company’s point of view, the mentioned joint ventures of value creation are not always voluntary. With the emerging change management debate, it is already foreshadowed here that they can actually be tied to the design and requirements of these joint ventures. The pattern of “values-in-participation” can create win-win situations for companies and its internal/external stakeholders. But that doesn’t necessarily have to be the case, as the emergence of change management as dealing with opposing positions shows. This then leads to the question of how management develops as a framework for change management.

4. Management 1.0–5.0

To structure change management in phases of development, it is characterized as a field of action of corporate management. Management 1.0 and 2.0 refer to “modern management” that works in the tradition of classical economics. Since the postmodernists, the analytical paradigm has been considered problematic (Kemp, 2013). This leads to the development of Management 3.0 and 4.0. Management is considered “bureaucratic” and dominated the last century (Josserand et al., 2006). Such epochs are to be seen as highlighted megatrends that

cannot be clearly defined in time but show focal points in thinking and prioritized approaches (Lies, 2025):

- *Management 1.0*: This management operates with the idea of classical economics. Traditional management means the execution of rational decisions. Management 1.0 is hierarchical management (Appelo, 2011). It was applied with developments such as Taylorism (separation of intellectual and manual work) at the beginning of the 20th century and lasted until the automation debate (1960s). Value creation means “value in utility.”
- *Management 2.0*: “Modern management” wants to optimize processes, structures and functions with “hard approaches.” Management 1.0 supplemented by “add-on models” that form the preliminary stages of change management in the 1970s: Total Quality Management and Six Sigma are part of Management 2.0 (Appelo, 2011). The concept of quality is developing from an originally result-related quantity to a complex set of values that also takes up processes or even culture so that the exchange-related value creation has evolved. In the 2.0 era, however, the value-added handle still remains dominated by “scientific.” Due to its universalist approach, scientific management became synonymous with “modernity” in management (Kemp, 2013).
- *Management 3.0*: The era 2.0 ends with the decline of the “industrial wave” and shifts to the “information wave.” The goal is shifting from growth to quality of life. This age of management begins around the 1970s. Since the 1980s at the latest, the dominant analytical planning paradigm of management has begun to fade. The values-in-access approach is increasingly shaping value creation and thus a management that has to move from “transactions” to “relationships.” Leadership means empowering and motivating (Kelly, 2019). Common values become the challenge of communication in a world of multiple rationalities, which leads to the importance of “resistance” for change management.
- *Management 4.0*: A dominant aspect of “4.0” is digitalization (2000s). Together with digital-social networking, this leads to a shift of power from organizations to their stakeholders. Accordingly, the concept of value creation, which is now coined by “values in participation,” is changing and thus also the requirements for change management.

Further versioning is under discussion. Management 5.0 is a response to a sustainable society 5.0 (Smuts and Van der Merwe, 2022). There is also talk of Management 6.0, which aims at the challenge of “smart management,” i.e. “seamless human–machine symbiosis” (Madsen et al., 2025). In the following, this phase formation of management serves as a frame to trace the development of change management (e.g. Vahs, 2023) to trace the path to “smart changes” as change management 5.0.

4.1 Change 1.0

If management action is derived by means of the management cycle, it becomes clear that it only becomes active when it shows deviations from the target state. Hence, every form of management is “change” in the sense of a change that is brought about by planned action. Accordingly, value creation takes place autonomously.

4.2 Change 1.0 as principles of management

The second industrial revolution was characterized by the growth of companies and corporations, so management theories such as Taylorism or Fayolism became popular. If their theories are understood as a “change,” it results in the criticism and further development of the first wave of industrialization at the beginning of the 19th century. Taylor

revolutionized the traditional way of designing industrial work by dissolving the unity of planning and execution of work (Schreyögg and Koch, 2020). “In the first half of the twentieth century, the dominant change strategy was a Tayloristic top-down search for efficiencies [...]” (Hayes, 2022, p. 137).

Taylor developed this approach around 1910 and focused on the scientific analysis of work processes to achieve efficiency gains. He emphasized the division of work, the standardization of tasks and the use of incentives to increase productivity (Kupiek, 2025). Fayol formulated the “14 principles of management.” These included principles such as division of labor, authority, discipline and unity of command. If you like, the standardization of leadership is the first form of the platform economy (Kupiek, 2025).

4.3 Change 1.0 as the management cycle

In a basic view, change management is an application of management. It follows the usual approach of management as a method with the management cycle: preparation, analysis, concept, role out controlling (Vahs and Weiland, 2020). This means that management itself always acts on the basis of gap analyses that require more or different underlying services.

The “Deeming Cycle” (PDCA – plan, do, check, act) is one example of the traditional management cycle. At the same time, it is often understood as an approach of quality management. Today, the PDCA cycle is undergoing an update. It is also as a new agile method. The PDCA cycle describes the phases in the continuous improvement process: Plan, Do, Check, Act (Helmold and Dathe, 2023). Value creation is planned autonomously from the inside out. A trade-off between corporate and stakeholders’ values existed.

“Change” corresponded to “management,” since every form of management brings about change. Hence, any kind of management originally always meant “change” (Mills et al., 2009, p. 34). Change management is a tautology in this era.

5. Change 2.0

From today’s perspective, not all management is “change management.” With Change 2.0, it is beginning to set itself apart from conventional management. Optimizing strategy and structure are the focus of change 2.0, a phase that corresponds to the “add-on” phase of Scientific Management. The challenge of how to organize “values in exchanges” began. This is where the forerunners of today’s change management were developed within the 1970s. They are still relevant today and still play a central role today but typically play a role as selected fields of action of integrated change processes depending on the objective.

5.1 Change 2.0 as restructuring

“Facing more competitive markets, more demanding shareholders, and more challenging workforces, company executives may ask whether it is time to reorganize the company” (Bowman et al., 1999, p. 33). Restructuring means significant changes in the organizational structure of the firm, including divisional redesign and employment downsizing (Bowman et al., 1999). Portfolio restructuring, financial restructuring and organizational restructuring aim to enhance performance. Accordingly, restructuring is designed for productivity improvement, cost reduction, increased shareholder value or a better alignment of the organization with a changing environment. Values in exchange here typically refers to the relationship with the shareholders. Restructuring refers to many different forms of change. Restructuring can occur for numerous reasons, e.g. downsizing or rightsizing (market conditions or competitiveness), rationalization or cost-cutting (market conditions or competitiveness), change in strategy (strategy implementation), merger or acquisition (strategy implementation) and among others (Cameron and Green, 2024).

5.2 *Change 2.0 as downsizing*

“Downsizing, the planned elimination of positions or jobs, is a phenomenon that has affected hundreds of companies and millions of workers since the late 1980s” (Cascio, 1993, p. 95). Downsizing refers to the planned elimination of positions or jobs but does not include the discharge of individuals for cause, or individual departures via normal retirement or resignations. It is expected to yield economic as well as organizational benefits (Cascio, 1993). They include, for example, lower overhead, less bureaucracy, faster decision-making or increased productivity.

5.3 *Change 2.0 as lean management and just in time*

“Lean” is a metaphor and means waste-free processes in production and the organization of processes according to the principles of stabilization, flow, rhythm, pull and perfection. The goals are good quality, short delivery times and low costs. The focus is on the customer, i.e. another “values in exchange” perspective:

Lean has become the most prevalent business strategy for positioning continuous improvement in public service organizations, manufacturing and service. Continuous improvement is the foremost goal for any organization to assist them to attain operational excellence and quality enhancement, and also to improve performance. (Oon *et al.*, 2021, p. 342)

Just in Time (JIT) belongs to the specific-functional approaches of change management. They aim to organize greater efficiency and increased customer satisfaction and therefore offer significant potential in increasingly competitive service situations. The principle of JIT is to eliminate sources of manufacturing waste by getting right quantity of raw material and processing the right quantity of products in the right place at the right time (Dange, 2016). The core principle of JIT is to produce the kind of units needed, at the time needed and in the quantities needed, i.e. an (internal/external) focus of optimized pattern of exchange within the value chain. It is an approach to organize operational excellence (Dange, 2016).

5.4 *Change 2.0 as total quality management and Six Sigma*

Total quality management (TQM) originated in Japan after the Second World War. The origin of TQM is assigned to Change 1.0 here, as the idea of quality originally referred to products and thus production. In the beginning there was the product with its functionality, which was ensured by specifications and tolerance ranges. Here the reference to Six Sigma from TQM becomes clear. Product requirements therefore initially determined the concept of quality (Brüggemann and Bremer, 2012).

However, the concept of quality has undergone considerable change in the past. With the increasing complexity of products and production from around the 1970s onwards, the quality requirements also became more multifaceted. Today, quality refers to the entire organization and also includes, for example, process or culture quality. In fact, TQM impacts customer satisfaction more than performance (Choi and Eboch, 1998). Looking at quality management, a historicization of quality 1.0–4.0 can also be traced here. At the same time, it opens up and shifts the value creation from “exchange” to “access”: It forms a building block in the development of Change 1.0–4.0.

5.5 *Change 2.0 as business excellence and benchmarking*

The Business Excellence movement has emerged from quality optimization (Brüggemann and Bremer, 2012). Business excellence can be seen not only as the next step after TQM or a new quality understanding but also as an umbrella term that takes into consideration a wider spectrum of issues such as the social and environmental outcomes of a company (Toma and Marinescu, 2018). “If TQM is appropriately managed, it supports the organization in

achieving excellence, the real source of stakeholder value's continuous creation" (Mele and Colurcio, 2006, p.464):

[...] benchmarking is defined as the systematic study and comparison of a company's key performance indicators with those of competitors and others considered best-in-class in a specific function, such as quality management, inventory control, orders processing, etc. The purpose of benchmarking is to identify performance gaps and potential areas of improvement at the strategic or business process levels. (Dervitsiotis, 2000, p.641)

By closing the identified gaps, benchmarking for business excellence is part of change management.

5.6 Change 2.0 as business process management

Process orientation is a specific approach to design and thus the approach of management. A process is a completely closed, timely and logical sequence of activities that are required to complete planned tasks. With the necessary substeps, the consideration and optimization of interfaces of those involved in the process is a special requirement of process management (Becker and Kahn, 2003).

The diverse process perspectives emphasize their advantages for the management of change. This applies to the process orientation of circular models, to life-cycle models, to shape path dependencies, but also psychological approaches (Hayes, 2022):

- The identification of the necessary steps;
- the order of the necessary steps;
- and the labeling of the "what" and "when."

Change management is therefore a special challenge for process management. In business process management, exchange value is apparent in business process redesign. The redesign aims to increase the exchange value of the process (vom Brocke and Sonnenberg, 2015).

5.7 Change 2.0 as IT implementation

Although digitization is still being discussed intensively in the 2020s, it is anything but new. In the 1990s, implementing IT was a challenge for change management. At that time, for example, it was said: "Information technology (IT) project implementation is still a grey area" (Kurupparachchi et al., 2002, p. 126):

Information technology (IT) alone cannot create a competitive advantage, as its business value is determined by the changes it brings to an organization and its environment through its ability to leverage intangible, complementary business resources. In fact, IT's impact on work practices, structures, strategies and products and services can lead to substantial organizational transformation. (vom Brocke et al., 2021, p. 200)

For example, enterprise resource planning (ERP) is an integrated set of programs that provides support for core organizational activities such as manufacturing and logistics, finance and accounting, sales and marketing, and human resources. Research suggests that most improvements in ERP usage are in intangible areas such as increased interactions across the enterprise, quick response time for information or the integration of business processes (Ruivo et al., 2020), i.e. the value in exchange.

5.8 Change 2.0 as "how-to-do-change"

Kotter's model for "leading change" is probably the most quoted (Appelbaum et al., 2012). It is a process-driven how-to-do-model derived from experienced errors corporation made

within change management (Kotter, 2007). The steps include 1. Establishing a sense of urgency, 2. Creating the guiding coalition, 3. Develop a vision and strategy, 4. Communicating the change vision, 5. Empowering broad-based change, 6. Generating short-term wins, 7. Consolidating gains and producing more change, and 8. Anchoring new approaches in the culture. On the one hand, the efficacy of Kotter's process has been broadly supported in the literature. On the other, the process has also been criticized. It has been claimed that this, and other, change management processes describe what has to be done but provide little detail in how it should be achieved (Pollack and Pollack, 2015). However, such "inside-out" approaches are considered models of long-term value creation by reorganizing the value chain (Kurzack et al., 2021).

From today's perspective, Change 2.0 are focused, linearized management approaches that are rationally planned inside-out and aimed at optimizing strategies, structures and processes (Burnes, 2017). From the perspective of the Management 2.0 era, they are "add-ons." Organizational development means "improvement within the box" (Anderson and Ackerman-Andersen, 2010, p. 52). The "'change is manageable' bubble began to burst in the mid-1980s" (Anderson and Ackerman-Anderson, 2010, p. 44). "Change" does not yet do justice to the integrative-holistic approaches of change management 3.0 and will therefore be discussed in the following text.

6. Change 3.0

Latest in the 1980s, the dominant analytical planning paradigm of management has begun to fade. The information age became the stakeholder age, that is, different values develop relevance within organizations. At this point, at the latest, "values in access" has an impact on change management: from the inside but also from the outside. This chapter discusses with selected debates and approaches how this development affects change management.

6.1 *Change 3.0 as the cracking of the code of change*

To increase the success of change management processes, Beer and Nohria (2000) structure relevant change factors into two categories: the hard fact or e-strategy and the soft fact or o-strategy (Beer and Nohria, 2000):

- *Hard-fact strategies:* The "hard-fact" strategy or "e-strategy" ("economic value") is based on financial ratios. Hard factors that are ultimately expressed in shareholder value ("hard approach"). They lead to a rational change program.
- *Soft fact strategies:* Decision-makers who rely on "soft strategies" or "e-strategies" ("organizational capability"). They assume that shareholder value alone harms the company. This approach is about developing a corporate culture with adequate human capital that is committed to change ("soft approach").

If change management often does not achieve its goals because it is dominated by hard factors such as returns, it must be adapted as a change program in such a way that resistance is reduced as much as possible. Or to put it another way: Change management means "values in access."

6.2 *Change 3.0 as readiness and resistance management*

Change readiness is the individual's and organizational desire for supporting change. It is an applied area of knowledge management to enhance it. Change readiness is the most prevalent positive attitude toward change that has been studied in the organizational change literature. Change readiness consists of both state and process (Rusly et al., 2012):

- The readiness state is influenced by the beliefs that proposed change is needed, significant and sufficiently supported by the environment in which it will take place. As a process, readiness involves recognizing a need for change, comparing the costs and benefits of change and planning for the change.

“Change readiness is the most prevalent positive attitude toward change that has been studied in the organizational change literature” ([Rafferty et al., 2012](#) p. 111). Es kann als Gegenstück zum Widerstand begriffen werden, der als besonderes Kennzeichen von Change 3.0 gilt. The “high art” in change management is the overcoming of resistance ([Lauer, 2014](#), p.133).

The individual assessment of a change process by managers and employees results from the subjective/personal risk assessment of individuals ([Lies, et al., 2011a, 2011b](#)):

- Personal risks due to change processes: Loss of job, loss of status, less money, new colleagues, etc [...]; and
- Material risks due to change processes: no improvements, no efficiency gains, etc.

With these criteria of personal and factual risks, four basic types of actors in change processes can be distinguished: promoters, skeptics, inhibitors and resisters. This structuring means that 95% of a company’s actors can be classified as potential opponents of change ([Mohr and Woehe, 1998](#)).

6.3 Change 3.0 as organizational development: balancing force fields

Organizational development is an early change 3.0 approach that dates back to the 1960s and thus emerged well before the start of the 3.0 era in the 1990s.

Organizational development (OD) is a systemic and planned change effort that uses findings from the behavioral sciences to increase organizational effectiveness and problem-solving capabilities so that organizations can adapt to changing environmental conditions. ([Kauffeld et al., 2019](#), p.76)

Lewin’s force field analysis was originally counted among the contributions of organizational development ([By et al., 2014](#)). Based on Gestalt psychology, human behavior is codetermined by the environment. This leads to Lewin’s “Frontiers in group dynamics.” Force field analysis aims to reduce the formation of fronts as much as possible. It is necessary to maintain the balance between forces to drive change ([Lewin, 1947](#)). This leads to typical reaction phases (“unfreeze,” “move,” “refreeze”), which are shaped by individual perception and interpretation. On the one hand, this approach is part of 2.0 linearized modeling. With its “codetermined” force field analysis and group dynamics, it already belongs to the “value in access”-era.

6.4 Change 3.0 as business psychology

With the development of change readiness and resistance, corporate psychology is becoming more important for change. “Change” is seen as an attitude toward co-creative value creation, for which employees are committed – or not ([Shanmugam and Durugbo, 2015](#)). One popular example for change 3.0 is the management the grief curve. The [Kübler-Ross \(1969\)](#) change curve is a paradigm for navigating the change process. The original is about the individual coping with grief after deaths. They are structured in phases and transferred as experienced emotions in the form of a curve to profound change processes. In this way, the change curve explains the emotional experience in change processes and the resistance that can be explained in this way ([Von Hehn, 2021](#)). Models such as ADKAR (awareness, desire, knowledge, ability, reinforcement) by Prosci ([Hiatt, 2006](#)) tie in with these basic concepts.

Individual behavior depends on personal skills and situational aspects: Individual wanting and being able as well as social should and enable are formative behavioral aspects

that must be taken into account, especially in change management processes. This applies the “ACCO” model of change management (Comelli and von Rosenstiel, 2011):

- *AC – Actor – Wanting*: Wanting includes everything that is important to someone. The value orientation. Needs and other guiding principles shape the will. They determine human motivation, i.e. the motives that shape action.
- *CO – Context – Should*: The social “should” includes the implicit and explicit rules and regulations as well as norms of behavior: Enabling: Situational enabling focuses on the conditions that shape a situation.

These personal and action-related fields as change management lead to the conception of change as power management.

6.5 *Change 3.0 as power management and sense-making*

Power has many dimensions. This approach considers the (unintended) redistribution of informal power in social networks as a cause and effect of change (Lies, 2003):

- *Power* is defined here by available social capital. Social capital indicates the ability and possibilities of companies, customers or other actors to control valuable actions, for example, the assertiveness of a change.
- *Informal Power* refers to the ability of an actor or an organization to control a valuable event, i.e. above all the completion of (sale) purchase processes, but also regarding leadership or control of management: The acceptance of a leader, the spirit of a sales manager, identification with the company brand.

Such group-wide perceptual variables are an expression of social capital. Social chapter indicates the ability of an organization to control valuable events such as value creation. “Change” is the consequence of the shift in positions of power, as this triggers an update of order in social systems (Lies, 2003). The concept of informal power is closely linked to the creation of “meaning” or “purpose.” Sensemaking is considered as the process through which people assign meaning to issues or events (Cristofaro, 2022):

The sensemaking framework allows us to think more critically about organizational change. It encourages us to focus on organizational change as a sense of situation rather than a concrete fact [...]. It directs us to go beyond the idea of manager as professional or expert to focus on his or her skill as a sensemaker. (Mills *et al.*, 2009, p. 19)

6.6 *Change 3.0 as change leadership*

With the management requirements, a special change leadership debate has arisen, “Change requires effective leadership to introduce change successfully: it is leadership that makes the difference” (Gill, 2003, p. 307). Change requires special tasks of management: They must be planned, organized, directed and controlled (Gill, 2003). Beyond this, the chapter has already shown that change also requires leadership. The O- and E-strategy (Beer and Nohria, 2000), the special skills and change management as resistance management have already shown this.

“Change as a Leadership Requirement” leads back to the leadership style debate:

Change has often been associated with leadership. [...] As opposed to transactional leaders who get people to perform by providing them rewards, transformational leaders motivate their followers to achieve and exceed their performance levels by transforming the employees’ attitudes, beliefs, and values. (Hechanova and Cementina-Olpoc, 2013, p. 12).

6.7 Change 3.0 as systemic change management

Systemic change management is aimed at influencing the self-organization of companies as systems in such a way that negative dynamics in the form of resistance are limited or positive dynamics in the form of commitment and support are strengthened. In the following approach, the idea is to adapt rational-linear change processes (Change 2.0) to the dynamics of the organization. Rather, they are considered holistic units that organize themselves according to their own rules on the group dynamic level (Lies *et al.*, 2011a, 2011b).

This view is popular with the importance of soft factors as group dynamic processes in management and/or among employees makes change management internal stakeholder management. These are groups that can assert their claims, for example by inhibiting or even preventing the change program in the form of open or covert resistance (Lies *et al.*, 2011a, 2011b). “The system fights back” (Brandenberg *et al.*, p. 99). This is where emergence comes to light, i.e. intrasystemic and unplannable phenomena such as resistance. Hence, systemic fits are needed to manage (Nadler and Tushman, 1980). To reduce impacts on the first order, change at the formal level and change at the second level, i.e. mutually influencing systems, are included in management (Lies *et al.*, 2011a, 2011b):

- *The change program as first-order management:* It characterizes the content, instrumental and temporal approach of a change process according to previously primarily rational aspects and results from the change strategy. It follows the logic of rationality.
- *The change dramaturgy as second-order management:* As in theater, dramaturgy refers to the staging of the performance of the change, which is determined by the script (i.e. the change program) but is based on the expectations of the audience. The dramaturgy represents the (re-)ordered connection of steps of the change program according to rational aspects and critical perception of stakeholders.

The result is a change process that no longer runs in a straight line but adapts to the system dynamics in such a way that resistance is lowered and commitment is strengthened wherever possible. With the power and system approaches, the “values in access” dominance becomes particularly visible.

6.8 Change 3.0 as IT-enabled transformation

The transformation from “analog to digital,” i.e. the introduction of IT to support management, is anything but binary. Digitization is a process that has been going on for more than half a century. The implementation of IT functions began with Change 2.0 in the 1970s and began to become an IT-driven change age from the 1980s onwards, which was always met with some skepticism. “We entered the 1990s highly skeptical of IT’s benefits” (Venkatraman, 1994).

The opportunities and impact of IT on companies and their further development have grown steadily. The first level is the basic one for leveraging IT functionality within a business. In many cases, IT means to implement isolated systems (e.g. a customer order-entry system, inventory control system, selected ERP-modules). Later, IT functionality was used as a lever for designing the new organization and associated business processes. IT regards the redefinition of the business scope. The fifth level of transformation means the development of new business models on the basis of digital-social networks, i.e. digitally organized value creation networks.

6.9 Change 3.0 as a structuring framework

Change as a framework structures and organizes different goals, approaches and measures for integrated approaches. Change management has become a constant requirement. It needs a blueprint or an architectural model that records the coordinates of change in vertices. It thus

provides an overview for each specific change case. At the same time, it relates central fields of action to each other. The 3C model (need of change, willingness to change, ability to change; in the original 3W model: Wandlungsbedarf, Wandlungsbereitschaft, Wandlungsfähigkeit) is both: a description and explanatory pattern for the requirements of a far-reaching process of change (Krüger, 2014, p. 4ff.):

- *Need for change:* The starting point is to determine the need for change. Only a recognized and recognized need for change leads to enforceable change processes.
- *Willingness to change:* The key to success for profound change is the willingness to change. It is based on attitudes and the benefit calculations for the planned changes.
- *Ability for change:* The basis for adaptability is the knowledge and skills of those involved. They find support in systemic skills, especially strategy, organization, systems, culture, but also production or information technology.

Latest since Change 3.0, there is a difference between management, which assumes joint goal achievement, and change management, which is based on different and dynamic target systems in the process of change. At the same time, this leads to a change in value creation: from “values in exchanges” to “values in access.” The shift from “planned change” to “emergent change” marks the transition from change 2.0 to change 3.0 (Burnes, 2017). New digital cap will often require upgrades to employee skills, tech and other aspects of the organization. This also requires behavioral changes. Today’s term “change management” (since about the mid-1990s) refers to the holistic, far-reaching changes of organizations, strategies and structures.

7. Change 4.0

In line with “Industry 4.0,” the Change 4.0 (since 2000s) era is characterized by digitalization. However, digitization means more than just mechanization. At the same time, digital-social networking strengthens the formation of social systems. This leads to a further shift in value creation: It is now seen around the requirement of “values in participation,” which calls into question the conventional change methods. The era of co-producing management has begun. Co-oriented value creation makes change events more diverse, and the pace increases. Internal and external contexts are taken into account at the same time, which makes digitization with real-time data possible in the first place (Kupiek, 2025). Inside-out, outside-in and outside-out (e.g. tribals, communities and other stakeholder networking powers) at the same time can become valid. The joint venture “Value Creation” begins to formulate and enforce requirements for the manner of management. Now there is talk of the “beyond change” phase, because the interaction possibilities of digitization call conventional approaches into question (Anderson and Ackerman-Anderson, 2010, p.59f). “Beyond” means that classic change management approaches are no longer sufficient because the framework conditions and digital change techniques have changed radically. “Beyond” means looking at change beyond processes and content and looking at the environment (Herold *et al.*, 2007).

7.1 Change 4.0 as micro-meso-macro-ecosystems

The main purpose of micro-meso-macro ecosystems is to conceptualize the impact environment of a multidisciplinary approach, for example based on sustainability, innovation and transformation. Dynamic business ecosystem conceptualize challenge-driven transformative change (Enquist and Sebhatu, 2021):

- Ecosystems are multilevel in nature and can be viewed on micro, meso and macro levels as well as from processual, institutional and systemic perspectives.
- A business ecosystem can be seen as platform for stakeholder interaction consisting of people and nature.
- A multidisciplinary methodological approach is needed to confront the complexity of wicked problems and to organize vision- and goal-driven transformative change that meets global challenges.

The actors in change processes at the micro level need to be aware of the possibility that the institutional setting at the meso level will protect the status quo and not permit changes in the broader institutional structures (values, laws, routines, policies). The combination of micro-meso-macro layers makes management a chaotic challenge (see introduction) that faces the linearity of Change 1.0 and 2.0.

7.2 Change 4.0 as learning organizations

Approaches of learning organizations answer the question of how they survive not only as environmentally open systems in a turbulent, often hostile environment. With constantly renewed knowledge, they prove their ability to survive and progress. Learning organizations have the ability to self-transform ([Sattelberger, 1993](#)).

When learning companies are described on the one hand as organizations with a special ability and on the other hand as organizations with a stock of relevant knowledge for survival. This leads to four types of consideration of learning companies ([Edmondson and Moingeon, 1998](#)): 1. Organization as residues of past learning; 2. Organizations as communities with collections of individuals who can learn and develop; 3. Organizations as patterns of participation which enable organizational improvement gained through intelligent activity of individual members; and 4. Organizations that benefit from their ability to learn by constantly improving measurably.

Learning organizations promote new ways of thinking and support people to learn to learn with each other ([Senge, 2017](#)). Learning goes hand in hand with change as self-organizing transformation processes. They are thus representative of the “beyond change” era.

7.3 Change 4.0 as digitized platforms and ecosystems

Previously, change was driven by the change vision as well as the goals and measures derived from it. The new, data-driven change management integrates an additional layer of information. Effective change management is key for successful AI adoption and organizational change management practices are increasingly being supported and transformed by AI ([Tursunbayeva, 2024](#)):

- *Data-driven culture*: Data-mature companies read a lot from them, about the past, the present and, what is most interesting about change, also about the future.
- *Data-driven leadership*: Promoting a data-driven corporate culture is a matter for data-driven leadership. It grows out of culture and gives it its uniqueness in interaction.
- *Data-driven capabilities*: The third element of data maturity is data capability. Among the special capabilities of Change 4.0 is the data capability. This refers to the effective, efficient, responsible and sustainable handling of data. The overarching goal is a high level of skills and competencies with the highest possible data security.

Data-driven organizations enable the networking of different players for digital platforms. They support the “buy in” in change processes ([Sahay and Goldthwaite, 2024](#)). Digital

platforms can connect diverse participants, allowing them to better match the fragmented desires and needs of the participants (Kenney *et al.*, 2019). Digital platforms orchestrate an ecosystem of actors to cocreate value. These disciplines include (Hein *et al.*, 2020) economics with a market-based perspective, technology management with a technical perspective and information systems with a socio-technical perspective. The process of digitization supports an economy-wide redesign of value creation, delivery, and capture processes (Gawer, 2021). This redesign of value creation can be found in typical mechanisms associated with digital platforms as ecosystems.

Digital platforms are new intermediaries transforming economic value creation, industrial structures, and innovative activity, all of which are about to undergo their biggest changes in the postwar era (Kenney *et al.*, 2019). “Most digital platforms act as private regulators of their ecosystems” (Gawer, 2021, p. 114). Ecosystems are characterized as an interconnected group of coevolving (f-) actors. The addition of “eco” to the approaches of “systems” indicates the importance of self-organization and the power inherent in the social-digital networking of consumers (Lies, 2025). In this way, the organization of digital platforms becomes examples of “value creation as participation.”

7.4 Change 4.0 as a variety of unplannable transformation processes

Linguistically, change and transformation processes are identical. They describe and encompass the changes from a starting to a target organization. Their distinction is therefore in need of explanation and labeling. “(.) transformation is change, but the differences are important; transformation is a very particular type of change” (Poutiatine, 2009, p. 194). At least four types of transformation processes can be distinguished:

- *Transformation as discontinuous change:* The new state and the process are unknown at the beginning. Hence, it is an emergent transformation and the most complex pattern of change. Transformation is an emerging outside-in impacted process driven a vision and by trial and error discovery (Anderson and Ackerman-Anderson, 2010).
- *Transformation as digitization-driven social and/or corporate change:* The digitization has become a data economy. The data economy, emerging from the current hyper-technological landscape, is a global digital ecosystem (Sestino *et al.*, 2023). Transformation refers to a digitally driven change that enters companies and society, which are multicomplex nonlinear approaches. The predictability is limited (Rowland and Higgs, 2008).
- *Transformation as digitizing business models:* Digital transformation or “digitalization” describes the integration of digital technologies into business processes. The exploitation of digital technologies offers opportunities to integrate products and services across functional, organizational and geographic boundaries (Vaska *et al.*, 2021). Change 4.0 is aligned to radical-dynamic approaches, sometimes with iterative approach loops (Corral, 1995), e.g. with applied agile methods as Scrum.
- *Transformation as twin transformation:* Transformation processes sometimes refer to deeply maturing changes that are intended to implement (economic) social requirements. Sustainability as a climate-friendly transformation is a current example of this (Enquist and Sebhata, 2021).

Change 4.0 is the digitally driven “Change beyond Change era” based on digital-social stakeholder networking. It makes co-creative value creation as joint ventures easy, by allowing communities to organize themselves on the go, temporarily, even real-time. With Change 4.0, the systemic approach of Change 3.0 is also easy to apply on the go and in real

time. Social and digital networking as well as data availability enable the redistribution of power in favor of stakeholders, so that radical disruptions can occur regarding patterns of value creation at any time as a game changer.

8. Change 5.0 as smart transformation

The maturity of digital-automated decision-making is growing in the 4.0 era. The 5.0 era is the age of completely digital-autonomous management decisions, i.e. completely AI-driven change management processes, for example. From the point of view of value creation, market services and the question of their organization are completely automated in such a way that inside-out and outside-in requirements are integrated into the “joint venture” of value creation. – Management smartness refers to the status of completely autonomous digital decisions. To understand the evolution of digitization to develop marketing smartness, a four-step process is outlined (Davenport and Kirby, 2016), which is marked here as “smartization”: change smartization:

- *Stage 1:* The first stage of “smartization” means supporting management with digital data analysis.
- *Stage 2:* The second stage includes automated management.
- *Stage 3:* This stage a challenge today. This is where artificial intelligence (AI) is needed to facilitate decisions made by humans and/or (partially) replace them with applied solutions.
- *Stage 4:* The fourth stage stands for digitized, autonomous and self-organizing marketing autonomy. It will lead to change management 5.0 as “automated change management.”

Smart changes as completely digital-autonomous change management systems and processes are currently still fiction. However, they are already being approached with autonomous factories or programmatic advertising as semi-autonomous systems. In fact, the levels of smartness could be related to all phases 1.0–4.0 discussed earlier, if change management-processes are designed in this way today. Smartization is becoming more and more complex: Starting with linear-inside out planned management cycles 1.0 to digital platform-supported joint ventures of value creation 4.0. Theoretically, change management 5.0 evolves and leads back into the future to 1.0 as perfect-rational management with the difference that resistance and other unpredictability are assumed, but these are automatically mastered through perfect smartness.

9. Conclusion: Theoretical insights and practical implications of change management phases 1.0–5.0

This article has asked four research questions, which can now be answered with the order of the selected change management approaches.

RQ1. Which “principle-driven change eras” are to be identified, to justify the different views on change sometimes as “tautological,” sometimes as “planned” or “messy”?

Looking at the development of change management, the following versioning emerges. They are driven by the (internal/external) requirements for value creation. The previous phases do not necessarily dissolve but can be supplemented by the following ones, so that a step-by-step model of change historicization is created (see Figure 1).

- *Change 1.0:* One can develop the view that any kind of management originally always meant “change.” Since management originally worked in analytical-mechanistic management and companies were seen as machines for achieving

				• AI-driven • Automated integration	Change 5.0: „Smart changes“		
				• Perfect automation • Self-Controlling Automated	Management 5.0		Values within automated management
			• Digitalization • Networking stakeholder power • Co-creation era • Outside-out • self-organizing emergent changes		Change 4.0: „Digital-integrated-beyond change era“		Values in participation
			• Digitisation • Growing stakeholder power		Management 4.0		
		• Rising importance of context • Information and communication for stakeholder value • Behavioral-holistic systemic approaches • Outside-in • Messy era • Increasing complexity • Discontinuities			Change 3.0: „Multiple values era“		Values in access
					Management 3.0		
	• Functional focused • Linear approaches • Inside-out • „Add-on“-Era • Reengineering, TQM; Just in Time, Lean				Change 2.0: „Strategy und structure-Era“		Values in exchange
					Management 2.0		
• Analyzing & planning • Scientific management • Management as Applied Economics • Rational Choice • Implementing management principles • Autonomous value creation					Change 1.0: „Change-Tautology Era“		Values in corporate outcomes
					Management 1.0		
• Inside-out, rationally, individual • Linear-analytical • Radical • predictable – limited dimensions • within in the box		• Outside-in, inside-in and inside-out • Iterative • Disruptive • Non-predictable-multi dimensional • Out of the box			Thinking		
„analytical planing paradigm“		„emergent self-organizing paradigm“			Paradigms		pattern of value creation
Management 1.0	Management 2.0	Management 3.0	Management 4.0	Management 5.0			
1850er	1970er	1980er	2000er	Still fiction			

Figure 1. Eras of change management

Source: In further development of [Lies \(2024\)](#)

goals, resistance as a core challenge of change management was conceptually not permissible at all. Values are inside-out planned outcomes. “Change” corresponded to “management,” since every form of management brings about change. Change management is a tautology.

- *Change 2.0:* With the decline of the industrial wave, the view and importance of growth also changed: It was no longer size and growth that were important, but the importance of efficiency rised. Strategy and structure are the focus of change 2.0, a phase that corresponds to the “add-on” phase of Scientific Management. Change are planned and linear processes. This kind of change improves the status quo: Organizational development means “improvement within the box.” Value creation means to keep access to corporate outcomes. The “change is manageable” paradigm began to fade in the mid-1980s. This indicates the turn of change 2.0 to 3.0 which also marks the transition from “planed change” to “emergent change.”
- *Change 3.0:* Today, there is a difference between management, which assumes joint goal achievement, and change management, which is based on different and dynamic target systems in the phase of change. Value creation is access driven. In this way, resistance that makes it difficult or impossible to achieve change goals can be explained. Today’s term “change management” (since about the mid-1990s) refers to the holistic, behavioral, far-reaching changes of organizations, strategies and structures.
- *Change 4.0:* Digitization is a defining aspect of management 4.0 and also has an impact on the management of change. But “4.0” is more than “digital technologies.” In the application of management 4.0, the technical networking of “man and machine” also means new social networks, which leads to the “beyond change”

phase with the claim of “value in participation.” In change, management, employees and, if necessary, customers and other stakeholders become co-producers. If Change 4.0 is called “transformation,” then this process, in contrast to the previous versions, is an emergent process that develops out of itself.

- *Change 5.0: Smart change management as perfect automated value creation with the integration of different values, e.g. from companies and their stakeholders.*

Looking back, change processes 3.0 are associated with the challenge of overcoming resistance. This distinguishes change from conventional management, which is based on common goals. When management and change management change, so does the consulting required for them.

The following insights arise for change management in theory and practice: Theoretically, the change phases make paradigms and ways of thinking become visible, on the basis of which approaches can be assigned whose criteria are otherwise arbitrarily next to each other. In addition, shifts in paradigms become visible. The categories and factors mentioned at the beginning can essentially be classified (see tab – extract). Already known and also new approaches can be assessed for suitability against the background of the type of value creation (Kupiek, 2025), which would otherwise be used experimentally. This also shows a practical relevance of the phases. Depending on the phase and change approach, additional or different requirements for change management practice can be identified, for example, when “2.0” approaches are used in the digitization of international corporations that should actually pay more attention to emergent change phenomena. This is also the greatest limitation. If one wants to understand the statements of the phases as “cracking the code of change” a stakeholder-dependent and context-related analysis of required value creation would be necessary. However, the phases can also be used to explain when change is sometimes defined in the literature as “tautology,” sometimes “as plannable” or is marked as “messy.”

RQ2. To what extent is change management to be understood as a tautology to the conventional concept of management?

Since management originally (Management 1.0) worked in analytical-mechanistic system of management and companies were seen as machines for achieving goals, resistance as a core challenge of change management was conceptually not permissible at all. “Change 1.0” corresponded to “Management 1.0,” since every form of management brings about change.

RQ3. To what extent is change management “plannable” and/or “messy”?

Overall, attitudes toward change management have changed. Whereas in the past (Change 1.0 and 2.0) there were linear and predictable planning approaches, today multi-complex nonlinear approaches are popular, the predictability of which is limited. Change 4.0 is aligned to radical-dynamic approaches with iterative and agile approach loops.

RQ4. To what extent is change an “AI-driven” process?

With the 4.0 era, digitization is leading to (partial) autonomy management, as autonomous factories or programmatic advertising as areas of application show. This data-driven development is progressing: Management 5.0 as perfect-digital-autonomous change management smartness and automated optimization of value creation. It would then lead back to management 1.0 as perfect rationality with infinite speed of adaptation. But this is a vision that Change Management 4.0 is still a long way from as the path to management smartness defines the 4.0 era.

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