# **Exploring microfoundations** of field-level change

**Essays on transformations in the retailing industries** 

Lauri Paavola



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Essays on transformations in the retailing industries

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#### **Abstract**

This dissertation is a study of the microfoundations of institutional change. More specifically, it seeks to understand how bottom-up institutional change is related to and enabled by changes in organizational routines. Until the last two decades, institutional change was typically attributed to macro-level factors such as exogenous shocks that may come in the form of a shift in social values, new legal regulations, or a novel technology. Similarly, it has been thought that routines need to be adapted, changed, or abandoned according to such higher-order triggers. Although the area has attracted increased interest, there remain a variety of unanswered questions related to the microfoundations of change processes that come as a result of individuals solving problems in their mundane everyday activities.

To shed light into these questions, I introduce an ensemble of three essays on transformations in the field of retailing, focusing on distinct aspects of bottom-up emergence. In the first essay, I elucidate how routines and industries are mutually constitutive. I show how routines can not only be conceived as the stable building blocks of organizations, but also as generative systems driving organizational outcomes. Accordingly, my results advance the understanding of the generative nature of routines by suggesting that, while the changes within a single routine may seem small at first sight, such changes can spill over into other routines and practices, thereby creating a chain reaction and compiling into a higher-order transformation. In the second essay, my focus is on algorithms that have increasingly replaced mundane routines in organizations, extending and even exceeding the efficiency of human agency. I show how this may amount to a fundamental shift in the logic of decision-making at the field-level, causing some decisions to lose visibility to senior management. The essay enhances our current understanding of the impact that big data increasingly exerts on many organizational aspects. Finally, in the third essay, I look into the role of serial field-configuring events (FCEs) as a medium for interactions among routines and fields, and seek to uncover their role in higher-order change. Whereas the current literature views the intended factors related to the organizing of the event as key determinants of its impact, I show how the role of FCEs is highly dependent on the FCE's surroundings. This essay highlights the role of serial FCEs on strategy implementation and underlines the importance of studying FCEs in their networks within and across organizations over time.

**Keywords** Institutional change; microfoundations; routines; algorithms; field-configuring; events; retailing.

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Helsinki, 19.12.2020 Lauri Paavola

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# **Essays**

This doctoral dissertation consists of an introductory part and of the following three essays, which are referred to in the text as Essay I, Essay II and Essay III.

**Essay I.** Paavola, Lauri; Cuthbertson, Richard. The role of organizational routines in driving industry-level transformations. Non-published essay. Submitted to a journal (review status: under review).

**Essay II.** Paavola, Lauri; Cuthbertson, Richard. Algorithms creating paradoxes of power: Explore, exploit, embed, embalm. Non-published essay. Submitted to a journal (review status: conditional accept 29.9.2020).

**Essay III.** Paavola, Lauri. Exploring the role of serial FCEs in strategy implementation. Non-published essay. Submitted to a journal (review status: under review).



#### 1. Introduction

During the past decade, the microfoundations of institutional change have been subject to active research (e.g., Haack et al., 2019; Powell & Rerup, 2016; Smets et al., 2012). The earlier studies focused more on the macro-level: the so-called "evolutionary outlines" of the change processes (Lounsbury et al., 2003). In this view, change comes about from, for example, shocks created by the introduction of new technologies (e.g., Garud et al., 2002), incompatible institutional arrangements that create conflicts among existing institutions (Seo & Creed, 2002), or from situations in which organizations, constrained by their networks, navigate through conflicting institutional pressures (Pache & Santos, 2010). However, with the focus on the macro-level, all of these viewpoints can yield only a simplified view of institutional change, as discussed by Smets et al. (2012) and by Delbridge and Edwards (2008).

More recently, there has been a realization that change may also result from the mundane actions of individual actors at the micro-level (e.g., Haack et al., 2019; Powell & Rerup, 2016; Smets et al., 2012). In the 1990s, several scholars, dissatisfied with the notion that institutions are created or configured by external factors at the macro-level, began to address this research gap in domains that focused on the micro-level (Schneiberg, 2013). The concepts of *institutional work* and *institutional entrepreneurship* refer to the creation or transformation of institutions by individuals with sufficient resources who wish to further their own interests (Maguire et al., 2004; Lawrence & Suddaby, 2006).

Other domains focusing on the micro-level include the study of practices (Smets et al, 2012), Field-Configuring Events (FCEs) (Schüßler et al., 2014), and organizational routines (Powell & Rerup, 2016). For example, Smets et al. (2012) reveal how improvisations in work practices may diffuse across an organization and eventually lead to a field transformation. Their study illustrates three different mechanisms through which mundane work became justified and diffused among lawyers in the field of law and legal services. These mechanisms are variously termed situated improvising, reorienting the normative network, and unobtrusive embedding, the latter referring to a change "radiating" beyond an organization in an effective or "unobtrusive" way to cause change at the field-level. Similarly, Schüßler et al. (2014) discuss how the actions and interactions of individuals in a series of Field-Configuring Events connect to field-level changes.

More specifically, their study shows how different event structures and processes produce or prevent varying institutional changes in the transnational climate policy field. Furthermore, in their conceptual paper, Powell and Rerup (2016) propose that institutions may be reproduced through the "routine activities of ensembles of individuals."

In this dissertation I will be specifically focusing on organizational routines. While the concept of institutional entrepreneurship envisages certain individuals as having the ability to bring about institutional change, routines have been traditionally viewed as stable or even inert entities (Salvato & Rerup, 2011). However, routines have more recently been shown to have a greater capacity to contribute to transformations than has previously been assumed (Feldman et al., 2016), and in this study I seek to understand their role in institutional change. Moreover, I study the impact of algorithmic technologies on certain routines; the two concepts are closely related, given that algorithms are likely to replace some of the most mundane action-patterns of routines; this, as we will see, sometimes leads to unexpected consequences. Finally, Field-Configuring Events (FCEs) are thought to have an impact on both routines and institutional fields, and so this dissertation examines the role played by FCEs in mediating change among routines and institutions.

Despite the number of recent attempts to advance the understanding of microfoundations in institutional change, a variety of different questions remain unanswered, and I will discuss these in the next subsection. I note that in institutional theory, routines and practices are viewed as the "microfoundations" for higher-order change, whereas in discussions that regard routines as practices, routines are sometimes viewed as "microactivities" of higher-order phenomena, e.g., dynamic capabilities (Salvato & Rerup, 2011). For the sake of clarity and consistency, and contrary to the usual convention in literature on routines, I will use the term "microfoundations" throughout this thesis when referring to either microfoundations or microactivities.

#### 1.1 Theoretical background

As Whittington (2006) among others has proposed, the connections between the internal workings of organizations and the "broader phenomena outside" should be more closely examined than has previously been the case. In line with this proposition, the focus of this dissertation is on the microfoundations of institutional change. More specifically, I seek to understand the connections between organizational routines and institutional fields, as well as the impact of FCEs in mediating such interactions. In the studied settings, change originates from the everyday or periodical work of individuals, eventually resulting in shifts in the overall field-level logics. In what follows, I will explain in more detail the theoretical research gaps in the two selected domains.

#### 1.1.1 Organizational routines as drivers on institutional change

Routines are traditionally viewed as stable or even inert entities (Salvato & Rerup, 2011), and have therefore not been seen as transformational or as having a strategic role (Salvato, 2009). Consequently, routines have not been considered to play a role in higher-order phenomena such as industry- or field-level transformations. Indeed, the term "routine" has been commonly used to refer simply to the standard, repetitive nature of certain actions (Cohen et al., 1996; Nelson & Winter, 1982).

However, it has recently become accepted that routines are not clearly defined entities but are rather "repetitive streams of situated action" (Feldman et al., 2016). Situated actions are enacted in specific times and places, in a manner that is, even if only partially, ad hoc (Danner-Schröder & Geiger, 2016; Feldman, 2016). Routines are not mindlessly executed but are rather carried out by knowledgeable and reflective actors, and variation may emerge on any occasion where a routine is enacted (Bucher & Langley, 2016; Dittrich et al., 2016). It has been found that routines play a much more active role in contributing to innovations and transformations than was previously assumed to be the case (Feldman et al., 2016).

Although the connections have not been empirically shown, all of this implies co-constitution among routines and institutional fields. For example, Powell and Rerup (2016) have proposed that there is a connection between the performance of routines and the microfoundations of institutions, as institutions are reproduced through routine activities. This suggests interesting avenues for research. How, for example, can a change in a routine or the introduction of an entirely new routine impact the development of a field? Furthermore, what are the consequences of algorithmic technologies on established organizational routines and the consequent field-level development? Recently, various algorithms have changed routines by replacing many of the most mundane action-patterns; conceptually, algorithms are similar but not identical to routines since an algorithm runs in a similar way with every enactment, whereas routines exhibit variation (Powell & Rerup, 2016). All of this has stimulated my motivation to study the influence of routines or changes in routines on higher-order phenomena. In particular, I am interested in routine dynamics as well as in the interrelations among routines and practices in their institutional environments.

# 1.1.2 Field-Configuring Events mediating change among routines and institutions

FCEs are defined as short-term social events such as professional gatherings, conferences, technology contests, or prize ceremonies that encapsulate or shape the development of a field, industry, profession, market (Lampel & Meyer, 2008; Meyer et al., 2005), or organizational ecosystem (Thomas & Autio, 2014). Typically spanning a time period ranging from a few hours to a few days, an FCE gathers together actors and constituents who belong to the same field or organizational ecosystem but who come from different organizational or geographical backgrounds (Lampel & Meyer, 2008). A typical FCE provides opportunities for

presentations, face-to face social interactions, information exchanges, reputation advances, etc. (Lampel & Meyer, 2008, Schüßler et al., 2015). In this way, the participants may gain awareness of their common concerns, recognize accomplishments, and influence the development of the field (Anand & Jones, 2008, p. 1037; Citroni, 2015; Nissilä, 2015).

Since FCEs often give rise to crucial turning points in fields, industries, or ecosystems, Davis and Marquis (2005) and Lampel and Meyer (2008) suggest that observing these settings is an efficient way of collecting rich data and gaining an understanding of the development of the field. The impact of FCEs on fields has been recognized and actively studied since the term was coined by Meyer et al. (2005). Generally, the organizers of an FCE attempt to design the event so as to shape field evolution toward intended and desired outcomes, but the organizers' agency is limited and their intentions are not always realized (Schüßler & Sydow, 2015). Unacknowledged conditions, unintended consequences of actions, and even possible counteraction by opponents (Giddens, 1984) may cancel or negate the positive impact on the field or even on the entity organizing the event (Schüßler & Sydow, 2015). Moreover, despite being knowledgeable agents, organizers may coordinate the events in routinized ways that do not recognize the effects on the field (Giddens, 1984; Schüßler & Sydow, 2015).

While the literatures related to organizational routines and institutions have rarely been bridged, FCEs have been considered to have an impact on both. In practice, the participants in an FCE are often actors who execute various routines, as we will see in this dissertation. Thus, insofar as routines have the power to bring about institutional change, FCEs have power to mediate such change via the transformation of routines. The literature on FCEs has strongly focused on the impact and outcomes of these events (e.g., Anand & Jones, 2008; Glynn, 2008; Nissilä, 2015). On the other hand, with the exception of the work of Schüßler et al. (2014) and Leca et al. (2015), little consideration seems to have been given to the question of why a particular FCE (or series of FCEs) succeeds or fails in bringing about the intended outcomes, and as a result there is a dearth of knowledge about how such events ought to be organized. This leaves an interesting gap for research.

#### 1.1.3 The research questions

As already noted, the role of organizational routines in field-level transformations has rarely been addressed. Despite this, there have been indications of co-constitution among these concepts (Powell & Rerup, 2016). In this dissertation, I consider how the everyday performance of routines may influence higher-order phenomena, i.e., institutional fields. In addition to this, I analyze how the introduction of new algorithmic technologies may have an impact on the operating logics of entire industries, eventually resulting in the need to re-create existing organizational routines. Finally, I look into the role of serial Field-Configuring Events as a medium for interactions, and explore their role in higher-order change generally and in strategy implementation in particular. In essence,

the problem I seek to understand is: how is bottom-up institutional change related to and enabled by changes in routines?

In order to address this overarching research issue, I seek to answer the following more specific research questions:

- 1. How does the everyday performance of routines influence higher-order transformations?
- 2. What are the consequences of algorithmic technologies on established organizational routines?
- 3. What role do FCEs play in implementing strategic change in a co-operative ecosystem?

In this dissertation, I seek to provide answers to these questions through an ensemble of three research studies focusing on two specific transformations in the field of retailing. Although the analyzed transformations have both resulted in changes at the field-level, the mechanisms behind these processes have been very different. First, my research in the field of UK grocery retailing illustrates how a relatively mundane "loyalty routine", built on new algorithmic technologies, created new insights into customer behavior for the grocery retailer Tesco. These insights illuminated the value of customer data to several decision-makers within the organization, leading to its more systematic collection and use. Very quickly, the use of customer data spread to a variety of functions within Tesco, and this data was eventually also shared with suppliers. Through various mechanisms, Tesco's competitors began to implement similar processes, with the result that customer data became the primary determinant in decision-making for the entire industry.

In my second case, I focus on how the impact of the "HR days" event, an annual FCE intended to develop and transform human resource management practices within a Finnish cooperative ecosystem known as the S-Group, changed from being a mere routine annual event to one that exerted strategic influence on the ecosystem. What underlay the changing impact was a structural reorganization of the ecosystem, which led to increased interest among the member cooperatives in developing their work practices. Unlike the case of Tesco, where the new routine incrementally "infected" the field, the field-level impact mediated by the HR days event was relatively direct, as it played an important role in the S-Group acquiring 40% of the grocery retail market share in Finland (even 90% in some parts of the country). This change transformed the general understanding of the impact of efficient human resources management on the retail sector. Whereas the case of UK grocery retailing illustrates the role of routines as drivers of field-level change, the contribution in the case of the S-Group focuses on understanding how serial FCEs may mediate change among routines and fields over time.

#### 1.2 Structure of the dissertation

This dissertation consists of a Kappa and three essays. The structure of the dissertation is as follows. In Chapter 2, I provide a literature review on the microfoundations of institutional change, first looking into the role of routines, and then moving on to FCEs as mediators of change. Chapter 3 describes the context of the research and then the research approach, starting with the ontological and epistemological underpinnings, before moving on to the selected research design and the types of data used. Chapter 4 summarizes the core content of the thesis presented in Part 2 of the dissertation (Essays I-III). Finally, in Chapter 5 I provide a short discussion on the conclusions of the three essays and discuss the results from the perspective of institutional scholarship. The aim of this dissertation is to build theory in an inductive fashion by means of the studied cases.

#### 2. Literature review

#### 2.1 Micro-level approach to institutional change

According to Scott (1995: 235), institutions are "social structures that have attained a high degree of resilience". Institutional theory studies structures such as "schemes, rules, norms, and routines" (Scott 2008), how they are transmitted, and how they become established as guidelines that provide stability for social behavior. Institutions exist at various levels, from macro levels all the way down to the micro-level interactions between individuals. In short, while the term "institution", by definition, means something stable, it is nevertheless interesting to examine institutional change. More precisely, institutional theory is, in part, concerned with how institutions and their constituent components are "created, diffused, adopted, and adapted over space and time; and how they fall into decline and disuse." (Scott, 1995; 2008)

Institutional change has been viewed mostly from the macro-level viewpoint. Smets et al. (2012, see also references therein) discuss three approaches to understanding institutional change. The first approach is termed the exogenous shock model in which change originates in an external shift, whether this is in social values, legal regulations, or a novel technology. The second approach focuses on endogenous conflicts and contradictions within a field and their ability to trigger change, while the third approach places the emphasis on the intraorganizational dynamics through which organizations respond to the conflicting demands imposed by their institutional environments (Smets et al., 2012). A point of interest in the third approach is that the responses of organizations to the aforementioned institutional pressures can, in turn, feed back on the field.

Smets et al. (2012) argued that in all of these approaches, the analysis is mostly at the macro-level, leading to an arguably one-sided picture. Less attention was given to bottom-up change processes or to the activities of "unorganized, non-strategic actors in catalyzing change" (Ansari & Phillips, 2011: 18). According to Schneiberg (2013), during the 1990s, institutionalists became dissatisfied with the idea that the stability of institutions is configured or determined by macro-level, external factors. Instead, they sought to include social movement theory in their research (Schneiberg, 2013). In general, social movement theory, which focuses on communities as an institutional level analysis, proposes that communities consist of or are founded upon individuals and their actions, and as individuals change, so do their communities.

In addition to social movement theory, the concepts of institutional work and institutional entrepreneurship were developed. As far back as 1988, DiMaggio had argued that "organized actors with sufficient resources" can give rise to new institutions when they perceive an opportunity to realize their interests (DiMaggio, 1988). Institutional entrepreneurship refers to such actions that lead to the creation, or alternatively transformation, of institutions (Maguire et al., 2004). The term institutional work, coined by Lawrence and Suddaby (2006), refers somewhat more broadly to "purposive action" by individuals who attempt to create, maintain, or disrupt institutions or businesses. In 2009, Lawrence et al. argued that instead of concentrating on the possible macro-level changes in institutions, we should pay more attention to the processes and actions by which individuals "build, sustain, and tear down" institutions. In 2011, Lawrence et al. elaborated on this concept, emphasizing that institutional work may succeed or fail at affecting the institutional order, and that such work involves compromises, unintended consequences, etc. This is at odds with the concept of institutional entrepreneurship, which envisages the process as rather more successful and straightforward.

In general, to understand both the macro-level and micro-level perspectives, one must understand their interactions, and acknowledge that the fundamental nature of each depends on the other. In a relational viewpoint, routines, technologies, and institutions are not thought of as having innate meaning. Instead their meaning comes about via *mutual constitution* (Emirbayer, 1997). This entails the notion that one cannot understand human agency as independent action but rather as something that is configured by the surrounding structures, and vice versa; thus, institutions, routines, etc. can only be understood if one understands the agency that plays a role in producing them (Feldman & Orlikowski, 2011). Closely related to this notion is the so-called paradox of embedded agency, which tackles the question of how the actors embedded in an institution can bring about change within it.

Practice theory is concerned with understanding how individuals' actions lead to change in strategy, routines, technologies, and institutions. For example, Smets et al. (2012), by means of their case study of a law firm, have shown that change may come about via reflexive attempts by individuals to solve problems in their day-to-day activities. This goes some way toward solving the paradox of embedded agency.

However, Cardinale (2018) has criticized past research for its assumptions (such as those seen in the work of Smets et al., 2012), and identifies two specific shortcomings that have hindered its development. More specifically, Cardinale (2018) writes: "I argue that the quest to establish microfoundations for institutional theory is hindered by two assumptions on which it currently rests: that structure simply constrains and enables action and that agency is mostly associated with reflexivity."

According to the first assumption, structure simply constrains and enables action, so that it is not specified whether in the latter case the action is still influenced by the structure (Cardinale goes onto theorize how structure also actively

orients action). The second assumption, conversely, views agency as constrained by the surrounding structure, being limited mostly to reflexivity, that is, the constant examination and reformation of practices (see also Sydow and Windeler, 1998). Citing Cardinale's work, Haack et al. (2019) also talk about how actors can choose how to act albeit that this choice is bounded by the overarching rules determined by the surrounding structures. With these constraints, institutional change may come about as a result of individuals' actions, but the path leading to the change, as well as the final outcome, will typically vary from the original intention. Such unintended change has been discussed in the practice approaches to institutions (Lounsbury & Crumley, 2007).

Building on an earlier proposal by DiMaggio and Powell (1991: 22), Cardinale (2018) discusses the need to provide microfoundations for institutional theory, taking into account the various relevant aspects. These include the pre-reflective aspect of agency that arises from an individual's history; the reflective, strategic aspect of agency; the other actors who play a role in the institutional change; and the situation in which it occurs. According to Cardinale, there is a constant interplay between the pre-reflective and reflective aspects, and they together determine the development's direction.

Organizational routines and their dynamics constitute an interesting theoretical perspective that can take into account many of these aspects. Routines are thought to have two aspects: the *ostensive* aspect, which is essentially formed by the history of the routine and its enactments, and the *performative* aspect, which refers to an individual execution of the routine that often occurs in a reflective or effortful manner. In practice theory, change is seen, at least by Cardinale, to result essentially from adaptation to the surrounding structures, a view that mostly excludes the influence of history. By contrast, the ostensive aspect of a routine is shaped by history, which constrains and enables the resulting performance of the routine; this corresponds to the pre-reflective aspect envisioned by Cardinale.

In addition, intentionality is a key driver of continuous routine change as well as of the formation of completely new patterns of action and change across multiple routines (Feldman, 2000; Feldman & Pentland, 2003; Dittrich & Seidl, 2018). Again, this goes beyond what is conceived in practice theory, where attempts at change tend to be strictly constrained by the surrounding structure. For example, Deken et al. (2016) showed how actors accomplished novel outcomes across several routines by intentionally attempting to do so.

However, intentionality may be a more complicated and dynamic phenomenon than it first appears. Dittrich and Seidl (2018) criticize existing research on routine dynamics for its unquestioning assumption that individuals performing a routine start out with certain end goals or intentions, and then choose the means suitable for accomplishing them. Drawing on a year-long ethnographic study of a pharmaceutical company, these authors propose that we should instead, or at least additionally, examine how the enactment of means influences actors' ends and intentions, contributing to our understanding of routine change and dynamics.

Moreover, Dittrich and Seidl (2018) argue that intentions do not simply arise from individuals, nor are they merely something "of the mind" (see also Chia & Holt, 2006). Instead, routine participants can develop a sense of purpose via performing routines. These intentions may be temporary in nature and achieved without conscious reflection, which runs contrary to the views discussed earlier. All of this suggests that it may be fruitful to study routines and their continuous change in order to understand institutional change – in particular, to understand how embedded agency, such as actors executing routines within the constraints of the surrounding structure (Schultz, 2008), may bring about endogenous change.

#### 2.2 Organizational routines in higher-order change

Recent academic research suggests the study of organizational routines, also referred to as micro-institutions (Powell & Colyvas, 2008), as a useful approach for negotiating the aforementioned challenges. While an individual routine may appear to be a mere description of how work is done, from a micro perspective it is precisely via routines executed by individuals and groups that "institutions are reproduced" (Powell & Rerup, 2016). These authors propose that individuals discover "puzzles or anomalies" while executing routines, and they develop answers to these as well more generally developing their knowledge in a cumulative way. In the aggregate, routines have even more meaning, and the routine perspective focuses also on the shared understandings among actors of how specific activities should be carried out (Feldman, 2000; Nelson & Winter, 1982). These shared understandings interact with the relevant institutional logics, as we will soon explore in more detail.

Although the concept of organizational routines has been in circulation since the early 80s, research in the area has been particularly active during the last decade (e.g., Dittrich & Seidl, 2018; Feldman & Pentland, 2003; Salvato & Rerup, 2018). An organization's behavior can be considered to be determined by the routines it has in place for the execution of specific tasks (Pentland & Feldman, 2005). In the broad view, a given organizational routine can exhibit a great deal of continuity over time, leading some theorists to emphasize the role played by routine in organizational inertia and stability (Pentland & Feldman, 2005). However, research during the past decade has revealed that routines may in fact change frequently and endogenously, and thus they can be viewed as a source of organizational flexibility and change (e.g., Feldman & Pentland, 2003). The definitions of routines have developed and varied alongside the building of the theory. Cohen et al. (1996, p. 683) defined routines as "an executable capability for repeated performance in some context that has been learned by an organization in response to selective pressures." However, perhaps the most suitable definition for our current understanding is that of Feldman and Pentland (2003: p. 95), who define routines as "repetitive recognizable patterns of interdependent actions, carried out by multiple actors."

The repetitive nature of routines helps organizations coordinate their processes (i) by allowing them to establish a sequence of activities to be performed, (ii) by

enabling various actors within an organization to observe progress on the task, and (iii) by making the completion of a task visible throughout the organization (Okhuysen & Bechky, 2009). Routines enable actors and groups to apprehend the extent of the activities necessary to accomplish a given task, as well as the time frame required for the sequence of activities (Okhuysen & Bechky, 2009). Routines can provide a group with a common perspective on an intended action via the exchange of information through verbal communication and artefacts such as text documents or software (Feldman & Rafaeli, 2002). These artefacts can provide a template for task completion, developing the efficiency of the process by increasing motivation and overcoming internal resistance (Okhuysen & Bechky, 2009).

In the literature, routines have long been seen as drivers of stability and organizational inertia, but more recently their dynamic and generative character has attracted attention (e.g., Feldman & Pentland, 2003; Feldman et al., 2016). In fact, it should be noted that since the environment is always changing, it requires "effortful accomplishment" (Pentland and Rueter 1994, p. 488) to repeatedly produce a given action pattern. Furthermore, it is now recognized that organizational routines often exhibit endogenous change (Feldman & Pentland 2003). To better understand such change, we recall the ostensive and performative aspects of a routine (Feldman, 2000). The ostensive aspect represents the routine as an enacted pattern, whereas the performative aspect refers to specific executions of the routine. There is an interplay between the two aspects: the prevailing rules, artifacts, and actors' existing understandings of routines inform how they execute routines, but actors usually retain some latitude in how they choose to perform routines in specific situations and at specific times (Aggerholm & Asmuß, 2016; Bruns, 2009; D'Adderio, 2008; Essén, 2008; Feldman, 2000). Since the situations in which a routine is executed vary, the specific executions may differ according to relational factors (Becker, 2004; Murmann et al., 2003), sometimes leading to departures from formal rules (Kozica et al., 2014). In turn, such deviations can then eventually lead to a reformulation of the actors' understanding of the routines, and more generally a reformulation of the ostensive aspect (Feldman & Pentland, 2003).

This is also fairly closely related to the view of Dittrich and Seidl (2018) that intentions are not pre-determined but instead develop through the execution of routines. This may also involve multiple routines, in a relational manner: according to Dittrich and Seidl, the performance of a routine "can generate new questions and new assets for the performance of other routines", which can then lead routine participants to conceive of new intentions and to update routine patterns (i.e., the ostensive aspects). This goes beyond mere reflexivity, in the sense that wholly new actions patterns may be developed (Dittrich & Seidl, 2018). This also answers the above-mentioned criticism by Cardinale (2018), who regarded a focus on mere reflexivity as an excessively limited view.

Such organizational learning can be considered to be "performance improvement oriented activity", the purpose of which is to respond to changing environmental conditions, such as new customer expectations or technological developments (Wolf, 2008). For example, Leonardi (2015) argues that new technologies can significantly alter routines. It is also interesting to examine how change can occur in the opposite direction, i.e., in a bottom-up manner. Indeed, studies of organizational practices have shown how the execution of everyday routines can lead to organization-level change or innovations (Sele & Grand, 2016). However, the question of how changes that originate in routines can bring about institutional change has remained relatively unexplored. This is in part due to the fact that routines have, as already noted, been traditionally viewed as stable, inert entities that lack a strategic role (see also Salvato, 2009).

As a result, authors such as Whittington (2006: 617) proposed that the connections between the internal workings of organizations and the "broader phenomena outside" should be more closely examined. In particular, these broader phenomena may include field-level structures and changes. Of course, some such studies exist, but they still regard change as a top-down phenomenon; for example, it was found that individual organizations contributed to the concept of equal opportunity but that this was nevertheless initiated and ratified at field-level (Dobbin, 2009). Nonetheless, we propose that changes can be effected in the opposite direction, in that they can originate in routines that emerge in everyday work and then become the new standard within an organization, finally being "infected" to other organizations within the field; hence, they can change the prevailing institutional logic. The study of organizational routines provides a way of potentially combining the top-down and bottom-up viewpoints, thereby properly connecting the individual, organizational, and institutional levels of analysis.

#### 2.3 FCEs as a medium for change

We have observed so far that organizational routines can both change and be changed by external factors. For example, interactions in local political negotiations can be seen as drivers of the development in local routines (Leonardi, 2015). Conversely, in the routine perspective, one typically observes interrelated actions performed by individuals, which can then have outcomes at the level of institutions. Van de Rijt (2017) states that the "change and reinforcement" of institutions occurs not only via such interrelated actions but also via interactions among individuals. An example of an interaction that may change the understanding of existing routines and lead to the creation of new routines or, alternatively, facilitate the "infection" among routines, is provided by Field-Configuring Events (FCEs).

Lampel and Meyer (2008) and Meyer et al. (2005) define an FCE as a short-term social event, such as a professional gathering, conference, technology contest, or prize ceremony that encapsulates or shapes the development of a field, industry, profession, technology, or market. In an FCE the constituents of a field assemble and have opportunities for face-to-face interactions through which they can gain awareness of their common concerns, exchange information and

coordinate actions, mutually influence field structuration, and recognize accomplishments (Anand & Jones, 2008, p. 1037; Citroni, 2015; Giddens, 1984; Nissilä, 2015). Such activities also involve social accountability, as actors justify their behavior to others, in particular regarding the execution of routines (Biggart & Beamish, 2003). A typical FCE occurs periodically, and it involves, inter ali, sharing news, exchanging business cards, the advancement of reputations, and standard-setting (Lampel & Meyer, 2008; Schüßler et al., 2015).

Building on the work of Davis and Marquis (2005), Lampel and Meyer (2008) argue that in order to properly understand the role and significance of FCEs, one should examine them in the context of the research on the evolution of institutional and organizational fields. As discussed earlier, it is only recently (during the past two decades or so) that scholars have begun to focus on human agency and other bottom-up processes of institutional and field-level change. As individuals or organizations meet with increasing frequency, they may, depending on the local circumstances, trigger field evolution (Lampel & Meyer, 2008; Powell et al., 2005). At some points in the development, FCEs may generate "evolutionary pressures that shape the field's cognitive, normative, and/or social structures" (Lampel & Meyer, 2008).

FCEs can have a profound effect on routines, technological artefacts, regulatory frameworks, etc., making them a relevant topic of study (Garud, 2008; Lampel & Meyer, 2008). However, Schüßler et al. (2014) and Leca et al. (2015) argue that not only are (serial) FCEs not necessarily successful in changing or configuring a field, but that their ability to achieve this may change over time. The intentionality of FCEs, comparative to the intentionality of routines, a complicated issue since these events may be *intended* to produce emergent and unplanned outcomes (Lampel, 2011). We recall that from the relational perspective, the meaning of a phenomenon is determined by its relatedness to other phenomena; however, little has been said about, for example, the specific role that serial FCEs play in higher-order phenomena, such as strategy implementation over time.

# 3. Research approach

In this chapter, I discuss the empirical contexts of the conducted research. I also present the philosophical fundamentals of the study and describe how they are reflected in the manner in which this research has been conducted. Finally, I explain the design of the study and how this was created, describe the empirical materials upon which the results of the research are founded, and outline the applied research methods.

#### 3.1 Empirical contexts: Changed logics of retailing

The nature of the retail sector has changed over the past four decades (Grewal et al., 2017; Treadgold & Reynolds, 2016; Sorescu et al., 2011) such that the boundaries between the distribution and communication channels have blurred (Verhoef et al., 2015). During this time period, major retail chains throughout the world have competed by investing in volume-driving resources, such as large physical spaces and identically constructed stores, and they have achieved significant economies of scale (Cuthbertson et al., 2021). Indeed, store sizes and layouts usually conform to a single design irrespective of the store's location and the varying needs and expectations of shoppers (Treadgold & Reynolds, 2016). The late 20th century saw certain retail companies emerge as the largest businesses in the world; through standardization, these firms were able to achieve a greater product assortment and lower prices (Cuthbertson et al., 2021). Changes in these global enterprises have a direct impact on the entire landscape of retailing, sometimes changing the scene dramatically.

However, at the turn of the century and especially within the last 10 years, the value of volume-driving resources has reduced and this has caused many large retail businesses to struggle (Cuthbertson et al., 2021). Retailers are instead forced to identify emerging value drivers that provide new sources of growth. This has been achieved via the development of better services and enhanced customer experiences. While retailers have historically prided themselves on their customer-centricity (while actually offering a "one size fits all" approach) the past decade or so has seen customer engagement take a truly central role (Treadgold & Reynolds, 2016, pp. 7-8).

All in all, competitive advantage is being achieved less and less via huge sales capacities and acres of retail space (Cuthbertson et al., 2021). Instead, the ability to innovate, to create superior business models, and to effectively use masses of data has provided the means of developing richer customer experiences. One of

the main drivers in the evolution of the consumer landscape is technology (Treadgold & Reynolds, 2016). Algorithmic technologies seem to be the most reliable way to make decisions in a truly customer-centric way. Innovative data analysis methods, especially those that rely on algorithmic technologies, have enabled the emergence of the use of customer data as opposed to mere product sales data. This new data can be used to understand individual customers and their needs, leading to superior individualized service. However, these technologies and the data that they operate on may no longer even be visible to managers, effectively turning the customers into decision-makers. Hence it is not surprising that the very nature of the retail sector is widely thought to be changing (Grewal et al., 2017; Treadgold & Reynolds, 2016).

#### 3.1.1 Case 1: Tesco and UK grocery retailing

In the first two essays of the dissertation (Essay I and Essay II), I am particularly interested in the increasing use by grocery retailers of new technologies for managing customer data; such use has transformed the way in which food-supply is organized today and will be organized in the future. This change in practices has led to the creation of new processes, identities, and cultures at an organization-specific level, and has eventually resulted in a field-level transformation.

The case of UK food retailing provides a particularly interesting empirical setting, as it can be considered the frontrunner in this global transformation. UK retailers were quick to embrace the technological change and can today be considered as a space where the decision-making processes of most companies have, to a certain extent, become embedded in customer data analyses. As a result, the focus of grocery retailers and suppliers has seen a field-level shift from products to customers, with different loyalty programs operating as vehicles for change. The transformation was initiated by Tesco in 1995 when it launched its Clubcard (Humby et al., 2008). The launch arguably provided Tesco with a valuable edge that was instrumental in steering the company into profitable new business areas, forcing the other retailers to follow suit. After an exploratory phase, during which a lack of computing power limited the collection and use of data, the focus soon shifted to its exploitation, not only by the retailer but throughout the supply chain. Finally, many of the data analyses became automated by algorithms and were thus embedded as drivers of change within the organizations. Currently, customer behavior is seen as the key driver of development, with data being automatically collected and analyzed at every touch point (store, app, website, contact center, email, and social media) in ever increasing volumes.

#### 3.1.2 **Case 2: S-Group**

The S-Group is a large Finnish cooperative retail ecosystem, which is today made up of a network of 20 regional cooperatives and 38,000 employees. The S-Group consists of SOK, which is the central organizing body headquartered in Helsinki, and a network of geographically, operationally, and culturally scattered independent cooperatives located across Finland. These cooperatives are

customer cooperatives, meaning that they are owned by their customers (customer-owners) who have invested a membership fee and signed a membership agreement with their local cooperative. SOK, on the other hand, is jointly owned by the member cooperatives. It takes care of activities such as the joint purchasing of merchandise and business consulting, and generally provides support for the cooperatives.

By the 1970s, the S-Group was in financial difficulties. While in the 1930s, the average net income of the S-Group cooperatives was 2%, this had fallen to 0.5% by 1960, and was as low as 0.1% in 1970. Indeed, by 1977, 112 out of the 217 cooperatives in the S-Group were loss-making. In 1983, SOK initiated a series of strategic changes aimed at turning around the financial situation,. This began with the appointment of a new CEO and, in June 1983, the launch of a strategic plan to reform the S-Group ecosystem known as the S83 plan. The plan called for three major changes: (1) a restructuring of the network of cooperatives and cooperative mergers (it was planned that a network of 36 regional cooperatives would replace the then existing network of 177 local cooperatives); (2) changes to the financial structure (SOK would no longer balance out co-operative losses); and (3) a focus on grocery retail (this required unrelated businesses such as manufacturing and agriculture to be divested).

In Essay III, I conduct a longitudinal study of the changing influence of a specific serial FCE with a strong field-mandate, the so-called "HR days" event, which was an annual gathering of HR managers designed to coordinate the shared understanding and development of human capital within the S-Group. The scope of the research spans the restructuring and turnaround of the S-Group. The turnaround led to an ecosystem-wide transformation, and effectively a fieldlevel transformation, as the S-Group took over 40% of the market share in Finland (in some parts of the country, market share was as high as 90%). Even before the turnaround, the S-Group's market share had been dominant in some parts of the country, especially outside of the big cities. In these parts of the country in particular, the turnaround transformed how the cooperatives and their employees understood the requirements posed by retail on human resources; this transformation of understanding and expectation amounted to an institutional change. Previously, many employees came from an agricultural background, and generally remained employed by the S-Group until retirement, but the turnaround led to a new culture of efficiency, in which many employees were laid off and new employees, often with a university degree, were hired according to the group's specific needs.

#### 3.2 Epistemological underpinnings

The epistemological foundation of this thesis is similar to that of Feldman et al. (2016). My most central object of study is organizational routines. I view routines not as clearly defined entities but rather as "repetitive streams of situated action" (Feldman et al., 2016) that are enacted in specific times and places by knowledgeable actors, potentially leading to variation in the routine (Bucher & Langley, 2016; Dittrich et al., 2016).

Since the boundaries of a routine are not sharply defined, there are various issues that one might pay attention to. I will consider the internal dynamics of routines, focusing on the performative aspects and situated action as well as on the antecedents and consequences of routine executions. I propose giving less attention to actors or their intentions, or to artifacts and materiality, even while acknowledging that actors and materiality are essential for the execution of routines (e.g., Orlikowski and Scott, 2008; D'Adderio, 2008, 2011). This is partially because, as we will observe, well defined routines or artifacts do not, in any case, guarantee desired outcomes, nor do transformations necessarily arise from material causes such as new technologies. Nonetheless, we recognize that a focus on some aspects necessarily creates the possibility that other aspects will receive less attention than they might deserve. However, by focusing on situated action, and in particular on the execution of routines, one can also learn about new intentions that actors develop via executing routines (recall Dittrich & Seidl, 2018).

It is worth noting that observing routines is by no means a trivial enterprise. Even when directly observing situated action, difficulties may arise from the fact that actions may be widely distributed over space and time (Pentland et al., 2010). Becker (2005) and Hodgon (2008) even describe a latent, "generative" layer of a routine that may be "dormant" over a long time period producing no observable performances; this level is obviously even more difficult to observe directly. One can, of course, directly observe the rules, artifacts, or standard operating procedures of routines (Feldman, 2016) but, as already noted, this tends to be unsatisfactory. Feldman et al. (2016) point out that the enacted patterns, i.e., the ostensive aspects of routines, "may or may not be articulated by the people enacting them." Thus it is left to the researchers to identify routines and their action patterns. Due to the difficulty of observing these directly, I rely most strongly on interviews with key figures and on their understanding of how the past development of routines has unfolded; this will be described in more detail in a later subsection.

#### 3.3 Ontological underpinnings

This research is based on a process point of view, which views processes rather than entities, states, or events, as fundamental objects (Feldman, 2016). Organizational routines have not traditionally been viewed from a process perspective, having been considered to be stable entities related to organizational inertia. It can be said that Feldman and Pentland's (2003) theory of the internal dynamics of routines, involving the ostensive and performative aspects, opened up the application of the process point of view to routines. When we consider these aspects, it becomes interesting to observe how the way in which actors actually perform routines is consequential for how routines are solidified or changed over time (Rerup & Feldman, 2011; Turner & Rindova, 2012). Indeed, I view time as an essential dimension, since I wish to understand how certain transformations have unfolded over fairly lengthy time periods (up to a few decades).

This viewpoint is founded on a relational ontology that proposes that the nature, and even the existence, of any object, idea, or phenomenon depends on its relation and connections to other things. In sociological theory, such ontology is also known as relationality (Emirbayer, 1997). A different view, substantialism, proposes that the nature of a phenomenon is detachable from other phenomena, and is independently knowable (Feldman et al., 2016); this contrasts both ontologically and epistemologically with relationality.

An analysis of routines, and especially of routine dynamics that involve ostensive and performative aspects, relies on a relational approach (Feldman, 2016). Such analysis requires the tracing of relationships among individual actions in a sequence as well as their order; for example, a particular subroutine may have a different outcome depending on the stage of the overall routine in which it is enacted (Spee et al., 2016). The meaning and the nature of a routine, as it is understood by an observer, is also dependent on the viewpoint; for example, a given action can appear to one observer to be merely a small adjustment, but can amount to a novel or unusual action to another (Deken et al., 2016). Gavetti et al. (2012) argue that the empirical tracing of the individual actions of routines across time and space is crucial for a multi-level understanding of organizational behavior.

As noted in the previous subsection, materiality is not my main focus, yet it should be noted that materiality and action are mutually constituted, and thus interrelated (D'Adderio, 2014; Feldman, 2016). Also, materiality enters into my considerations when I study algorithmic technologies; as computers and algorithms take action in an "increasingly automated world" (Dourish, 2013), materiality and action are of course directly connected or even indistinguishable.

#### 3.4 Research design and data

Being qualitative in nature, this research aims toward theory extension rather than theory testing. For this type of study, the case study method has been found to be appropriate (Eisenhardt & Graebner, 2007). This dissertation is founded on three individual research studies and two different empirical cases, one from the UK and one from Finland, thereby providing richness and variety. The analyzed research settings offer intensive longitudinal process studies from the field of retailing. The applied data has been collected under two different government funded research projects with the dual purpose of writing different academic publications while producing other, more practice-oriented, research outputs for the project partners.

Due to the longitudinal nature of the research studies conducted in this dissertation, they rely on a large amount of data derived from interviews or documented in the archives of our case companies, which are combined with data collected from a variety of public sources. Archival data is particularly suitable for longitudinal process studies where the past development of an entity is being observed over a long period of time (Langley et al., 2013; Langley, 1999). After analyzing voluminous written documents, memoranda, transcripts of meetings,

copies of old contracts, photographs, and interviews, chronologies have been constructed of the past developments. The archive material was complemented by a large number of interviews and informal discussions, during which the collected and documented data were repeatedly consulted. Furthermore, at later stages of the research, additional interviews were conducted to verify the validity of the results. We have striven for maximum accuracy and legitimacy (Eisenhardt & Graebner, 2007) by comparing the individual interviews. In cases of contradiction, respondents have been contacted for further clarification. In Table 1, I have listed our key sources of data in each of the analyzed case studies. I also provide further detail on my personal role in the data collection related to both cases.

Table 1: Data collected under this dissertation (data presented in essays has been supplemented by data collection by co-author).

Data type	Case 1 (Essays I and II) – use of customer data in the field of UK grocery retailing (1990-2017)	Case 2 (Essay III) – impact of HR- days at S-Group (1970-1995)
Informants (pri- mary data)	20* interviews and a number of informal discussions with managers from the 6 largest companies in the field of UK grocery retailing (collection period 2014-2018).	33 [11*] interviews (25 respondents) with all (6) past CEOs and 19 top managers, as well as a number of informal discussions with S-Group managers.
Company ar- chives (second- ary data)	Selection of historical strategic plans, organization charts, and past presentations.	Selection of board minutes, strategic plans, memoranda (1980 – 1990).
CEO archives (secondary data)		Selection of private notes, personal memoranda, photographs, presentations.
Autobiographies (secondary data)		86 autobiographies by retired mid- dle/top management.
Annual reports (secondary data)	Selection of historical annual reports, financial analyst reports (available online).	Complete set of annual reports 1970 – 2002.
Other public data: books, newspaper arti- cles (secondary data)	Prior studies on the development of UK grocery retailing and busi- ness press articles on organiza- tions operating in the field of UK grocery retailing.	10+ books or biographies on case company, online newspaper articles on S Group & retail environment (1983 – 2002).

<sup>\*[</sup>number on interviews] personally attended.

In this dissertation I adopt an inductive and explorative theory-building approach to study the role of organizational routines in field-level transformations (Eisenhardt, 1989; Strauss & Corbin, 1998). As I am interested in understanding the relationship between micro- and macro-level dynamics (Salvato & Rerup, 2011), I take a practice perspective (Nicolini, 2013), which allows me to focus on everyday activities at different organizational levels and their consequences (Feldman & Orlikowski, 2011; Nicolini, 2011). Accordingly, my study requires close-up engagement in the field, observing practitioners and their routines and practices, as well as knowledge of the broader context and network of the focal organization or ecosystem throughout the time under investigation (Kozlowski & Klein, 2012; Langley, 1999).

My research is founded on a relational ontology and a process point of view. With such a theoretical foundation, ethnographic methods of studying routines are particularly suitable since they can enable the investigation of routines and their action-patterns (Feldman, 2016; Orlikowski & Scott, 2008). I therefore employ some ethnographic methods even though my study is, on the whole, not an ethnography. In particular, in one of my case studies, the data include a large number of company visits, interviews, and workshops conducted during the observed period, enabling real time observation of the development. While interviewing key figures about their understanding of how past development unfolded is not an ethnographic data collection method, consulting archival data reveals how past events were documented when they occurred, which to some extent also enables the researcher to observe the events in these moments.

#### 3.5 Data analysis

The details of the analytical techniques are presented in the individual essays, but I present here a relatively general overview of the chosen approaches. My research was initially driven by the wish to examine what role microfoundations play in higher order transformations. Empirically, my focus was on the organizing of retailing; to be more precise, I focus on how the context of the routines or the introduction of new routines changed the way in which retailers operate more generally. The individual research papers do not theoretically discuss institutional transformations but focus instead on change in organizations, ecosystems, and industries. Thus, I treat the essays as data upon which I theorize in the discussion section. In this section I offer my observations on the changes from an institutional standpoint.

In the case studies on Tesco and the UK grocery retailing industry (Essays I and II), the research has followed an inductive and open-ended research design (Strauss & Corbin, 1998). In this work, my co-author and I have directed our search toward the mechanisms or processes that have allowed Tesco to adapt and change its practices as circumstances evolved. In Essay I, when focusing on their practices revolving around the use of customer data, it was the routines at play when the firm was deciding on "the customer offer" that sparked our interest. At first sight, the different routines appeared to be relatively stable and we

looked out for processes that guided how the routines were adapted and maintained. However, we could not identify a higher-order capability or a clear-cut strategy that orchestrated these changes. We then realized that the patterns of actions constituting the routines evolved within and across the routines themselves (Salvato, 2009). Small changes in the performance of one routine led to changes in other routines, thereby slowly changing the way Tesco and other actors in the UK grocery retailing sector decided on the offer in their stores. In Essay II, we went one step further and focused on understanding how this led to an overall change within the industry, with customer data replacing the point-of-sales (POS) data that had previously been used. This change led to even wider changes in the operating logic of retailers and suppliers. In both essays, we analyzed and coded the interviews individually and cross-checked our readings, going back and forth between theoretical concepts and empirical data. We began our empirical analysis with thematic coding that enabled us to divide the past development into various distinct phases.

In Essay III, I used a similarly open-ended research design to identify how the impact of the HR days had evolved to change how work was conducted within S-Group. I started by writing a narrative description of how the event was organized, who participated in it, how its impact was perceived by the participants, and how it had impacted their practices. Based on these descriptions and an initial understanding of the larger changes that had occurred within S-Group, I coded the data to capture the central reason for the changing impact. I was able to cluster the development into three temporal phases, in each of which the HR days played a significantly different role.

In all of the analyzed cases (Essays I-III), the insights from thematic coding led us to the final phase of the analysis. Building on the identified changes within Tesco and S-Group, the analysis was oriented to these companies' industries. We studied the changes that occurred in the practices of Tesco's competitors, suppliers, and customers, and the overall change that took place within the S-Group ecosystem. In the studies discussing Tesco, our analysis revealed that the "infections" from the routines were a result of a 20-year period of back-and-forth interactions within the industry, leading to a convergent form of operating as all actors integrated customer data and its analysis into their routines. In the case of S-Group, I was able to connect the impact of the annual HR days to the overall changes within S-Group, thus supporting my theorizing on the role that serial FCEs play in strategy implementation.

### 4. Summary of essays

This chapter presents and summarizes the key content of the study, which is presented in Essays I-III in Part 2 of the dissertation.

# Essay I: Driving Industry-level Transformations—the Role of Organizational Routines

In Essay I, my co-author and I consider the role that routines play in higher-order phenomena, such as firm-level or industry-level transformations. We perform a longitudinal study of the collection and use of customer data at Tesco, the largest grocery retailer in the UK, and its impact on the UK retailing industry. Until the early 1990s, Tesco, like the other grocery retailers in the UK, collected and relied on point-of-sales data but in 1994 Tesco began a collaboration with a small data analysis company called Dunnhumby to launch a loyalty program known as the Clubcard. This allowed for the collection of data on individual customers, which enabled Tesco to make decisions based on information upon that was vastly more detailed than that offered by point-of-sales data.

When the loyalty program was first launched, customers could sign up for their Clubcard at one of Tesco's stores. They were required to provide their names and addresses, as well as information on their age, the size of their families, etc. Such information would allow Tesco to identify which customer had made each transaction performed at one of its stores. By making purchases at Tesco, customers would accumulate points that were converted into discount vouchers that Tesco would mail to the customers several times each year. When paying at the till, not only would the products purchased by a customer be swiped, the customer's Clubcard and any of the discount coupons they were using would also be registered.

As can be seen from this description, the Clubcard program and its operation initially amounted to a rather simple and mundane organizational routine that was operated alongside Tesco's other routines. However, customer data soon proved useful in informing new product development (NPD) since it provided the first opportunity to observe whether customers would buy a new product for a second time, thereby accurately indicating whether a new product was going to be a success. This was something that traditional product sales data had not been able to do. Customer data was also relevant to the area of pricing. Through this data, Tesco realized its customer-base consisted of several distinct groups, some of which were highly price sensitive while others were not. Thus, Tesco

could start to adjust the pricing of its products in a more flexible and efficient way. For example, contrary to the traditional pricing method of lowering prices on some of the biggest-selling items in order to attract more customers, Tesco could now focus on the products that were popular among price-conscious shoppers. A similar development took place in promotions, which could likewise be efficiently targeted at specific customer groups.

Hence, over time, the use of customer data had a profound influence on most of Tesco's routines and operations, and this eventually amounted to organizational transformation. However, in the next phase of the development, the transformation spread outside of Tesco. The sharing of customer data and analyses with supply chain partners was pioneered in the UK, indeed perhaps globally, by Tesco in 2002. Suppliers were willing to pay Tesco for the customer data, which proved to be far superior to the data and analyses that suppliers had formerly used when developing new products or creating promotional campaigns. Moreover, a significant benefit came from the fact that the retailer and supplier could now speak the same language when discussing customers, sales performance metrics, etc.

As the suppliers gained significant benefits from having access to customer data, they were eager for other retailers to make similar information available, especially because Tesco, having an information monopoly, was able to charge a high price for the data. Sainsbury's began its own customer data analyses in 2007, but the other UK food retailers were hesitant to start similar a program due to its high running costs and the effect of these on their operating margins. However, Tesco's by now dominant position as the market leader inevitably put pressure on competitors to observe and, if possible, mimic what Tesco was doing. Moreover, the other retailers were feeling the influence of the use of customer data via their suppliers, with the result that most UK retailers had launched loyalty card programs by 2014.

Hence, our results advance the understanding of the generative nature of routines, suggesting that minor changes involved in a particular routine or its action patterns can become significant as the change spreads across the organization or industry. While the spread of customer data could be seen as a bottom-up process that started with Tesco's micro-level routine, the development gained a more top-down nature when competitors started to conform to what was increasingly becoming an industry standard. In Tesco and even in Sainsbury's, the use of customer data spread slowly across the organization, but Morrisons, being much later to the game, could do benchmarking with suppliers and then implement the entire package at once, aided by hiring people who had previously worked for Tesco's Clubcard program.

# Essay II: Algorithms creating paradoxes of power: Explore, exploit, embed, embalm

In Essay II, my co-author and I use the same case as in Essay I to explore the impact of algorithmic technologies and big data on organizational routines. In

Essay I we observed how the use of customer data brought about an industry-level change in UK grocery retailing; in Essay II we consider this change from a broader perspective, viewing it as a field-level change in the logic by which organizations in food retailing operate. Customer data in particular is increasingly being collected and managed by means of algorithms, which are in fact one of the factors that have shifted the focus of retailers from product sales data to customer data. We observe a frontrunner in this 20 year transformation: the field of food retailing in the UK. We shed light on how algorithms have changed the way in which the food industry is organized, adding to our understanding of the generative and transformative nature of technologies. The impact of algorithmic technologies has been largely driven by the strong competitive position of Tesco in the UK food retailing market.

With radical increases in computing power and its reduction in price, as well as the advent of big data, algorithmic technologies around the collection and analysis of customer data have rapidly developed. Traditionally, retailers have designed their stores in particular ways, perhaps relying on store managers' "gut feelings", and this has determined the offer available to customers and influenced their behavior. However, decision-making is becoming increasingly automated, being embedded in algorithms that operate on customer data in real time and which far exceed the efficiency of human agency. This amounts to a fundamental shift in the logic of decision-making in the field of retailing, as explained by a consultant in the grocery-retailing field:

"Instead of retailers choosing their ranges from products available, the data started flowing to the opposite direction. The needs of customers are now reflected directly onto the suppliers and producers."

This customer-centric view can be considered a new norm that is now followed not only by most retailers but also by suppliers, whose operations are largely informed and determined by the customer data collected by retailers. In fact, not only can customers' actions be considered a central factor in what gets to be offered in stores, but customer behavior and the retailers' reactions to it have become so embedded in the data analysis process that they may no longer be visible to managers. This can be seen as power and agency shifting onto customers, who are effectively no longer simple purchasers but are, albeit unconsciously, co-producers and co-suppliers who participate in and share responsibility for production and supply decisions. We explore how such technologies have turned the sourcing of food into a highly automated transaction, moving from explore and exploit to embed and embalm, therefore preserving the status quo rather than leading to further improvement. Hence, we enhance the understanding of the impact that big data has on organizational processes and structures, and demonstrate that we need a more critical understanding of its implications for power and transparency.

## Essay III: Exploring the role of serial FCEs in strategy implementation

In Essay III, I conduct a longitudinal study of the changing strategic influence of a serial Field-Configuring Event (FCE) with a strong field-mandate, the so-called "HR days" event. This event was an annual gathering of HR managers designed to coordinate the shared understanding and development of human capital within a large Finnish retail ecosystem known as the S-Group. The scope of the research spans the restructuring and turnaround of the S-Group, during which the group's context underwent a major transformation.

Over a period of many years, the relatively independent decision-making of the individual cooperatives had stagnated the centralized development of the S-Group. The employees of SOK were good, punctual workers, but it was only after changes in management, which took place with the implementation of the so-called S83 plan, that they were given the incentive to develop their work. A new culture emerged within the central organization as well as in the regional cooperatives around the country. As expressed by the HR manager of SOK, "[t]he employees started to care about the way they did their thing."

A central incentive produced by the S83 plan was the termination of the socalled "automatic funding mechanism" which had in practice balanced out the losses of loss-making cooperatives. After this impetus, the financial results of many individual cooperatives began to improve, as the stores acted on the feedback provided by the observed results. The first step for the individual loss-making cooperatives was to improve their efficiency by laying off their redundant employees. Next, the cooperatives began to carefully make new hires that took into account their specific needs. For example, business skills began to be valued over the agricultural background that had historically been typical of many employees. Previously, employees could usually expect to be employed until retirement, so the turnaround amounted to a fundamental shift in the HR culture in retailing, particularly in certain parts of the country. For the first time, the SOK HR Manager's presentation at the HR days sparked discussion, and afterwards the HR managers of several individual cooperatives directly requested her help, leading to much closer collaboration and contact over the following months and years.

Finally, the education of employees shifted from vocational training to strategic management. The education center, Jollas, had been founded in 1961 but it was only when the S83 plan had been created in response to pressures created by Finland's deteriorating economic situation and the S-Group's diminishing market share that regional cooperatives began to actively make use of the center. The HR days played a key role in informing the cooperatives' HR managers about Jollas and encouraging them to exploit the center. These managers could send employees to the center for education and training, with a clear goal of creating highly competitive managers who could deal with growing competition within the sector and other external adversities.

My analysis shows how the strategic role of the HR days event changed from being a mere routine annual event to being strategically influential after the S83 restructuring. Whereas the current literature views factors related to the organization of an event as the key determinants of its impact, there was no apparent difference in the purpose and organizing of the HR days before and after S83. By elucidating how factors beyond the organizing of the event had an influence on its outcomes, I show how such serial FCEs and their impact can depend on certain pressures and other input coming from the environment, whether that be from the field or, as in my case, an organizational ecosystem. Accordingly, my findings advance the role of FCEs in strategy implementation but underlines the importance of studying them in context, which includes their networks within and across organizations over time. My research implies that after the restructuring, the HR days played an important role in supporting the overall turnaround of S-Group.

## 5. Discussion and conclusions

In this dissertation, I have studied two different transformations in the field of retailing via by examining the cases of the transformation of the grocery retailing industry in the UK and the turnaround of a large Finnish cooperative retail ecosystem. In Section 5.1 I will discuss the conclusions of the first case, which was studied in Essays I and II. In Section 5.2 I will discuss the second case, corresponding to Essay III, and also consider some parallels and comparisons between the two cases. Finally in Section 5.3 I will discuss limitations of the research as well as future research.

#### 5.1 Role of organizational routines in field-level transformations

Essays I and II jointly offer insights into the role that routines and changes to routines, sometimes via algorithmic technologies, play in transformation processes. My literature review established that until the last two decades or so, institutional change was typically attributed to macro-level factors, such as exogenous shocks that may come in the form of a shift in social values, a shift in legal regulations, or a novel technology (Smets et al., 2012). Similarly, it had been thought that routines are adapted, changed, or abandoned in response to such higher-order triggers (e.g., Nelson & Winter, 1982). Although this strand of research has recently received growing interest (see, for example, the work of Cardinale, 2018; Haack et al., 2019; Schneiberg 2013; Smets et al., 2012), there remain a variety of unanswered questions related to the bottom-up change processes that come as a result of individuals solving problems in their mundane everyday routines and practices.

In Essays I and II, I observe how change can take place in such a bottom-up manner. The transformation of the field of UK grocery retailing was not initiated by any external factor, even though technological development had a part to play. Instead, the decisions to innovate a new customer loyalty program and to utilize the resulting customer data were taken by Tesco's management, with Tesco's suppliers and competitors later following the store's example. The program was not mere reflexivity, as claimed by Cardinale (2018). It was an intentionally implemented novel operational process, even if there was no intention to produce change, at least not at the field-level. Tesco's Clubcard program was, initially, a relatively mundane organizational routine that was operated alongside Tesco's other routines, such as pricing, promotions, and new product development. However, the running costs of the loyalty program were significant, and this sparked the drive to gain more strategic and operational benefit from

the collected customer data by using it to inform the design and offer in Tesco's stores. Here we observe an example of how a routine and its execution may give rise to new intentions that were not envisaged by an organization at the outset (Dittrich & Seidl, 2018).

Even as the change brought about by the Clubcard evolved into an industry-level change, this occurred incrementally rather than at a specific moment. Tesco and Dunnhumby gradually learned more about the analysis of customer data and made small tweaks, which first impacted on Tesco's routines and this led to change at organization-level (Sele & Grand, 2016). Again, we see here how the performance of a routine can lead the routine's participants to ask new questions and update the intentions that are related not only to that particular routine (such as the customer data routine) but also to other routines (such as new product development).

Later these changes infected the suppliers, competitors, and customers. Indeed, my findings suggest that the ability of a novel routine to trigger a higher-level transformation depends on the ability of its action patterns to infect other routines; in Essay I, I define the term "infection" as a routine's performative aspect exerting influence by either transforming other routines or being mediated by them. The other routines may be closely-related routines within an organization; thus, within Tesco, the customer data largely replaced the point-of-sales data that had previously been used to inform pricing routines, promotions routines, etc. On a theoretical level, it is interesting to note that these latter routines were not exogenously recreated but simply became more effective when they were based on customer data. They therefore carried the infection to the extent that infections also occurred across organizational boundaries. For example, competing companies observed the advantages of using customer data and introduced analogous programs of their own. The infections sometimes also led to the introduction of completely new action-patterns and practices, for example as customers began to swipe their loyalty cards at the till.

Furthermore, with radical increases in computing power and the lowering of its price, as well as the advent of big data, algorithmic technologies around the collection and analysis of customer data have rapidly developed. Traditionally, retailers have designed their stores in particular ways, perhaps relying on store managers' gut feelings, and this has determined the offer available to customers and influenced their behavior. However, decision-making is now being increasingly automated, becoming embedded in algorithms that operate based on customer data. This amounts to a fundamental shift in the logic of decision-making in the field of retailing; a shift that is now followed by most retailers and suppliers. In fact, not only can customers' actions be considered a central factor in what becomes offered in stores, but customer behavior and the retailers' reactions to it have become so embedded in the data analysis process that these may no longer be visible to managers. This can be seen to have shifted power and agency to customers, who are effectively no longer mere customers but also coproducers and co-suppliers who participate in and share responsibility for production and supply decisions.

All of this can, finally, be seen as an institutional change, where the entire operating logic in the field of retailing has been transformed. Initiated by the introduction of Tesco's loyalty routines, the retailing field has slowly shifted its focus from products to customers. This sheds light on the relatively unexplored question of how routines can bring about higher-order or institutional change (Powell & Rerup, 2016; Rerup & Feldman, 2011). Unlike the practice-driven processes of *institutional work* (Lawrence & Suddaby, 2006) and *institutional entrepreneurship* (Maguire et al., 2014), where action leading to the creation, or alternatively transformation, of institutions is intentional, the change in my case was not purposeful but was triggered by the introduction of a mundane operational routine. By viewing high-level transformations and routines as mutually constitutive rather than as a top-down phenomenon, my study also responds to a call for multi-level studies (Salvato & Rerup, 2011).

The aforementioned infections of routines, especially those occurring across the organizational boundaries between Tesco and its competitors, demonstrate how transferring routines or attempting to produce the "same" routine is a non-trivial process, as previously noted by, say, D'Adderio (2014). Take Sainsbury's Reward Card as an example: its operation consisted of essentially the same actions patterns as Tesco's Clubard, but its impact was much smaller. This leads us to the double connotation of the notion of performance (i.e., performative vs ostensive.) Indeed, it seems necessary to open the "black box" of how the manner of performing routines, i.e., how they are executed or carried out, is consequential for how firms financially perform as market players. This supports my conceptual choice of a relational perspective, in which the focus is not on routines or other phenomena as stable entities, but rather on their dynamics and interactions with each other and the environment.

Overall, the observed higher-level transformation process can be seen as a compilation process (Kozlowski et al., 2013). We follow Kozlowski and Klein (2000) in defining compilation as a discontinuous process in which a phenomenon acquires a novel character after moving through levels or, as in our case, becoming a new standard. As Tesco's loyalty routine infected Tesco's other routines, and then its customers, suppliers, and competitors, it had rather different impacts on each of these groups; while a competitor could attempt to simply copy Tesco's routine, a supplier's response would have to be rather different because its practices and goals differ to those of a retailer. Nonetheless, these divergent impacts together yielded a field-level transformation that went far beyond Tesco's original routine, consistent with the notion of compilation. As mentioned earlier, infections can be mediated through other routines; this occurred with Tesco's pricing and new product development routines that, while remaining somewhat similar, nevertheless spread the influence of the new customer data routine. Infections can also lead to new routines or actions patterns, as can be seen in the customers who began to swipe their loyalty card at the till. Finally, we note that all of these connections and infections took place through a macro-level environment that consisted of, inter alia, competition within the market and various pressures coming from suppliers, etc.

### 5.2 Impact of FCEs in mediating change

In the previous section I discussed how the infections of routines occurred and it is evident that in many cases these took place without the routine participants being physically proximate. The infections were also largely unintentional; when Tesco introduced its loyalty card program, it did not intend or expect to significantly change the entire field. By contrast, we analyze in this section a series of Field-Configuring Events (FCEs), the explicit purpose of which was to bring routine participants to the same geographical location in order to foster the change and development of certain practices.

In Essay III we will see how the turnaround of the S-Group was very significantly influenced by a specific serial FCE, namely the HR days event. We recall from the literature section that an FCE is a short-term social event that typically occurs periodically, such as a professional gathering, conference, or prize ceremony that encapsulates or shapes the development of a field, industry, profession, technology, market, or, most relevantly to the purposes of Essay III, an organizational ecosystem (Lampel & Meyer, 2008; Meyer et al., 2005; Thomas & Autio, 2014). In Essay III, I observe a specific FCE called the HR days event, whose purpose during the observed time period was to develop and coordinate HR practices within the S-Group.

In the existing literature on FCEs, it usually seems to be assumed, even at definition-level, that these events do in fact bring about (field-level) change. The focus then turns (solely) to the outcomes of the FCEs. However, we also recall from the literature review that the intentions of an FCE are a complicated issue, since these events may be *intended* to produce emergent and unplanned outcomes (Lampel, 2011). In Essay III, I understand an FCE to be an event that has a strong field mandate and also, in the case of the HR days, fairly well-defined intentions, but it then becomes an interesting question as to what is the actual impact of the FCE, and what does the impact depend on.

Previously, Schüßler et al. (2014) studied how the influence of a series of FCEs may depend on how it is organized. However, the purpose and the general structure of the HR days event remained somewhat similar throughout the observed time period. Nonetheless, the annual HR days were, for many years, ineffectual at developing and spreading new HR practices in the cooperatives. Thus, in Essay III, I focus on the effects of the context and external pressures on the FCEs, and note how these had a major impact on the FCEs' strategic roles over time.

In the case of the turnaround of the S-Group, the change arose mostly as a result of the implementation of the so-called S83 plan. This plan was implemented to with the aim of achieving crucial reforms with planned outcomes that included the easing of pressures, both economic (such as by terminating the automatic funding mechanism) and social (such as by auditing cooperative finances, which helped change the mentality and increase the motivation of cooperative HR managers). Essay III illustrates how the HR changes implemented by the cooperatives took place in a fairly unified fashion, pointing to the central role played by the HR days in influencing and informing the way in which the individual

HR managers implemented the changes. Building on this, the study as a whole reinforces the notion that serial FCEs may play an important role in strategy implementation (Jarzabkowski & Seidl, 2008). However, it also underlines the importance of studying FCEs in their networks within and across organizations over time. From a managerial viewpoint, the case demonstrates that it can be more efficient to apply the appropriate pressures to existing routines or other resources, rather than to outright replace them.

As mentioned earlier, one of the explicit goals of FCEs such as the HR days is to bring the participants together by securing their close physical proximity. Building on this notion, I take note of Schüßler et al.'s (2014) discussion of *temporal boundedness* and *interactional openness*. The former refers to diverse actors gathering in one space for a limited time period, whereas the latter refers to the event being limited in time (i.e., there is no same space requirement). Schüßler et al. consider both of these aspects to be essential if an FCE is to be effective. Convening in the same space can stimulate knowledge exchange, especially when participants have differing views that might lead to argument and even conflict (Garud, 2008; Leca et al., 2015), or possibly to infections of routines, as in the Tesco case. However, from the Tesco case it is obvious that infections can occur over large physical distances, whereas the case of the S-Group demonstrates that physical and temporal boundedness may be necessary but they are far from being sufficient for generating transformations.

#### 5.3 Limitations and future research

To ensure the credibility of the conducted research, most particularly the validity of the data, I have combined different data collection methods (interviews, observations, company archives, and public documents), collecting multiple individuals' accounts of inspected incidents, and I have discussed the results with both the employees of the studied organizations and any third parties that observed the development. Together with my co-author, I have gathered data from several different organizations, and the first analysis of the data was concerned with interpreting the results in their individual contexts.

Next, I undertook an examination of the core phenomena of interest in this dissertation, especially the routines and bottom-up transformations. Despite the apparent differences between the two cases, this exercise yielded interestingly similar observations and conclusions for both. For example, both cases exhibited transformations as a relational and nonlinear phenomenon. This indicates that the results may be transferable to other contexts, at least within the retailing industry.

Despite efforts to ensure the credibility and generalizability of the research, certain limitations naturally arise, both in relation to the methodology and the empirical materials. The credibility of the research would be further improved by including more real-time observations in the collected data, especially in the case of the S-Group study. The transferability of the research would, of course,

be enhanced by studying a larger number of cases, as well as by studying organizations that represent more varied fields, organizational structures, or organizational cultures. Further generalizability could be achieved by examining organizations located in more diverse cultural contexts, e.g., on different continents.

All of this opens interesting avenues for further research in various fields. Even within the field of (grocery) retailing, a larger number of cases would open up the possibility of comparing the possibly varied triggers and outcomes of transformations observed in the different cases, or at different moments in time. This would also enable theory-testing as opposed to just theory-building. It can be noted that in many countries, the utilization of customer data is far less developed than it is in the UK, and while Tesco was significantly constrained by technological limitations at the time it was introducing its customer loyalty program, an organization implementing such a program today would likely take a different path.

The interplay between routine dynamics and algorithmic technologies is thought to be an underexplored area (Glaser et al., 2020). While Tesco and UK retailing have been frontrunners in customer data routines and algorithmic technologies, digitalization and the adoption of these technologies is quickly spreading through various other fields. Institutional theorists have lagged behind their colleagues from other research fields in focusing on the impact of technology and digitalization (Hinings et al, 2018; Hinings & Meyer, 2018). Be that as it may, Gegenhuber et al. (2020) propose that there is now an opportunity for institutional theorists to examine how digital technologies can transform the ways in which "institutions are created, complemented, threatened or destroyed."

Just as I have observed a shift in power to customers who, in essence, have become co-suppliers and co-producers in the field of retailing, Gegenhuber et al. have asked: "[...] how can we theorize artificial agency in institutional contexts?" A partial answer to this question is provided by my research on Tesco, where I have shown that algorithmic technologies may begin to operate in ways that are no longer even visible to managers, shifting agency to the algorithms. Of course, this is only one example; changes that are equally (if not even more) fundamental are likely to be seen in fields other than grocery retailing, and involve not only algorithmic technologies but also artificial intelligence, social media, block-chain technology, etc. Thus, I propose that it will be increasingly important to understand this overall shift in focus to customers and algorithms.

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