



# Digitalization and the future of Management Learning: New technology as an enabler of historical, practice-oriented, and critical perspectives in management research and learning

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### Abstract

How are historical, practice-oriented, and critical research perspectives in management affected by digitalization? In this article, we describe and discuss how two digital research approaches can be applied and how they may influence the future directions of management scholarship and education: Social Media Analytics and digital archives. Our empirical illustrations suggest that digitalization generates productivity improvements for scholars, making it possible to undertake research that was previously too laborious. It also enables researchers to pay closer attention to detail while still being able to abstract and generalize. We therefore argue that digitalization contributes to a historical turn in management, that practice-oriented research can be conducted with less effort and improved quality and that micro-level data in the form of digital archives and online contents make it easier to adopt critical perspectives.

### Keywords

Critical, digital archives, digitalization, historical turn, practice, social media analytics

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## Introduction

The 50-year anniversary of a journal is a good time to reflect upon past and future directions of research. In particular, it is suitable to address how the emergence of new technologies may affect scholarship and the role of scholars. While it is often acknowledged that industrial competition is largely governed by the underlying techno-economic foundations and productive forces of society and that changes in these foundations will by necessity also affect the structuration of industries, including competition and profitability (Marx, 1867; Schumpeter, 1934), such materialist perspectives upon academic research are scarcely adopted to the competitive game of academic research. Management research is rarely conceived as subjected to similar constraints and interdependencies, but sweeping changes such as digitalization may have a considerable impact upon what forms of research are possible, and what cost and effort is related to different forms of scholarship. It is clear that historical, and more practice-oriented and critical perspectives on management have gained attention in the past two decades (e.g. Bucheli and Wadhvani, 2014; Cooke, 1999; Whittington, 2006), but the dominant logic of management research still primarily rests on assumptions derived from neo-classical economics, where aggregated data are analyzed using econometric approaches and where assumptions of rational, self-maximizing, and profit-maximizing behavior are intrinsic to the research undertaken (c.f. Cummings and Bridgman, 2011). A similar logic has so far largely prevailed within business school education, which tends to build on assumptions of strategy as something that can be taught and employed in a mechanistic, reductionist manner (c.f. Mintzberg, 2004). Relatedly, calls have been made for reinventing management education: “*management is neither a science nor a profession, neither a function nor a combination of functions. Management is a practice—it has to be appreciated through experience, in context*” (Gosling and Mintzberg, 2004: 19).

Radical changes such as digitalization may spark the creation of new lines of research and alter certain forms of education. Presently, it is unclear how digitalization of research may affect the prevalence of those perspectives and assumptions prevailing in a journal like *Management Learning*, which include the use of historical perspectives, and the application of more critical and practice-oriented perspectives. Effects on the functioning of business schools and the teaching of management education may also be seen in the coming years. In this article, we therefore set out to explore how digitalization may affect several perspectives that are significant in *Management Learning*. While we would not suggest that these three perspectives (historical, critical, and practice-oriented) are mutually exclusive or an exhaustive set of perspectives covered in the journal, we choose those three as points of departure for an exploration into the effects of digitalization on topics frequently prevailing in the journal.

We approach this topic by describing two methodological approaches to make use of digitalization for management research: digital archives and Social Media Analytics (SMA). Both have gained momentum in recent years, but little is known concerning how they may affect the kind of research that is often pursued in a journal like *Management Learning*. To our knowledge, these two approaches have not been applied to teaching at business schools and hence, we focus on management research and instead discuss some of the implications for management learning and for business schools. For these two approaches, we provide some guidelines and empirical illustrations, which are subsequently discussed in relation to the three perspectives articulated earlier. The empirical illustrations and references to the work of others are provided in order to offer insight into the effects of digitalization. While highlighting some benefits and challenges related to both approaches, our overall conclusion is that digitalization is likely to enable more critical and practice-oriented management research and that both older and more recent, contemporary history are likely to gain in popularity with digitalization, especially due to the substantial increases in efficiency enabled by digitalization.

The article is organized as follows. In the next section, we briefly review current research regarding organizational history and the prevalence of critical, practice-oriented perspectives in management research. Here, we highlight a set of challenges that are revisited later in the article. Next, we describe SMA while also providing some empirical illustrations from our own research projects and an analysis where SMA is related to the three perspectives highlighted previously. Thereafter, we do the same thing for digital archives. Eventually, we analyze and discuss how these two approaches and data sources may affect management learning.

## **Historical, practice-oriented, and critical perspectives in management research and learning**

In this section, we review some elements of management research that are commonly adapted in *Management Learning*, including the use of historical, critical, reflexive perspectives (Durepos et al., 2018) that are often practice-oriented (Gherardi, 2009). Toward the end of each sub-section, we highlight some of the empirical challenges related to each of these perspectives. Next, we describe how digitalization might mitigate some of these challenges.

### *Historical perspectives in management studies*

Historical perspectives have been an integral part of *Management Learning* for a long time (e.g. McNay, 1973; Mmobuosi, 1987; Snell and James, 1994). Several benefits of the historical perspective have been highlighted and calls for more such studies have been made on numerous occasions recently (e.g. Segal, 2017).

Previous research has highlighted that historical studies make it easier to uncover and track emergent strategies (Mintzberg and Waters, 1985). Other scholars have argued that a more diverse approach to management history may spark more creativity among both management students and scholars (Cummings and Bridgman, 2011). While process studies have been important in strategic management for a long time (Cummings and Daellenbach, 2009) and numerous calls have been made for a “historical turn” in management (Rowlinson et al., 2014), it is clear that such a turn has up until now largely remained unrealized (c.f. Ernkvist, 2015). The apparent scarcity of such studies is arguably related to a set of challenges associated with historical in-depth studies.

Making use of historical data usually requires extensive work (Yates et al., 2013). Extracting information from archives imposes the need to travel to archives and finding the right material. Searching through an archive is a time-consuming process also associated with considerable risk as it is far from certain that the researcher will find a case study that is of any theoretical interest. Analyzing these vast amounts of material and writing based upon it is equally laborious and there is indeed a common perception of historians getting “lost in the archives” (Fellman and Popp, 2013). If the researcher wishes to look something up one more time, the process has to be repeated again.

In sum, historical research has been associated with rather low efficiency. This drawback may be an important reason why historical studies have so far failed to become more widely diffused in management research. While some scholars have argued that the exclusion of historical perspectives in management textbooks is only partial (Bell and Taylor, 2013), it can nevertheless be concluded that the “historical turn” in management has so far failed to materialize on a larger scale (Greenwood and Bernardi, 2013). We return to these challenges in the analysis and discussion later as we argue that the emergence of social media data and digital archives may spark an increase in productivity.

### *Practice-oriented perspectives*

The practice-oriented perspective has been brought forward as particularly useful in order to realize more critical perspectives (Edenius and Yakhlef, 2007; Gherardi, 2009) and researchers have argued that management learning as a subject is largely concerned with practice-oriented scholarship (Ramsey, 2013).

Generally, practice-oriented management research stands out in a couple of ways. First, it pays attention to what actors actually do. In emphasizing activities on the micro level, practice-based management is explicitly concerned with context, situating agency at an intersection of different practices. By doing so, this perspective should ideally pay attention to both activities on the actor level, and the larger meso-macro fields (Bourdieu, 1990) or social systems (Giddens, 1984) in which these activities take place, while also adopting a process perspective. Relatedly discursive approaches and careful assessments of strategy talk and texts are also prevalent in this stream of research (Vaara et al., 2004).

While some authors argue that the practice-oriented perspective has accomplished a methodological shift in strategy research (Vaara and Whittington, 2012), the prevailing logic in management research still builds upon assumptions from neo-classical economics as advanced econometric studies of aggregated data are still the most common approach (Ketchen et al., 2008). Managers are assumed to behave as rational, planning individuals, making strategic choices as independent and capable actors (e.g. Porter, 1980). Scholars have highlighted that *Management Learning* has a responsibility to promote both theory and practice that is attentive to context, including local and site-specific aspects of individuals (Perriton and Hodgson, 2013) and that much therefore remains to be done before a “practice turn” is realized in management.

One potential reason for the prevailing lack of a practice turn can be the empirical and methodological challenges associated with practice-oriented management research. Paying attention to the micro-level activities over time, while being careful not to remove the context is arguably associated with both exceptionally rich data and considerable hard empirical work.

### *Critical perspectives*

A third recurring aspect of research published in *Management Learning* relates to the critical perspective (e.g. Bridgman, 2007) and Critical Management Studies (CMS) (Alvesson and Willmott, 1992), which underlines the importance of being critical to both empirical data, teaching and research activities as well as the general role of business schools. Frequently, CMS scholarship employs assumptions or perspectives that come from academic disciplines that have been less represented in business schools historically, for example, critical theory (Bourdieu, 2005).

The critical perspective highlights the importance of questioning inherent conventions and assumptions, for instance through discourse analysis (Brown and Duguid, 2001). Bourdieu stated that ideally, research should “make the exotic mundane and the mundane exotic” (Bourdieu and Wacquant, 1992: 68). In doing so, CMS seeks to address underlying intentions that are often not articulated, and foster reflexivity (Maclean et al., 2012).

One part of doing so concerns questioning the role of researchers and business schools and it is frequently argued that the mission of scholarship and education is to ask difficult questions and challenge popular views rather than reinforcing them (Cummings and Bridgman, 2008). Business education has, however, in many countries become more of a commercial enterprise. Being dependent upon both commercial and political sources of funding as well as tuition fees (Weick, 2001), business schools rarely question management. According to some researchers, there are

implicit assumptions of neo-liberal ideology present in most research in strategic management (Levy et al., 2003). While the critical perspective has become a management field of its own in the past decades, it has so far not exerted transformative influence on mainstream management research. Again, we suspect that a potential barrier for more widespread diffusion of critical perspectives is empirical and methodological. It is empirically more difficult to study behaviors, thoughts, and habits which go beyond what is spelled out clearly in terms of numbers that are often used in management research.

## Synthesis

Historical, practice-oriented, and critical approaches are three commonly recurring perspectives within *Management Learning*. It seems that these three interrelated issues have gained momentum and grown considerably over the past decades, but that much potential remains to be realized. The prevailing consensus in strategic management still builds upon assumptions of rational, self-maximizing behavior as depicted in neo-classical economics and managers are described as similarly rational, utility-maximizing, and capable actors (Vaara and Whittington, 2012). Relatedly, there are also certain prevailing stereotypes of management researchers (Bell and Clarke, 2014).

Our review also indicates that an important obstacle for more widespread diffusion of these perspectives is related to methods and access to rich empirical data. Historical, critical, and practice-oriented perspectives with the ambition to study behavior on the micro-level, while also paying attention to context and the field level at the same time, are difficult to apply not only because they require considerable access to data but also extensive time and effort to perform such rich studies.

Given that empirical and methodological constraints may prevent the emergence of critical, practice-oriented, and historical research, new sources of data and new ways to analyze data may hold the potential to transcend established tradeoffs and alter academic research. The emergence of Information and Communication Technologies (ICTs) has sparked an explosion in the amount of available data and methods for analysis. In industries, ICTs in the form of internet connectivity, software, and access to cheap computing power, have paved the way for new business models where resources are subject to declining marginal costs, productivity gains, and increasing returns instead of diminishing returns and rising marginal costs. The partial upheaval of conventional laws of scarcity has opened up new opportunities while also creating considerable disruption in mature industries (e.g. Christensen, 1997).

Management researchers currently face the challenge and opportunity of making use of these vast sources of data and the substantial improvements in software that enable novel ways to analyze both qualitative and quantitative data. It is still unclear how this potential can be realized, and consequently, it is presently unclear how digitalization will affect topics relevant for *Management Learning*. In our ambition to explore how digitalization affects the above, we therefore continue by describing and reviewing two relevant methodological approaches while also providing related empirical illustrations from a couple of research projects. The first case concerns SMA and the next one is related to digital archives. Both have gained momentum in present years and may hold potential for management research more generally. Each approach is described in detail in the coming sections and some associated empirical illustrations based upon recent work by the authors and other scholars are provided. Effects on historical, practice-oriented, and critical perspectives are discussed toward the end of each section. We pay special attention to time and efficiency, and possibilities to combine micro-levels of detail with broader generalizations.

## Social media analytics

Opportunities related to digital, online data collection have increased vastly in recent years, and one consequence of this development has been the emergence of SMA, an interdisciplinary approach that uses a variety of methods for the analysis of social media data (Stieglitz et al., 2014). As social media represents “*a kind of living lab, which enables academics to collect large amounts of data generated in a real-world environment*” (Stieglitz et al., 2014: 90), it is therefore a suitable empirical context for studying contemporary topics. Moreover, the unobtrusive character of SMA also makes it useful when studying how a topic is framed, as content is added continuously in real time.

### *Data collection and preparation*

One of the main challenges when collecting online data utilizing SMA is the fragmented social media landscape and the lack of standardized ways of gaining access to different social media platforms. As a response to this challenge, there exists a range of software services that can be used by both researchers and practitioners.

When collecting data associated with our empirical illustrations below, we have used a service called Notified. The service captures entries in social media published on several social media platforms available online. To use the service, the researcher first enters a set of keywords and picks the language filter to be used. While a broad set of languages provide a potentially richer data set, delimiting data collection to one particular language filter allows for a more focused approach that can be of particular relevance for studies of emerging phenomena. Having set keywords and language filters, publicly posted material from Twitter, Instagram, Facebook, blogs, forums, and YouTube is thereafter collected in a real time database. The tool hence allows researchers to gather data in a structured way from a diverse set of social media platforms which means that scholars therefore do not need to make use of unreliable methods such as scraping techniques (Stieglitz et al., 2014). Next, the collected data are prepared, for instance by removing spam and entries that do not fit the research question.

### *Data analysis*

After data collection is completed, the data sets are commonly analyzed by applying content analysis (Silverman, 2006). More specifically, this is carried out by both analyzing structured (i.e. account details) and unstructured content such as text. In the first phase, data sets are reviewed by analyzing the distribution of captured data per social media platform. Next, various coding schemes can be employed depending on the research aim. In the following sub-sections, some empirical illustrations of such coding and analysis are offered.

### *Empirical illustrations*

Below, we describe different examples of empirical work that have been conducted utilizing SMA up until now. Some of this data has already been published and other material is presently under consideration for publication in various journals. As a result, the role of these synthesized empirical examples in the context of this article is simply to illustrate what is possible to do with the SMA approach and how it relates to historical, practice-oriented, and critical perspectives in management research (see also: Geissinger et al., 2018a; Geissinger et al., 2019; Laurell et al., 2019a; Laurell et al., 2019b). We also refer briefly to other contributions using SMA that are deemed relevant.

*Comparisons between social and traditional media.* In relation to digitalization of the media landscape and the emergence of social media, there are presently few studies explicitly comparing social and traditional media. With the emergence of SMA and access to online databases of articles from traditional media, it is now possible to make such comparisons.

In the specific case (Laurell and Sandström, 2018), a comparison of coverage of Airbnb and Uber in social and traditional media was performed by gathering and subsequently comparing all relevant content in both forms of media during the same time period. Findings reveal that social media was more concerned with the services provided by Airbnb and Uber than their societal implications. Put differently, in social media, consumers primarily made statements about their user experiences. In traditional media, articles were instead written about the pros and cons of these solutions in terms of their societal implications. In general, social media seems to be more positive toward the two studied firms.

*Institutional analysis of organizational fields.* In another study where the SMA approach was employed, institutional analysis of the field “sharing economy” was conducted (Laurell and Sandström, 2017). Gathering 1000 entries in social media, these data were subsequently used to among other things identify (1) practices, (2) issues that are debated, and (3) who the important actors were.

Data collection and coding revealed that practices which followed a market logic seemed to be more popular whereas non-commercial logics such as sharing or gifting played a minor role. Uber and Airbnb were with a wide margin the actors receiving most attention and commonly discussed issues were oriented around taxation, regulation, and environmental effects. In sum, the term sharing economy seems to be characterized by tensions between commercial and non-commercial forces.

*Discourse analysis.* We note that there are presently many academic contributions using SMA that in various ways look at an ongoing discourse. Perceptions of firms or innovations have been studied using SMA; measurements of, for example, reputation, opinions, and so on, can be performed in real time in a scalable and resource-efficient manner (Bhattacharya et al., 2015; Doherty, 2014; Mjhoor, 2016; Strohbach et al., 2015; Zhang, 2015). Coding structures like positive/neutral/negative can be employed in order to explore sentiments vis-à-vis certain innovations or firms (Laurell et al., 2019b; Laurell and Sandström, 2016) and the popularity of products and services has also been studied by using SMA (Pensa et al., 2016). Other scholars have made use of SMA and software protocols in order to study the personalities of entrepreneurs and managers (Obschonka et al., 2017). Scalability seems to be an advantage of using SMA. In an ongoing research project, data collection concerned the role of social media in promoting crowdfunding for sustainable ventures. In this case, more than 140,000 entries in social media were collected concerning crowdfunding in order to assess how much attention is paid to sustainability (Laurell et al., 2019a).

SMA can be used in order to assess the relative importance or magnitude of an issue in comparison to other topics. In the case of 140,000 entries, 308 user-generated content specifically addressing sustainability could be identified, meaning that a total of approximately 0.2 percent of all gathered material was concerned with sustainability. The material contained a total of 37 crowdfunding campaigns that on average received two entries in social media. By obtaining this form of descriptive data, the link between two issues (in this case crowdfunding and sustainability) could be measured.

### *Social media analytics: analysis and discussion*

In the following sub-sections, we describe and discuss in further detail how SMA could be helpful for conducting historical, practice-oriented, and critical scholarship in management research.

*Historical perspectives.* We would argue that the SMA approach makes it possible to track and write history in real time. As data can be gathered continuously regarding a particular issue, changes can be tracked and monitored while they are still taking place. Social media contains the expressions of various actors. Statements here cannot be regarded as factual, but rather as part of an ongoing discourse. It would also be possible to conduct backwards-looking historical studies. Needless to say, such studies cannot go very far back in time, but there is potential in collecting and making use of large sets of data with little effort.

*Practice-oriented perspectives.* We would argue SMA makes it easier to conduct studies on what actors actually do. In the SMA case of the sharing economy above, we were able to document and identify different practices (e.g. selling, lending, gifting, etc.) while also making it possible to measure the relative frequency of each practice (Laurell and Sandström, 2017).

SMA also seems to make it easier to combine micro- and macro-level approaches. As described above, we used it to assess important discussions about the sharing economy as a field, identifying issues such as taxation and regulation as critical while also making it possible to measure and assess who the most dominant actors were. Hence, the state of a field can be studied, while also paying attention to different actors. As data are collected in real time, the above is possible to do over time, hence making it possible to employ more of a process perspective (Van de Ven and Huber, 1990).

*Critical perspectives.* Scholarship in *Management Learning* has often emphasized the importance of employing a critical perspective in management research. This includes going beyond what is frequently taken for granted concerning empirical data, methods, and dominant conventions and conclusions. This can be done through, for example, discourse analysis (Brown and Duguid, 2001).

Discursive perspectives are also enabled by having access to large pools of digital data. Management scholarship that relies on interview data and publicly available documents such as annual reports may struggle to uncover the discourse surrounding a particular subject. Generally speaking, SMA opens up a range of opportunities to make more critical assessments. For instance, there is extensive public debate today in the Western world concerning the role of social media and how it relates to other internet sources and to traditional media. Terms such as “fake news” and “alternative facts” are at times used to depict mounting concern regarding information available online. There are, however, few studies where comparisons are made between social and traditional media. Due to digital research methods, critical assessments of media contents and comparisons across media sources will become increasingly possible to conduct systematically over long periods of time. Our comparison between social and traditional media marks a first critical step in this direction.

Data from social media can also be used to observe how actors attribute meanings to different concepts and relate them to each other. Statements concerning the role of social media in domains such as crowdfunding (Bartenberger and Leitner, 2013) can therefore be utilized to disentangle the interrelationships between different concepts as well as phenomena.

While data from social media holds the potential to enable contemporary historical, practice-oriented, and critical perspectives, it is presently unclear how it should be interpreted. Actors make statements in social media being aware that these statements are available to the general public. We welcome research that explicitly addresses how social media data should be interpreted, its reliability and what actors choose to communicate and how this relates to their interests.



## Digital archives

Archival material has become increasingly digital over the past decade (Nicholson, 2013), but the implications for management research of such a “digital turn” (Bucheli and Wadhvani, 2014) remain unclear at the present moment. Below, we make use of a large digital archive built within a research project in order to empirically illustrate how digital archives may affect historical, practice-oriented, and critical research.

### *Data collection*

We have gathered and used a rich set of archival data from both the Swedish telecommunications sector and the Stockholm Stock Exchange (SSE) consisting of management minutes, mail correspondence, as well as minutes from meetings between key actors, government authority verdicts, law verdicts, and newspaper articles. Material has been collected from the Swedish National Archives and the former government monopoly Televerket’s archives, subsequently photographed, converted into PDF-format, stored, and filed in digital form using the software tool Filemaker. All letters in the documents have also been OCR-processed which means that one can search for words and sentences using a search engine in this digital archive. The software allowed us to put all documents in a chronological order with the exact date of events for every document. Altogether, 7117 physical documents regarding the Swedish telecom market during the 70s, 80s, and 90s (see Table 1 below) have been photographed, digitalized, and OCR-processed by a research assistant working full-time for 2 years. This was done within the scope of a larger research project concerning the interplay between technological and regulatory change (see also Ernkvist, 2015; Eriksson et al., 2019; Geissinger et al., 2018b; Gustafsson et al., 2016). The SSE data contains a total of 2608 documents (see Table 1), which have also been photographed, digitalized, and OCR-processed.

### *Data analysis*

Once a database has been built according to the steps described in the previous section, various topics can be addressed. A technology, a firm, or an individual can be studied in further detail. Making use of the search function in a database where all documents have been processed using OCR technique implies that all documents containing this particular term or name can be identified. With documents digitized according to their date and the form of document (e.g. minutes, PM, government statement, etc.), it is also possible to track what different actors have said and done over time. By having access to multiple sources, data can be used in order to code history into events, with multiple sources backing the event. With a sufficiently rich database of documents, it should therefore be possible to triangulate and hence reach higher internal validity at little additional cost. Also, the creation of such events and their backing of multiple sources can also be used as a preparation before engaging in oral history interviews (Ernkvist, 2015).

### *Empirical illustrations*

Below, we provide some brief empirical illustrations of how a digital archive can be used. The first one concerns the emergence of Cable-TV in Sweden, the next one maps Televerket’s political strategies during the 1980s and the third one deals with how the SSE was digitalized.

*Cable-TV in Sweden.* Swedish television was for many decades monopolized by the government. The creation and widespread diffusion of Cable-TV in the country opened up a market that had

**Table 1.** List of archival sources related to the telecommunications sector. In total, 7118 documents are available electronically. In total, 2634 documents are available electronically for the SSE case.

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Archive

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Televerket and Telia archives

Televerket Company archives (Swedish National Archives)

PTS (Swedish National Archives), also contains correspondence with the entrant firms Comvik and Europolitan

Archive of the Department of Communication (Swedish National Archives)

Archives of Director General Tony Hagström (Swedish National Archives)

Archives of Statsanställdas förbund (Union archive, ARAB)

Televerket Department of Strategic Planning archive

Liberalisering, regler och marknader, SOU 2005:4 (Committee archive, (Swedish National Archives))

Post- och Teleutredningen 1990:27, prop 1992/93:200

Company and interest organization publications from the National Library of Sweden (KB)

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Archive and repository

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The Stenhammar archive donated by OM's founder Olof Stenhammar.

Repository: CfN (Center for Business history)

Stockholm Stock Exchange archive donated by Ingemar Eliasson.

Repository: National Archive, Marieberg.

Holdings of official documents at the Royal Library.

Repository: Stockholm Stock Exchange

The Royal Bank Inspection records on SSE

Repository: National Archive, Arninge.

SOU 1989:72 "Värdepappersmarknadskommittén" (19 volumes, SE/RA/323989).

Repository: National Archive Marieberg

Ministry of Finance archive from the development of SOU 1989:73 .

Repository: National Archive Arninge

The Swedish Securities Dealers Association (SSDA).

Repository: SSDA

SNS archive of the shadow investigation to SOU 1989:72 commissioned to Merton Miller and Charles Upton. "Strategies for capital market structure and regulation."

Repository: SNS (Studieförbundet Näringsliv och Samhälle)

The Cincinnati Stock Exchange Archive

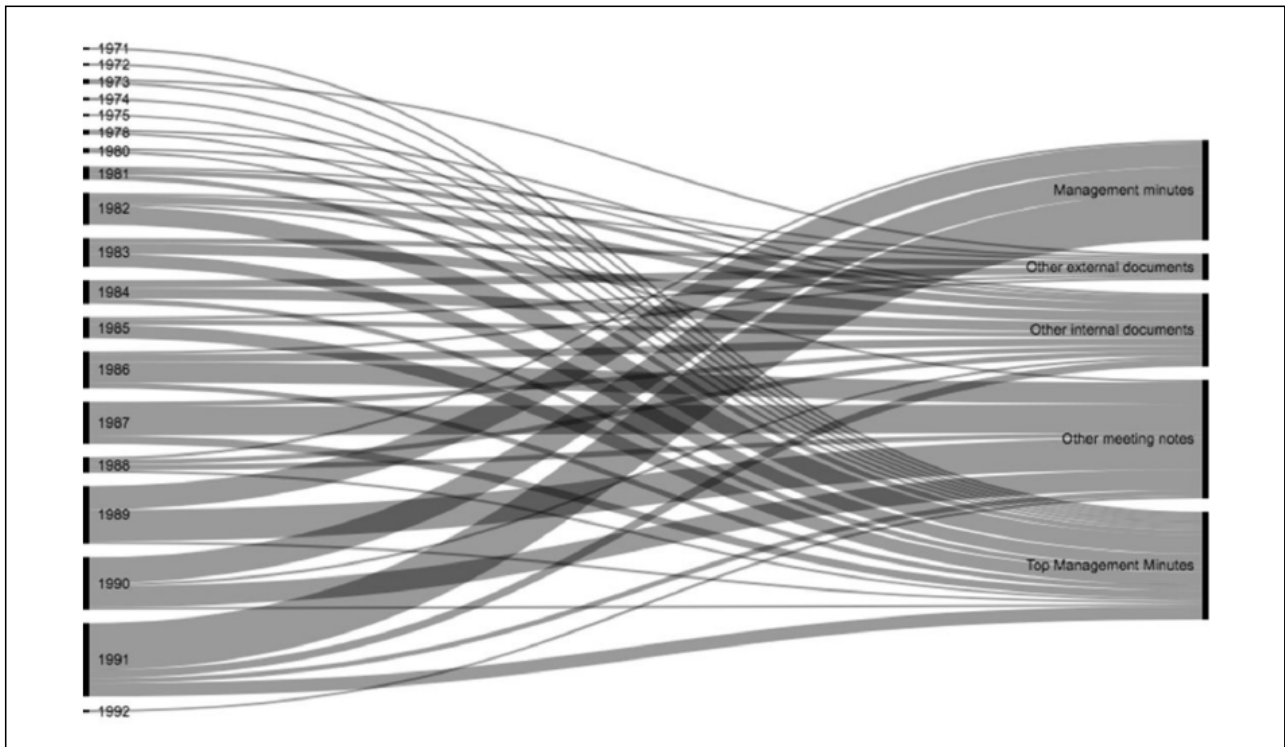
Repository: The D.R.G

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SSE: Stockholm Stock Exchange.

previously not been subject to commercial forces. Interestingly, the state-owned Swedish telecommunications monopoly, Televerket, was the main actor developing and expanding the Cable-TV network in Sweden. Its role in creating a different media landscape is therefore instrumental.

Figure 1 below shows in what *types* of sources Cable-TV is discussed from the first time it was mentioned in 1971 to the privatization in 92/93. Here, external sources were used preceding the formal start of the project. In the graph, this is visible through the formal management group created to run the Cable-TV division (Management minutes) as well as the increasing top management attention put on these issues (Appearance in Top Management Minutes). In addition, the phase preceding formal work on the project included mainly external sources compiled of government reports and different types of correspondence, as well as its seldom appearance at the top management level. The table below thus provides a visualization of what organizational levels paid



**Figure 1.** A visualization of in what sources Cable-TV is mentioned over time.

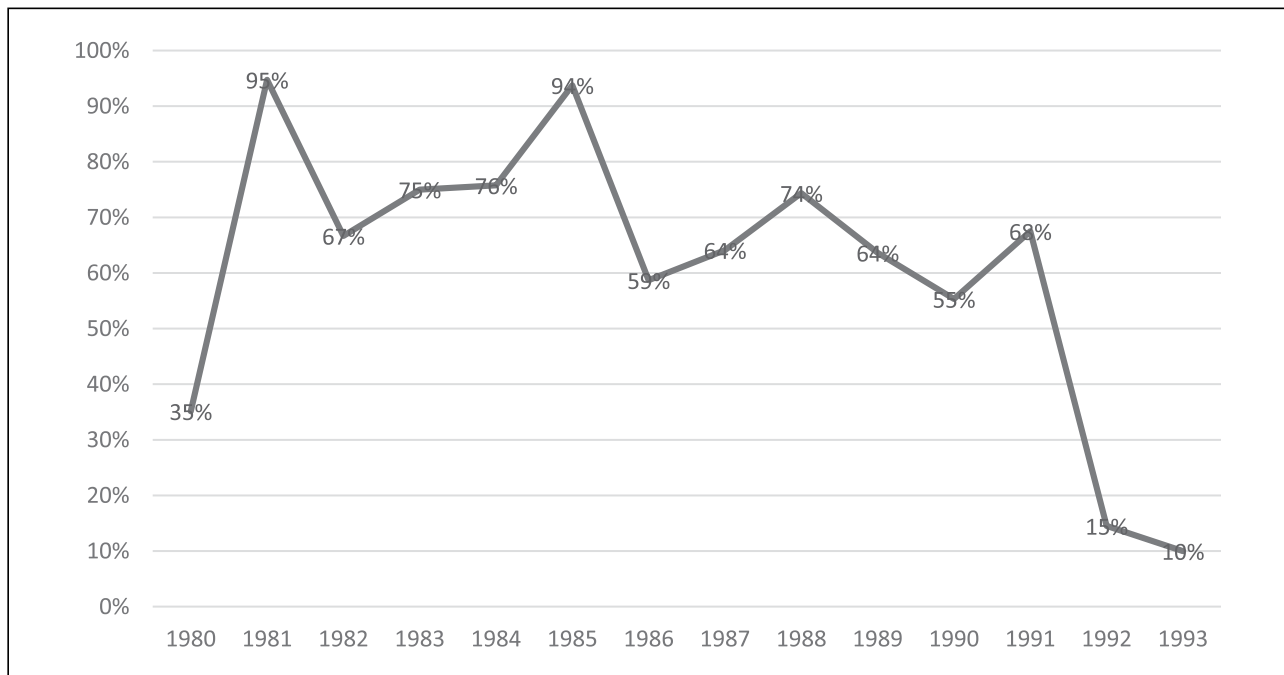
most attention to a particular issue, and how this changed over time. With digital archives, the creation of such a graph is relatively straight forward. As it is possible to search out all different categories of documents (e.g. management minutes) as well as to what extent these documents contain certain terms (in this case Cable-TV), this kind of overview can be obtained quickly.

*Assessments of corporate political activity.* Within the scope of a larger research project, we have classified and coded the non-market activities of Televerket, the former Swedish telecommunications monopoly. With access to management minutes, it is possible to assess how much attention is paid to non-market aspects of strategy, that is, strategic efforts directed toward the regulatory set-up. In Figure 2 below, management minutes have been classified regarding whether they contain any non-market activities or not. Thus, these data make it possible to assess the relative importance of the non-market domain of strategy and how it unfolds over time.

*The Stockholm Stock Exchange 1978–1992.* The SSE was the first national exchange to start implementing a digital trading system and fully remove its trading floor. Later, the SSE became the first stock exchange in the world to change its structure from a cooperative form to a for-profit company with open ownership, a development other stock exchanges followed in the coming years. Also, the SSE was one of the first actors to introduce a fully digital trading system in 1989.

A financial exchange is a marketplace, that is, a place where buyers and sellers of financial securities or other instruments—“brokers”—meet to trade. In the case of SSE, as the *de facto* and *de jure* monopoly, it was the sole provider of the financial infrastructure necessary for equity trading with the exception of the clearing and settlement that was made by a third party. This meant that of the different steps in making a trade, the SSE matched orders of buyers and sellers at the exchange floor and exchanges were usually owned by brokers and dealers.

Given the strong influence of interest groups and retrospective accounts of how brokers successfully resisted automated trading systems elsewhere, the SSE’s successful efforts to undertake

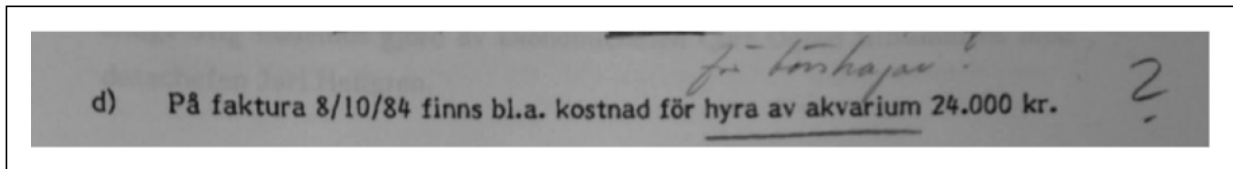


**Figure 2.** Share of Televerket's management minutes containing material related to non-market activities 1980-1993.

these changes are noteworthy. This lack of resistance can only be understood by looking at the field conditions during the studied time period. At that time, there were international pushes for deregulation of financial flows and markets along with increasing availability of digital technology. These trends were manifested by growing trading volumes and an increasing heterogeneity among banks and brokerage firms active on the SSE. In these years, increasing trading volumes became problematic to handle for the SSE's limited capacity.

In the long run, this increase in volume laid the foundation for a transition to more of an efficiency-logic. The new CEO of the SSE, Bengt Rydén, routinely used increased international competition and changing technological conditions in various interviews and other official communication in order to push for digitalization and deregulation. As a key issue in the breaking between the old conservative logic with the exchange manifesting some type of conservative culture and a new efficiency paradigm is when the meeting of the international national exchange (FIBV) in 1984 was hosted by the SSE. When showed pictures and asked questions about this event, multiple respondents who were in the board at the time stated that it felt "over the top." While this is interesting in itself, the key snippet really showing this is an evaluative report written by a consultant for the royal bank inspection who subsequently commented on it. While most of the big expenses were highlighted, this is also the case for the snippet as is shown in Figure 3 below. In addition here however, the evaluators have commented the rent of an aquarium taken up in the report writing "för börshajar" directly translating as "for stock sharks" which is a derogatory word for stockbrokers emerging as common use in Sweden during the 1980s. This snippet thus relates the old conservative values to the emergence of a new breed of brokers who started their firms during the exceptional growth in both value and amount that happened during the 1980s.

*Other applications of digital archives.* It needs to be emphasized here that the research described earlier is not the only work presently going on at the intersection between business, management, and history (Rowlinson et al., 2014). Developments in recent years regarding both data availability and software for structured analysis are opening up new directions for research (Kipping and



**Figure 3.** Snippet illustrating a clash between old, traditional bankers and the new breed of brokers. Here, a reviewer of expenses highlights that at an event hosted by the SSE, 24,000 SEK had been spent at renting an aquarium. As “stock shark” was a derogatory term used to depict the new category of stock brokers, the expense was part of a joke and illustrative of excessive spending.

Üsdiken, 2014). Management contributions making use of digital archives are growing, both in numbers and in importance. Here, we mention two illustrative examples.

The works of Murmann (2013) draw upon a comparative historical method in order to explore the co-evolution of the global synthetic dye industry. Having built a relational database containing data on all firms in all dye-producing countries prior to the First World War, Murmann was able to describe the growth and evolution of this industry in five countries over a 60-year time period. His database spanned 379 different firm units, annual reports, histories of firms, reports from exhibitions, trading associations, and biographies. As stated by Murmann, comparative historical research is scarce and rarely involves more than two cases. In Murmann’s work, we see comparisons across many institutional contexts and based upon these data, a theory on the co-evolution of industries is developed.

Digital archives have also been used in order to document the micro-level actions and behaviors of firms. In a series of contributions, Braguinsky, a co-author, studies the Japanese cotton spinning industry, using an approach referred to as “nano-economics” (e.g. Braguinsky and Hounshell, 2016). Nano-economics, “*involves digging below the microeconomic level to understand the evolution of industries*” (Klepper, 2011: 143). A nano-economic database thus contains information that is more detailed than the information used in economics, including information about important employees, networks, patents, institutions, founders, and so on (Braguinsky and Hounshell, 2016). These scholars argue that historical research has often lacked structured analysis and generalizability. Frequently, historical perspectives have been used to support narratives, but are less useful for testing theories. Braguinsky’s contributions make use of data on a level of detail that is unusual, while adapting econometric methods for analysis and abstraction.

### *Analysis and discussion*

Next, we discuss how digital archives affect historical, practice-oriented, and critical perspectives on management research. Essentially, digitalization seems to result in considerable productivity gains that can benefit all the three perspectives, and in the coming sub-sections, we delve deeper into in what ways this is the case.

**Historical perspectives.** As stated in the section “Historical, practice-oriented, and critical perspectives in management research and learning”, historical perspectives hold considerable potential as they make it possible to track emergent strategies (Mintzberg and Waters, 1985), open up for more creativity (Cummings and Bridgman, 2016), and make it possible to study how events unfold over time. The “historical turn” in management has so far largely failed to materialize, arguably due to the laborious and complex work associated with writing history (Yates et al., 2013).

Digitalization seems to enable a shift toward more historical perspectives as it holds the potential to make data collection and analysis much more resource-efficient. The research related to

digital archives described earlier illustrates how the emergence of software, digital photography, OCR-processing, and the creation of a database structure creates considerable productivity improvements. It is possible to create visualizations with little effort (see Figure 1), and the emergence of various strategies can be tracked over time. Having access to vast amounts of data enable tracking when something starts to emerge and relate intra-organizational events such as the creation of an organizational entity, management decisions, and so on, to changes in the environment. Figure 1 concerning the emergence of Cable-TV in Sweden presents such a picture of emergence and related attention.

Also, it is much easier to provide quantifications of historical patterns. This can be seen in Figure 2 where all management minutes from Televerket have been used to estimate the relative attention given to non-market activities. With this form of data, it is thus possible to visualize how strategies emerge and to quantify the attention devoted to different topics over time. These figures and estimations could be generated without much work. Using the search function and making use of certain keywords, the number of documents could be reduced from more than 7000 to 200 documents. Scrolling through documents, searching for certain keywords also enhances productivity. All in all, the data collection and analysis described earlier required two days' work. Historical research has for a long time been difficult to make use of as detailed empirical work has taken place at the expense of theoretical rigor and difficulties in generating patterns and generalizations. The coding and related visualizations described earlier suggest that digital archives may help to counter some of these difficulties and enable more theory-driven history.

It is important to keep in mind the considerable up-front investment related to gathering and digitizing all documents. As stated previously, one research assistant worked full-time for 2 years creating these archives. Time and effort devoted to database design also needs to be taken into account. The creation of a digital database may therefore be suitable for a PhD student or a research team that can devote time and effort to this up-front cost. Also, it is clear that making use of archives that have already been digitized is much easier than doing this work.

Once a digital archive is in place, however, historical research becomes subject to small marginal costs and considerable economies of scale as it is possible to make use of the data in numerous different ways. Creating possibilities to search and extract documents allows for several researchers to look at the same material simultaneously, thus facilitating collaboration while also potentially increasing the internal validity. Improved collaboration and access to data should arguably also make it possible to improve the reflexivity of researchers.

As more and more public archives are digitized and made available for researchers, we would expect these empirical sources in combination with increasingly intelligent software to contribute to the increased use of historical perspectives in the coming years.

*Practice-oriented perspectives.* Digital archives enable systematic coding of documents into incidents, which can subsequently be categorized into an analytical scheme such as the one by Oliver and Holzinger (2008), thereby providing quantifications of the various practices and how they unfold over time.

In the case of digital archives, micro-level activities can also be combined with aggregated observations concerning the state of an organization or a field. Actors can be identified, actions can be tracked and measured on the micro level, including assessments of their discursive strategies. Snippets can more easily be found on the micro level and related to aggregated patterns such as turnover growth, the emergence of brokerage firms, and how they differed from traditional actors such as banks (Figure 3). Access to data from regulators, competitors, and parliament makes it possible to see where and how a field emerges. The Cable-TV case shows the relative importance of

management over time, giving indications of who were the driving actors behind developing this technology.

*Critical perspectives.* Our empirical illustrations discussed earlier show how digitalization can enable the employment of more critical perspectives. Access to micro-level field data such as digital archives imply that scholars can go beyond general patterns and aggregated data. For instance, literature in economics has long argued that vested interests are usually able to influence regulation to their favor and that incumbent firms are therefore frequently at an advantage vis-à-vis entrant firms. This pattern is usually referred to as rent seeking and/or regulatory capture (Buchanan, 1980). Micro-level data on the non-market activities of firms are however rare in this research. In the case of Televerket, it is clear that the incumbent monopolist was not able to proactively capture the regulatory set-up. To the contrary, the firm, despite its superior financial and relational resources, had to play a defensive game for an entire decade. These findings stand in contrast to dominant economic models of rent seeking and can only be observed by having access to micro-level documentation such as digital archives where it is clear what actors are actually doing, while also coding activities into patterns that can be quantified.

Access to a digital archive also makes it possible to relate multiple sources to a certain event, thereby increasing the internal validity. Such material can also be used in order to conduct oral history interviews, enabling more detailed accounts that are less susceptible to hindsight bias.

### *Implications for research and management learning*

Having observed the potential of digitalization to shift management research more toward historical, practice-oriented, and critical perspectives, we would argue that researchers will in the coming years need to become increasingly skilled in making use of digital data sources. This includes command of programming languages, as well as mastering different digital coding techniques and various software that can be used. One can only speculate as to how these new skillsets may transform the role of researchers in management. What is the role of a researcher when parts of data collection and analysis are performed by software, that is, code written by someone else? How would such a change affect transparency and validity? Critical, reflexive perspectives upon these changes will be of importance in the coming years.

As our overall conclusion is that digitalization holds the potential to direct management research more toward some of the perspectives employed by *Management Learning*, we would also expect that such a shift can affect education at business schools. As stated previously, business schools have by and large been implicitly influenced by neo-classical economics and models of competition under conditions of rational, self-maximizing behavior in the marketplace, often disregarding other aspects of business (Cummings and Bridgman, 2011). Access to digital archives, SMA and associated software to create visualizations and quantifications of micro-level behavior can hopefully result in valuable teaching material that highlights complexity rather than downplays it, that as a consequence encourages students to challenge the workings of business. Increasingly, accessible archives and methods for coding the contents should arguably also make it easier to apply critical perspectives and to study in closer detail what organizations actually do. SMA and studies of web discourse are similarly likely to open up for new approaches to teaching management. We acknowledge the potential of digitalization in transforming both management research and teaching, but acknowledge that there are barriers to such change within the system. Further research on resistance to digitalization of management research and learning is welcomed.

## Conclusion: digitalization and the future of *Management Learning*

In this article, we have explored how digitalization may affect future research directions of *Management Learning*. We have looked at how three recurring and interrelated perspectives in the journal may be affected by digitalization: historical, practice-oriented, and critical perspectives on management while also discussing their prevalence in education. Having reviewed dominant topics associated with these three perspectives and identified barriers to a more widespread diffusion of research in these areas, we have subsequently used two examples of digital research methods being applied in ongoing research in order to illustrate the potential impact of digitalization: SMA and digital archives.

Historical, practice-oriented, and critical perspectives have traditionally been associated with considerable work and limited generalization. Archival data are usually inaccessible as it requires getting to a remote location, subsequently finding all relevant documents. Practice-oriented and critical perspectives have also been constrained by limited access to micro-level data and thus been associated with extensive work. These three perspectives are frequently used in order to support narratives.

In conclusion, we argue that both SMA and digital archives make it possible to more efficiently pursue existing research and that new research can be conducted. Our empirical and methodological illustrations point at substantial productivity improvements realized from digitalization for both our described approaches. The case of digital archives shows that when documents can be accessed through a computer and watched on a screen, as well as identified with search functions and being classified into different categories, it becomes much easier to integrate historical perspectives into management research. Timelines can be created, emergence can be tracked, micro-level activities can be coded into incidents which in turn can be traced over time and the general macro-level picture can be described without sacrificing details on the micro level. It becomes possible to generalize across larger sets of data while also tuning in to practices and behaviors on the micro level, thereby opening up for more practice-oriented and critical perspectives. The use of software and search functions makes it possible to do so while sacrificing less of the generalizability researchers often seek to obtain.

SMA holds similar potential to shift management research. History can be written in real time through ongoing, continuous data collection. Also, a field and its practices can be studied, both by making quantifications and by looking into the actual contents posted by actors, making discursive assessments, both of individuals and organizations.

In sum, we argue that digitalization holds the potential to shift management research more toward perspectives frequently advocated by a journal like *Management Learning*. As more and more archives are digitized, new software emerges and data available online can be used, historical, practice-oriented, and critical perspectives upon management research are likely to benefit. We welcome further research on this topic, particularly reflexive work concerning the changing role of researchers and business education as a consequence of digitalization.

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**References**

- Alvesson M and Willmott H (1992) Critical theory and management studies: An introduction. In: Alvesson M and Willmott H (eds) *Critical Management Studies*. London: SAGE, 1–20.
- Bartenberger M and Leitner P (2013) Crowdsourcing and crowdfunding: Approaches to foster social innovation. In: *Proceedings of the IADIS international conference web based communities and social media*, 81–85.
- Bell E and Clarke DW (2014) ‘Beasts, burrowers and birds’: The enactment of researcher identities in UK business schools. *Management Learning* 45(3): 249–266.
- Bell E and Taylor S (2013) Writing history into management research. *Management & Organizational History* 8(2): 127–136.
- Bhattacharya S, Sinha V, Chaudhuri K, et al. (2015) A conceptual framework for determining brand attitude and brand equity through text analytics of social media behavior. In: Khosrow-Pour M (ed.) *Encyclopedia of Information Science and Technology*, 3rd edn. Hershey, PA: IGI Global, 1393–1405.
- Bourdieu P (1990) *The Logic of Practice*. Stanford, CA: Stanford University Press.
- Bourdieu P (2005) *The Social Structures of the Economy*. Cambridge: Polity Press.
- Bourdieu P and Wacquant LJ (1992) *An Invitation to Reflexive Sociology*. Chicago, IL: University of Chicago Press.
- Braguinsky S and Hounshell D (2016) History and nanoeconomics in strategy and industry evolution research: Lessons from the Meiji-Era Japanese cotton spinning industry. *Strategic Management Journal* 37: 45–65.
- Bridgman T (2007) Reconstituting relevance: Exploring possibilities for management educators’ critical engagement with the public. *Management Learning* 38(4): 425–439.
- Brown JS and Duguid P (2001) Structure and spontaneity: Knowledge and organization. In: Nonaka I and Teece DJ (eds) *Managing Industrial Knowledge: Creation, Transfer and Utilization*. London: SAGE, 44–67.
- Buchanan JM (1980) Rent seeking and profit seeking. In: Buchanan JM and Tollison G (eds) *Toward a Theory of the Rent-seeking Society*. College Station, TX: Texas A&M University Press, 3–15.
- Bucheli M and Wadhvani D (2014) *Organizations in Time: History, Theory, Methods*. Oxford: Oxford University Press.
- Christensen CM (1997) *The Innovator’s Dilemma: When New Technologies Cause Great Firms to Fail*. Boston, MA: Harvard Business School Press.
- Cooke B (1999) Writing the left out of management theory: The historiography of the management of change. *Organization* 6(1): 81–105.
- Cummings S and Bridgman T (2008) Strawman: The reconfiguration of Max Weber in Management Textbooks and why it matters. *Academy of Management Proceedings* 2008(1): 1–6.
- Cummings S and Bridgman T (2011) The relevant past: Why the history of management should be critical for our future. *Academy of Management Learning & Education* 10(1): 77–93.
- Cummings S and Bridgman T (2016) The limits and possibilities of history: How a wider, deeper, and more engaged understanding of business history can foster innovative thinking. *Academy of Management Learning & Education* 15(2): 250–267.
- Cummings S and Daellenbach U (2009) A guide to the future of strategy?: The history of long range planning. *Long Range Planning* 42(2): 234–263.
- Doherty AJ (2014) *Understanding Web Sentiment Analytics and Visualization: A Social Media Analysis*. Available at: <https://repository.arizona.edu/handle/10150/320061>
- Durepos G, Alcadipani R, Maclean M, et al. (2018) Celebrating 50 years of *Management Learning*: Historical reflections at the intersection of the past and future. *Management Learning* 49: 124–127.

- Edenius M and Yakhlef A (2007) Space, vision and organizational learning: The interplay of incorporating and inscribing practices. *Management Learning* 38(2): 193–210.
- Eriksson K, Ernkvist M, Laurell C, et al. (2019, October) A revised perspective on innovation policy for renewal of mature economies – Historical evidence from finance and telecommunications in Sweden 1980–1990. *Technological Forecasting and Social Change* 147: 152–162.
- Ernkvist M (2015) The double knot of technology and business-model innovation in the era of ferment of digital exchanges: The case of OM, a pioneer in electronic options exchanges. *Technological Forecasting and Social Change* 99: 285–299.
- Fellman S and Popp A (2013) Chapter 13. Lost in the archive: The business historian in distress. In: Czarniawska B and Löfgren O (eds) *Coping with Excess: How Organizations, Communities and Individuals Manage Overflows*. Cheltenham: Edward Elgar, 216–243.
- Geissinger A, Laurell C, Öberg C, et al. (2019) Description of sustainability connotations of sharing economy platforms – what is the picture from social media? Accepted for publication in *Journal of Cleaner Production*, vol. 206, 419–429.
- Geissinger A, Laurell C and Sandström C (2018a) Digital Disruption beyond Uber and Airbnb – tracking the long tail of the sharing economy, accepted for publication in *Technological Forecasting and Social Change*.
- Geissinger A, Laurell C, Sandström C, et al. (2018b) Digital Entrepreneurship and field conditions for Institutional Change – Exploring the role of cities, accepted for publication in *Technological Forecasting and Social Change*.
- Gherardi S (2009) Introduction: The critical power of the “practice lens.” *Management Learning* 40: 115–128.
- Giddens A (1984) *The Constitution of Society: Outline of the Theory of Structuration*. Berkeley, CA: University of California Press.
- Gosling J and Mintzberg H (2004) The education of practicing managers: Companies and business schools must work together to reinvent management education, rooting it in the context of managers’ practical experiences, shared insights and thoughtful reflection. *MIT Sloan Management Review* 45(4): 19–23.
- Greenwood A and Bernardi A (2013) Understanding the rift, the (still) uneasy bedfellows of History and Organization Studies. *Organization* 21: 907–932.
- Gustafsson R, Ernkvist M, Sandström C, et al. (2016) Towards an integrative digital history approach in organization studies. In: *Academy of Management Proceedings*, vol. 2016, No. 1. Briarcliff Manor, NY 10510: Academy of Management, 18182.
- Ketchen DJ, Jr Boyd BK and Bergh DD (2008) Research methodology in strategic management: Past accomplishments and future challenges. *Organizational Research Methods* 11(4): 643–658.
- Kipping M and Üsdiken B (2014) History in organization and management theory: More than meets the eye. *The Academy of Management Annals* 8(1): 535–588.
- Klepper S (2011) Nano-economics, spinoffs, and the wealth of regions. *Small Business Economics* 37: 141–154.
- Laurell C and Sandström C (2016) Analysing Uber in social media – disruptive technology or institutional disruption? *International Journal of Innovation Management*, 5–7 December in Brisbane, Australia. DOI: 10.1142/S1363919616400132. Knut Holt Best paper award vid ISPIM Innovation Summit.
- Laurell C and Sandström C (2017) The sharing economy in social media – analyzing tensions between market and non-market logics. *Technological Forecasting and Social Change* 125: 58–65.
- Laurell C and Sandström C (2018, April) Comparing the impact of social and traditional media on disruptive change – evidence from the sharing economy. *Technological Forecasting and Social Change*: 339–344.
- Laurell C, Sandström C and Suseno Y (2019a, April) Assessing the interplay between crowdfunding and social media. *Technological Forecasting and Social Change*: 117–127.
- Laurell C, Sandström C, Berthold A, et al. (2019b, July ) Exploring barriers to adoption of Virtual Reality through Social Media Analytics and Machine Learning – an assessment of technology, network, price and trialability. *Journal of Business Research*: 469–474.
- Levy DL, Alvesson M and Willmott H (2003) Critical approaches to strategic management. In: Alvesson M and Willmott H (eds) *Studying Management Critically*. London: SAGE, 92–110.

- Maclean M, Harvey C and Chia R (2012) Reflexive practice and the making of elite business careers. *Management Learning* 43(4): 385–404.
- McNay I (1973) European management education: History, typologies and national structures. *Management Learning* 4: 3–13.
- Marx K (1867) *Capital*, vol. 1. New York: International Publishers.
- Mintzberg H (2004) *Managers, Not MBAs: A Hard Look at the Soft Practice of Managing and Management Development*. San Francisco, CA: Berrett-Koehler Publishers.
- Mintzberg H and Waters JA (1985) Of strategies, deliberate and emergent. *Strategic Management Journal* 6(3): 257–272.
- Mjhoor AY (2016) *Evaluation of user perceived QoE in mobile systems using social media analytics*. Doctoral Dissertation. Available at: <https://repository.lib.fit.edu/bitstream/handle/11141/1133/MJHOOL-THESIS.pdf?sequence=1&isAllowed=y>
- Mmobuosi I (1987) The process by which managers attach value to courses: Three case histories and their implications for course evaluation and institutional image. *Management Learning* 18(2): 140–148.
- Murmann JP (2013) The coevolution of industries and important features of their environments. *Organization Science* 24(1): 58–78.
- Nicholson B (2013) The Digital Turn: Exploring the methodological possibilities of digital newspaper archives. *Media History* 19(1): 59–73.
- Obschonka M, Fisch C and Boyd R (2017) Using digital footprints in entrepreneurship research: A Twitter-based personality analysis of superstar entrepreneurs and managers. *Journal of Business Venturing Insights* 8: 13–23.
- Oliver C and Holzinger I (2008) The effectiveness of strategic political management: A dynamic capabilities framework. *The Academy of Management Review* 33(2): 496–520.
- Pensa RG, Sapino ML, Schifanella C, et al. (2016) Leveraging cross-domain social media analytics to understand TV topics popularity. *IEEE Computational Intelligence Magazine* 11(3): 10–21.
- Perriton L and Hodgson V (2013) Positioning theory and practice question(s) within the field of management learning. *Management Learning* 44(2): 144–160.
- Porter ME (1980) *Competitive Strategy: Techniques for Analyzing Industries and Competition*, vol. 300. New York: Free Press, p. 28.
- Ramsey C (2013) Management learning: A scholarship of practice centered on attention? *Management Learning* 45(1): 1–20.
- Rowlinson M, Hassard J and Decker S (2014) Research strategies for organizational history: A dialogue between historical theory and organization theory. *Academy of Management Review* 39(3): 250–274.
- Schumpeter JA (1934) *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. New Brunswick, NJ: Transaction Publishers.
- Segal S (2017) The existential dimensions of the paradox of becoming in the process turn in organisation studies. *Management Learning* 48(4): 471–486.
- Silverman D (2006) *Interpreting Qualitative Data*, 3rd edn. London: SAGE Publications.
- Snell R and James KT (1994) Historical roots and future directions. *Management Learning* 25(4): 499–502.
- Stieglitz S, Dang-Xuan L, Bruns A, et al. (2014) Social media analytics. *Business & Information Systems Engineering* 6(2): 89–96.
- Strohbach M, Ziekow H, Gazis V, et al (2015) Towards a big data analytics framework for IoT and smart city applications. In: Xhafa F, Barolli L, Barolli A, et al. (eds) *Modeling and Processing for Next-Generation Big-Data Technologies*. Cham: Springer, 257–282.
- Vaara E and Whittington R (2012) Strategy-as-practice: Taking social practices seriously. *Academy of Management Annals* 6(1): 285–336.
- Vaara E, Kleymann B and Seristö H (2004) Strategies as discursive constructions: The case of airline alliances. *Journal of Management Studies* 41(1): 1–35.
- Van de Ven AH and Huber GP (1990) Longitudinal field research methods for studying processes of organizational change. *Organization Science* 1(3): 213–219.

- Weick KE (2001) Gapping the relevance bridge: Fashions meet fundamentals in management research. *British Journal of Management* 12: S71–S75.
- Whittington R (2006) Completing the practice turn in strategy research. *Organization Studies* 27(5): 613–634.
- Yates J, Bucheli M and Wadhvani RD (2013) Understanding historical methods in organization studies. In: Bucheli M and Daniel Wadhvani R (eds) *Organizations in Time: History, Theory, Methods*. Oxford: Oxford University Press on Demand, 265–283.
- Zhang M (2015) *Social Media Analytics of Smoking Cessation Intervention: User Behavior Analysis, Classification, and Prediction*. Philadelphia, PA: Drexel University.