

Title: Open Strategy and IT: A review and research agenda

Sub-theme 50: Open Strategy: Practices, Perspectives and Problems

Josh Morton¹

Alex Wilson¹ (corresponding author)

a.wilson8@lboro.ac.uk

Robert Galliers²

Marco Marabelli³

- 1. School of Business and Economics, Loughborough University, Loughborough, LE11 3TU, UK**
- 2. Bentley University, 175 Forest Street, Waltham, Massachusetts 02452, USA and School of Business and Economics, Loughborough University, Loughborough, LE11 3TU, UK**
- 3. Bentley University, 175 Forest Street, Waltham, Massachusetts 02452, USA and Warwick Business School, University of Warwick, Scarman Rd, Coventry CV4 7AL, UK**

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Introduction

Open strategy has drawn increasing attention in recent years. A growing number of studies have captured greater transparency and heightened inclusion in the strategic practices of contemporary organisations (Whittington et al., 2011; Hautz et al., 2017). It is often Information Technology (IT) that can facilitate involvement of a wider range of stakeholders in the generation of strategic content and knowledge (Chesbrough and Appleyard, 2007), and in the practice of strategy (Whittington et al., 2011; Whittington, 2014). However, despite the widely-recognised role of such technology as social media (Huang et al., 2013; Baptista et al., 2017) in driving openness in strategy, literature with an explicit focus on IT has been surprisingly sparse to date (Tavakoli et al., 2015; 2017). Thus far, most papers have been published in Management and Strategic Management outlets, including a recent special issue on open strategy in *Long Range Planning* (e.g., Birkinshaw, 2017; Hautz et al., 2017). Additionally, much of the research to-date has focused on dimensions of openness; inclusiveness and transparency to provide much-needed analysis of open strategy. In consequence, IT is an often present, yet silent, partner in studies of open strategy.

Although Whittington et al. (2011) identify technology as a potential driver for openness in strategic practice, there is only limited reference throughout the literature on the nature of the important role played by IT in open strategy. The intricacies of *how* IT enables open strategy remain ambiguous and underdeveloped. More recently, a clear link between open strategising and the organisational use of IT has

been identified (e.g., Amrollahi et al., 2014; Tavakoli et al., 2017). Tavakoli et al. (2015, p.1-5; 2017) provide an important step in positioning IT as a core enabler for open strategy, by integrating 'IT-enabledness' with the dimensions of inclusion and transparency in an attempt to provide a "consolidated definition" of open strategy. However, while this places IT as essential in much open strategy work, it does so by holding open strategy cases against different lenses of strategic thought. The authors establish open strategy as a practice, and invite closer inspection of how the sociomaterial ensemble of IT and open strategic practices interact. Therefore, future research must go further to craft a more comprehensive and explicit research agenda by clarifying the types of IT and how they are used in open strategy. This paper builds upon these important contributions by invoking established concepts and theories in strategy and strategic information systems (IS).

Further, this paper aims to examine and review how various information and communication technologies are employed to support [open] strategic practice with the intention of elevating IT from the position of silent partner and, as a result, to formulate a research agenda that can help further explicate the role of IT in open strategising. First, the paper identifies the types of IT used for open strategy, arguing that these are yet to be outlined in great depth in the literature to date, and remain 'blackboxed'. Second, the paper builds on the outlining of different IT types to illuminate four thematic areas; i) scope, ii) scale, iii) suitability, and iv) structure, which connect the aforementioned IT types with IT in-use for open strategy. We review these areas in-line with existing open strategy literature. The paper concludes with a research agenda, further developing the thematic areas and emphasising potential research directions consistent with calls for a 'synergy' between strategy

practice and IS research (Peppard et al., 2014; Whittington, 2014).

Types of IT used for open strategy

The majority of literature to date tends to 'blackbox' the types of IT in-use in open strategy work. Common epithets include "online platforms" (e.g., Stieger et al., 2012; Malhotra et al., 2017), or "web 2.0 technologies" (Matzler et al., 2014a; Amrollahi and Ghapnchi, 2016). Additionally, open strategy has been equated with crowdsourcing or open sourcing (e.g., Newstead and Lanzerotti, 2010; Stieger et al., 2012; Amrollahi et al., 2014; Matzler et al., 2014a; Aten and Thomas, 2016), and "social networks and collaboration software" (Stieger et al., 2012, p.45) have been emphasised as key to enabling actors to participate in open discussions, contribute ideas, and thus collectively contribute to and develop new strategies (Matzler et al., 2014b).

However, a number of studies have shown promise in positioning the role of IT more centrally in relation to enabling open strategic inclusion and transparency, going beyond the aforementioned broader examination of IT in relation to crowd- and open-sourcing phenomena. For example, the inclusive use of Wikis in strategy has been studied (Dobusch and Kapeller, 2013; Baptista et al., 2017), whilst IBM's specific strategy of 'jamming' events has also been explored (Whittington et al., 2011; Morton et al., 2016a; Tavakoli et al., 2017). Others have identified abundant types of social media used for open strategising (Baptista et al., 2017), whilst research has also focused on more specific examples of IT used to enable openness in strategy Blogging platforms (Whittington et al., 2011; Morton et al., 2016b; Gegenhuber and Dobusch, 2017), particularly as a means of being transparent about strategy, and

sharing strategic content. Online surveys and email and mailing lists are noted as a means of collecting strategy ideas and opinions and discussing strategy over time (Dobusch and Kapeller, 2013; Luedicke et al., 2017). Idea contest platforms (Matzler et al., 2014b; Hutter et al., 2017), as used for strategic inclusion, resonate closely with IT studied throughout much of the open innovation literature and stress the potential importance of incentivisation in open strategy activities (e.g., Piller and Walcher, 2006; Bullinger et al., 2010). Less commonly mentioned forms of IT include employee listening programmes, used to conduct electronic interactive interviews with stakeholders, as a means of demonstrating openness by listening to the strategic views of employees (Baptista et al., 2017). A summary of the types of IT used for open strategy in current literature is shown below (Table 1), emphasising the broad and varied nature of how types of IT are situated in the open strategy literature.

Type of IT	IT use for open strategy	Example Studies
Blogging and microblogging platforms	Used by top management to communicate with and include stakeholders in strategic discussions	Whittington et al. (2011); Morton et al (2016b); Gegenhuber and Dobusch (2017)
Crowdsourcing platforms	Tools which specifically identify with following a crowdsourcing or open sourcing model/process/design	Newstead and Lanzerotti, (2010); Stieger et al. (2012); Amrollahi et al. (2014); Amrollahi and Ghapnchi (2016); Aten and Thomas (2016); Malhotra et al. (2017)
Email/ mailing lists	Used as a means of discussing strategy with stakeholders, and collecting strategic ideas	Dobusch and Kapeller, (2013); Luedicke et al. (2017)
Employee listening programmes	Used by managers to electronically capture and record employee thoughts on strategic issues	Baptista et al. (2017)
Idea contest/competition platforms	Designed to incentivise participation in strategic idea generation	Hutter et al. (2017)

Innovation Jams/strategy jams	Specific use of IBM jamming process and associated IT	Whittington et al. (2011); Matzler et al. (2014a); Whittington (2015); Morton et al. (2016a); Tavakoli et al. (2017)
Online surveys	Used as a means of collecting strategic ideas and opinions of stakeholders	Dobusch and Kapeller, (2013); Morton et al. (2016b)
Social software/social media platforms	Tools which are identified as social software platforms, social media or IT platforms generally	Morton et al. (2016a); Baptista et al. (2017)
Wiki platforms	Used specifically for strategic idea generation, and publishing of strategic outputs (e.g., final strategic plans)	Dobusch and Kapeller, (2013); Baptista et al. (2017)

Table 1: Types of IT used for open strategy

Thus, the open strategy literature is already rich with meaningful theoretical and practical insights, and this outlining of IT types provides a useful first step in expanding the meaning of IT use more specifically in relation to open strategy.

Thematic areas and IT in-use for open strategy: Open strategy scope, scale, suitability, and structure

To review the phenomenon of in-use for open strategy, we outline four thematic areas which further connect open strategy and IT types with IT in-use. The first area explores the ‘scope’ of open strategy activities in relation to IT. Secondly, ‘scale’ considers the role of IT in relation to participation in open strategising. Third, ‘suitability’ examines why particular types of IT might be used to enable open strategy, and lastly ‘structure’ links open strategy and IT with notions of strategy content, particularly in relation to ownership and control in strategising. Ultimately, we propose that these four areas of concern, as summarised in Table 2, warrant deeper

exploration and serve as a platform to develop further research at the intersection of strategy and the enabling role of technology. We develop these areas to review and identify latent gaps as the second important stage towards crafting a comprehensive research agenda for open strategy and IT.

	Thematic areas for open strategy and IT	Key indicative themes
IT-based factors affecting open strategy	Scope- IT and internal and external forms of openness	Further understanding the relationship between IT and the different forms of internal and external openness which it enables. Significant here is positioning why and how particular IT-driven open strategy practices might operate in relation to such boundaries, and whether they cover part of an organisation, the whole organisation, or operate between multiple organisations.
	Scale- IT and Participation	Exploring the scale of participation and how and why this varies. Table 1 shows there is variation in terms of how many people across different organisational functions participate in open strategy practice. The role of IT in delimiting the scale of open strategy is also a pivotal theme.
	Suitability- Adopting IT and analogue tools for enabling openness	Explicating why organisations might adopt particular technologies, and thus central here is the propriety of different IT tools for enabling openness in strategy, and understanding why certain strategising tools are used to enable openness in different situations or contexts. This might also include how IT is coupled with more traditional, analogue forms of strategising, in contrast to suggestions that IT is always the central enabler for open strategising activity.
	Structure- Open strategy, IT and strategy content	The significance of structure in relation to open strategy and IT can help to unpack concepts of ownership in open strategy in relation to strategising and the generation of strategy contents through IT. Thus, important here are notions of IT, open strategy and strategy content; specifically towards recognising who holds influence and

		control of strategy when strategic content is open and changeable via IT.
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Table 2: Thematic areas for Open Strategy and IT

Scope - IT and internal and external forms of openness

The ‘scope’ of open strategy warrants attention so as to further understand the relationship between IT and the different forms of internal and external openness which it enables. Inclusiveness and transparency in open strategy literature emphasise internal and external organisational boundaries, and whether IT is deployed to enable openness across internal or external boundaries is indeed a central consideration (Chesbrough and Appleyard, 2007; Whittington et al., 2011). Birkinshaw (2017; p.424) presents a framework to highlight aspects of strategy that can become open (Figure 1). Both within and across these aspects, there are choices to be made concerning how particular IT-driven open strategy practices might operate and whether they cover part of an organisation, the whole organisation, or operate between multiple organisations.

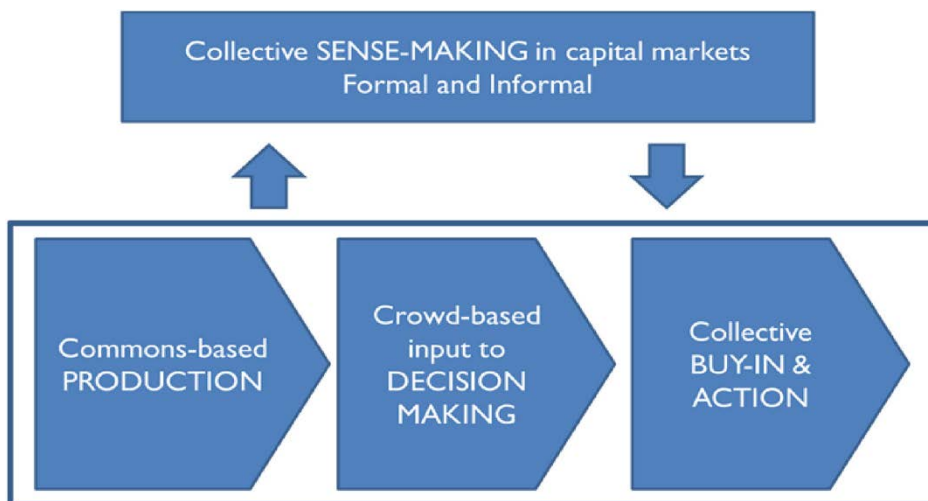


Figure 1: Open Strategy Framework (Birkinshaw, 2017)

The scope of open strategy practice and IT is important because types of IT are used in different ways in relation to organisational boundaries, for example, in terms of commons-based production (Chesbrough and Appleyard, 2007). Others have examined how IT is used to provide input to decision making within, and beyond, organisational boundaries (Morton et al., 2016a; Baptista et al., 2017). The scope of open strategy practice matters therefore as to how different types of IT might enable internal and/or external openness, and this is consistent with theoretical contributions in literature which have explored how such types of openness might emerge (both voluntarily and involuntarily) through adoption of social IT (Haefliger et al., 2011; von Krogh, 2012).

We also recognise that accounting for these forms of openness remains rudimentary in the current literature, and could be translated into more specific modes of open strategy enabled by IT (Gegenhuber and Dobusch, 2017), which might extend notions of inclusiveness and transparency along a continuum of degree of openness in relation to these dimensions (Hautz et al., 2017). Considering the array of IT used for open strategy, as we have detailed in Table 1, questions of how IT enables certain directional forms of communication and collaboration between strategic actors is also potentially interesting as a means of further unpacking the concept of IT use in open strategy, as particular types of IT might enable different dynamics of activity to occur as mediated by IT (Henfridsson and Lind, 2014; Jarzabkowski and Wolf, 2015).

Scale - IT and participation

The 'scale' of open strategy praxis and practice in (or between) organisations is often at the very heart of the motivation to develop open strategy. Put simply, this involves

the inclusion of different (i.e. non-elite) and more stakeholders in aspects of strategising and/or rendering these aspects visible to many more organisational stakeholders (Whittington et al., 2011). Whilst variant types of participation have been portrayed in open strategy work to date (Hutter et al., 2017), we suggest it is pertinent to not only explore who is involved in open strategising, but to also understand what role differing types of IT have in enabling participation (Tavakoli et al., 2015; Hutter et al., 2017). As such, participation in open strategy might be understood numerically in terms of diversity in the scale of user participation (Surowieki, 2004; Koch et al., 2013). Examples in the open strategy literature, such as focus on strategy 'jams', have documented situations where there have been tens of thousands of participants in strategising (e.g., Whittington et al., 2011; Matzler et al., 2014a), whilst other examples have analysed much smaller scale involvement (e.g., Amrollahi and Ghapnchi, 2016; Morton et al., 2016b). This focus might yield insight into intricacies of how IT is used to enable different levels of participation and across different aspects of open strategising (i.e. Figure 1 above). There is also the potential to explore how different types of IT enable strategic inclusiveness and transparency of varying scale. Indeed, the role of strategic actors outside of established internal and external dimensions increasingly require more attention, including how external actors might provide open strategy services (Whittington et al., 2011) or how types of IT for open strategy are delivered by facilitators of open strategy (Morton et al., 2016b; Tavakoli et al., 2017). Examples in the existing literature have included organisations working with consultancy firms to create online strategy platforms (Newstead and Lanzerotti, 2010; Tavakoli et al., 2017), and the facilitation of strategic discussions hosted by volunteer interest groups (Morton et al.,

2016b). Thus, exploring differences in IT use according to scale of participation, or how IT might be adapted to enable participation of different practitioners would enhance understanding of the field.

Suitability- IT and analogue tools for enabling openness

The theme of 'suitability' in relation to open strategy and IT also warrants closer attention. Current literature has done little to explore why certain types of IT are used, and why organisations might adopt particular technologies for open strategising to take place. Whilst the themes of scope and scale imply the possibility for managers to make decisions about the design or nature of openness, the theme of suitability addresses why organisations might adopt particular types of IT in certain situations based on scale of participation and scope of activities involved. Within the theme of suitability, there should be deeper interrogation of the propriety of different IT tools for enabling openness in strategy, and also understanding of why certain IT based strategising practices are used to enable openness throughout different situations or contexts (Tavakoli et al., 2017). In theory, it should be that openness stems from the use of more traditional, analogue forms of strategising (such as strategy away days, board meetings, or PowerPoint presentations) incumbent within organisations (Baptista et al., 2017), or indeed a combination of IT and analogue tools. However, more research is required to explore this combination of IT and analogue tools being used for open strategy, such as through face-to-face and roundtable discussions (Dobusch and Kapeller, 2013; Friis, 2015), and strategy workshops (Santalainen and Baliga, 2014; Mack and Szulanski, 2017). Given the well-documented importance of IT in open strategy, furthering theoretical knowledge about particular choices of IT

and analogue means of strategising and their bundled features (Demir, 2015; Jarzabkowski and Kaplan, 2015) is significant, and also addresses deficient attention paid to the potential importance of analogue tools in open strategising activity (Baptista et al., 2017).

Structure- Open strategy, IT and strategy content

Lastly, the theme of organisational 'structure' concerns the challenges from open strategy which presents a vividly different approach to strategising. We use the term 'structure' to address the interplay between established, expected, and designed structures that pervade organisations and the variety of efforts we have seen to produce open strategies. More specifically, this area can help to unpack concepts of structure which might be blurred by openness in strategy, including notions of ownership and generation of strategic content or knowledge transfer in relation to open strategising through the use of IT (Whittington et al., 2011; Luedicke et al., 2017). For example, Mack and Szulanski's (2017) study shows that the nature of open strategising is affected by structural characteristics of the organisation. They show contrasting approaches in terms of stakeholder inclusion compared to participation in centralised versus decentralised structures.

Indeed, the literature to date has indicated varied dynamics for how strategy is open in relation to emerging strategic content (Appleyard and Chesbrough, 2017; Tavakoli et al., 2017). Whilst some authors have indicated that openness through IT lies primarily in stages of ideation in open strategy (Whittington et al., 2011; Matzler et al., 2014a), others have emphasised openness expanding to the potential ownership in decision making processes (Mount and Pandza, 2016; Luedicke et al., 2017).

Despite this, content has been illuminated as an area which requires further attention in the open strategy domain, particularly by going beyond particularities of open strategising processes and towards focus on the way in which openness affects the content of strategy (Hautz et al., 2017). Thus, endeavours here might examine more closely the salient organisational structures with regard to who holds influence and control of strategy when strategic content is open and changeable via IT (von Krogh, 2012).

Additionally, there has been recognition of different 'branches' of open strategy research, including a content branch interested in how organisations might sustain themselves economically through openness (Chesbrough and Appleyard, 2007; Appleyard and Chesbrough, 2017). Within this distinction, there also remains conjecture as to whether open strategy initiatives' relationship with strategy are passive or active (Hutter et al., 2017). From our interpretation of the current open strategy literature, we suggest that further research should be more specifically guided towards whether the aim of strategising of new contents relates directly to organisational or operational levels, and whether contents are directly strategic (Whittington et al., 2011; Luedicke et al., 2017) or relate more indirectly to processes such as innovation and business model renewal (Chesbrough and Appleyard, 2007; Stieger et al., 2012; Matzler et al., 2014a). The role of IT in enabling these different types of strategy content through strategising is also underrepresented, and thus the question of how IT-driven open strategy unlocks types of content relating to different structures and levels of strategy in organisations remains nascent.

In sum, the four themes of scope, scale, suitability, and structure offer a platform

from which to add breadth and depth of research which will help to more definitively unpack the significance of IT in open strategy. In the following sections we review the possible contribution from applying analytical lenses from both IS and strategic management.

Social and material perspectives on issues in IT-use and open strategy - A practice-based research agenda

The third step, and central to this paper, is to outline a more explicit programme for future work emerging from practices of IT in-use. To do so we present analytical lenses that will assist in addressing the themes outlined in the previous sections. Tavakoli et al. (2017, p.5) establish open strategy as a practice-based phenomenon; that is a phenomenon that is constituted “less on the deterministic functional properties of IT than on how IT artefacts are used (enacted) differently within different practices”. As such we craft a research agenda that places practice centre-stage, with the *doings* of practitioners forming the very nature of open strategy in organisations. For this research agenda practice is key to uncovering particular features of the open strategy and IT dynamic, consistent with social and material perspectives of practice theoretical work in strategy and IS phenomena (Peppard et al., 2014; Whittington, 2014).

To further develop this agenda, we turn to recent advancements where IS strategising scholars have brought to the surface the key role of everyday practices (e.g., Arvidsson et al., 2014; Peppard, et al., 2014; Whittington, 2014). Such research builds on the strategy-as-practice literature (e.g., Jarzabkowski, 2004; Vaara, 2012) and suggests that to fully understand how strategy unfolds ‘in practice’ it is relevant

to look at micro-level aspects (Johnson et al. 2003). To analyse IT use in open strategy at a granular level, the uptake of this joint strategy-as-practice and IS strategy agenda (Whittington, 2014; Peppard et al., 2014) would elevate IT from silent partner to a pivotal enabler in open strategising activity. In this vein, the explicating of open strategy and IT, as we have suggested, should account for practice-based aspects (i.e., '*doing* open strategy').

The practice-based view stems from ANT (actor-network theory) and post-feminist theories (e.g. Butler, 1988; Barad, 2003) and was brought to sociology and management fields first (Schatzi, 2001), before being widely adopted by IS scholars due to the pioneering work of Wanda Orlikowski (2007; 2008) and Suzanne Iacono (Orlikowski and Iacono, 2001), where 'sociomateriality' was first conceptualised as a theoretical perspective. This perspective (and theorising) accounts for people and 'objects' as equally important, and we emphasise that this can be adopted, in line with the IS literature, to unpack the significance of IT artifacts in (open) strategy praxis. In the case of IT artifacts, technology can be seen as being actively involved in organisational processes and practices rather than being a tool utilised by actors to achieve objectives in open strategy work. Further, the notion of sociomateriality can be an imperative lens through which the 'social' (people) and the 'material' (objects) in open strategy are viewed as interwoven rather than merely interacting, and are thus imbued in practices (Orlikowski, 2006). One of the most relevant contributions in this literature attributes agency to both social and material actors (Leonardi and Barley, 2010). This implies that both human and material agency have the ability to reconfigure organisational practices in the accomplishment of open strategy activity (Leonardi 2012).

Drawing on Foucault (1977; 1980) and Latour (1986), and particularly relevant to our practice based agenda, are notions that sociomaterial theorising acknowledges the relevant role of power, here conceived as a relational construct (Hardy 2014; 2015) that is produced through 'discourses' involving people and things (i.e., IT artifacts). Therefore, sociomaterial practices (entanglement between people and objects) are interwoven with power dynamics. For instance, technology adoption and exploitation for open strategising can be seen as a practical accomplishment (performed through various actions/interactions where the protagonists are human and material agency). Power is imbued in these sociomaterial practices as people adopt and exploit technologies (e.g., an enterprise system) to achieve organisational goals (Marabelli and Galliers, 2017), and this understanding can be extended to explicating how managers utilise IT in their experimenting with open approaches to strategy.

As has been explored in the preceding sections of this paper, open strategy research has gained much attention in the past decade, and a more nuanced understanding of the dynamics and dimensions of open strategy work, in particular, have been brought to fruition through scholarly research efforts, from across different disciplines. Whilst IT has been highlighted as being an imperative driver of openness in strategy, there has been a lack of systematic examination of the significance of different IT types in enabled open strategising to occur. The first area we propose for future research focuses on the scope of IT and open strategy. Here researchers might want to capture more exacting uses of IT for opening particular dynamics in strategy work. Future work might explore how IT enables openness in strategy to occur within and between different organisational boundaries (Chesbrough and Appleyard, 2007), and how IT enables certain directional forms of communication and collaboration between

strategic actors (Henfridsson and Lind, 2014). Further, important studies might position the ways in which IT-enabled open strategising contradicts traditional theories of strategy and the firm, and why scope of strategising might be relevant in such conjecture. Theoretical notions of power might also inform research programmes, particularly by explicating the differences in the role of power in dealing with top-down, planned, *and* bottom-up, emergent strategising practices.

The significance of scale in our review has emphasised work at the nexus of IT and participation. The potential to explore the scale of participation and how and why this varies is a central theme (Hutter et al., 2017). How the number of people participating in open strategy varies across different organisational functions is one notable route to understanding scale, whilst the role of IT in delimiting the scale of open strategy is also a pivotal theme. Further, scholars might extend extant research to explore what role external facilitators might have in enabling open strategy through IT (Whittington et al., 2011; Morton et al., 2016b), and different contextual settings will be key to understanding when open strategy requires scale to reach beyond internal boundaries to bring those outside of the firm into everyday practices (Johnson et al., 2003). The practice lens in strategy and IS work will be central to focus attention on what people do with particular technologies in their ongoing and situated activity (Orlikowski, 2007; Whittington, 2014), and future work exploring scale in open strategising might study IT in a tightly defined stream of praxis over time (Jarzabkowski and Wolf, 2015) to understand participation at key stages in the continuum from closed to open strategy (Hautz et al., 2017; Tavakoli et al., 2017).

Our discussions of the relevance of suitability aim to inspire future research towards

more direct questions relating to types of IT in open strategy. For example, we echo calls for closer attention to be paid to the material in strategy praxis (Peppard et al., 2014; Whittington., 2014; Tavakoli et al., 2017) and empirical studies could examine the material features of IT and how these are inherently interwoven with strategy practitioners in the transpiring of openness in strategy (Orlikowski, 2006). Our arguing for the significance of analogue tools in open strategy work to date means future endeavours might also explore what differences exist between use of IT and analogue tools for open strategising, and understand more clearly why particular tools are chosen for open strategy activity in different contexts. Ultimately, suggestions that there exists a clear opportunity for IS researchers to help as strategy-as-practice scholars understand the role of material technologies in strategy are pertinent here to extending this area of open strategy research (Whittington, 2014).

As we emphasised through our earlier discussions of structure, this thematic area raises a number of important directions for research. Key here might be understanding more specific intricacies of how IT mediates activity between organisational actors in the generation of new strategy contents (Jarzabkowski and Wolf, 2015). Research might also explore how IT driven openness alters power dynamics in strategy, consistent with research in IS work and sociomaterial theorising involving people and 'things' (Whittington, 2014; Marabelli and Galliers, 2017). The question of who holds influence and control of strategy when strategic content is open and changeable via IT is similarly relevant here, resonating with much research which has sought to understand the dynamics of open strategising (Morton et al., 2016a; Tavakoli et al., 2015; 2017). Other relevant ventures might

pose what types of strategy content emerge from IT-driven open strategising, and how IT unlocks different forms of strategising between strategy content and strategy process, including whether openness applies to organisational or operational strategies, or to innovation more broadly. Last is the significance of empirical work towards understanding how IT enables increased access to strategic content for erstwhile non-strategists, consistent with studies which more explicitly focused on dynamics of transparency (Gegenhuber and Dobusch, 2017; Malhotra et al., 2017).

The final consideration for our agenda brings together the ideas from all areas of this paper to echo the call for more comparative cases of open strategy (Hautz et al., 2017), whilst also stressing the need for longitudinal approaches to explore research at the intersection of open strategy and technology work. In order to further interrogate the relevance of IT for opening strategy, research must go beyond focusing on single contexts, as this limits the potential for understanding the significance of IT in use. Indeed, research ventures might instead seek to specifically understand open strategy in different contexts by placing IT as the principal point of interest. The differences in the use and effect of particular open practices through types of IT in distinct cultural and organisational contexts is key, as are the significance of their mediating effect on (open) strategising (Jarzabkowski and Wolf, 2015). We argue that longitudinal approaches to researching open strategy are needed to show not just that IT can open-up strategic activities in organisations, but to show how IT is changing strategic work in organisations long-term. This might also help unpack the evolution of open strategy tools used in strategising activity over time, and help to emphasise how managers dictate the dynamics of openness, along the continuum between being open and closed (Hautz et al., 2017).

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