

# RETHINKING CHANGE IN BUSINESS PROCESS MANAGEMENT: FROM PRESCRIPTIVE TO EXPLANATORY RESEARCH

*Completed Research Paper*

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## Abstract

*This paper suggests that a shift in BPM research from the dominant prescriptive approach to an explanatory approach is required to develop a more comprehensive understanding of business process change. While prescriptive approaches focus on interventions tailored at optimizing business processes, they often assume that change can be planned and controlled, overlooking its complexity. To address this gap, we emphasize the need for explanatory approaches that uncover the underlying mechanisms of change. Drawing on Van de Ven and Poole's (1995) 'motors of change' framework, we analyze Business Process Management (BPM) studies through a structured literature review. We categorize BPM research into four theoretical approaches: lifecycle, teleology, evolution, and dialectics. The paper shows how different theories shape BPM scholars' interpretations of business process change, influencing what they capture and overlook. By integrating explanatory theorizing, BPM research can develop a more nuanced understanding of business process change, ultimately enhancing prescriptive interventions.*

*Keywords: BPM, Change, Process, Organization Studies.*

## 1 Introduction

Changing business processes is a central topic in Business Process Management (BPM) research and practice (e.g., Baiyere et al., 2020; Grisold et al., 2020). Traditionally, BPM research has focused on prescriptive approaches that optimize business processes for greater efficiency, quality, and flexibility (Van der Aalst, 2013). These approaches include incremental improvements (Grisold et al., 2021) and radical process redesign (Hammer & Champy, 1993), both of which emphasize interventions including normative guidelines, best practices, and process improvement frameworks (Dumas et al., 2018; Reijers, 2006; Röglinger et al., 2012). While these prescriptive approaches provide valuable tools for managing business process change, they often assume that change can be planned and executed in a controlled manner (Mahringer & Walleser, 2023). However, this glosses over the fact that business process change is more complex than often assumed.

Research has already acknowledged the complexities of business process change. For instance, process participants often have divergent goals and understandings (Suša Vugec et al., 2018), and there are sociodynamic side effects of process change, which may block BPM interventions (Bartelheimer et al., 2023; Berente et al., 2016; Beverungen, 2014). These studies underpin the complex nature of business process change (Mahringer & Walleser, 2023; Pentland et al., 2020). To fully grasp these complexities, BPM research needs to go beyond prescriptive approaches and incorporate explanatory ones (Grisold, Wurm, et al., 2022) that conceptualize and theorize business process change. In this vein, we argue that

underlying theories influence how BPM scholars conceptualize and study process change, affecting both the development of prescriptive interventions and the aspects they emphasize—or overlook—when analyzing business process change in practice. Thus, different theories highlight different facets of the phenomenon. To address this aspect, we ask: How do different theoretical approaches to change shape understandings of business process change and its management in BPM research?

To explore this question, we draw on Van de Ven and Poole's (1995) 'motors of change' framework, a well-established taxonomy from organization studies. This framework proposes four theoretical approaches to change: *lifecycle*, which views change as a structured, stage-based process; *teleology*, which sees change as a goal-driven process; *evolution*, which considers change an adaptive response to environmental pressures; and *dialectics*, which conceptualizes change as emerging from conflicts between opposing forces. We apply these four theoretical approaches to the BPM context through a structured literature review of 105 BPM studies that examine business process change. Using a typological approach (Delbridge & Fiss, 2013), we categorize BPM research based on its alignment with these four change theories. Our analysis identifies how these different theories shape BPM scholars' interpretations of business process change, highlighting both what they capture and what they might overlook.

Our argument unfolds as follows. We begin by reviewing BPM research that addresses business process change. Next, we outline the methodology of our structured literature review. We then present our findings, mapping BPM studies to four distinct theoretical approaches to change. Following this, we discuss the implications of our analysis. Specifically, we argue that explanatory approaches can complement prescriptive BPM research by accounting for the complex and emergent nature of business process change. Additionally, our work makes the theoretical approaches underlying research on business process change explicit, enabling BPM scholars to better understand what they see and what they might miss. We further outline practical implications and conclude by outlining the study's limitations and suggesting directions for future research.

## **2 Theory: Business Process Change**

BPM research usually adopts a prescriptive approach to business process change, assuming a linear, straightforward execution (Grisold et al., 2020; Hammer, 2014). Studies typically focus on interventions, including frameworks that provide structured roadmaps for process improvement. Examples of such prescriptive approaches include process redesign frameworks, such as Hammer and Champy's (1993) business process reengineering (BPR), which emphasize radical process transformation. Scholars also suggest continuous improvement methodologies, such as process maturity models, which advocate incremental optimization of business processes (Röglinger et al., 2012). These models provide actionable guidance for BPM practitioners, offering structured roadmaps for implementing business process change. These studies tend to assume that business process change can be deliberately designed and managed, potentially overlooking the emergent and unpredictable nature of change observed in organizational practice (Baiyere et al., 2020; Mahringer et al., 2024).

Against this backdrop, BPM research has begun to explore the complexities of business process change in practice. Scholars have identified gaps between process models and real-world execution, showing that process change is not always straightforward (Suša Vugec et al., 2018). This model-reality divide is sometimes visible in resistant behavior of process participants responsible for the execution of change initiatives (Dumas et al., 2018; Suša Vugec et al., 2018; Trkman, 2010). Additionally, unintended side effects may arise from the implementation of new technologies and tools (Berente et al., 2016; Grisold et al., 2020). Lastly, the enforcement of business rules and other norms (e.g., through implementing digital artifacts) may gloss over the socio-technical implications of business process change (Beverungen et al., 2021; Haase et al., 2024). These insights emphasize that business process change is a complex phenomenon (Grisold, Groß, et al., 2022).

To account for the complexities of business process change, this paper advocates for an explanatory approach. While prescriptive approaches focus on designing and implementing solutions for process improvement, explanatory research seeks to understand the underlying dynamics and mechanisms that

drive business process change. Explanatory research often develops theories, which can inform and enrich prescriptive BPM approaches. For example, Grisold, Wurm, et al. (2022) illustrate how Routine Dynamics research offers a valuable explanatory lens that complements BPM by introducing theoretical concepts. Their work underscores the potential of explanatory perspectives to deepen our understanding of process change and management practices. Recognizing the value of explanatory research for BPM, our paper examines how different theoretical approaches influence the way business process change is studied and managed. We focus explicitly on business process change and the implications of different theories for BPM, including the implications that these approaches might have for understanding the management of business process change (Danilova, 2019).

### **3 Methods**

This paper applies and refines Van de Ven and Poole's (1995) 'motors of change' taxonomy in the context of BPM. It is based on an extensive review of the BPM literature. Our approach can be characterized as typology-based (Delbridge & Fiss, 2013). Typologies organize existing approaches and theories with their complex causal relationships adding more detail to existing constructs and their interrelationships. The strength of typological theorizing lies in its capacity to encompass multidimensional constructs and integrate them into a coherent framework (Cornelissen, 2017). This style of theorizing is particularly suitable for our purposes, as it allows us to compare and contrast the different theoretical approaches BPM researchers adopt, pushing our thinking about business process change forward. Methodologically, we conducted the research in three steps, which we describe next.

#### **3.1 Development of the Theoretical Argument**

Our analysis began with the observation that, although the BPM literature addresses business process change in various ways, the underlying conceptualizations of change remain underexplored. To address this gap, we turned to a theoretical framework that systematically categorizes different approaches to change. We chose Van de Ven and Poole's (1995) taxonomy, which defines change as observed differences over time in organizational characteristics or activities. This taxonomy was selected for its detailed classification of change theories and its broad recognition in organization studies. It identifies four theoretical approaches to change: lifecycle, teleology, evolution, and dialectics. This taxonomy allows for a meaningful comparison of how business process change is conceptualized in BPM research. Its multidimensional perspective makes it particularly well-suited to capturing the complex nature of business process change.

#### **3.2 Identification of BPM Literature on Change**

We conducted a structured literature review to better understand theories underlying process change in BPM. We searched for studies within the BPM field that explore business process change. To ensure comprehensive coverage of BPM research on business process change, we systematically searched three major academic databases (i.e., Web of Science, EBSCOhost, Scopus) for papers that deal with the topics 'business process management' and 'change'. The databases were chosen because of their extensive coverage of peer-reviewed journals and conference proceedings. By using multiple databases, we ensured a comprehensive and rigorous search across BPM literature. We then extended our scope, using search terms that are heavily used by Van de Ven and Poole (1995) and other papers using this taxonomy to describe the four approaches to change. A protocol for the literature review is shown in Table 1.

In total, our literature search yielded 661 results based on our search terms. We then reviewed the titles, abstracts, and keywords of the search results to ensure they met our inclusion criteria. Results were included if they dealt with change in the BPM context. This narrowed down the number of results to 74, with which we conducted forward and backward searching to find other relevant papers. In sum, we identified 105 papers that are relevant to our work.

Criteria	Execution
Research question	How do different theoretical approaches to change shape understandings of business process change and its management in BPM research?
Sources searched	Web of Science, EBSCOhost, Scopus
Search terms	a) business process management AND change AND (life cycle OR stages OR regulation OR direction* OR matur*)
	b) business process management AND change AND (teleolo* OR goal OR aim)
	c) business process management AND change AND (evolut* OR "process drift" OR mutat* varia* OR random*)
	d) business process management AND change AND (dialect* OR conflict OR tension* OR *theses OR synthesis)
Search strategy	Peer-reviewed journals and conference papers; theoretical and empirical studies; no publication date limit, no sector limit, no topic limit; search terms contained in papers' title, abstract, and keywords
	Forward and backward searching of results
Inclusion criteria	Paper deals with Business Process Management and change
Exclusion criteria	Duplicates
	Language is not English

Table 1. Literature review protocol.

### 3.3 Analysis of Theoretical Approaches to Change in the BPM Literature

We then examined whether and how the literature review results aligned with the theoretical approaches to change outlined by Van de Ven and Poole (1995). This involved a full reading of the papers identified in Step 2 to assess how they described change processes and their management in BPM. Relevant excerpts from each paper were extracted and analyzed with respect to the four theoretical approaches in Van de Ven and Poole's (1995) taxonomy. We assigned excerpts to the theoretical approaches based on the dominant logic reflected in the text. When papers included content relevant to multiple approaches, individual quotes were coded according to the respective theoretical approach. Our coding was guided by a predefined set of indicators derived from the conceptual definitions of each change approach (e.g., stage-based development for lifecycle, goal-directed iteration for teleology, variation and selection for evolution, and conflict-driven change for dialectics). Of the 105 BPM papers analyzed, 35 were primarily associated with the lifecycle approach, 31 with the teleological approach, 29 with the evolutionary approach, and 10 with the dialectical approach. Importantly, we do not treat these theoretical approaches as mutually exclusive—while each BPM study was attributed to one main approach for the purposes of classification, many included elements resonating with other theoretical approaches. In our analysis, we focus on the following aspects: We demonstrate how the four theoretical approaches to business process change are reflected in BPM studies, and we outline the potentials and limitations that those approaches impose on the research and management of business process change.

## 4 Findings: Approaches to Business Process Change

We next present the four theoretical approaches to business process change based on the work of Van de Ven and Poole (1995): the lifecycle approach, the teleological approach, the evolutionary approach, and the dialectical approach. We describe each approach, explain the underlying mechanisms that drive change, and highlight relevant conditions. Additionally, we translate each approach into the BPM context, illustrate how these approaches manifest in current BPM literature, and examine the implications for the management of business processes by Process Managers (PMs), as well as the limitations of each approach. Table 2 summarizes our arguments.

Change as	... lifecycle	... teleological	... evolutionary	... dialectical
Explanation	<ul style="list-style-type: none"> <li>- Business processes go through a logical sequence of stages</li> <li>- Structured BPM cycles</li> </ul>	<ul style="list-style-type: none"> <li>- Change oriented towards specified goals</li> <li>- Continuous improvement of business processes</li> </ul>	<ul style="list-style-type: none"> <li>- Business processes with the most fitness in relation to their context will survive</li> </ul>	<ul style="list-style-type: none"> <li>- Resolution of conflicts between business processes /process models generates change</li> </ul>
Underlying mechanisms	<ul style="list-style-type: none"> <li>- Regulation by organizing principle (e.g., norms) determines lifecycle stages</li> </ul>	<ul style="list-style-type: none"> <li>- Cycle of goal formulation, implementation, evaluation, and modification of process goals</li> </ul>	<ul style="list-style-type: none"> <li>- Random variation, selection and retention of business processes in a competitive environment</li> </ul>	<ul style="list-style-type: none"> <li>- Confrontation of thesis and antithesis, conflict and subsequent synthesis between opposing forces</li> </ul>
Conditions	<ul style="list-style-type: none"> <li>- Existence of process logic</li> <li>- Separation of 'planners' and 'doers'</li> </ul>	<ul style="list-style-type: none"> <li>- Purposeful, adaptive actors</li> <li>- Articulate, appropriate goals</li> <li>- Openness to adapt the course of actions</li> </ul>	<ul style="list-style-type: none"> <li>- Competition for scarce resources among business processes</li> <li>- Heterogeneity across business processes</li> </ul>	<ul style="list-style-type: none"> <li>- Multiple actors with different theses</li> <li>- Openness to conflicts</li> <li>- Antithesis has power to challenge thesis</li> </ul>
Activities of Process Managers	<ul style="list-style-type: none"> <li>- Plan and organize change</li> <li>- Regulate and control process stages</li> <li>- Measure process performance</li> <li>- Provide guidance</li> </ul>	<ul style="list-style-type: none"> <li>- Identify process problems</li> <li>- Articulate goals</li> <li>- Facilitate goal consensus among involved actors</li> <li>- Monitor and adapt goals</li> </ul>	<ul style="list-style-type: none"> <li>- Manage selection and retention of variations</li> <li>- Allocate resources</li> </ul>	<ul style="list-style-type: none"> <li>- Encourage and facilitate tensions</li> <li>- Manage emerging conflicts</li> <li>- Provide ideas for synthesis and direct it within boundaries</li> </ul>
Limitations	<ul style="list-style-type: none"> <li>- Overlooks external disruptions</li> <li>- Assumes fixed, linear trajectories</li> </ul>	<ul style="list-style-type: none"> <li>- Overlooks non-goal directed changes</li> <li>- Change initiated only in case of large problems</li> </ul>	<ul style="list-style-type: none"> <li>- Assumes heterogeneity and competition</li> <li>- Not applicable to explorative processes</li> </ul>	<ul style="list-style-type: none"> <li>- Cases without antithesis</li> <li>- Cases with uneven power distribution between actors</li> </ul>
BPM Literature examples	Küng and Hagen (2007); Van der Aalst (2013); Verma (2009)	Dumas et al. (2018); Jansen (2020); Reijers et al. (2010)	Lin et al. (2020); Maaradji et al. (2015); Ostovar et al. (2020)	Choudrie (2005); Sockalingam and Doswell (1999)

Table 2. Overview of the theoretical approaches to business process change

## 4.1 Lifecycle Approach

### 4.1.1 Description of the Lifecycle Approach

The lifecycle approach to change asserts that change follows a logical or natural sequence of stages, with each stage building on earlier ones. Specific activities in each stage aim to achieve certain objectives before transitioning to the next stage. These stages unfold in a fixed order, where change is driven by progression through these stages (Poole & Van de Ven, 2021; Van de Ven & Poole, 1995).

A lifecycle approach to process change is contingent on two key conditions. First, an underlying organizing principle determines the adherence to the predefined stages in a lifecycle process. This may either be due to 'logical necessities', in which successive stages require the previous ones to occur, due to 'natural progressions' in which the stages build on growth in the previous ones, or due to 'legislated progressions' through stages enforced by regulatory bodies (Poole & Van de Ven, 2021). These models prescribe a predetermined sequence of actions, which rational, logically thinking agents can use to make decisions effectively (Poole & Van de Ven, 2021). Regulation, in this approach, refers to adherence to the organizing principle that governs the execution and development of processes. The second condition is the separation between 'planners' who design the change lifecycle and 'doers' who implement it

without participating in its development (Ford et al., 2008). This can cause challenges when actors have different views on change.

#### 4.1.2 The Lifecycle Approach in BPM

Transferring the lifecycle approach to BPM, business process change unfolds through structured BPM cycles where processes are designed, implemented, and optimized according to logical stages. The 'BPM lifecycle' is a common method to describe business processes from their identification, through the analysis of existing process models, to process redesign, the implementation of new designs, and the monitoring of the performance of redesigned processes (e.g., Van der Aalst, 2013; Verma, 2009). The lifecycle helps align business processes with organizational objectives (Macedo de Morais et al., 2014). Van der Aalst (2013), for example, identifies three phases of a BPM lifecycle: the '(re)design phase', in which a model of the business process is created; the 'implementation phase', where the model is transformed into a system that is executable and ready to run; and the 'run and adjust phase', where the process is enacted in practice, and adjusted to the organization's needs. BPM systems support this sequence by establishing regulations for business process change technologically (Reijers, 2006).

The underlying logic of the lifecycle approach can be seen in several empirical BPM accounts. Verma (2009) proposes a lifecycle model based on the logic of the financial performance of individual business processes. This model chooses business processes based on regulations such as the value contribution of the process, and then follows a predefined cycle to improve them (similar to Van der Aalst, 2013). Van Looy (2021) emphasizes that decision makers need to comply with IT infrastructure regulations to manage business process change. As these examples demonstrate, a lifecycle approach to change in BPM assumes that business processes progress through logical, institutionalized stages to achieve improvement (i.e., change). The stages show a clear orientation to rules and logics, e.g., through the implementation in BPM system requirements.

The lifecycle approach is also evident in business process maturity models. Maturity models formalize levels of maturity and prescribe steps for achieving higher maturity levels. Küng and Hagen (2007), as one empirical example, describe how a bank restructured its processes following a predefined sequence to improve process maturity. Fischer et al. (2020) demonstrate how a drink manufacturer standardized its processes in alignment with regulatory rules and responsibilities, employing a prescribed sequence for audits to improve non-compliant processes. Hammer (2007) developed a process implementation roadmap, evaluating business processes based on the analysis of 'enablers' that progressed through predefined maturity stages.

#### 4.1.3 Implications of the Lifecycle Approach for Managing Change

Viewing BPM through a lifecycle approach, PMs regulate the sequence of stages in the change lifecycle, ensuring adherence to the BPM lifecycle. They oversee process redesign teams, manage the change process, and ensure compliance with regulations embedded in the normative logic of the change process (Trkman, 2010). To achieve process change according to the lifecycle approach, PMs rely on the support of technology-supported systems to ensure compliance with organizational regulations (Van Looy, 2021). PMs roles may also evolve throughout the change lifecycle based on the maturity of the business process, from the initial design of the change process to a more measurement and control-intensive role in later stages, focusing on standardization and reducing variability (Danilova, 2019; Hammer, 2007). The lifecycle approach prompts PMs to evaluate process maturity, select actions based on the current stage, and guide process participants in alignment with the ongoing stage of the change process.

#### 4.1.4 Limitations of the Lifecycle Approach

However, the lifecycle approach has limitations. It assumes that business processes progress through a fixed sequence of predefined stages, with each stage completed before moving to the next (Recker, 2014). This structured view makes it difficult to account for external disruptions or unexpected contextual factors that can significantly alter process trajectories (Grisold et al., 2019; Grisold, Groß, et al., 2022). Because such disruptions often fall outside a predefined progression, their impact cannot be

easily explained or integrated into lifecycle models of change. Additionally, lifecycle models tend to conceptualize business processes as progressing along fixed, linear trajectories without accounting for iterative feedback loops or adaptation mechanisms. This perspective may not fully capture the complexity of business process change, where organizations often need to adjust and refine processes in response to evolving business needs and environmental influences.

## **4.2 Teleological Approach**

### **4.2.1 Description of the Teleological Approach**

The teleological approach to change revolves around the idea that a specified goal acts as a catalyst for the transformation of an organizational entity (Van de Ven & Poole, 1995; Van de Ven & Sun, 2011). Change progresses toward a desired end state, without prescribing the exact path to that state. It involves repetitive cycles of goal formulation, implementation, evaluation, and modification. This approach assumes that actors can articulate goals and have autonomy in shaping their actions to achieve them. Consensus among actors regarding the goal and the ability to assess alignment with those goals are also required (Van de Ven & Poole, 1995).

### **4.2.2 The Teleological Approach in BPM**

In BPM, a teleological approach to change is consistent with considering cycles of goal formulation, implementation, evaluation, and modification to improve business processes. Unlike the logical, formalized stages as in a lifecycle approach, the teleological approach is inherently goal-driven, allowing organizations to adapt dynamically, continuously refining process changes based on feedback to earlier versions of any given business process. It emphasizes process flexibility to fit the context at a given time rather than adhering to a rigid sequence. In this context, ‘regulation’ refers to the alignment of processes to meet specific goals and objectives, but not through adherence to logical or natural phases (as in the lifecycle approach). Change unfolds through an iterative progression of refining business processes based on performance outcomes and the evolving goals of the organization and its actors (Cysneiros & Yu, 2004). Understanding business process change as a teleological process thus reflects BPM models that define goals based on current and realistic objectives. Based on these goals, organizations may adapt subsequent stages of a BPM lifecycle to achieve them (e.g., Dumas et al., 2018; Reijers et al., 2010).

A notable model aligned with this approach is the BPM lifecycle model proposed by Dumas et al. (2018). The model portrays BPM as a continuous improvement process, where issues identified during the initial phases of process discovery and analysis inform goals for change, leading to a ‘to-be business model’ that reflects these goals. The implementation phase then focuses on transitioning the process to this model, while the monitoring and controlling phase assesses the performance of the process relative to the goals. Consequentially, the underlying mechanism of goal orientation focuses solely on the current and future status of the business process, without specifying the path to the desired end state.

Empirically, teleological approaches to business process change are common in continuous improvement programs of organizations. Fischer et al. (2020), for example, describe BPM in a telecommunications organization as part of a holistic strategy, where individuals actively participate in goal-driven cycles for continuous process optimization. This approach fosters the self-governance of individual processes, with actors setting appropriate goals, evaluating their achievement, and making modifications as needed. Similarly, Jansen (2020), in a success story of process mining in organizational practice, explains that actors in the case company were able to define issues in processes, set individual goals, monitor goal attainment, and continuously strive for improvements by benefiting from transparent process data and information-sharing across well-performing processes. Process mining supported the identification of future opportunities and risks for the business processes and thereby allowed the organization to adapt the goals of business processes as needed. Additionally, Xia and Wei (2008) emphasize that a context-driven adaption of business processes allows for the achievement of business process goals in alignment with real-time developments in the organizational environment. Other studies

developed goal-oriented approaches for modeling and changing business processes based on the extensive database that modern organizations have of their operations (e.g., Truong et al., 2021).

#### **4.2.3 Implications of the Teleological Approach for Managing Change**

Based on a teleological approach, PMs play a crucial role in articulating appropriate process goals (Markus & Jacobson, 2010), facilitating consensus among the involved actors, and aligning them with the broader organizational strategy (Danilova, 2019; Rahimi et al., 2016). They must also ensure the provision of necessary resources to support goal attainment (Dumas et al., 2018). Additionally, PMs are tasked with monitoring goal attainment during the execution of the business process (e.g., Danilova, 2019; Dumas et al., 2018). This monitoring may lead to adjustments in the goals, driving continuous process improvement (Rahimi et al., 2016). To fulfill this role, PMs can rely on the large pool of available process data (Jansen, 2020).

#### **4.2.4 Limitations of the Teleological Approach**

Teleological approaches assume that change efforts are only initiated when the potential for improvement surpasses a certain threshold (Van de Ven & Sun, 2011). If this threshold is not met due to the absence of significant threats or opportunities within a particular business process, continuous improvement might stall (Greve, 1998). Additionally, actors may become committed to courses of action that are not yielding the expected results (McNamara et al., 2002), if process goals do not align with environmental conditions. Also, when business processes lack supporting systems that are 'process-aware' and provide precise information on processes to define appropriate goals, cycles of change relying on such information may encounter challenges (Van der Aalst, 2003). In essence, a teleological approach to change is effective only when actors can assess whether and how business process change contributes to specified goals.

### **4.3 Evolutionary Approach**

#### **4.3.1 Description of the Evolutionary Approach**

The evolutionary approach explains change as evolving through a repetitive sequence of variation, selection, and retention events (Van de Ven & Poole, 1995). In an organizational context, this process generates competition among entities, which can either be organizational units, roles, processes, or other methods for the division of organizational tasks. The processes with the best fit to their context survive, while others vanish over time. Novel opportunities arise randomly through variation and cannot be predicted (Campbell, 1969; Van de Ven & Poole, 1995). Selection results from competition among variations (Van de Ven & Sun, 2011). Retention maintains existing organizational entities over the proposed variations (Van de Ven & Poole, 1995; Weick, 2015). Change, thus, functions through a "recurrent, cumulative, and probabilistic progression of variation, selection, and retention" (Van de Ven & Poole, 1995: 518).

Several conditions apply in the evolutionary approach to change. First, it requires organizational entities to compete for a given set of scarce resources. Without competition for resources, entities persist even if they do not fit the context in which they operate. Second, available resources must be relevant for multiple organizational entities. If organizational entities do not compete for resources, entities will persist regardless of their fit to the operating context. Third, organizational entities competing for resources must differ sufficiently to allow for selection between them. If entities are too similar, selection is not possible (Van de Ven & Sun, 2011).

#### **4.3.2 The Evolutionary Approach in BPM**

Applied to BPM, an evolutionary approach to change entails that business processes compete for a limited set of organizational resources. Through random variation, selection, and retention, business processes evolve with different levels of fit to their context. Processes that align best with the context's requirements receive resources and persist, while less-fit processes are replaced. More frequent



variations are expected to positively influence the fit of a given business process to the respective context, as they generate more opportunities for improvement (Van de Ven & Poole, 1995).

Empirically, the evolutionary approach is reflected in studies that examine the concept of ‘process drift’, which refers to statistically significant changes in process behavior over time (e.g., Bose et al., 2011; Maaradji et al., 2015). Process drift occurs when actors deviate from the prescribed process model—either in individual actions or entire sequences—to adapt to changes in the environment (Maaradji et al., 2015; Ostovar et al., 2020). BPM scholars have developed methods that detect and compare business processes before and after drift (Ostovar et al., 2020), and serve as decision criteria for selecting or retaining these changes. Some studies (e.g., Lin et al., 2020) introduce mechanisms specifically designed for ‘forgetting’ certain variations, which may appear counterintuitive in relation to retention. However, forgetting in this context does not mean simply discarding variations but rather actively deciding which variations should not be retained. Forgetting is a necessary aspect of the retention mechanism, as it ensures that only relevant or beneficial variations persist, while ineffective or undesirable changes are excluded. An evolutionary approach is also evident in BPM studies that address competition among processes. Fischer et al. (2020) present the case of a toy manufacturer, in which management aims to accomplish performance improvement holistically. The business process improvement initiatives, in this specific example, are fed from the same resource base and compete for scarce resources. This competition leads to a prioritization of certain business processes over others.

#### **4.3.3 Implications of the Evolutionary Approach for Managing Change**

PMs need to understand the impact of process variations and assess effects of individual variations on business processes effectively (Ostovar et al., 2020), ensuring flexibility for adaptations and robustness to retain models amid temporary disruptions (Ng et al., 2015). They compare pre- and post-drift business models to understand how variations affect performance and alignment with strategic goals (Maaradji et al., 2015). Also, PMs need to select the fittest business processes relative to their contexts (Hammer, 2007; Markus & Jacobson, 2010), directing resource allocation towards fitter business processes.

#### **4.3.4 Limitations of the Evolutionary Approach**

In organizations, in which the number of variations in business processes is too small, and competition for resources amongst the business processes does not exist, evolutionary processes of change may break down (Van de Ven & Sun, 2011). However, in organizations with many competing business processes, resource allocation to business processes that are the fittest at a specific point in time, involves the risk of channeling resources away from promising business processes, which are changing, but not yet performing well enough to be funded by the organization. Explorative business processes, in this case, may fall short of exploitative business processes performing well under traditional managerial performance assessments (Chang et al., 2002).

Additionally, an evolutionary approach to change considers randomized variation a key mechanism that allows for the emergence of diverse process configurations, with selection pressures determining which variations are retained. Van de Ven and Poole (1995) explicitly discuss how evolutionary change processes rely on random variation to create diversity, enabling organizations to adapt to environmental changes. However, most BPM research on process evolution does not explicitly account for randomized variation. While certain studies examine the evolution of BPM in general (e.g., Recker & Mendling, 2016; Reijers, 2021), they often frame process evolution as a deliberate and structured process, where variations are introduced through controlled and strategic changes rather than emerging through random, trial-and-error experimentation. This suggests that BPM research implicitly adopts a more deterministic view of process evolution, focusing on guided improvement rather than spontaneous process variation.

## **4.4 Dialectical Approach**

### **4.4.1 Description of the Dialectical Approach**

The dialectical approach to change views change as unfolding through political dynamics among actors with opposing positions (Van de Ven & Poole, 1995; Van de Ven & Sun, 2011). According to Van de Ven and Poole (1995), change occurs when contradictions between opposing entities create pressure for change. These contradictions manifest as a struggle between a thesis (the existing status quo) and an antithesis (an alternative conception). Change unfolds when either the antithesis overcomes the thesis, leading to a shift in the status quo, or when a synthesis—a negotiated resolution between the opposing forces—is achieved. This newly established state becomes the starting point (new thesis) for future cycles (Van de Ven & Sun, 2011). Conflict and its resolution are therefore central to the dialectical change process, serving as catalysts that drive change over time (Van de Ven & Sun, 2011).

The dialectical approach assumes the presence of multiple actors with differing opinions to create a synthesis from the friction between these different actors (Van de Ven & Sun, 2011). Openness to engage in conflict within the organization is essential for dialectical approaches to change. If dominant actors representing the thesis suppress potential conflicts, the antithesis will not accumulate enough power for change to occur (Hargrave, 2021).

### **4.4.2 The Dialectical Approach in BPM**

A dialectical approach to business process change envisions the current form of a business process as the thesis, supported by organizational actors maintaining the status quo. The antithesis consists of opposing actors proposing alternative versions of business processes, for example, by presenting a new variant of a process model. When the antithesis gains power, the confrontation between the thesis and antithesis can change the business process, either resulting from the antithesis or as a negotiated synthesis that lies between the current form of the business process and the form that is imagined by the opposition (Sockalingam & Doswell, 1999).

The BPM literature emphasizes opposing theses and the conflicts they create (Sockalingam & Doswell, 1999). Conflict promotion and management are essential for achieving effective change in business processes (Ghiringhelli & Virili, 2021; Sockalingam & Doswell, 1999). These conflicts, when channeled constructively, lead to creative solutions, superior decision-making, and empowerment of organizational actors. A case study of a periscope manufacturer for naval applications, for example, explored the role of conflict and conflict management in a BPM initiative (Sockalingam & Doswell, 1999). The authors revealed that effective conflict management is crucial for BPM success as it turns differing opinions into creative solutions and empowers participants. The challenge is keeping conflicts constructive, which is achieved through transparent information policies and participative decision-making, encouraging actors to act on emerging process issues. Another study by Choudrie (2005) found that task-related conflicts were considered beneficial for BPM, but personal fears of job losses created opposition to change initiatives. The organization addressed this by dedicating a regular time slot to resolve process-related problems and finding solutions that facilitated the preferences of all parties involved. Moreover, Mafazi et al. (2014) show that stakeholders may have different opinions on if and how to change a business process. These opinions on future versions or possible new variants of a business process are, following Van de Ven and Poole (1995), a conflict between thesis and antithesis. The authors, thus, propose a framework that is based on behavioral consistency rules to detect possible conflicts and to resolve these conflicts efficiently, either by combining the opposing opinions or by letting a user decide which change is the most feasible.

### **4.4.3 Implications of the Dialectical Approach for Managing Change**

The dialectical change approach places specific demands on PMs in the management of business process change. Their role is to effectively manage conflicts (which are a source of change) while ensuring that these conflicts remain constructive and do not escalate into obstructive relationship conflicts (Choudrie, 2005; Sockalingam & Doswell, 1999). PMs also enable actors to articulate and weigh the theses, and

are crucial for reaching a synthesis where both sides adjust their ideal conceptions of the business process. They are responsible for facilitating conflicts between actors and supporting the search for synthesis when it does not emerge from the dialectical practice itself (Danilova, 2019).

Additionally, PMs play a crucial role in encouraging individual process participants to be open to changes not only in the business process itself but also in the underlying mechanisms that influence their behavior (Meziani & Saleh, 2011). PMs also need to set boundary conditions for synthesis, especially if they conflict with organizational strategy (Sayer & Harvey, 1997). They provide the necessary resources to facilitate conflict in the business processes (Danilova, 2019; Taher & Krotov, 2016).

#### **4.4.4 Limitations of the Dialectical Approach**

Considering limitation, the presence of antitheses is essential for dialectical change processes but can be suppressed by unequal distribution of power between actors (Van Looy, 2015). When PMs are subordinate to functional managers, functional interests may overshadow process optimization initiatives (Maddern et al., 2014). Furthermore, when actors holding functional authority want to preserve the status quo, antitheses may be stifled (Van Looy, 2015). Another significant limitation is the necessity for a functioning conflict and communication culture within the organization. A lack of effective, change-oriented communication and conflict resolution mechanisms can hinder conflict-driven business change processes from leading to meaningful transformation (Taher & Krotov, 2016; Van de Ven & Sun, 2011).

## **5 Discussion**

### **5.1 Unpacking the Complexities of Business Process Change**

Most BPM research adopts a prescriptive approach to business process change, assuming that organizations can manage change through structured interventions for designing, managing, and optimizing business processes (Dumas et al., 2018; Hammer, 2014). These approaches assume that change follows a linear, well-defined trajectory, where processes can be analyzed, modeled, and improved in a controlled manner. However, some scholars have started to challenge this assumption by arguing that business process change is inherently complex (Grisold et al., 2020), because the reality of process change is rarely as predictable or sequential as traditional BPM models suggest. Instead, change emerges dynamically and unpredictably (Mahringer & Walleiser, 2023). We argue that to understand the complexity of business process change, BPM research needs explanatory approaches (Baiyere et al., 2020; Mendling et al., 2020) as a complement to the prescriptive approaches. Explanatory approaches can help theorize the emergent and often contested nature of business process change that may go unnoticed in prescriptive approaches.

This paper takes a step towards explanatory research of business process change by making the diversity of change approaches visible that are implicitly embedded in research on business process change. Based on Van de Ven and Poole's (1995) 'motors of change', we identify four theoretical approaches—lifecycle, teleological, evolutionary, and dialectical—through which existing BPM research conceptualizes business process change, demonstrating that different approaches offer complementary yet distinct insights into the complex nature of change.

Our paper has two major implications for research on business process change in BPM. First, it allows us to understand the complexities in business process change. The complex nature of business process change cannot be fully captured by deterministic models but require explanatory thinking that acknowledges the emergent nature of business process change, because business process change is often characterized by unpredictable adaptations, stakeholder negotiations, and socially constructed transformations (Berente et al., 2016; Orlikowski, 1996). While BPM research has extensively studied how organizations can plan and execute structured process improvements, our paper highlights the role of unforeseen events, social interactions, and individual agency in shaping process change. Our analysis shows how different theoretical approaches help explain these phenomena. For instance, the evolutionary approach provides a way to conceptualize deviations between process models and their

actual execution (Suša Vugec et al., 2018), not as exceptions to be corrected, but as variations in response to contextual demands. The question is less how to correct these variations, but how to enable retention of the fittest ones. Similarly, the dialectical approach offers an explanation for unintended side effects of BPM initiatives—such as resistance, conflicting goals, or disrupted workflows—as outcomes of competing forces and tensions between stakeholders (Grisold et al., 2020).

Second, our work makes theoretical approaches to business process change explicit. We thereby encourage BPM scholars to critically reflect on how their research frames business process change. Our paper shows that BPM research is already engaging with different theoretical approaches to business process change, even if these theoretical approaches are not always explicitly acknowledged. Recognizing this diversity is crucial, as it allows scholars to critically reflect on the assumptions underpinning their work and consider how different theoretical approaches shape research questions, methodologies, and interpretations of change (Mahringer et al., 2025), as well as what they might overlook. Our work also suggests that BPM research can benefit from greater methodological diversity. Many BPM studies rely on structured modeling techniques, simulation, or process mining, which are useful for capturing predefined process flows, but may miss out on important factors in the conceptualization of change, struggling to account for its negotiated and sometimes contested nature (Grisold, Wurm, et al., 2022). Reflexivity to the complex nature of business process change opens opportunities for alternative methodological approaches, for example ethnographic methods (Dittrich, 2021), in addition or as an alternative to trace data analysis. These methods could enable a more comprehensive understanding of business process change, capturing how change unfolds in practice and over time, or how new opportunities for change are discovered (Mahringer, 2021).

By sharpening the conceptual understanding of business process change, we provide a foundation for advancing BPM as an explanatory discipline. Our findings encourage BPM scholars to critically examine their theoretical assumptions and explore how diverse change approaches can enrich BPM research and practice. In doing so, we contribute to the ongoing evolution of BPM as a field that explains the underlying mechanisms of change, offering a more comprehensive understanding of how business processes evolve in organizational settings.

## **5.2 Practical Implications**

Our paper offers practical implications for organizations and BPM practitioners by highlighting how different theoretical approaches shape business process change. First, organizations can benefit from the appreciation of different approaches to business process change. Understanding these different approaches to change can help PMs recognize the underlying assumptions to BPM initiatives and better understand sociodynamic side-effects of business process change. It can sensitize both PMs and process participants to the existence of these distinct aspects and the disparities among them, helping them to reflect on the assumptions they make in BPM initiatives, recognizing potential blind spots that might arise from viewing change through any theoretical approach alone.

Another important implication is the recognition that process change is rarely a linear endeavor. Change initiatives are complex, involving competing interests and unintended consequences (Baiyere et al., 2020; Berente et al., 2016). PMs should therefore adopt a more holistic perspective, considering not just the design and execution of business process change initiatives but also the organizational and behavioral factors that shape how change unfolds over time. By incorporating a broader understanding of process change, organizations can better understand challenges such as stakeholder resistance, unforeseen side effects, and the need for iterative adaptation (Recker, 2014; Trkman, 2010).

Finally, our study highlights the importance of critical reflexivity in BPM practice. PMs must be aware of the assumptions and implicit models of change that guide their actions. Different approaches to process change lead to different strategies and outcomes, yet many BPM methodologies implicitly favor structured, prescriptive approaches (Röglinger et al., 2012). By fostering a more reflective approach to process change, organizations can identify new opportunities, better navigate uncertainty, and improve the implementation of process changes (Mahringer & Walleser, 2023).

### 5.3 Limitations and Future Research

While this paper provides a structured analysis of how BPM research conceptualizes business process change, it also has limitations that open avenues for future research. First, our work is based on a structured literature review rather than empirical data collection. Future research could thus empirically explore how BPM researchers and practitioners perceive and apply different approaches to change in real-world settings, particularly exploring potential gaps between research and practice.

Second, our application of Van de Ven and Poole's (1995) framework provides a structured typology but does not claim to encompass all nuances of business process change. Further theoretical refinements could integrate additional approaches to change relevant to BPM.

Moreover, there is potential to examine the change mechanisms in each of the four theoretical approaches. In particular, the role of random variation in BPM process evolution remains largely unexplored. While Van de Ven and Poole (1995) emphasize the importance of variation in evolutionary change, BPM studies tend to focus on structured, intentional change mechanisms. Future research could examine whether and how BPM frameworks allow for unstructured, emergent variations and their role in long-term process change.

Lastly, while we highlight how BPM literature frames process change, future studies could investigate how organizational actors, particularly PMs, make decisions about process change—whether to change at all, how to approach change, and what factors influence their decision-making beyond prescriptive BPM practices. This would enhance our understanding of BPM as both a practical, design-oriented field and a theoretically rich, explanatory discipline.

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