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Author:

Tavakoli, A; Schlagwein, D; Schoder, D

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Open Strategy: Literature Review, Re-Analysis of Cases and Conceptualisation as a Practice

Asin Tavakoli

University of Cologne

Daniel Schlagwein (corresponding)

UNSW Australia

schlagwein@unsw.edu.au

Detlef Schoder

University of Cologne

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Abstract: An increasing number of organisations (e.g., Daimler, IBM and Red Hat) have adopted what has been called “open strategy”: involving large groups of people in strategy making via information technology (IT). Our review of the recently emerged research stream on open strategy reveals inconsistencies in the use of explicit definitions and implicit conceptualisations of open strategy. To support future discourse and research, we develop a theoretically coherent and comprehensive conceptualisation of open strategy as a practice in this paper. This conceptualisation is based on a structured review of existing publications and re-analysis of well-documented open strategy cases. We use the strategy-as-practice

lens and the concept of *Idealtypus* as theoretical foundations. The paper proposes a research agenda for open strategy.

Keywords: open strategy; openness; strategy as practice; practice theory; literature review; research agenda.

1 Introduction

This paper reviews the emerging literature on “open strategy” and provides conceptual development. Open strategy is an emerging information technology (IT)-enabled strategizing practice in which organisations involve large numbers of internal or external people in strategy making (Whittington et al. 2011). For example, IBM involved no fewer than 150,000 people in its strategy planning via an IT platform (Bjelland 2008). The use of open strategy has also been documented at Daimler (Binder and Bertram 2010), HypoVereinsbank (Matzler et al. 2014a), Premium Cola (Luedicke et al. 2016), Red Hat (Yeane 2011), Wikimedia Foundation (Dobusch and Kapeller 2013) and other organisations (Gast and Zanini 2012). Open strategy promises access to dispersed and creative strategic ideas (Matzler et al. 2014a), better and faster decisions (Yeane 2011), and increased approval of strategy by employees, customers and partners (Jette et al. 2015). Open strategy is enabled by social IT (e.g., Haefliger et al. 2011) and it is becoming an important strategic use of IT (Harrysson et al. 2016).

Open strategy has been of increasing interest to researchers, with a first generation of research studies on open strategy already published. The high level of current research interest in open strategy is further evident in dedicated panels (Berends et al. 2013); workshops (Friesl et al. 2014), online communities (Seidl et al. 2016), conference tracks (Dobusch et al. 2015) and journal special issues (Whittington et al. 2014).

Open strategy is categorically different from traditional “top-level strategizing” and qualitatively different from “bottom-up strategizing”. Traditional top-level strategizing is mostly secretive (Powley et al. 2004), non-inclusive and closely controlled by the organisation’s “upper echelon” (Hambrick and Mason 1984), the elite group of senior executives (Andrews 1988; Montgomery 2008). Bottom-up strategizing refers to the involvement of middle management (Floyd and Woolridge 1992) or selected groups of employees from lower organisational levels (Mantere and Vaara 2008). However, extending beyond bottom-up strategizing, open strategy is unique in its overall transparency (Dobusch and Mueller-Seitz 2012; Whittington et al. 2011), wide inclusiveness (Santalainen and Baliga 2015; Stieger et al. 2012) and the central use of social IT to effectively enable mass participation (Amrollahi and Ghapanchi 2016; Haefliger et al. 2011). Open strategy can be seen as a particular form of IT-enabled crowdsourcing (Malhotra et al. 2016). Hence, open strategy is considered a novel and unique strategizing phenomenon that needs separate study (Whittington et al. 2011).

In our structured review of the emerging open strategy literature, we found interesting and relevant insights on open strategy. However, we also found ambiguities and inconsistencies in how the phenomenon of open strategy is delineated, defined and conceptualised. Even the name of the phenomenon is unclear, described with terms such as: “open strategy” (e.g., Whittington et al. 2011), “co-creating strategy” (e.g., Rapp et al. 2016), “democratic strategy” (Stieger et al. 2012), “collaborative strategic planning” (e.g., Liinamaa et al. 2004) among others. The literature is also inconsistent in regard to which actual phases and routines are “open”: idea generation (e.g., Whittington et al. 2011), decision making (e.g., Pittz and Adler 2016), strategy communication (e.g., Dobusch and Gegenhuber 2015) or all of them. Furthermore, open strategy has been described as involving internal people (Stieger et al. 2012), external people (Brauner and Kettner 2015) or both (Bjelland 2008). In short, the

literature review reveals that, while there is implicit consensus that “open strategy” is a novel and unique phenomenon worthy of dedicated study, no consensus exists about what “open strategy” precisely is and how it should be theoretically approached.

To increase clarity and move the discourse and research on this interesting phenomenon forward, this paper addresses the following questions: firstly, *how has open strategy been conceptualised in prior literature?* Secondly, in recognising the value of a practice-theoretical view on open strategy (as we will discuss below): *how can open strategy be understood as a practice?* Thirdly, then: *how do we advance research on open strategy?*

Our answers to these questions are based on a structured literature review (Jones and Gatrell 2014; Rowe 2014; Schryen 2015) in which we analysed claims about, and conceptualisations of, open strategy. The review led to us to formulate a practice-theoretical view on open strategy because we found this view found to be particularly informative. We used the strategy-as-practice lens (Golsorkhi et al. 2010; Jarzabkowski et al. 2007; Whittington 1996) to re-analyse seven salient, well-documented open strategy cases described in the literature. The cases were not necessarily presented in practice-theoretical terms and concepts in the original sources. Based on this practice-theoretical re-analysis and drawing on Max Weber's concept of *Idealtypus* (Weber 1904), we then develop an improved conceptualisation and definition of “open strategy” as a practice as the key contribution of the paper. We propose a research agenda based on this conceptualization.

The paper is organised as follows. In section 2, we present our literature review method. In section 3, we present the review findings with a focus on conceptual and definitional issues, identifying entity, process and practice views on open strategy. In section 4, we present an overview of seven salient and well-documented open strategy cases and re-analyse them using the practice view. Based on this analysis, we develop a practice-based

conceptualisation of open strategy. In section 5, we discuss the implications of the paper and provide a research agenda for open strategy. We conclude with a brief summary.

2 Literature Review Method

We undertook a structured review of the literature on open strategy to investigate and critically assess how open strategy has been researched and conceptualised to date. Literature reviews are an appropriate method to systematically and critically assess the state of research on a particular phenomenon: they help to inform concept and theory development (Rousseau et al. 2008; Rowe 2014) and to develop agendas for future research (Boell and Gecez-Kecmanovic 2014; Schwarz et al. 2007; Webster and Watson 2002).

We conducted a structured (systematic and iterative) process of searching, reading, selecting and integrating prior literature (Jones and Gatrell 2014; Rowe 2014; Schryen 2015). Due to the novelty of the phenomenon, we reviewed both academic and professional publications. Our decision to include professional publications was due to the limited availability of academic publications to date, to capture views and terminology of professional praxis and to access and include detailed reports of cases not found in academic publications at that level of detail (see also Tate et al. 2015; vom Brocke et al. 2015).¹ Our interest was in the actual doing of open strategy within the reported cases (rather than success or performance measures).

To identify relevant academic sources, we conducted keyword-based searches in several leading academic databases (i.e., ProQuest ABI/INFORM, AIS eLibrary, EBSCOhost, JSTOR, ScienceDirect and Web of Science). To identify relevant professional sources, we searched

¹ We acknowledge that issues of vested interest could be present in professional publications. We considered the benefits of including such publications (e.g., more detailed accounts of cases) to outweigh the drawbacks.

leading professional online repositories (e.g., Gartner, Management Innovation eXchange [MIX] and McKinsey Quarterly). We used keyword-based searches to avoid an overly narrow focus on particular outlets and to find all (or almost all) available publications (Kitchenham and Charters 2007). In addition, we used backward and forward searches (Webster and Watson 2002). That is, we analysed the reference lists of identified relevant publications (backward search) and, using the “cited by” functions of Google Scholar and Web of Science, we searched for newer publications citing the identified publications (forward search). We conducted this process iteratively, for example extending the set of search keywords based on the emerging insights and findings from the review. The search, selection and review process was updated several times to account for newer publications, with the final update of the review, as reported in this paper, occurring in September 2016.

We selected publications by assessing their relevance (against our initial characterisation of open strategy as provided in this paper’s introduction) through reading titles, abstracts and, eventually, full texts. We refined the conceptualisation and definition of open strategy through the review process which, in some cases, led to the re-inclusion (or exclusion) of publications. Overall, we assessed over 6,000 publications (the keyword-based searches led to a large number of “hits”) with 99 publications about open strategy eventually considered as relevant. We classified 58 publications as academic, as they were targeted at an academic audience, and 41 publications as professional, as they were targeted at a professional audience. A complete compilation of sources identified and a corresponding EndNote library is available from authors on request.

Given that our interest was in conceptual and theoretical framing, we conducted a primarily inductive analysis of the publications focused on the actual body of text (e.g., how the open strategy phenomenon was described, which aspects were included and excluded, which implicit or explicit theoretical views were taken). We used thematic analysis coding

techniques (Ezzy 2002) to analyse the identified publications, and prepared extensive groupings of the definitions and concepts of open strategy in the reviewed publications. We focused on the conceptual foundations of open strategy, the characteristics attributed to open strategy, the definition of open strategy (if any) and the underlying views on open strategy.

While the original intention was a conventional “state-of-the-art” literature review, we identified substantial issues in the literature in terms of the precise definition and meaning of “open strategy”. We became sceptical about the ready integration and synthesis of empirical findings regarding open strategy as these findings were based on inconsistent understandings of open strategy. Our intermediate conclusion was that the conceptual development of open strategy is insufficient and inconsistent across the literature. Hence, the review focused on critically analysing the current conceptualisations of open strategy, with the aim of developing an improved coherent and holistic conceptualisation of open strategy, as well as a corresponding research agenda corresponding to this conceptualisation. The literature review, therefore, was not focused on summarising empirical findings in a narrow sense.

In the remainder of the paper, the findings from the literature review are presented. We review ontological and conceptual views on open strategy (section 3), before developing a practice view on open strategy based on the re-analysis of cases in the literature (section 4).

3 Views on Open Strategy: Entity, Process or Practice?

3.1 Analysis of the Conceptual Foundations of Open Strategy

Recognizing the substantially different philosophical views (stances, lenses, perspectives) underlying social science research (see also Nicolini 2013; Orlikowski and Baroudi 1991), we categorised the identified publications' underlying dominant philosophical view. A philosophical view concerns the ontological and epistemological assumptions of a publication (i.e., of its authors as far as evident in the text). The literature documents very different views about what constitutes “strategy” (ontology) and, hence, how knowledge claims can be made about it (epistemology) (e.g., Gavetti and Levinthal 2004). We also found this issue in the open strategy literature.

Our analysis revealed that open strategy has been conceptualised in different publications according to what we call the “entity view”, “process view” and “practice view”. Our classification of publications into these views is based on our analysis of the textual contents of the publications (by the first authors in consultation with the other authors) because most authors did not explicitly state their views and assumptions. Their ontological and epistemological views are implied by the way in which authors talk and argue about open strategy as well as how they structure their analyses and present their findings.

We next briefly summarise the key characteristics of these three views on open strategy, before assessing the benefits and issues of taking these views.

Entity View on (Open) Strategy

The entity view conceptualises open strategy as a “black box”, a thing or a separable entity with objective properties (e.g., Golsorkhi et al. 2010; Thompson 2011). Until the 1990s, the predominant approach in researching strategy (in general) was by conceptualising it as an entity. The entity view focuses on antecedent and consequent factors of strategy (Golsorkhi

et al. 2010), and is used to answer research questions, such as what measurable effects different strategies may have on organisations (Chia and MacKay 2007).

In the entity view, the purpose of strategy research is to identify antecedent factors that cause or correlate with strategy and to assess the measurable consequences of strategy. In doing so, this view employs the natural science approach of logical positivism (and analytic philosophy more widely) (Wolf and Floyd 2013). This view builds on dualist assumptions (originating in modern philosophy with Descartes) that the world can best be understood by separating subject/object and mind/world (Riemer and Johnston 2014; Scada 2004). The view sees the world as composed of entities with objective properties. Theories are then essentially to understand (predict) how the change in value of one property causes a change in value of other properties of the same entity or of other entities (Weber 1997; Weber 2012).

About one-third of the identified open strategy publications were followed the entity view (it should be noted at this point that many of the reviewed publications are not very clear about their underlying conceptualisation of open strategy and appear to “flip-flop” between, for example, entity and process views). Typical statements indicating an entity view include: “[l]ook no further for evidence of the success of the strategic planning efforts than the Red Hat financial results” (Yeane 2011). Some focus on particular factors, such as process fairness: “co-creation in strategy creation leads to increased perceived process fairness” (with process fairness being conceptualised as a one-off measure, see Tackx and Verdin 2014, p. 20) or participation behaviour: “the encountered positive effect of participation behaviour on SOVC [sense of virtual community] seems interesting and congruent with previous studies [...]” (Hutter et al. 2016, p. 12). Others focus on strategy as a whole, with research questions framed, for example, as: “[h]ow do [open innovation] initiatives in the mobile telecommunications industry influence the business strategy of mobile actors?” (Ghezzi et al. 2016, p. 571), or have an emphasis on general firm performance: “a better

strategy selection AND a better strategy implementation improve the firm's performance" (Tackx and Verdin 2014, p. 21, emphasis in the original). Similarly, some design-oriented studies (Amrollahi et al. 2014; Amrollahi and Rowlands 2016b; Tackx and Verdin 2014) conceptualise open strategy as the outcome of the use of certain IT artefacts, for example: "[the] developed [IT] artefact provides a basis for study[ing] the effect of participation and involvement on effectiveness and adoption of strategic plans" (Amrollahi et al. 2014, p. 4).

Process View on (Open) Strategy

The process view considers open strategy as a sequence of activities with particular outcomes. Research on strategy or on strategizing as a process (in general) has grown in popularity since the 1980s (e.g., Burgelman 1983b; Hambrick and Mason 1984; Mintzberg 1994), answering the general question of how strategy develops over time (Chia and MacKay 2007; Farjoun 2002; van de Ven 1992). The process view accounts for the organisation as a whole (Whittington 1996), the organisational structure and the macro activities conducted by its actors (Chia and MacKay 2007; Marabelli and Galliers 2016). Strategy is treated as a process organised in a temporal or logical order of sequences (Burgelman 1983a; van de Ven 1992). The process view increasingly shifts strategy research from "hard" natural science or economic approaches to "soft" social-theoretical approaches (e.g., Langley et al. 2013; Sandberg et al. 2015). Yet, this view is still typically focused on final outcomes (Pettigrew et al. 2001). The process view considers socio-technical activities over time but, in most cases, exhibits much of the same ontological assumptions as the entity view. Strategy process researchers lately began to question the positivistic, linear perspective on the strategy process, broadening the focus from outcomes to actual doings (Chia and Holt 2006; Chia and MacKay 2007). In this "late" process view, the boundaries are blurring with the practice view (in regard to strategy doings). The process view we are referring could be called the "traditional" process view, focused on theorizing activities and phases along a timeline that lead to some form of outcomes.

Based on our coding and analysis, the majority of the classified publications embrace the traditional process view. Research from this perspective is focused on the open strategy process. For example, “[o]pen strategy formulation (OSF) is a process by which an organization’s strategy for the future is developed [...]” (Malhotra et al. 2016, p. 1). These open strategy processes are broken down into macro sequences or activities: “[d]etails on each set of activities and the results of performing them are described” (Amrollahi and Ghapanchi 2016, p. 389). Processes and underlying sequences are typically structured and outlined in cases. This corresponds to views held by practitioners, for example, “the project leader of Rabobank Grafen was eager to discuss the way he and his team structured the process of collective strategizing in his bank” (van der Steen 2016, p. 1). However, the actual doings and tasks on a micro level remain relatively unclear in this view, with “[open strategy] [being] an ongoing process of aligning people and motivating them to continuously contribute” (Matzler et al. 2014b, p. 52). Scholars adopting the traditional process view essentially try to answer “[...] what constitutes an effective process [for open strategy]?” typically, at a high level of abstraction (Passig et al. 2015, p. 1125).

Practice View on (Open) Strategy

The practice view on open strategy takes a holistic perspective of the phenomenon by focusing on practices (coherent patterns of activities) and by considering a variety of heterogeneous aspects (Peppard et al. 2014; Whittington et al. 2014). Researching strategy as a practice is part of the broader “practice turn” in the social sciences (Schatzki et al. 2001). This is manifested as the “strategy-as-practice” perspective in the strategic management domain (Whittington 1996), which we use synonymously with the practice view on strategy going forward. In the practice view, practices have ontological primacy: they are the nexus of agency, routines, context knowledge (Cook and Brown 1999; Orlikowski 2002) and material artefacts (Hafermalz and Riemer 2015; Orlikowski 2002). The practice view has its

philosophical roots in non-dualist, Continental philosophy, and builds on approaches such as Heidegger's phenomenology and Dewey's pragmatism (Cook and Brown 1999; Feldman and Orlikowski 2011; Nicolini 2013; Tsoukas 2010). Building on these philosophical roots, sociologists (e.g., Bourdieu, Giddens, Schatzki), cultural theorists (e.g., Foucault, Lyotard) and post-humanists (e.g., Latour, Pickering) have developed concrete practice theories. Practice theory is therefore a family of theories rather than a single theory (Reckwitz 2002; Schatzki et al. 2001; Tavakoli and Schlagwein 2016). Approaches, such as that taken by Schatzki, emphasise social actors within practices ("social practices"), while approaches such as those of Latour, Pickering and recent work on sociomateriality place equal emphasis on social and material actors ("sociomaterial practices") (for further details, see Sandberg and Tsoukas 2011). Practice theories, typically, share an underlying relational (non-dualist) view (Feldman and Orlikowski 2011) that holds that human being(s) and the world are intertwined (and not separated into a subject–object relationship) (Sandberg and Tsoukas 2015) and both are constantly shaping and being shaped by a web of practices (Nicolini 2013). Practice theory emphasises the entanglement of the social world and the material world in the form of practices (Cecez-Kecmanovic et al. 2014; Jones 2014), and further helps in making sense of strategizing in its ongoing nature and its everyday activities (Feldman and Orlikowski 2011; Jarzabkowski 2005). It is for this reason that practice-theoretical research promises relevance for professional practice (Bromiley and Rau 2014; Sandberg and Tsoukas 2011; Whittington 2014).

About one-third of the analysed publications embrace a practice view. At times, this view is made explicit, such as: "to investigate how the collective's principles of radically open strategizing are translated into actual strategizing practices [...], we adopt a strategy-as-practice perspective" (Luedicke et al. 2016, p. 1). Most studies adopt the view more implicitly; for example, the practice view is apparent in statements, such as "[...] open strategy as a concept involving a bundle of practices, the mix varying across contexts" (Whittington et al.

2011, p. 535). Open strategy is seen as a set of contextual and situated practices. Material artefacts, such as IT, are recognised as an inherent component of open strategy practices: “[...] users are shaped by social software, the architecture of digital artefacts, and the specific practices of collaboration that surround and build these artefacts” (Haefliger et al. 2011, p. 303) or “the approach leads to the identification of common understandings, teleologies and rules driving the adoption of social media, each of which contributes to constellations of practices and material arrangements of open strategy” (Baptista et al. 2016, p. 6). The focus is less on the deterministic functional properties of IT than on how IT artefacts are used (enacted) differently within different practices: “accounting for the materiality of the respective strategy-making practices ... the same technology was put to completely different uses” (Dobusch and Gegenhuber 2015, p. 21).

The application of the practice view, widely understood, on open strategy increases in more recent sources. Researchers have begun to more broadly analyse the role and linkage of open strategy to open practices (Dobusch et al. 2014). In addition, the role of open strategy practices in organisational and business models is of increasing interest (Appleyard and Chesbrough 2016). Temporal aspects, such as the emergence and routinisation of open strategy practices, have been researched (Appleyard and Chesbrough 2016; Tavakoli et al. 2016). On a more detailed level, focused on individual open strategy practices and its "components", researchers are directing their analyses toward internal (incl. their hierarchical levels, see Laari-Salmela et al. 2015) and external (Morton et al. 2016a) practitioners of open strategy, the importance of IT in enabling open strategy practices (Baptista et al. 2016; Tavakoli et al. 2015) or instantiated strategy episodes and strategy-making within particular contexts (Morton et al. 2016b; Tavakoli et al. 2015).

Critical Assessment of the Literature

The three views on open strategy research have produced initial findings that are relevant for researchers and professionals. However, not only is the overall body of knowledge somewhat small due to the newness of the phenomenon, it is also somewhat lacking in coherency and comprehensiveness as the views on open strategy are inconsistent and, in some cases, appear to have limitations.

Table 1 provides a summary of the three views, their research purposes, levels of analysis and methodological focuses as well as their and weaknesses. The table is based on the open strategy literature as well as other relevant IS and strategy literature.

Conceptual View on Open Strategy	Purpose of Research	Level/Focus of Analysis	Methodological Focus	Relative Strengths/Weaknesses
<p>Entity View: Open strategy/strategy as a “black box” entity (a thing) with antecedent factors causing it and consequent factors caused by it (e.g., Golsorkhi et al. 2010; Hutter et al. 2016)</p>	<ul style="list-style-type: none"> ▪ Predict and explain causal relationships between antecedents and strategy success (Wolf and Floyd 2013) ▪ Purpose: Identify/predict better open strategies (e.g., Yeane 2011) 	<ul style="list-style-type: none"> ▪ Generic/generalized organizational level of analysis (Golsorkhi et al. 2010) ▪ IS/IT as an influencing factor (Markus and Robey 1988) 	<ul style="list-style-type: none"> ▪ Single (Hutter et al. 2016) or multiple (Ghezzi et al. 2016) case studies as representative of the class of open strategy cases in general. ▪ Statistical analyses of antecedent and consequent factors (Weber 1997), analysing antecedent factors such as “process fairness” (Tackx and Verdin 2014) 	<ul style="list-style-type: none"> ⊕ Focus on macro factors that influence the outcome of strategic plan implementation – Generic, industry-level factors independent of context not useful for professionals in particular context – Open strategy doings and does not accounted for
<p>Process View (traditional): Open strategy/strategy as a dynamic, sequential bundle of activities leading to an outcome (e.g., a strategy document) (Burgelman 1983a; Malhotra et al. 2016)</p>	<ul style="list-style-type: none"> ▪ Identify strategy process steps on an organisational level (Ansoff 1965) ▪ Provide tangible guidance to professionals (Mintzberg 1994) ▪ Outline of open strategy processes including their IT artefacts (Tavakoli et al. 2015) 	<ul style="list-style-type: none"> ▪ Overall strategy processes and their outcomes in individual organisations (Pettigrew et al. 2001) ▪ IS/IT used as an object in process (Markus and Robey 1988) ▪ Focus on open strategy procedures/steps such as “crowd deliberation” (Passig et al. 2015) 	<ul style="list-style-type: none"> ▪ Study of socio-technical interaction in strategy processes (e.g., via multiple case studies) (Pettigrew et al. 2001) ▪ Analysing sequences or IT artefacts in open strategy process such as social software (Malhotra et al. 2016) 	<ul style="list-style-type: none"> ⊕ Focus on temporal-sequential macro patterns in strategic plan development – Typically, no micro level and context analysis of practitioners – Material artefacts are typically not in scope

<p>Practice View: Open strategy/strategy as a set of practices enacted by practitioners in particular praxis episodes (Luedicke et al. 2016; Whittington 2006)</p>	<ul style="list-style-type: none"> ▪ Untangle complex phenomena with inextricably linked aspects (Whittington 2006) ▪ More effective practitioners and practices (Jarzabkowski et al. 2007) ▪ Understanding open strategy practices in their context (Whittington et al. 2011) 	<ul style="list-style-type: none"> ▪ Individual strategy practice and sets of strategy practices in an organisation/initiative (Whittington 2006) ▪ IS/IT as a material artefact entangled with social actions (Cecez-Kecmanovic et al. 2014) ▪ Open strategy practices and particular aspects such as transparency in emerging organisations (Gegenhuber and Dobusch 2016) 	<ul style="list-style-type: none"> ▪ Zooming in and out of practices through (Nicolini 2009) ▪ Intense approaches such as (n)ethnography to collect detailed data in open strategy settings (Luedicke et al. 2016; Nicolini 2009) 	<ul style="list-style-type: none"> ⊕ Focus on micro/macro doings and constituting material artefacts embedded in their context; holistic understanding – Does not allow for generalisability in a statistical sense (can be generalised in the sense of theoretical abstraction)
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Table 1. Three Views on Open Strategy

The entity view treats open strategy as a “black box” and focuses on antecedent and consequent factors of strategy; for example, one such factor could be “process fairness” (Tackx and Verdin 2014). These factors then impact on open strategy, or open strategy impacts on them. The purpose of research that takes the entity view is to predict and explain relationships between such factors through statistical analyses to ultimately identify, for example, which open strategy is better than other open strategies (Yeane 2011). The major weakness, in relation to our purpose of better understanding what constitutes open strategy, is that neither the actual open strategy doings nor the material artefacts (such as IS/IT) are typically part of the analysis. Furthermore, publications taking the entity view typically aim to “average out” the idiosyncratic contexts of organisations. While considered to be powerful and widely used in traditional strategic management research, the entity view has been criticised for a lack of practical relevance (e.g., Mintzberg and Waters 1985; Peppard et al. 2014). The entity view appears limited in its ability to help in understanding and conceptualising the actual doing of open strategy which, for any concrete instance performed by practitioners, always takes place in a particular context that may need a more specific and/or holistic understanding.

The process view is a step toward a more holistic conceptualisation of open strategy, as it accounts for strategy making as an overall organisational process over time (e.g., Tavakoli et al. 2015). Typically, the research purpose is to identify aggregate, temporal open strategy sequences and procedures (e.g., Passig et al. 2015) at an organisational level, leading to particular outcomes. The material IS/IT artefacts are conceptualised as underlying infrastructure for part of the open strategy process. The major weakness, for our purpose, is that what continues to be lacking is the conceptualisation of the actual doings, the tools and the practical and managerial activities at the micro level. Furthermore, the context and knowledge of the environmental factors of the organisation, that is, the premises and underlying assumptions of doing open strategy in a particular organisation are not accounted for in a traditional process view (Chia and Holt 2006; Chia and MacKay 2007). In other words, while the process view explains the temporal structure of open strategic doings, it is often silent on other aspects such as the details of what is actually done, or the norms and values underlying these doings.

The practice view treats open strategy as a set of sociomaterial practices that are enacted by practitioners in open praxis episodes (Whittington 2006). One aim of the practice view is to provide conceptual foundations for a comprehensive study of the sociomaterial open strategy phenomenon in context, for instance, the role of norms of transparency in the open strategy practices of emerging organisations (Gegenhuber and Dobusch 2016). The practice view helps to focus analysis on the “internal life” of open strategy practices (Chia and MacKay 2007; Nicolini 2009; Tsoukas and Chia 2002) while keeping sight of the context. For one example, a study of the in the German Premium Cola collective used practice view to explain how open strategizing practices (e.g., distributed agenda setting by many) are moderated by “counterbalancing” practices (e.g., authoritative decision making by few) (Luedicke et al. 2016). Arguably, a weakness of the practice view is its lack of generalisability in a statistical

sense. Of course, it allows generalisation in the sense of theoretical abstraction (as we do in this paper). From our analysis and reading, this view is particularly suitable for holistically accounting for all relevant aspects of open strategy.

In summary, according to our analysis and assessment, inconsistencies exist between these three views (and even within these views) on open strategy. Many sources were vague about the view take, apparently taking the term “open strategy” to be sufficiently self-explanatory (which according to our analysis it is not). Hence, a well-articulated, coherent and sufficiently detailed conceptualisation of what constitutes open strategy will be helpful and necessary for better integration of future work. A coherent conceptualisation needs to go beyond the use of the same term, “open strategy”. The entity and process views appear to have limited applicability for conceptualising and understanding open strategy as they focus on a set of factors that are most relevant to final outcomes or on the process steps followed to reach these outcomes. These views provide little consideration of the actual strategy doings (what is actually being done in open strategy and what role material artefacts, such as IS/IT, play in these doings) and underlying norms and values. We hence consider that the practice view provides the most promising theoretical lens through which to view open strategy.

The practice view allows the researcher to “zoom in” on individual practices and their constituting factors (the practice’s agents, artefacts, context and emerging activities at the granular level). The view then allows the researcher to “zoom out” toward the fields of practices that constitute wider society (see also Levina and Arriaga 2014), while never neglecting the practice’s components (see also Gaskin et al. 2014; Nicolini 2009). In other words, the practice view allows a phenomenon to be understood in its relational whole. Seeing open strategy as a new practice, not as a new entity or as a new process, allows for a holistic conceptualisation.

The remainder of the paper develops a coherent and comprehensive (holistic) conceptualisation of open strategy, based on the practice view. To achieve this, we first introduce a concrete practice-theoretical framework, strategy-as-practice, to support our analysis.

3.2 Strategy-As-Practice

The strategy-as-practice lens is widely considered to be the most common practice-theoretical view on strategy. We particularly build on the “3P” (practitioners, practices and praxis) strategy-as-practice framework (Jarzabkowski et al. 2007; Whittington 2006). In the 3P framework, a particular strategy phenomenon (in this case, open strategy) is understood as a practice, with the framework making analytical cuts by distinguishing practitioners, sets of (sub-)practices and praxis episodes as its constituting components (Jarzabkowski et al. 2007; Whittington 2006). The 3P framework has been developed and advocated as a concrete theoretical framework within the strategy-as-practice perspective to support analyses such as those in our paper (Jarzabkowski et al. 2007; Jarzabkowski and Spee 2009; Peppard et al. 2014).

Figure 1 provides an overview of the 3P framework, adapted from Whittington (2006).

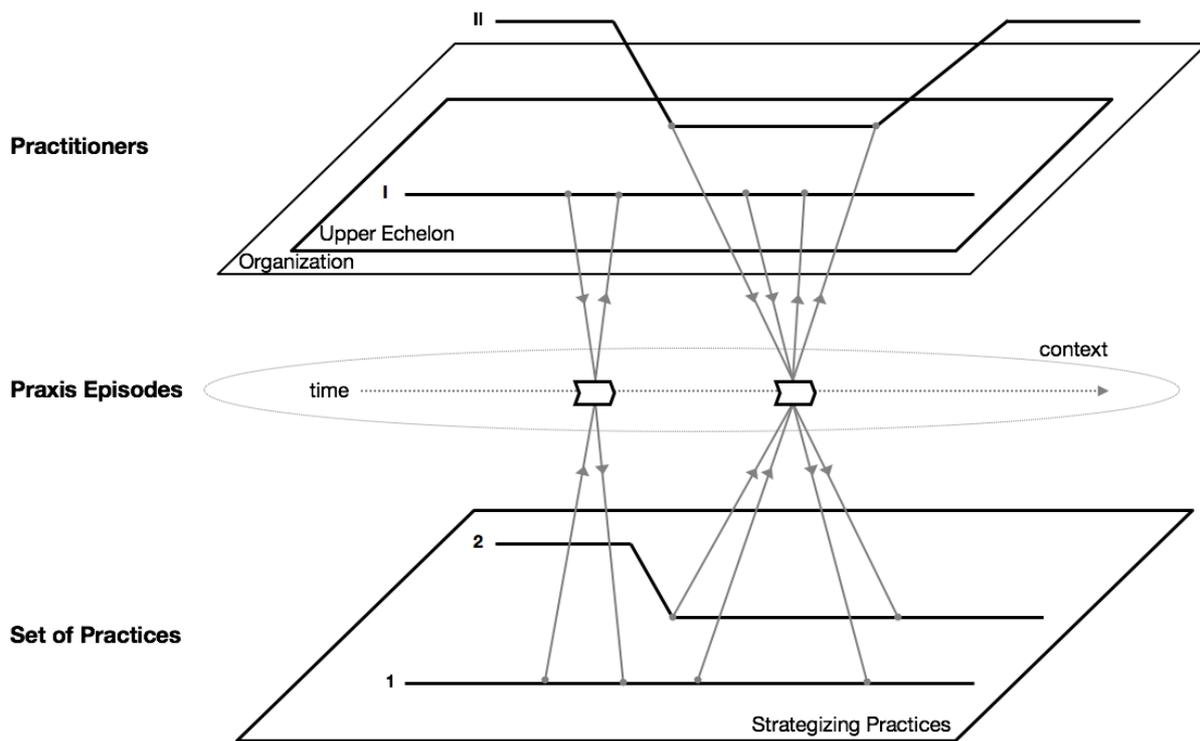


Figure 1: Strategy-As-Practice According to the 3P Framework (adapted from Whittington 2006)

Practitioners (at the top of figure 1) are the strategy doers, that is, the people who are involved in doing strategy (Peppard et al. 2014; Whittington 2006). Potential strategy practitioners can come from a range of people which certainly includes people in the upper echelon (practitioner type I in figure 1), and potentially includes people outside the upper echelon (e.g., middle managers) and external people, such as paid researchers and consultants (practitioner type II in figure 1) (Mirabeau and Maguire 2014; Whittington 2006). The latter become part of the upper echelon for a specific time or type of doing (indicated by the bend in the line of practitioner type II in figure 1). While doing strategy, practitioners enact a set of sociomaterial strategizing practices that are available to them from their respective contexts (Whittington 2006). For example, external consultants might be able to draw from contexts that are additional to those accessible to internal managers.

Practices (at the bottom of figure 1) describe the routines, norms and tools of doing strategy. They are bundled in sets of strategizing (sub-)practices (Whittington 2006) that form the overall practice. Strategizing practices may already exist in the organisation (see practice 1 in figure 1) or may be introduced from the outside (see practice 2 in figure 1) (Mirabeau and Maguire 2014). Practices are concerned with shared, situated, embodied and materially mediated (e.g., through IT) strategy routines (Huang et al. 2014; Whittington 2006). They are shared among practitioners with similar knowledge and emotional states within similar contexts (Reckwitz 2002; Vaara and Whittington 2012). They allow practitioners to act collectively (Jarzabkowski et al. 2007). For example, the conduct of and participation in “strategy off-sites” (strategy meetings taking place at a dedicated, physically separated place) is such a strategizing practice (Hodgkinson et al. 2006; Whittington 2007). Practices are not only social but also material (Baptista et al. 2016; Whittington 2015); hence, they are characterised as being “sociomaterial” (e.g., Cecez-Kecmanovic et al. 2014; Jones 2014; Stein et al. 2014). When practitioners enact practices, they appropriate material artefacts and tools that become inextricably linked and entangled with the practice and are understood as one and the same. For example, artefacts that are part of strategizing practices may include particular IS/IT (e.g., computers, applications, business analytics tools), physical artefacts (e.g., whiteboards, flip charts) and analytical techniques (e.g., SWOT analysis, Porter’s Five Forces Framework analysis). Different artefacts may be part of different practices, serve different purposes and be appropriated in a variety of ways (Orlikowski 2000).

Praxis (in the centre of figure 1) comprises the sociomaterial “strategic doings”, the actual activities as they are performed in a particular context. Praxis refers to the concrete instantiated shared routines and appropriated artefacts of doing strategy (Jarzabkowski et al. 2007; Whittington 2006). Praxis brings together the practices of different distributed practitioners and the context within which they act and contribute (Jarzabkowski et al. 2007). These practices unfold in praxis episodes (see horizontal arrows in figure 1, Whittington 2006)

which are particular, time-bound and situated manifestations of the interplay between practices (including its material artefacts, such as IS/IT) and practitioners (Huang et al. 2014). These episodes may (or may not) follow repeated sequential “process” patterns; therefore, praxis is where the practice and process views of strategy overlap (Whittington 2007). For example, praxis episodes may be about “communicating strategy” and involve doings such as the writing and circulating of “strategic vision” statements.

4 Conceptualisation of Open Strategy as a Practice

In this section, we use the above 3P framework to re-analyse well-documented open strategy cases described in the reviewed literature. In the original publications, these cases were not necessarily described in practice-theoretical terms and concepts. The purpose of this analysis is to obtain content from which to formulate a coherent and comprehensive conceptualisation of open strategy as a practice and to show the applicability of this view.

4.1 Description of Open Strategy Cases

A range of different open strategy cases has been reported in the reviewed publications. We focus on seven particularly salient and well-documented open strategy cases. Appendix B provides a full list of all open strategy cases identified in the reviewed literature.

An Austrian automation supplier (name not disclosed in the source publication) conducted “DialogTage”, an open strategy project, in 2010. The aim of DialogTage was to define the overall corporate strategy of the automation supplier, including operational business improvements. Two-thirds of all employees, 216 in total, participated in the project by generating 1,374 posts and voting for ideas to be implemented. Top management sponsored and defined the initial focus areas for the initiative. External researchers and selected employees facilitated the discussion on particular topics in order to guide the mass effort.

The participants discussed the strategic direction of the organisation. A custom-built forum-like IT platform was used to enable communication, collaboration and feedback (e.g., rating of ideas). All outcomes and idea discussions were accessible on the IT platform. Senior management shared aggregated results in the form of a management letter containing selected strategic ideas that was sent to all employees. While DialogTage led to better engagement of employees in work matters and increased loyalty toward the organisation, the organisers feared that some employees might feel exposed if their ideas were not implemented (Stieger et al. 2012).

Daimler, the German car manufacturer, initiated its business innovation community in 2008 to develop, discuss and implement new strategic and business models that extended beyond its core business (Binder and Bertram 2010; Buchenau 2010; Kuhn 2008). This initiative was sponsored by the Chief Executive Officer (CEO) and was conceptualised and operationally led by Daimler's Business Innovation division. The initiative was embedded in a wider movement of using social tools in different group divisions to encourage more employee involvement in management and administration (Gruel 2013). The business innovation community was, at that point, the only cross-divisional initiative at Daimler. In total, 30,000 participants generated 1,500 ideas and related discussions using Intranet platforms and blogs. Blog posts about the approach in general and several selected ideas were further posted on an external blog to allow non-members (i.e., external people) to participate. Overall, 58 business ideas were developed by the community, resulting in 11 pilot projects, including car2go, a car sharing business, that evolved and was extended from a collection of ideas. At the time of writing, car2go is active in over 30 European and North American cities and has been spun off as an independent entity, with Daimler as its majority shareholder. While Daimler gained access to heterogeneous ideas from a variety of areas in the organisation, some senior managers perceived the initiative as not valuable and did not participate (Kuhn 2009; Matzler 2014; Matzler et al. 2014a).

HypoVereinsbank, a subsidiary of the Italian universal bank, UniCredit, ran an open strategy initiative in 2010 (Leichsenring 2012a; Leichsenring 2012b) to operationalise its corporate strategy, particularly customer service. In total, 2,600 employees worked to define six core strategic customer service standards. These service standards were later operationalised and implemented by all retail branches, leading to increased customer satisfaction ratings. The individual breakdown and original discussions of the ideas were, and remain available, on the IT platform. HypoVereinsbank used a custom-built social media platform for the initiative and a CEO blog to communicate announcements and promising ideas to participants. An external marketing and communications agency supported the bank in managing the process. While HypoVereinsbank was able to access a broad pool of knowledge, it was noted that the organisers were concerned that a somewhat secretive culture could hinder open strategy adoption (Janek 2012; Matzler et al. 2014b).

IBM, the US-based technology and service company, has conducted several “Innovation Jam” initiatives over the past 10 years, most directly sponsored by the CEO (Bhalla 2010; Bjelland 2008; Hemp and Stewart 2004). For example, the Innovation Jam 2008 aimed to define the overarching corporate vision and to develop the overall strategic plan, including ideas to operationalise the strategy at the product and process levels. For the 2008 jam, approximately 150,000 internal and external participants generated and discussed 32,000 ideas. In the end, 10 strategic ideas received funding of around USD100 million. Aggregated discussion outcomes and implementation decisions were communicated externally. The jam took place on a dedicated jamming IT platform that supported automated analysis and aggregation of ideas, with this jamming platform spun off as a service offering for IBM customers (Bjelland 2008; Morrison 2009). All of IBM's open strategy initiatives are embedded in the context of using, developing and selling social IT platforms such as IBM Notes or Connections. While IBM collected creative and unconventional ideas from the

crowd, a high level of resources investment (to build and manage the initiative) was noted (Bhalla 2010; Bjelland 2008; Hemp and Stewart 2004).

Premium Cola, a German alternative soft drink producer, founded in 2001, is organised as a collective. All "collectivists" – employees, consumers, producers, retailers, potentially competitors – can contribute to shaping the overall business, setup, operations and strategy (Lübbermann 2016). Premium Cola does not have profit aspirations. The collective is managed by a CEO, a German legal requirement, and a small team of administrative employees, supported by a core group of members. Since 2002, the collective has used a shared mailing list and occasional Skype meetings for a core team to discuss topics that have a strategic impact on their business model, organisation, customer relationships and competition. By February 2014, 1,650 members of the collective had participated in the discussion, producing 18,633 emails. The outcomes of these discussions have been, for instance, a new product category, Premium Beer, or new strategic partnerships, for example, with a major German drugstore chain. Premium Cola's open approach has led to the emergence of a collective identity, legitimised collective decisions and maintained motivation among practitioners. However, there were also fears of exposing too much externally (Dörner 2013; Luedicke et al. 2016).

Red Hat, the US-based software company, has defined its business model, operating model and technical model using open strategy since 2008 (Gast and Zanini 2012; Whitehurst 2011). The initiative has been sponsored and partly organised by C-level managers and their direct reports. As an open source software (i.e., Linux) provider and developer, Red Hat, in other aspects, had already embraced the social norms of openness and participation that underlie co-creation with large, external crowds. The first initiative took place over five months in 2008. More than 3,000 internal participants contributed and discussed their ideas on social IT platforms and in "town hall" meetings. Overall, this process led to the selection and

subsequent operationalisation of 17 ideas. In addition, the management team provided regular online updates on the progress of the implementation of co-created strategic ideas. Red Hat used wikis and Intranet pages, as well as topic-specific mailing lists for open strategy. Senior managers of Red Hat considered that the initiative had a direct, positive impact on organisational profit in the following years; however, the organisers highlighted the resource intensity of this strategy-making approach (Matzler 2014; Yeane 2011).

Wikimedia Foundation, the US-based non-profit organisation supporting the online Wikipedia encyclopaedia, turned to open strategy in 2009. The aim of the initiative was to develop a strategy for involving more people in developing encyclopaedia articles and in generally developing the organisation (Dobusch and Müller-Seitz 2015; Grams et al. 2011; Newstead 2010). The Foundation's trustees served as sponsors to start this endeavour, with 1,000 users and core members of the Wikipedia community participating in collaborative idea generation in a wiki and discussing a total of 850 strategic ideas and proposals. The resulting strategy, intermediate steps and complete development process (i.e., in which ideas were aggregated) were transparent and accessible online (Dobusch and Kapeller 2015; Dobusch and Mueller-Seitz 2012; Plesner and Gulbrandsen 2015). This initiative is in line with the broader context of the Wikimedia Foundation and its norms of participation and open, collaborative creation (Germonprez et al. 2011). Given the successful past open strategy initiatives, and despite some fears about the misuse of democratic decision making for lobbying particular interest, Wikimedia Foundation is conducting a follow-up initiative at the time of writing.

In Table 2, the cases and the benefits and drawbacks of open strategy, according to the cited sources, are briefly summarised. The benefits that stand out are a broader strategic ideas pool and increased loyalty by employees. However, organisations also faced increased resource consumption, participant misbehaviour and disappointment, and fears about externally revealing their strategies.

Case	Year	Participants	Goal of the Initiative	Adopted IT	Documented Benefits (⊕) and Drawbacks (–)
Austrian automation supplier	2010	216 (1,373 posts)	Develop overall corporate strategy	Custom-built forum-like IT platform	⊕ Better engagement; increased loyalty – Concerns that employees could feel exposed if ideas are rejected
Daimler	2008-2015	30,000 (1,500 ideas, 11 pilots)	Develop new business models beyond car manufacturing	Intranet platform and external blog	⊕ Creative ideas generated; new business line implemented – Not all senior managers saw value in participation
HypoVereinsbank	2010	2,600 (2,400 posts, 6 core standards)	Develop strategic customer service standards	Custom-built social media platform and CEO blog	⊕ Accessed broad knowledge network – Open strategy and secretive culture seen as potentially in conflict
IBM	2008	150,000 (32,000 ideas, 10 funded initiatives)	Define the overarching corporate vision and develop respective strategic plan	Custom-built social platform including standardised processes (now a commercial product)	⊕ Creative and unconventional ideas generated; several were implemented – Substantial resource consumption
Premium Cola	Since 2002	1,650 (18,633 emails)	Radical open business model which anyone can join	Mailing list, occasional Skype conference	⊕ Collective organisational identity creation; legitimised strategy decisions – Potential for “too much” transparency of strategy
Red Hat	Since 2008	3,000 (17 ideas for implementation)	Re-define business, operating and technical model	Social IT platforms, wikis, Intranet pages	⊕ Improved strategy; increased financial performance (as measured) – Substantial resource consumption
Wikimedia Foundation	2009/2016	1,000 (850 strategic ideas)	Outline a new strategy for increasing involvement and developing the organisation	Tailored (Wikipedia-separate) public wiki and mailing lists	⊕ Improved strategy; increased commitment of participants – Concerns that democratic decision making could be misused for particular interests

Table 2. Summary of Cases Selected for Analysis

4.2 Re-Analysis of Open Strategy Cases

We use the 3P framework as a theoretical tool to re-analyse the above open strategy cases.

Practitioners of Open Strategy

In focusing on practitioners, the re-analysed cases revealed a plethora of people involved in open strategy, many of whom would not typically be involved in traditional, closed strategy. Certain organisations focused solely on the involvement of a wide range of internal people (employees, organisational members), whereas other organisations also included a wide range of external people.

In the seven cases, we analysed, open strategy typically involved **internal practitioners** that extended beyond the upper echelon (left-hand side of table 3). All, or at least a very large number of, organisational members were invited to participate. Organisations practising open strategy involved top management (e.g., at IBM and Premium Cola), middle managers (e.g., at Red Hat and Wikimedia Foundation) and frontline and production employees (e.g., at the Austrian automation supplier and HypoVereinsbank). The ability to participate was not determined by reporting hierarchies. Open strategy initiatives were, however, typically led, controlled and coordinated by management (as in traditional, closed strategy). In cases such as Daimler and Wikimedia Foundation, the initiative emerged from board members, was supported and managed by a dedicated team and key employees served as promoters (e.g., Daimler) or focus group leaders (e.g., Red Hat). Premium Cola stood out as the organisation had agreed on an open approach during its founding period and conducted open strategy among all involved individuals from the very beginning.

Open strategy typically involved the participation of broad groups of **external practitioners** (right-hand side of table 3) for strategy work. This is in contrast to “just” selected, paid-for consultants or academics in traditional, closed strategy. Organisations, such as the Austrian automation supplier, HypoVereinsbank and Wikimedia Foundation, involved external practitioners in their strategy practice (i.e., the actual doing of strategy, and not simply in executing administrative or organising activities as market research). The degree of external involvement differed across all cases. HypoVereinsbank and Wikimedia Foundation included

external professionals, such as consultants and agencies, to facilitate the open strategy practice. These professionals set up the processes, tools and required meetings. Similarly, the Austrian automation supplier involved researchers to undertake the administrative management of its open strategy practices. In such cases, external people served as facilitators for conducting open strategy or helped the organisation in understanding the IT platform that was being appropriated for open strategy. Premium Cola, Red Hat and IBM went a step further and involved their customers, as well as friendly CEOs and senior managers of other organisations, for strategic idea development and feedback. In addition, they involved the employees of their customers and partners in idea generation and discussion. External people responded to open calls by the organisations for voluntary participation, with this substantially extending the circle of participants in open strategy.

Table 3 summarises our analysis of open strategy practitioners.

Case	Open Strategy Practitioners	
	Internal Practitioners	External Practitioners
Austrian automation supplier	<ul style="list-style-type: none"> ▪ Top management (sponsor) selected key priority areas ▪ Selected employees as facilitators ▪ Other employees as idea generators 	<ul style="list-style-type: none"> ▪ Collaboration with researchers who developed the platform and facilitated the process
Daimler	<ul style="list-style-type: none"> ▪ CEO as sponsor, “Business Innovation” team as permanent lead ▪ All employees as idea discussants 	<ul style="list-style-type: none"> ▪ On Daimler’s public blog, external practitioners’ comments on the overall process/“lighthouse” projects
HypoVereinsbank	<ul style="list-style-type: none"> ▪ CEO and senior leaders as sponsors ▪ Retail banking managers as editors ▪ Other employees as idea generators 	<ul style="list-style-type: none"> ▪ Communication agency as internal thought-partner for open strategy process and promotion
IBM	<ul style="list-style-type: none"> ▪ Group CEO as sponsor ▪ Jam team composed of IBM research managers (facilitators) ▪ All employees as idea generators 	<ul style="list-style-type: none"> ▪ IBM customers as idea discussants ▪ Industry/technology experts, consultants ▪ Competitors and partners, e.g., Eli Lilly, Citigroup, etc. as discussants
Premium Cola	<ul style="list-style-type: none"> ▪ Legal head and founder as well as core members of the collective as facilitators ▪ Other collectivists as idea generators and decision makers 	<ul style="list-style-type: none"> ▪ Consumers, producers, retailers, gastronomists and everyone in contact with Premium Cola as idea generators and decision makers
Red Hat	<ul style="list-style-type: none"> ▪ C-level and senior managers hosting discussions ▪ All employees as discussants, middle managers responsible for operationalisation 	<ul style="list-style-type: none"> ▪ External consultant as facilitator ▪ Open source development community as experts in IT topics ▪ External senior managers as sparring partners

Wikimedia Foundation	<ul style="list-style-type: none"> ▪ Foundation trustees as sponsors ▪ Team formed around a key trustee leading the initiative 	<ul style="list-style-type: none"> ▪ Wikipedia users as idea generators ▪ External non-profit consultants supporting the process
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Table 3: Open Strategy Practitioners in Analysed Cases

Practices of Open Strategy

Our analysis of the cases suggests that open strategy combines two sets of practices. The first set of practices is what we could call (traditional) “strategizing practices” (e.g., communicating a strategic vision) with these largely drawn from and mainly identical to closed strategizing. The second set of practices is what we could call “open practices”, with these practices typically not found in traditional, closed ways of strategizing. This second set of practices is much more akin to practices in crowdsourcing, open source software development and other IT-enabled “openness” phenomena. IT is enabling and shaping such practices, the practices would not be possible without IT. We focused our analysis below on the set of open practices used in open strategy (i.e., the second set). At the end of this section, we provide a brief overview of the traditional strategizing practices used.

Across the re-analysed cases, we identified three major open practices, all of which are shaped by the norms of transparency and inclusiveness, and enabled by IT (we discuss these three joint characteristics further below).

In particular, the case organisations drew upon the open practice of what we call “**transparent discourse**”. In open strategy, strategic discourse is enacted in an open, interactive and public fashion: all practitioners can read, follow and react to ongoing discussions. This is not a common practice in closed strategy where a select few discuss strategy proposals “behind closed doors”. In transparent discourse, large groups of internal or external practitioners are invited via open calls (open invitations) to follow or join the discussion. Organisations appropriate IT platforms, such as social networks, wikis, mailing

lists or microblogs, to connect practitioners and to host discussions. These platforms typically include social media functionality such as user profiles, message walls, message streams and direct messaging. For example, at the Austrian automation supplier and Wikimedia Foundation, practitioners could set up profiles and log in to a dedicated open strategy platform. Premium Cola used a simple mailing list approach. To enable asynchronous open discussions across locations and time, these platforms provided forums and wikis to support transparent discourse. Such IT platforms typically provided pre-set content frameworks and structures so practitioners could create their ideas in the right thematic area. Transparent discourse is hence very different from discussions in off-site meetings and at strategy retreats that are typically used for closed strategy.

The second open practice that was apparent in all cases was “**co-creation**” (the common short form of “collaborative creation”). In open strategy, strategy is jointly and iteratively created by a wide group of practitioners working in a collaborative fashion. This contrasts with closed strategy where, typically, a specialist group of practitioners performs strategy work in a more linear fashion. In co-creation, ideas are continuously, collaboratively and iteratively developed and revised. In the re-analysed cases, this led to ideas and solutions that were more widely supported due to the collaborative and iterative nature of their development (i.e., increased commitment, approval and perceptions of legitimacy by employees). Participation was voluntary and not typically rewarded financially. The case organisations used IT to enact this collaboration, appropriating wikis, forums and other social platforms in ways that supported collective ideation, problem solving and the storage and analysis of intermediate texts and other created content. These tools allowed transparent and asynchronous text-based collaboration as well as the upload of additional material such as product drawings or charts. For example, IBM and Red Hat enacted co-creation by having practitioners all ideas and solutions developed by groups in a collaborative fashion. All involved practitioners could access and add to nearly all the posted content. While they are

related, transparent discourse and co-creation are different: Transparent discourse is about the open, transparent and public discussion of strategy: co-creation is about the collaborative and participative doing of strategy work and the joint creation of content.

The third open practice identified across the cases is what we call “**democratic decision making**”. The practitioners involved could decide which topics were interesting and which avenues were to be followed in open strategy. This contrasts with authoritative decision making by the upper echelon in closed strategy. Practitioner groups, acting outside their reporting hierarchies and job descriptions for the purpose of open strategy, decided jointly on substantial aspects of the organisation’s future path. Voting, ratings, ranking or consensus-based discussions were used for decision making. For example, the Austrian automation supplier and Red Hat allowed all practitioners (including external people) to decide in large part the direction of the ongoing strategic work by introducing an idea rating mechanism such as standard “five stars” rating systems. Premium Cola had its practitioners discuss ideas until consensus was achieved. Underlying this approach to organizational decision making are “democracy and stakeholderism” ideas of the organisation rather than a “property and ownership” ideas. Social media platforms were an important foundation for this practice. Only through the adoption of IT could the analysed organisations move from mass contributions to mass decision making using sentiment analyses, machine learning or impact factor and ranking calculations. In some cases, these IT platforms themselves were actors within the practice by actively contributing to strategizing through their analytical capabilities (e.g., agency through automatic identification and highlighting of “trending” ideas, topics and themes).

Table 4 summarises how these open practices were evident in the cases.

Case	Open Practices in Open Strategy		
	Transparent Discourse	Co-Creation	Democratic Decision Making
Austrian automation supplier	<ul style="list-style-type: none"> Open discussions held in the central strategy forum and idea repository Asynchronous communication in customised forum software 	<ul style="list-style-type: none"> Developed ideas for future markets, customer needs, internal operations, improved core products Forum portal to enable collaboration among members 	<ul style="list-style-type: none"> Evaluated ideas for the strategic plan using impact factor calculations Custom-developed impact factor algorithm in forum to rate ideas based on engagement
Daimler	<ul style="list-style-type: none"> Openly discussed ideas and evaluations Transparently communicated and discussed initiative externally Company-wide (early) Facebook-like social platform to communicate internally; blogs for external communication 	<ul style="list-style-type: none"> Joint ideas created during the open strategy initiative to develop product/market opportunities and pilot business models Discussions in thread format stored in unstructured message stream of latest/highest rated ideas 	<ul style="list-style-type: none"> Rated ideas as a decision aid Collaboratively evaluated approach on external blog Rating mechanism included in social platform to identify valuable ideas
HypoVereinsbank	<ul style="list-style-type: none"> Conducted open call for the participation of retail employees Transparently discussed on custom-built Intranet platform and CEO blog 	<ul style="list-style-type: none"> Social media capabilities (profiles, messages, posts) used for collaboration Co-created ideas on customer service improvement and operationalisation 	<ul style="list-style-type: none"> Sought consensus on which topics to further develop
IBM	<ul style="list-style-type: none"> Openly discussed on centralised social platform Issued inter-organisational call for participation 	<ul style="list-style-type: none"> Ideated on open strategy initiative and future corporate vision Web portal with messaging, chat and file sharing used to enable collaboration 	<ul style="list-style-type: none"> Conducted (semi-automated) idea aggregation of and decision making on focus topics using machine learning and analytics
Premium Cola	<ul style="list-style-type: none"> Published an open call for participation when founding the collective Transparent, asynchronous discussions using a mailing list 	<ul style="list-style-type: none"> Co-developed all ideas, suggestions and problem solutions using one discussion thread per topic Conducted occasional Skype meetings for core team 	<ul style="list-style-type: none"> Evaluated and co-decided on ideas via inclusive email discussions Ultimate decision authority with organisation's legal head (authoritative decision making rarely occurred)
Red Hat	<ul style="list-style-type: none"> Transparently discussed ideas on an Intranet platform including wikis, live chats and forums Disseminated hot topics and status updates via mailing lists 	<ul style="list-style-type: none"> Co-created business, operating and commercial models, and technical vision Used forum-like discussion spaces for collaboration 	<ul style="list-style-type: none"> Decided on ideas to further implement/develop through online/offline discussions Consensus-oriented discussions on forum-like platform
Wikimedia Foundation	<ul style="list-style-type: none"> Openly discussed strategic initiatives on (Wikipedia-separate) public wiki 	<ul style="list-style-type: none"> Ideated the strategic planning initiative, participation, innovation and stabilisation of infrastructure 	<ul style="list-style-type: none"> Through participation, collaboratively agreed which topics to further develop

	<ul style="list-style-type: none"> ▪ Shared all decisions/ideas and aggregation steps on wiki pages ▪ Used accompanying forums/change commentary for discussion 	<ul style="list-style-type: none"> ▪ Used wiki versioning to track changes/additions to strategic ideas 	<ul style="list-style-type: none"> ▪ Video conferences to enable alignment discussions among decision makers
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Table 4: Open Practices in Analysed Cases

These open strategizing practices (transparent discourse, co-creation and democratic decision making) are characterised by norms of transparency and inclusiveness. In addition, these practices are all IT-enabled. **Transparency**, as a norm underlying and shaping open strategy, refers to the accessibility and visibility of information, discussions and strategic doings (in contrast to the secretive strategizing in closed strategy practices). At Daimler, for example, internal and external practitioners were made aware of strategic ideas identified by the crowd via a corporate blog. At Wikimedia Foundation, strategy documents and underlying raw data were published on a public wiki. **Inclusiveness**, as another norm underlying and shaping open strategy, refers to wide participation in the doing of strategy (in contrast to the rather exclusive closed strategy practices in which typically only the upper echelon participates). For example, in several of the analysed cases, frontline employees were included in both the ideation and operationalisation of strategic ideas. In some of the cases, even external stakeholders were considered to have a legitimate “say” and were included in open strategy. All three of these open practices are shaped by IT (**IT-enabledness**), impossible to implement or substantially less effective without the use of IT. All organisations used IT centrally for their open strategy. For example, Daimler and IBM appropriated sophisticated social platforms in open strategy, with Daimler using a social network-like platform with profiles, messaging and posting, while IBM used advanced text mining and machine learning algorithms. Information technology is a critical, constituent component of these practices (in contrast to closed strategy practices which existed in a similar form prior to the widespread use of IT such as Internet technologies).

For a holistic understanding of open strategy, we needed to recognize that the case organisations, in addition to the above open practices, also drew on traditional strategizing practices. These practices are not discussed in detail here as they are well-described in prior strategic management literature. They included off-site strategy meetings, various forms of strategic analysis (e.g., Porter’s Five Forces Framework analysis, SWOT analysis) and formulation of mission and vision statements. These practices are typical in any form of doing strategy (Jarzabkowski et al. 2007).

In sum, we can say that the difference between open and closed strategy (as ends of a spectrum as we will discuss below) lies in the use of these new open strategizing practices, transparent discourse, co-creation and democratic decision making.

Praxis Episodes of Open Strategy

Praxis brings practitioners and practices together, typically unfolding in episodes (Whittington 2006). In re-analysing the open strategy cases, we identified three typical praxis episodes. All case organisations drew on the set of open practices in at least one of these typical episodes but not necessarily in all episodes. We used a sequential “process model” of the three episodes to structure our analysis, within the outlined practice view on open strategy. Despite a linear presentation, we note that these strategy episodes are emerging (they are not strictly sequential in temporal order); permeable (they can overlap); and dynamic (they are based on non-deterministic interactions and may have varying degrees of openness across time) (e.g., Laari-Salmela et al. 2015).

The first type of open strategy episode that we found in the analysis was “**preparing and planning strategy**”. Preparing and planning episodes comprised all the routines related to understanding the context, defining the strategizing process, establishing strategic priority

areas and setting up the open strategy initiative. Typical manifest outcomes of this episode are a strategy framework (description of organizing structure) and an open call for participation. Furthermore, in this episode, the social community to handle the mass participation is typically developed and implemented. For example, Wikimedia Foundation, by bringing in academics and consultants, extended the circle of participants in its preparing and planning. IBM involved external CEOs and experts to define an initial strategic vision in transparent discourse. IBM then translated this strategic vision into a detailed strategizing framework that broke down the work to allow for meaningful co-creation of its various components.

The second type of open strategy episode that we found in the analysis was “**generating and evaluating strategy**”. These episodes involve work on strategic idea generation and assessment. The focus is on generating ideas by accessing widely distributed knowledge, evaluating ideas in an inclusive and transparent manner and deciding on which ideas are to be further developed. Typical manifest outcomes created in these episodes included discussion threads on social platforms, strategy pamphlets, reports and slide deck presentations that reported on aggregated/selected ideas, as well as decisions being made on particular sections in the strategy framework. For example, Red Hat invited practitioners to ideate and discuss the future direction for its overall product technology stack. The Austrian automation supplier combined co-creation of ideas immediately followed by democratic decision making on those ideas via an “impact factor”. This impact factor included voting as a central component, thus giving participants an indirect method to decide on ideas for implementation. IBM used a technology-supported, transparent clustering approach to automatically identify key areas of practitioner involvement. However, the upper echelon ultimately decided which ideas would be part of IBM's future direction. Across the cases, we found reports of increased buy-in by employees in these episodes, with this

attributed to the open way in which the generating and evaluating strategy episodes were performed.

The third and final type of open strategy episodes that we found in the analysis was “**communicating and implementing strategy**”. Typical outcomes of these episodes are the writing of intermediate and final strategy documents; the creation of detailed, actionable plans for different organisational functions; and the sharing of strategy documents on Intranets, company websites or social web platforms, including those on which they were co-created. For example, at the Austrian automation supplier, intermediate outcomes were shared on the forum. At Daimler, a few selected ideas were presented on the general Intranet, while the overall process of open strategy making was discussed on an external blog. At Wikimedia Foundation, strategy documents and operationalisation plans were presented and discussed publically.

Table 5 summarises the above discussion. Note that the degree to which these episodes were enacted varied between case organisations and depended on the extent to which open strategy was already established in the organisation (e.g., preparing and planning was pronounced in initial “runs” of open strategy but became much less so once this new practice was established in organisations).

Case	Open Strategy Praxis Episodes		
	Preparing and Planning Strategy	Generating and Synthesising Strategy	Communicating and Implementing Strategy
Austrian automation supplier	<ul style="list-style-type: none"> ▪ Set up open strategy initiative and developed strategy framework ▪ Framework structured along future industry solutions, internal potential, automation systems, etc. 	<ul style="list-style-type: none"> ▪ Posted and discussed strategic ideas ▪ Automatically calculated impact factor ▪ Aggregated strategic direction per framework area 	<ul style="list-style-type: none"> ▪ Communicated the development of strategic plan and intermediate ideas ▪ Developed management communication letter to employees
Daimler	<ul style="list-style-type: none"> ▪ Built gap analysis of current products/services portfolio 	<ul style="list-style-type: none"> ▪ Discursively developed business models 	<ul style="list-style-type: none"> ▪ Made detailed company-internal updates via Intranet

	<ul style="list-style-type: none"> Designed and built the innovation community 	<ul style="list-style-type: none"> Conducted peer review/rating Reviewed ideas in a closed/internal fashion 	<ul style="list-style-type: none"> Conducted external blogging Piloted selected business models internally
HypoVereinsbank	not discussed in reviewed sources	<ul style="list-style-type: none"> Generated ideas on improving customer service Openly shared selection criteria 	<ul style="list-style-type: none"> Disseminated open strategy process top-down via Intranet and platform Operationalised service standards (online, hard copy)
IBM	<ul style="list-style-type: none"> Informed corporate vision by external CEO interviews Translated vision into ideas framework 	<ul style="list-style-type: none"> Posted, discussed and voted on ideas Conducted idea mining Assessed ideas (only by upper echelon, closed) 	<ul style="list-style-type: none"> Communicated selected intermediate idea aggregation steps and outcomes on platform, Intranet and to stakeholders
Premium Cola	<ul style="list-style-type: none"> Designed and founded the organisation with an open business model, including open strategy, in mind 	<ul style="list-style-type: none"> Solved strategic problems and generated ideas iteratively using thread-based email discussions Agreed on and synthesised opposing ideas through consensus-based discussions 	<ul style="list-style-type: none"> Continuous communication of ongoing discussions (the whole group received every discussion) Ongoing updates and "re-discussions" during implementation
Red Hat	<ul style="list-style-type: none"> Developed an open strategizing framework (structured as internal and external topics) 	<ul style="list-style-type: none"> Brainstormed priority ideas Revised framework and directed ideas to new focus areas Selected ideas in open workshops and stored them on platform 	<ul style="list-style-type: none"> Provided regular CEO updates and hosted chats via platform Operationalised selected ideas
Wikimedia Foundation	<ul style="list-style-type: none"> Defined open strategy content framework Set up dedicated strategy wiki 	<ul style="list-style-type: none"> Discursively generated ideas in pre-defined areas of framework Decision making by upper echelon, decisions stored on wiki 	<ul style="list-style-type: none"> Published ideas, discussions and results Developed strategic directions and implementations

Table 5: Open Strategy Praxis Episodes in Analysed Cases

4.3 Open Strategy as a Practice

What can we learn from the above analysis of open strategy cases, in terms of practitioners, practices and praxis, for developing a coherent conceptualisation and definition of open strategy? While we could identify shared patterns in the above analysis, the cases exhibit different degrees and forms of openness (e.g., being more or less transparent, or more or less inclusive) and other idiosyncratic differences. For our purposes, we found it helpful to

use Max Weber's concept of *Idealtypus* to define “archetypical” open strategy (“ideal” does not mean “best”, the German and English meanings of “ideal” are not identical).

An *Idealtypus* (ideal type) denotes an archetypical, pure manifestation of a particular idea (Weber 1904) The concept of *Idealtypus* is a useful device for academic discourse in the social sciences, including our purposes in this paper. The concept can be used to describe (possibly hypothetical) positions at the end of ranges of empirical manifestations. This can be thought of as hypothetical [exaggerated, idealised, simplified, theoretical, extreme] “pure white” or “pure black” *Idealtypus* positions, compared to a range of “empirically observed greys”, *Realtypus* positions. Using this concept, an *Idealtypus* of open strategy is then to be conceptualised in contrast to an *Idealtypus* of closed strategy. Most specific empirical cases (here, concrete strategy practices of concrete organisations) lie between the extremes, but may be allocated to one or the other based on how closely they resemble the respective *Idealtypus*. Given this explanation, it should be clear that an *Idealtypus* of open strategy is not to be confused with “the average case” of open strategy. For example, the “homo economicus” of economic theories is an *Idealtypus* (is useful for thinking about hypothetical, idealized behaviour that assumes people behave in an entirely economic-rational manner; it is not identical to the average actual economic behaviour of people).

What does an *Idealtypus* of open strategy look like? Figure 2 (based on Whittington 2006 and the above analysis) conceptually shows typical practitioners (I-III), practices (1-4) and praxis episodes (horizontal arrows) of ideal-typical open strategy. Figure 2 is explained in detail below.

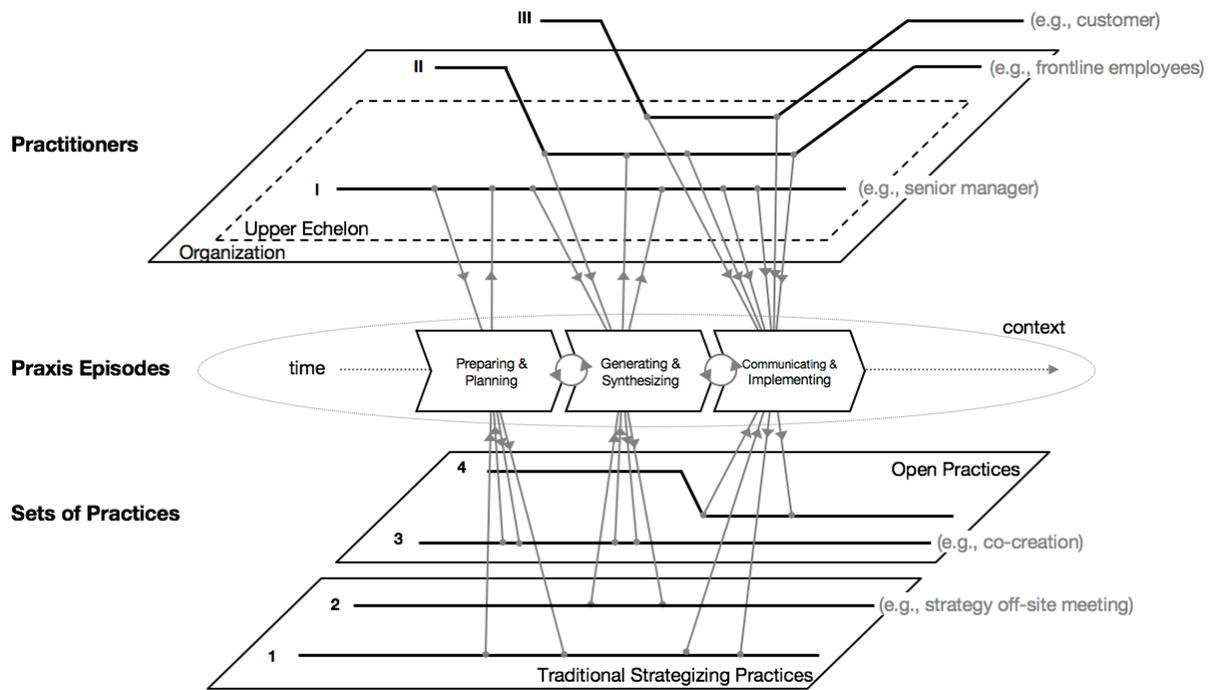


Figure 2: Conceptualisation of Open Strategy as a Practice

In regard to practitioners, open strategy is characterised by the participation of non-upper-echelon organisational members in the doing of strategy. In an *Idealtypus* of open strategy, all organisational members outside the boundaries of the upper echelon can also participate in the doing of strategy. This participation is not inhibited by reporting hierarchies, and ranges from senior managers already in the upper echelon (practitioner type I in figure 2) to frontline employees (practitioner type II in figure 2: the bend in the line is to indicate a temporary belonging to/involvement with the upper echelon of the organisation, even if only for open strategy). Furthermore, open strategy is characterised by the participation of stakeholders outside the organisation in the doing of strategy. In ideal-typical open strategy, any people outside organisational boundaries that have a legitimate “say” in the organisation’s doings – stakeholders, such as customers, consumers, partners or others (but not competitors or the general public per se) – participate in doing strategy (see practitioner type III in figure 2: the bend in the line is again to indicate a temporary belonging to the upper echelon for open strategy).

In regard to practices, open strategy draws on two sets of practices: open practices and traditional strategizing practices. In ideal-typical open strategy, the open practices of transparent discourse, co-creation and democratic decision making are enacted (the set of open practices in figure 2). These open practices are characterised by norms of inclusiveness and transparency, and are enabled by IT. As discussed above, inclusiveness refers to a norm of involving and including (not excluding) interested people, while transparency refers to a norm of making ideas, interactions and contributions visible. A critical element in, and for, open strategy is the appropriation of IT artefacts: social IT (such as social media, co-creation platforms, etc.), in particular, are necessary for and appear to “invite” open practices (see also Haefliger et al. 2011; Majchrzak and Malhotra 2013). In addition, open strategy draws on the set of traditional strategizing practices, as shown in figure 2.

Open strategy is enacted in praxis episodes which bring together the different types of practitioners and the two sets of practices in concrete, spatially and temporally situated (context-dependent) patterns of open strategy activities. In ideal-typical preparing and planning episodes (first arrow in figure 2), an overall vision is developed and the open strategy initiative is set up by defining work tasks and delineating strategic issues in a manner suitable for co-creation. In generating and synthesising episodes (second arrow in figure 2), strategic ideas are openly and transparently discussed, contents are co-created and decisions are made democratically. In communicating and implementing episodes (third arrow in figure 2), manifest outcomes of open strategy (such as strategy documents) are communicated and strategy is acted upon in operational doings. While these episodes take place over time, they are not necessarily enacted in a sequential order but may occur in a parallel, overlapping or iterative fashion.

Based on, and read to be in conjunction with, the above practice-based conceptualisation, we can formulate a definition of an ideal-typical open strategy: *Open strategy is a practice that involves upper echelon and non-upper-echelon organisational members as well as stakeholders from outside the organisation. Practitioners of open strategy draw upon sets of both traditional strategizing practices as well as open practices (transparent discourse, co-creation and democratic decision making). The latter set of practices is based on norms of inclusiveness and transparency and is enabled by IT. Open strategy is enacted in context-dependent praxis episodes over time.*

5 Implications and Conclusions

In this section, we discuss the implications for future research and the general conclusions that can be drawn from the literature review and the conceptualisation developed and provided in this paper.

5.1 Implications for Future Research

The purpose of developing the coherent and comprehensive conceptualisation and definition of “open strategy” provided in the previous section is to support future research and scholarly discourse on open strategy. Given the above conceptualisation and definition of open strategy, we answer our third research question: how do we advance research on open strategy? To outline avenues for future research and how it could be approached, we use the idea of “zooming in” and “zooming out” from the focal practice (Nicolini 2009).

“Zooming in” is the process of systematically focusing on a particular aspect (such as practitioners, practices, praxis) while keeping the context and the remaining aspects of the overall practice – in our case, open strategy – in sight (Nicolini 2009). In some previous studies, open strategy practitioners have been the focal point. Differences between

participants across hierarchical ranks have been discussed (Laari-Salmela et al. 2015) as have the roles of external facilitators in open strategy (e.g., Morton et al. 2016a). However, important questions on practitioners in open strategy remain unanswered. Future research may explore how different practitioners engage with each other in open strategy (e.g., competition vs. collaboration, see Majchrzak and Malhotra 2013) and what would constitute effective and strategic collaboration and co-creation (Levina 2005). Detailed practice-focused case studies and (n)ethnographies of open strategy may allow theorising of such.

Open strategy is a practice that “opens up” the upper echelon of organisations by allowing broad participation in the discussion of, creation of, and decision making on, strategy. Questions that future research may explore include: how does this opening up reconfigure the power relationships among owners, managers, employees and other stakeholders in organisations? How does it impact on the identity of the people involved? For example, does the role of the CEO shift from “strategy maker” to “strategy manager”? Again, in-depth practice-based research on the actual doings of strategy doers in their respective context will help to answer these questions.

Some research has been conducted on open strategy *practices*. In line with the practice view, open strategy practices (see Whittington et al. 2011) as well as counterbalancing practices (Luedicke et al. 2016) in the context of open strategy have been analysed. In addition, specific practice components, such as routines, norms and material artefacts (e.g., IT), have been researched. In particular, the role of IS/IT in strategy making and community building has been analysed (Haefliger et al. 2011). In future research, the relationship between IT and practices, and the notion of sociomateriality may need to be further developed in regard to open strategy. Our discussion highlights that IT is a constituent and central part of open strategy which is largely enacted through IT. Open strategy may hence provide a rich context for improving our understanding of the relationship between IT and practices. Questions that

may be explored in future research include: do practices shape IT (practitioners purposefully creating IT); does IT shape practices (IT inviting particular practices); or in what other ways can we understand the agency and role of IT for open strategy and other practices? (see also Jarzabkowski and Kaplan 2015). Open strategy appears to be build the idea that collective creativity yields better outcomes. How does IT enable and shape collective creativity in open strategy? To answer such questions future research on open strategy may need to draw from insights on creativity and computers-supported cooperative work.

Open strategy *praxis* has also been the subject of some research. To date, strategy praxis episodes have been researched across various cases leading to different models for the overall process (Morton et al. 2016b; Tavakoli et al. 2015) or for particular phases such as decision making (Dobusch and Müller-Seitz 2015). In future research, we need to investigate the temporality of open strategy practice How does open strategy emerge and, quite possibly, dissolve in organisations? How can we “think together” the process view (which models the internal timeline of the focal process, but not how the process itself emerges) and the practice view for understanding such temporality of practices? Longitudinal case analyses are needed to shed light on the temporality of open strategy practices.

One might also “zoom out” from open strategy’s individual components to open strategy as a practice. To date, studies have explored the relationship of open strategy to the overall organisational model (Appleyard and Chesbrough 2016) and have considered open strategy as part of other open practices (Dobusch et al. 2014). Going forward, future research may explore how open strategy and similar phenomena challenge theories of “the organisation” and its boundaries. Do we need to locate open strategy as one of the “new forms of organising” that are expanding organisations via IT (e.g., Kotlarsky et al. 2015; Puranam et al. 2014; von Krogh 2012)? How does open strategy relate to other open practices such as open innovation (Dahlander and Gann 2010), crowdsourcing (Schlagwein and Bjørn-

Andersen 2014) and open source software (Ågerfalk and Fitzgerald 2008)? For example, how can organisations develop integrated approaches for the different ways in which they could “open up” in various aspects? Further case research on extremely open strategizing in organisations such as Premium Cola (mentioned above) appears to be promising as it allows to contrast to more traditional strategizing in incumbent organisations and to highlight “how things could be otherwise”. On an even wider scale, open strategy may be part of an IT-enabled “open”, “social” and “networked” transformation of society (see also Benkler 2006). How can we understand open strategy as part of an increasing acceptance and embracement of social IT across society (e.g., widespread use of social media) and the corresponding changes in social norms (e.g., acceptance that actions and opinions are increasingly transparent)? Future research may examine how organizational practices are built "reusing" and "recombining" existing routines out of the private and social spaces.

5.2 Conclusions

In this paper, we have responded to the first research question (*how has open strategy been conceptualised in prior literature?*) by identifying entity, process and practice views in research and reports on open strategy (in section 3). This analysis is based on a literature review and informed by prior work that has taken different ontological perspectives on, and hence epistemological approaches to, “the same” phenomenon (e.g., Thompson 2011). We have articulated reasons for the particular promise offered by the practice view on open strategy.

We have responded to the second research question (*how can open strategy be understood as a practice?*) by providing a full conceptualisation and definition of open strategy as a practice. The conceptualisation (in section 4) is based on a re-analysis of seven salient cases of open strategy that have been well documented in the reviewed literature. We have built on

the strategy-as-practice literature (Peppard et al. 2014; Whittington 2006) and Weber's idea of *Idealtypus* (Weber 1904) to develop this conceptualisation.

Finally, we used the conceptualisation and definition of open strategy to develop a research agenda as per our third research question (*how do we advance research on open strategy?*). To develop a research agenda (in section 5.1), we have used the idea of “zooming in” and “zooming out” (Nicolini 2009) from the focal practice, open strategy. The theoretically coherent and comprehensive conceptualisation of open strategy provided by this paper will be helpful for better integration of future research and scholarly discourse.

In addition, the paper contributes to our understanding of the relationship between IT and strategy (e.g., Karpovsky and Galliers 2015), the intersection of which is of interest to the strategic IS research community (Gable 2010; Marabelli and Galliers 2016; Merali et al. 2012). In open strategy, interestingly, IT is not the addressee of strategy: instead, IT is central to the doing of strategy itself. In other words, we are not strategizing about IT use, but using IT for strategizing.

Furthermore, this paper contributes to the further development of the practice view, which has been criticised due to a lack of publications with concrete applications of this view to particular domains (Seidl 2014; Vaara and Whittington 2012). This paper may provide a useful example of how a phenomenon can be (re-)conceptualised as a practice and how practice-based views and research agendas can be developed for concrete domains. We believe that conceptualisations and agendas such as those provided in the following, in conjunction with ideas such as “zooming in” and “zooming out” elaborated elsewhere (Feldman and Orlikowski 2011; Nicolini 2009; Nicolini 2013), are the way to move the practice-based research approach forward, including on strategy-as-practice and open strategy. Future empirical research on practices may need to take the form of intense field work (e.g.,

ethnographies, longitudinal case studies) to be able to holistically account for the inherent complexity (Peppard et al. 2014). We also note that we took a primarily sociomaterial view of practice, according to which the role of IT is conceptualised as a constituent part of, and inseparable from, any practice (Orlikowski and Scott 2008; Scott and Orlikowski 2013). In our scenarios, the sociomaterial approach to practices helped us to understand how IT is enacted differently in open strategy (which is in contrast to considering IT as having its uses objectively “built into it”, and then excluding IT from analysis and focusing on exclusively “social” practices) (Orlikowski 2000). While insightful, there may be other useful approaches to develop the practice view.

For reflective professionals, our analysis of open strategy contributes to the knowledge on the “how” and “why” of open strategy. The *Idealtypus* conceptualisation of open strategy may provide an outcome vision for organisational professionals in regard to how and why they may consider implementing open strategy in their respective organisations. While the paper has focused on the conceptual foundations of open strategy (we do not provide step-by-step implementation guidelines in this paper) the cases reported and the analysis provided can serve as a reference point for new, open approaches to strategizing in organisations. The cases illustrate the enacted open practices (i.e., transparent discourse, co-creation and democratic decision making), the IT used (e.g., social networks, wikis, forums, etc.) as well as the benefits and drawbacks experienced by organisations that have used open strategy.

As any paper, our paper has certain (de-)limitations that should be mentioned. Firstly, the conceptualisation and definition of “open strategy” is an aggregated and ideal-typical conceptualisation based on existing cases. The paper is not to be understood as a normative account of how open strategy is to be performed, nor is it an expression of opinion that open strategy is in general preferable to closed strategy. Secondly, the reviewed literature on open

strategy is in an early stage. Our conceptualisation may need to be critically revisited as this literature stream develops and our knowledge about open strategy increases.

Open strategy is an emerging and dynamic phenomenon. We need further research to fully appreciate the empirical variety and theoretical nature of open strategy. Providing a coherent conceptualization of open strategy in this paper will contribute to develop a fruitful research stream on this interesting and important phenomenon.

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References

- Ågerfalk, P. J., and Fitzgerald, B. 2008. "Outsourcing to an Unknown Workforce: Exploring Outsourcing as a Global Sourcing Strategy," *MIS Quarterly* (32:2), pp. 385-409.
- Amrollahi, A., Ghapanchi, A. H., and Talaei-Khoei, A. 2014. "Using Crowdsourcing Tools for Implementing Open Strategy: A Case Study in Education," in: *Americas Conference on Information Systems (AMCIS)*. Savannah, USA.
- Amrollahi, A., and Rowlands, B. 2016a. "The Effectiveness of an Open Strategic Planning Approach," in: *Pacific Asia Conference on Information Systems (PACIS)*. Chiayi, Taiwan.
- Amrollahi, A., and Rowlands, B. 2016b. "OSPM: A Design Methodology for Open Strategic Planning," in: *Americas Conference on Information Systems (AMCIS)*. San Diego, USA.
- Amrollahi, A. R., and Ghapanchi, A. H. 2016. "Open Strategic Planning in Universities: A Case Study," *Hawaii International Conference on System Sciences (HICSS)*, Kauai, Hawaii.
- Andrews, K. R. 1988. "The Concept of Corporate Strategy," in *The Strategy Process*, J.B. Quinn, H. Mintzberg and R.M. James (eds.). Englewood Cliffs: Prentice-Hall, pp. 43-50.

- Ansoff, I. 1965. *Corporate Strategy*. New York: McGraw-Hill.
- Appleyard, M. M., and Chesbrough, H. W. 2016 (online/in press). "The Dynamics of Open Strategy: From Adoption to Reversion," *Long Range Planning*, <http://dx.doi.org/10.1016/j.lrp.2016.07.004>
- Aten, K., and Thomas, G. F. 2016. "Crowdsourcing Strategizing: Communication Technology Affordances and the Communicative Constitution of Organizational Strategy," *International Journal of Business Communication* (53:2), pp. 148-180.
- Aurik, J., Fabel, M., and Jonk, G. 2014. *The Future of Strategy: A Transformative Approach to Strategy for a World That Won't Stand Still*. New York: McGraw Hill.
- Bailey, A. 2016. "Virtual Community Design, Participation and Success: A Strategy-as-Practice Perspective," in: *International Conference on Information Resources Management (CONF-IRM)*. Cape Town, South Africa.
- Baptista, J., Wilson, A. D., Galliers, R. D., and Bynghall, S. (2016, online). "Social Media and the Emergence of Reflexiveness as a New Capability for Open Strategy," *Long Range Planning*. <http://dx.doi.org/10.1016/j.lrp.2016.07.004>
- Barclays. 2013a. "Barclays Values Jam: Jam Rules." *Collaboration Jam* Retrieved 02/23/2016, from <https://www.collaborationjam.com/minijam3/jam/registration/rules.do?jamId=200435>
- Barclays. 2013b. "Stakeholder Dialogue: 2013 Snapshot." *Stakeholder Communications* Retrieved 02/23/2016, from <http://www.barclays.com/content/dam/barclayspublic/docs/Citizenship/barclays-stakeholder-dialogue-2013.pdf>
- Benkler, Y. 2006. *The Wealth of Networks*. New Haven: Yale University Press.
- Berends, H., Whittington, R., Dobusch, L., Füller, J., Matzler, K., and Seidl, D. 2013. "Open Strategizing: New Practices for Transparent and Inclusive Strategy-Making," *Academy of Management Annual Meeting (AOM)*, Orlando, Florida.
- Bhalla, G. 2010. "Collaboration, Co-Creation, and Innovation Jams: An Interview with IBM's Liam Cleaver." Retrieved 02/23/2016, from <http://www.gauravbhalla.com/collaboration-co-creation-and-innovation-jams-an-interview-with-ibms-liam-cleaver/>
- Binder, M., and Bertram, B. 2010. "Business Innovation: Kreative Keimzelle für neue Geschäftsideen." Retrieved 02/23/2016, from http://presseservice.pressrelations.de/standard/result_main.cfm?aktion=jour_pm&r=428280&quelle=0&pfach=1&n_firmanr_=101667&sektor=pm&detail=1#
- Bjelland, O. M., Wood, R.C. 2008. "An Inside View if IBM's Innovation Jam," *MIT Sloan Management Review* (50:1), pp. 32-40.
- Boell, S. K., and Cecez-Kecmanovic, D. 2014. "A Hermeneutic Approach for Conducting Literature Reviews and Literature Searches," *Communications of the Association for Information Systems* (34), pp. 257-286.
- Brauner, R., and Kettner, N. 2015. "TOURISM Strategy 2020," City of Vienna, Vienna, Austria, pp. 1-49.
- Bromiley, P., and Rau, D. 2014. "Towards a Practice-Based View of Strategy," *Strategic Management Journal* (35), pp. 1249-1256.
- Buchenau, M.-W. 2010. "Daimlers Schlüssel für die Zukunft." *Handelsblatt* Retrieved 02/23/2016, from <http://www.handelsblatt.com/unternehmen/industrie/business-innovation-daimlers-schluessel-fuer-die-zukunft/3562582.html>
- Burgelman, R. A. 1983a. "A Model of the Interaction of Strategic Behavior, Corporate Context, and the Concept of Strategy," *Academy of Management Review* (8:1), pp. 61-70.
- Burgelman, R. A. 1983b. "A Process Model of Internal Corporate Venturing in the Diversified Major Firm," *Administrative Science Quarterly* (28:2), pp. 223-244.

- Cecez-Kecmanovic, D., Galliers, R. D., Henfridsson, O., Newell, S., and Vidgen, R. 2014. "The Sociomateriality of Information Systems: Current Status, Future Directions," *MIS Quarterly* (38:3), pp. 809-830.
- Cheng, S. 2012. "We're All Ears - Virgin Media's Approach to Listening." Retrieved 02/23/2016, from <https://www.simply-communicate.com/case-studies/company-profile/we%E2%80%99re-all-ears-%E2%80%93-virgin-media%E2%80%99s-approach-listening>
- Chesbrough, H. W., and Appleyard, M. M. 2007. "Open Innovation and Strategy," *California Management Review* (50:1), pp. 57-77.
- Chia, R., and Holt, R. 2006. "Strategy as Practical Coping: A Heideggerian Perspective," *Organization Studies* (27:5), pp. 635-655.
- Chia, R., and MacKay, B. 2007. "Post-Processual Challenges for the Emerging Strategy-as-Practice Perspective: Discovering Strategy in the Logic of Practice," *Human Relations* (60:1), pp. 217-242.
- Cook, S., and Brown, J. S. 1999. "Bridging the Epistemologies: Generative Dance Between Organizational Knowledge and Knowing Organizational," *Organization Science* (10:4), pp. 381-400.
- Cross, A. 2013. "Opening the Doors to Strategic Innovation: Exploring the Role of Openness in Overcoming the Barriers to Strategic Innovation," in: *Henley Business School*. University of Reading.
- Dahlander, L., and Gann, D. M. 2010. "How Open is Innovation?," *Research Policy* (39:6), pp. 699-709.
- Darbi, W. P. K., and Knott, P. 2016. "Strategising Practices in an Informal Economy Setting: A Case of Strategic Networking," *European Management Journal* (34:4), pp. 400-413.
- Dayton, B. K. 2011. "InnovationLive: Engaging 3M's Global Employees in Creating an Exciting, Growth-Focused Future." Retrieved 02/23/2016, from <http://www.managementexchange.com/story/innovationlive-engaging-3ms-global-employees-creating-exciting-growth-focused-future>
- Dobusch, L., and Gegenhuber, T. 2015. "Making an Impression with Open Strategy: Practicing Transparency and Engagement on Corporate Blogs," *Academy of Management Annual Meeting (AOM)*, Vancouver, Canada.
- Dobusch, L., and Kapeller, J. 2013. "Open Strategy Between Crowd and Community: Lessons From Wikimedia," in: *Academy of Management Annual Meeting (AOM)*. Lake Buena Vista, USA.
- Dobusch, L., and Kapeller, J. 2015. "Open Strategy Making With Crowds and Communities: Lessons From Wikimedia and Creative Commons," in: *Unpublished Working Paper*, F.U. Berlin (ed.). Berlin.
- Dobusch, L., and Mueller-Seitz, G. 2012. "Strategy as a Practice of Thousands: The Case of Wikimedia," in: *Academy of Management Annual Meeting (AOM)*. Boston, USA.
- Dobusch, L., and Müller-Seitz, G. 2015. "Closing Open Strategy: Strategy as a Practice of Thousands in the Case of Wikimedia," in: *Unpublished working paper*, F.U. Berlin (ed.). Berlin.
- Dobusch, L., Seidl, D., and Werle, F. 2014. "Opening up the Strategy-making Process: Comparing Open Strategy and Open Innovation," *Academy of Management Meeting (AOM)*, Philadelphia, USA.
- Dobusch, L., von Krogh, G., and Whittington, R. 2015. "Sub-theme 46: Open Organizations for an Open Society? Practicing Openness in Innovation, Strategy and Beyond." Retrieved 02/23/2016, from http://egosnet.org/jart/prj3/egos/main.jart?rel=de&reserve-mode=active&content-id=1392376003637&subtheme_id=1368705963302
- Dörner, S. 2013. "Erfolg mit dem Anti-Rabatt." *Wall Street Journal* Retrieved 09/01/2016, from

<http://www.wsj.de/nachrichten/SB10001424127887324662404578332230968156620>

- Doz, Y., and Kosonen, M. 2008. *Fast Strategy: How Strategic Agility Will Help You Stay Ahead of the Game*. Harlow, UK: Pearson.
- Ezzy, D. 2002. *Qualitative Analysis*. London, UK: Routhledge.
- Farjoun, M. 2002. "Towards an Organic Perspective on Strategy," *Strategic Management Journal* (23:7), pp. 561-594.
- Feldman, M. S., and Orlikowski, W. J. 2011. "Theorizing Practice and Practicing Theory," *Organization Science* (22:5), pp. 1240-1253.
- Fit, B. 2014. "Greenpeace Open Strategy." Retrieved 02/23/2016, from <https://instagram.com/p/uOPjJPibV0/>
- Floyd, S. W., and Woolridge, B. 1992. "Middle Management Involvement in Strategy and its Association with Strategic Type: A Research Note," *Strategic Management Journal* (13), pp. 153-167.
- Foudraine, J. 2015. "Practices to Involve Employees in the Strategy Process," in: *IBA Bachelor Thesis Conference* Enschede, Netherlands: pp. 1-7.
- Freeman, R. E., and Auster, E. R. 2015. *Bridging the Values Gap: How Authentic Organizations Bring Values to Life*. Berrett-Koehler Publishers.
- Friesl, M., Oviedo, L., Lethimaki, H., Santalainen, T. J., and Antonacopoulou, E. 2014. "Open Strategy Design and Networking Workshop." Retrieved 02/23/2016, from http://madrid.strategicmanagement.net/pre_conference_workshops/strategy_practice_open_strategy_design_and_networking_workshop.php
- Friis, O. U. 2015. "Openness in Strategy: Social Strategy Practices and Practitioner Interaction," *European Group of Organizational Studies Colloquium (EGOS)*, Athens, Greece.
- Gable, G. 2010. "Strategic Information Systems Research: An Archival Analysis," *Journal of Strategic Information Systems* (19:1), pp. 3-16.
- Gaskin, J., Berente, N., Lyytinen, K., and Yoo, Y. 2014. "Toward Generalizable Sociomaterial Inquiry: A Computational Approach for Zooming In and Out of Sociomaterial Routines," *MIS Quarterly* (38:3), pp. 849-871.
- Gast, A., and Lansink, R. 2015. "Digital Hives: Creating a Surge Around Change," *McKinsey Quarterly* (52:2), pp. 1-9.
- Gast, A., and Zanini, M. 2012. "The Social Side of Strategy," *McKinsey Quarterly* (49:2), pp. 82-93.
- Gavetti, G., and Levinthal, D. a. 2004. "The Strategy Field from the Perspective of Management Science: Divergent Strands and Possible Integration," *Management Science* (50:10), pp. 1309-1318.
- Gegenhuber, T., and Dobusch, L. 2016 (online/in press). "Making an Impression Through Openness: How Open Strategy-Making Practices Change in the Evolution of New Ventures," *Long Range Planning*. <http://dx.doi.org/10.1016/j.lrp.2016.09.001>
- Germonprez, M., Hovorka, D., and Gal, U. 2011. "Secondary Design: A case of Behavioral Design Science Research," *Journal of the Association for Information Systems* (12:10), pp. 662-683.
- Ghezzi, A., Balocco, R., Rangone, A., Sarkis, J., and Sarkis, J. 2016. "The Open Innovation – Strategy Nexus: Findings From the Mobile Telecommunications Industry," *Management Research Review* (39:5), pp. 569-598.
- Golsorkhi, D., Rouleau, L., Seidl, D., and Vaara, E. 2010. "Introduction: What is Strategy as Practice?," in *Cambridge Handbook of Strategy as Practice*, D. Golsorkhi, L. Rouleau, D. Seidl and E. Vaara (eds.). Cambridge: Cambridge University Press, pp. 1-20.
- Grams, C., Beaudette, P., and Kim, E. E. 2011. "Strategic Planning the Wikimedia Way." Retrieved 02/23/2016, from <http://www.managementexchange.com/story/strategic-planning-wikimedia-way>

- Gruel, W. 2013. "Open Innovation und individuelle Wissensabsorption," in: *Fakultät für Wirtschaftswissenschaften der Rheinisch-Westfälischen Technischen Hochschule Aachen*. Aachen, Germany: Rheinisch-Westfälischen Technischen Hochschule Aachen (RWTH).
- Haefliger, S., Monteiro, E., Foray, D., and von Krogh, G. 2011. "Social Software and Strategy," *Long Range Planning* (44:4), pp. 297-316.
- Hafermalz, E., and Riemer, K. 2015. "The Question of Materiality: Mattering in the Network Society," in: *European Conference on Information Systems (ECIS)*. Münster, Germany.
- Hambrick, D. C., and Mason, P. A. 1984. "Upper Echelons: The Organization as a Reflection of Its Top Managers," *Academy of Management Review* (9:2), pp. 193-206.
- Harrysson, M., Schoder, D., and Tavakoli, A. 2016. "The Evolution of Social Technologies," *McKinsey Quarterly* (53:3), pp. 8-12.
- Hemp, P., and Stewart, T. A. 2004. "Leading Change When Business is Good," *Harvard Business Review* (82:12), pp. 60-70.
- Hodgkinson, G. P., Whittington, R., Johnson, G., and Schwarz, M. 2006. "The Role of Strategy Workshops in Strategy Development Processes: Formality, Communication, Co-ordination and Inclusion," *Long Range Planning* (39:5), pp. 479-496.
- Huang, J., Newell, S., Huang, J., and Pan, S.-L. 2014. "Site-Shifting as the Source of Ambidexterity: Empirical Insights from the Field of Ticketing," *Journal of Strategic Information Systems* (23:1), pp. 29-44.
- Hutter, K., Nketia, B. A., and Füller, J. 2016 (online/in press). "Falling Short with Participation—Different Effects of Ideation, Commenting, and Evaluating Behavior on Open Strategizing," *Long Range Planning*, <http://dx.doi.org/10.1016/j.lrp.2016.08.005>.
- IBM. 2014. "Barclays: Rebuilding a Global Brand From the Inside Out to Strengthen Relationships With Customers," IBM Collaboration Programme Office, Portsmouth, UK.
- Janek, B. 2012. "6 Fragen zu Crowdsourcing bei der HypoVereinsbank." Retrieved 02/23/2016, from <http://www.financezweinull.de/6-fragen-zum-crowdsourcing-bei-der-hypo-vereinsbank/>
- Jarzabkowski, P. 2005. *Strategy as Practice: An Activity-based Approach*. London: Sage Publications.
- Jarzabkowski, P., Balogun, J., and Seidl, D. 2007. "Strategizing: The Challenges of Practice Perspective," *Human Relations* (60:1), pp. 5-27.
- Jarzabkowski, P., and Kaplan, S. 2015. "Strategy Tools-in-Use: A Framework for Understanding "Technologies of Rationality" in Practice," *Strategic Management Journal* (36), pp. 537-558.
- Jarzabkowski, P., and Spee, A. P. 2009. "Strategy-as-Practice: A Review and Future Directions for the Field," *International Journal of Management Reviews* (11:1), pp. 69-95.
- Jette, A., Breck, A., and Johns, R. 2015. "Integrating Balanced Scorecard Performance Management with Crowdsourced Strategic Planning," in: *TRB 94th Annual Meeting Compendium of Papers*. Washington D.C., USA.
- Jette, A., and Johns, R. 2016. "Signals From the Crowd: Strategic Management and Learning Through Crowdsourcing," *Journal of the Transportation Research Board* (2568), pp. 9-16.
- Jones, M. 2014. "A Matter of Life and Death: Exploring Conceptualizations of Sociomateriality in the Context of Critical Care," *MIS Quarterly* (38:3), pp. 895-925.
- Jones, O., and Gatrell, C. 2014. "Editorial: The Future of Writing and Reviewing for IJMR," *International Journal of Management Reviews* (16:3), pp. 249-264.

- Karpovsky, A., and Galliers, R. D. 2015. "Aligning in practice: from current cases to a new agenda," *Journal of Information Technology* (30:2), pp. 136-160.
- Kass, K. 2012. "Hobsons' hiWire Platform 'jives' with Employees." Retrieved 02/23/2016, from <https://www.simply-communicate.com/case-studies/company-profile/hobsons%E2%80%99-hiwire-platform-%E2%80%98jives%E2%80%99-employees>
- Kendall, S. L., Nino, M. H., and Staley, S. M. 2008. "Collaborative Strategic Planning: a Wiki Application," *Journal of Web Librarianship* (2:1), pp. 3-23.
- Kitchenham, B., and Charters, S. 2007. "Guidelines for Performing Systematic Literature Reviews in Software Engineering," Keele University & University of Durham, pp. 1-65.
- Kotlarsky, J., Oshri, I., Lee, J.-N., and Jarvenpaa, S. 2015. "Understanding Strategic Innovation in IT and Business Process Outsourcing," *Journal of Strategic Information Systems* (24:4), pp. 251-254.
- Kuhn, M. 2008. "Daimler 2.0?" Retrieved 02/23/2016, from <http://blog.daimler.de/2008/08/07/daimler-20/>
- Kuhn, M. 2009. "Business Innovation Community: 10.000 Mitglieder nach 1 Jahr." Retrieved 02/23/2016, from <http://blog.daimler.de/2009/09/01/business-innovation-community-10000-mitglieder-nach-1-jahr/>
- Laari-Salmela, S., Kinnula, M., and Väyrynen, K. 2015. "Participation in Open Strategy: Sharing Performances and Opening Backstages in Acts of Strategy," *Academy of Management Meeting (AOM)*, Vancouver, Canada.
- Langley, A., Smallman, C., Tsoukas, H., and Van de Ven, A. H. 2013. "Process Studies of Change in Organization and Management: Unveiling Temporality, Activity, and Flow," *Academy of Management Journal* (56:1), pp. 1-13.
- Lavoie, J. 2015. "Nobody's as Smart as Everybody: Unleashing Individual Brilliance and Aligning Collective Genius." Retrieved 02/13/2016, from <http://www.managementexchange.com/story/nobody's-smart-everybody-unleashing-quiet-genius-inside-organization>
- Leichsenring, H. J. 2012a. "Durch Crowdsourcing zu Neuen Servicestandards." Retrieved 02/23/2016, from <http://www.der-bank-blog.de/durch-crowdsourcing-zu-neuen-servicestandards/kundenservice/5834/>
- Leichsenring, H. J. 2012b. "Neue Servicestandards durch Crowdsourcing." Retrieved 02/23/2016, from <http://www.der-bank-blog.de/neue-servicestandards-durch-crowdsourcing/kundenservice/5844/>
- Levina, N. 2005. "Collaborating on Multiparty Information Systems Development Projects: A Collective Reflection-in-Action View," *Information Systems Research* (16:2), pp. 109-130.
- Levina, N., and Arriaga, M. 2014. "Distinction and Status Production on User-Generated Content Platforms: Using Bourdieu's Theory of Cultural Production to Understand Social Dynamics in Online Fields," *Information Systems Research* (25:3), pp. 468-488.
- Liinamaa, K., Nuutinen, J. A., Sutinen, E., and Vanharanta, H. 2004. "Collaborative Strategic Planning On-line," *PsychNology Journal* (2:2), pp. 242-254.
- Lombardi, G. 2014. "Unilever Leaders Chat Strategy with Employees." Retrieved 02/23/2016, from <https://www.simply?communicate.com/case?studies/unilever/unilever?leaders?chat?strategy?employees>
- Lübbermann, U. 2016. "Premium - Das Betriebssystem." *PREMIUM* Retrieved 09/01/2016, from <http://www.premium-cola.de/betriebssystem>
- Luedicke, M. K., Husemann, K. C., Furnari, S., and Ladstaetter, F. 2016. "Radically Open Strategizing: How Premium Cola Collective Takes Open Strategy to the Extreme," *Long Range Planning*, <http://dx.doi.org/10.1016/j.lrp.2016.07.001>

- Lundmark, E. 2013. "Invite Everyone to Evaluate the Strategy." Retrieved 02/23/2016, from <http://www.mixhackathon.org/hackathon/contribution/invite-everyone-evaluate-strategy>
- Majchrzak, A., and Malhotra, A. 2013. "Towards an Information Systems Perspective and Research Agenda on Crowdsourcing for Innovation," *Journal of Strategic Information Systems* (22:4), pp. 257-268.
- Malhotra, A., Majchrzak, A., and Niemiec, R. M. 2016. "Using Public Crowds for Open Strategy Formulation: Mitigating the Risks of Knowledge Gaps," *Long Range Planning*, <http://dx.doi.org/10.1016/j.lrp.2016.07.001>.
- Mantere, S., and Vaara, E. 2008. "On the Problem of Participation in Strategy: A Critical Discursive Perspective," *Organization Science* (19), pp. 341-358.
- Marabelli, M., and Galliers, R. D. 2016. "A Reflection on Information Systems Strategizing: The Role of Power and Everyday Practices," *Information Systems Journal*.
- Markus, M., and Robey, D. 1988. "Information Technology and Organizational Change: Causal Structure in Theory and Research," *Management Science* (34:5), pp. 583-598.
- Matzler, K. 2014. "Open Strategy." Retrieved 02/23/2016, from <http://www.impconsulting.com/en/feature-january-february-2014>
- Matzler, K., Füller, J., Hutter, K., Hautz, J., and Stieger, D. 2014a. "Open Strategy: Towards a Research Agenda," *European Conference on Information Systems (ECIS)*, Tel Aviv.
- Matzler, K., Füller, J., Koch, B., Hautz, J., and Hutter, K. 2014b. "Open Strategy - A New Strategy Paradigm?," K. Matzler, H. Pechlaner and B. Renzl (eds.). Wiesbaden: Springer, pp. 37-55.
- Merali, Y., Papadopoulos, T., and Nadkarni, T. 2012. "Information Systems Strategy: Past, Present, Future?," *Journal of Strategic Information Systems* (21:2), pp. 125-153.
- Merchant, N. 2010. *The New How - Creating Business Solutions Through Collaborative Strategy*. Sebastopol: O'Reilly.
- Mintzberg, H. 1994. *The Rise and Fall of Strategic Planning*. New York, NY, USA: Free Press.
- Mintzberg, H., and Waters, J. 1985. "Of Strategies, Deliberate and Emergent," *Strategic Management Journal* (6:3), pp. 257-272.
- Mirabeau, L., and Maguire, S. 2014. "From Autonomous Strategic Behaviour to Emergent Strategy," *Strategic Management Journal* (35), pp. 1202-1229.
- Montgomery, C. A. 2008. "Putting Leadership Back into Strategy," *Harvard Business Review* (86:1), pp. 54-60.
- Morrison, K. 2009. "The Implications of 'Jam' and Other Ideation Technologies for Organisational Decision Making," *Journal of Cultural Science* (2:1), pp. 1-9.
- Morton, J. 2016. "Open Strategy: Rhetoric or Reality?," in: *OpenSym '16*. Berlin, Germany.
- Morton, J., and TBD. 2016. "Material Tools, Strategic Arenas and Temporal Openness: Emerging Phenomena Linking Information Systems and Strategy Practice Research," in: *ifip 8.2*. Dublin, Ireland.
- Morton, J., Wilson, A., and Cooke, L. 2015a. "Collaboration and Knowledge Sharing in Open Strategy Initiatives," *iFutures*, Loughborough, UK.
- Morton, J., Wilson, A., and Cooke, L. 2015b. "Opening Strategy Through Jamming: Exploring the Process," in: *School of Business and Economics*. Loughborough, UK: University of Loughborough.
- Morton, J., Wilson, A., and Cooke, L. 2016a. "Exploring the Roles of External Facilitators in IT-Driven Open Strategizing," in: *OpenSym '16*. Berlin, Germany.
- Morton, J., Wilson, A., and Cooke, L. 2016b. "Open Strategy Initiatives: Open, IT-Enabled Episodes of Strategic Practice," in: *Pacific Asia Conference on Information Systems (PACIS)*. Chiayi, Taiwan.

- Mulay, A. 2011. "Participatory Strategic Planning System for Complex Service Environments," in: *Department of Computer Science and Engineering*. Columbus, USA: Ohio State University, pp. 1-68.
- Nayar, V. 2010. *Employees first, customers second: Turning conventional management upside down*. Boston, USA: Harvard Business Press.
- Newstead, B., Lanzerotti, L. 2010. "Can you open-source your strategy?," *Harvard Business Review* (32).
- Nicolini, D. 2009. "Zooming In and Out: Studying Practices by Switching Theoretical Lenses and Trailing Connections," *Organization Studies* (30:12), pp. 1391-1418.
- Nicolini, D. 2013. *Practice Theory, Work, and Organization: An Introduction*. Oxford, UK: Oxford University Press.
- O'Reilly, T. 2005. "What is Web 2.0." Retrieved 02/23/2016, from <http://oreilly.com/web2/archive/what-is-web-20.html>
- Orlikowski, W. J. 2000. "Using Technology and Constituting Structures: A Practice Lens for Studying Technology in Organizations," *Organization Science* (11:4), pp. 404-428.
- Orlikowski, W. J. 2002. "Knowing in Practice: Enacting a Collective Capability in Distributed Organizing," *Organization Science* (13:3), pp. 249-273.
- Orlikowski, W. J., and Baroudi, J., J. 1991. "Studying Information Technology in Organizations: Research Approaches and Assumptions," *Information Systems Research* (2:1), pp. 1-28.
- Orlikowski, W. J., and Scott, S. V. 2008. "Sociomateriality: Challenging the Separation of Technology, Work and Organization," *The Academy of Management Annals* (2:1), pp. 433-474.
- Passig, D., Cohen, M., Bareket, B., and Morgenstern, O. 2015. "Crowd-Deliberation as an Organizational Problem Solving Tool," *International Journal of Manpower* (36:7), pp. 1124-1143.
- Peppard, J., Galliers, R. D., and Thorogood, A. 2014. "Information Systems Strategy as Practice: Micro Strategy and Strategizing for IS," *The Journal of Strategic Information Systems* (23:1), pp. 1-10.
- Pettigrew, A. M., Thomas, H., and Whittington, R. 2001. *Handbook of Strategy and Management*. Thousand Oaks: Sage Publications.
- Pittz, T. G., and Adler, T. 2016. "An Exemplar of Open Strategy: Decision-Making Within Multi-Sector Collaborations," *Management Decision* (54:7), pp. 1595-1614.
- Plesner, U., and Gulbrandsen, I. T. 2015. "Strategy and New Media: A Research Agenda," *Strategic Organization* (13:2), pp. 153-162.
- Powley, E. H., Fry, R. E., Barrett, F. J., and Bright, D. S. 2004. "Dialogic Democracy Meets Command and Control: Transformation Through the Appreciative Inquiry Summit," *Academy of Management Executive* (18:3), pp. 67-80.
- Puranam, P., Alexy, O., and Reitzig, M. 2014. "What's "New" About New Forms of Organizing," *Academy of Management Review* (39:2), pp. 162-180.
- Rapp, M., Rhomberg, M., Koch, G., and White, K. 2016. "A New Path for the Public Sector: How to Design a Co-created Strategy in Higher Education," in: *International Conference on Electronic Participation (ePart)*. Guimarães, Portugal.
- Reckwitz, A. 2002. "Towards a Theory of Social Practice: A Development in Cultural Theorizing," *European Journal of Social Theory* (5:2), pp. 243-263.
- Riemer, K., and Johnston, R. 2014. "Rethinking the Place of the Artefact in IS Using Heidegger's Analysis of Equipment," *European Journal of Information Systems* (23:3), pp. 273-288.
- Rousseau, D. M., Manning, J., and Denyer, D. 2008. "Evidence in Management and Organizational Science: Assembling the Field's Full Weight of Scientific Knowledge Through Syntheses," *Academy of Management Annals* (2:1), pp. 475-515.
- Rowe, F. 2014. "What Literature Review is Not: Diversity, Boundaries and Recommendations," *European Journal of Information Systems* (23:3), pp. 241-255.

- Sandberg, J., Rouleau, L., Langley, A., Tsoukas, H., and Collins, H. 2015. "Call for Papers: Skillful Performance: Enacting Expertise, Competence, and Capabilities in Organizations," *International Symposium on Process Organization Studies (PROS)*, Kos, Greece.
- Sandberg, J., and Tsoukas, H. 2011. "Grasping the Logic of Practice: Theorizing Through Practical Rationality," *Academy of Management Review* (36:2), pp. 338-360.
- Sandberg, J., and Tsoukas, H. 2015. "Practice Theory: What it is, its Philosophical Base, and What it Offers Organization Studies," in *The Routledge Companion to Philosophy in Organization Studies*, R. Mir, H. Willmott and M. Greenwood (eds.). London, UK: Routledge.
- Santalainen, T. J., and Baliga, R. B. 2015. "Making Open Strategizing Real: Evidence From Expert Organizations," *Strategic Management Society Annual Conference (SMS)*, Madrid, Spain.
- Scada, J. 2004. *Cartesian Metaphysics: The Scholastic Originis of Modern Philospohy*. Cambridge, UK: Cambridge University Press.
- Schatzki, T. R., Knorr-Cetina, K., and von Savigny, E. 2001. *The Practice Turn in Contemporary Theory*. New York, USA: Routledge.
- Schlagwein, D., and Bjørn-Andersen, N. 2014. "Organizational Learning with Crowdsourcing: The Revelatory Case of LEGO," *Journal of the Association for Information Systems* (15), pp. 754-778.
- Schryen, G. 2015. "Writing Qualitative IS Literature Reviews – Guidelines for Synthesis, Interpretation and Guidance of Research," *Communications of the Association for Information Systems* (37:1), pp. 286-235.
- Schwarz, A., Mehta, M., Johnson, N., and Chin, W. W. 2007. "Understanding Frameworks and Reviews: A Commentary to Assist us in Moving our Field Forward by Analyzing our Past," *The Data Base of Advances in Information Systems* (38:3), pp. 29-50.
- Scott, S. V., and Orlikowski, W. J. 2013. "Sociomateriality—Taking the Wrong Turning? A Response to Mutch," *Information and Organization* (23:2), pp. 77-80.
- Seidl, D., Dobusch, L., Splitter, V., and Whittington, R. 2016. "Open Strategy Network." Retrieved 08/15/2016, from <http://openstrategynetwork.com/>
- Seidl, D., Whittington, Richard. 2014. "Enlarging the strategy-as-practice research agenda: towards taller and flatter ontologies," *Organization Studies* (35:10).
- Sibony, O. 2012. "Collaborative Strategic Planning," *McKinsey Quarterly* (49:2), pp. 94-97.
- Stein, M.-K., Newell, S., Wagner, E. L., and Galliers, R. D. 2014. "Felt Quality of Sociomaterial Relations: Introducing Emotions Into Sociomaterial Theorizing," *Information and Organization* (24:3), pp. 156-175.
- Stieger, D., Matzler, K., Chatterjee, S., and Ladstaetter-Fussenegger, F. 2012. "Democratizing Strategy: How Crowdsourcing can be Used for Strategy Dialogues," *California Management Review* (54:4).
- Tackx, K., and Verdin, P. 2014. "Can Co-Creation Lead to Better Strategy? An Exploratory Research," *Universite Libre de Bruxelles, Working Papers Working Papers CEB: 14-027*.
- Tate, M., Furtmueller, E., Everman, J., and Bandara, W. 2015. "Introduction to the Special Issue- The Literature Review in Information Systems," *Communications of the Association for Information Systems* (37:1), pp. 102-111.
- Tavakoli, A., and Schlagwein, D. 2016. "A Review of the Use of Practice Theory in Information Systems Research," *Pacific Asia Conference on Information Systems (PACIS)*, Chiayi, Taiwan.
- Tavakoli, A., Schlagwein, D., and Schoder, D. 2015. "Open Strategy: Consolidated Definition and Processual Conceptualization," in: *International Conference on Information Systems (ICIS)*. Fort Worth, Texas, USA.

- Tavakoli, A., Schlagwein, D., and Schoder, D. 2016. "Lifecycle of Strategy Practices: The Case of CarCo's Open Strategy Online Community," in: *International Conference on Information Systems (ICIS)*. Dublin, Ireland.
- Thambar, P. J. 2014. "The Role of Management Control Systems in Open Strategy Processes," in: *Management Accounting Department*. Sydney, Australia: University of Technology, Sydney.
- Thambar, P. J., Brown, D. A., and Sivabalan, P. 2015. "Management Control Systems and Open Strategy Processes – A Resource Dependence Perspective," University of Technology, Sydney, Sydney, Australia, pp. 1-58.
- Thompson, M. 2011. "Ontological Shift or Ontological Drift? Reality Claims, Epistemological Frameworks, and Theory Generation in Organization Studies," *Academy of Management Review* (36:4), pp. 754-773.
- Tsoukas, H. 2010. "Practice, Strategy Making and Intentionality: A Heideggerian Onto-Epistemology for Strategy as Practice," in *Cambridge Handbook of Strategy as Practice*, D. Golsorkhi, L. Rouleau, D. Seidl and E. Vaara (eds.). Cambridge, UK: Cambridge University Press, pp. 47-62.
- Tsoukas, H., and Chia, R. 2002. "On Organizational Becoming: Rethinking Organizational Change," *Organization Science* (13:5), pp. 567-582.
- UNSW. 2015. "UNSW 2025 Strategy: Our Strategic Priorities and Themes," UNSW Australia, Sydney, Australia, pp. 1-25.
- Vaara, E., and Whittington, R. 2012. "Strategy-as-Practice: Taking Social Practices Seriously," *The Academy of Management Annals* (6:1), pp. 285-336.
- van de Ven, A. H. 1992. "Suggestions for Studying Strategy Process: A Research Note," *Strategic Management Journal* (13), pp. 169-191.
- van der Steen, M. 2016 (online/in press). "Managing Bottom up Strategizing: Collective Sensemaking of Strategic Issues in a Dutch Bank," *Long Range Planning*, <http://dx.doi.org/10.1016/j.lrp.2016.02.003>.
- Virgin. 2011. "We're All Ears." Retrieved 02/23/2016, from <http://about.virginmedia.com/ourworld/sustainability>
- vom Brocke, J., Simons, A., Riemer, K., Niehaves, B., Plattfaut, R., and Cleven, A. 2015. "Standing on the Shoulders of Giants: Challenges and Recommendations of Literature Search in Information Systems Research," *Communications of the Association for Information Systems* (37:1), pp. 205-224.
- von Krogh, G. 2012. "How Does Social Software Change Knowledge Management? Toward a Strategic Research Agenda," *Journal of Strategic Information Systems* (21:2), pp. 154-164.
- Weber, M. 1904. Die „Objektivität“ sozialwissenschaftlicher und sozialpolitischer Erkenntnis. *Archiv für Sozialwissenschaft und Sozialpolitik* (19, 1), p. 22-87
- Weber, R. 1997. *Developing Ontological Foundations of Information Systems* Blackburn, Australia: Buscombe Vicprint.
- Weber, R. 2012. "Evaluating and Developing Theories in the Information Systems Discipline," *Journal of the Association for Information Systems* (13:1), pp. 1-30.
- Webster, J., and Watson, R. T. 2002. "Analyzing the Past to Prepare for the Future: Writing a Literature Review," *MIS Quarterly* (25:2), pp. xiii-xxiii.
- Werle, F., and Seidl, D. 2012. "Inter-Organizational Strategizing as Extension of Sensemaking Capacities," University of Zurich, Department of Business Administration.
- Whitehurst, J. 2011. "How Red Hat Found its Mission - The Open Source Way." Retrieved 02/23/2016, from <http://www.managementexchange.com/blog/how-red-hat-used-open-source-way-develop-company-mission>
- Whittington, R. 1996. "Strategy as Practice," *Long Range Planning* (29:5), pp. 731-735.
- Whittington, R. 2006. "Completing the Practice Turn in Strategy Research," *Organization Studies* (27:5), pp. 613-634.

- Whittington, R. 2007. "Strategy Practice and Strategy Process: Family Differences and the Sociological Eye," *Organization Studies* (28:10), pp. 1575-1586.
- Whittington, R. 2014. "Information Systems Strategy and Strategy-as-Practice: A Joint Agenda," *The Journal of Strategic Information Systems* (23:1), pp. 87-91.
- Whittington, R. 2015. "The Massification of Strategy," *British Journal of Management* (26), pp. 13-16.
- Whittington, R., Cailluet, L., and Yakis-Douglas, B. 2011. "Opening Strategy: Evolution of a Precarious Profession," *British Journal of Management* (22:3), pp. 531-544.
- Whittington, R., Hautz, J., and Seidl, D. 2014. "Call for Papers: Open Strategy: Transparency and Inclusion in Strategy Processes," *Long Range Planning* (Special Issue Call for Papers).
- Wolf, C., and Floyd, S. W. 2013. "Strategic Planning Research: Toward a Theory-Driven Agenda," *Journal of Management* (March), pp. 1-35.
- Wulf, A., and Butel, L. 2016. "Knowledge Sharing and Innovative Corporate Strategies in Collaborative Relationships: The Potential of Open Strategy in Business Ecosystems," *International Conference on Decision Support System Technology*: Springer, pp. 165-181.
- Yakis-Douglas, B., Angwin, D., Ahn, K., and Meadows, M. 2016 (online/in press). "Opening M&A Strategy to Investors: Predictors and Outcomes of Transparency During Organizational Transition," *Long Range Planning*, <http://dx.doi.org/10.1016/j.lrp.2016.06.007>.
- Yeane, J. 2011. "Democratizing the Corporate Strategy Process at Red Hat." Retrieved 02/23/2016, from <http://www.managementexchange.com/story/democratizing?corporate?strategy?process?red?hat>