ECIS Research in Progress (RIP) papers will be presented as poster displays.
There are dedicated time slots and space within the 3 Auditoriums, poster for days 2 and 3 of the conference
when it is expected that authors will be by their posters.
The three auditoriums are Portland, Dennis Sciama and Richmand which are buildings adjacent to each other. (These
are buildings 2, 5 and 8 on the map http://www.port.ac.uk/media/maps-and-directions/campus-map.pdf)
However, authors may also like to be around their posters to discuss their work and answer further questions at other
times throughout the conference such as during the break and lunch sessions.
We have tried to groups the posters in places similar to the locations where their track session presentations.
For those that have ordered their posters to be printed by the Print Shop at the university they can collect
their posters from the registration desk in Portland Building. Authors can collect and put up their posters
from Monday afternoon (25th June) onwards.

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Poster Number	Author	Title	Track
ECIS Day 2 Wednesday 27th June		**10:50am - 11:20am**	
Pot Pourri A		**Richmond Auditorium**	
1719	Bipat, Soerin	Understanding the relation between information technology capability and organizational performance	GENIS
1883	Hofma, Christian Casper	Immersive Virtual Environments: Understanding it's Influence on Organizational Routines	GENIS
2179	Ravichandran, T. (Ravi)	CEO incentives and information technology investments: an empirical investigation	AISD
1579	Kesiilwe, Atlarelang	A time motion study evaluating the impact of information technology on emergency department consultants activities	DIGHI
1746	Kowatsch, Tobias	The impact of interpersonal closeness cues in text-based healthcare chatbots on attachment bond and the desire to continue interacting: an experimental design	DIGHI
1751	Reuter-Oppermann, Me	Assessing information requirements for complex decision making in healthcare	DIGHI
1772	Panteli, Niki	Members' trajectory in online health communities: the case of Medicine Africa	DIGHI
2071	Aydinguel, Okan	Designing a Mobile Application for Ad-Hoc Tumor Board Scheduling	DIGHI
1330	Mettler, Tobias	Does gamification really foster long-term engagement to improve health behaviour? A systematic analysis	DIGHI
1503	Davcheva, Elena	Text mining mental health forums – learning from user experiences	DIGHI

Pot Pourri B		Portland Auditoriaum	
1144	Alohali, Mansor	Investigating the antecedents of perceived threats and user resistance to health information technology: towards a comprehensive user resistance model	ISADIF
1173	Levi-Bliech, Michal	The effects of a fleet-management app on driver behaviour	ISADIF
1262	Treiblmaier, Horst	Understanding the blockchain through a gamified experience: a case study from Austria	ISADIF
1518	Nuhu, Khalipha	Investigating user responses to mandatory IT-induced organisational changes: a pre-implementation study	ISADIF
1773	Janson, Andreas	How Digital Nudges Influence Consumers – Experimental Investigation in the Context of Retargeting	ISADIF
1396	Althaqafi, Turki	Public value creation using social media applications for the local government context	SMBSOC
1715	Hornung, Olivia	When emotions go social – understanding the role of emotional intelligence in social network use	SMBSOC
1802	Ross, Björn	Social bots in a commercial context - A case study on SoundCloud	SMBSOC
1172	Walser, Roman	Factors Influencing Controllees' Congruence and Willingness to Comply With Control Mechanisms in IS Projects	CCIST
1192	Ilg, Markus	Real Options in Agile Software Development: Handling the Paradox of Flexibility and Behavioural Stickiness in Project Valuation	CCIST

Pot Pourri C		Portland Auditorium	
1129	Reijnen, Crystal	A Shared Vision for Digital Transformation: Codification of The Operating Model Canvas	DIGTRA
1399	Hoffmann, David	Shaping Wellsprings of Innovation: Towards Organizational Design Configurations for Digital Innovation Management	DIGTRA
1889	Cabinakova, Johana	Conceptual framework for understanding impact of professional teachers' identity formation on usage of digital learning materials	DIGTRA
2038	Loebbecke, Claudia	Blockchain Technology Impacting the Role of Trust in Transactions: Reflections in the Case of Trading Diamonds	DIGTRA
1690	Jung, Anna-Katharina	Determining the Ethical Dimensions of Live Streaming: An Explorative Delphi Study	EthICT
1146	Bunduchi, Raluca	Socializing the value of technology – a multi-stakeholder perspective on valuing is	SOCHG
1720	Bipat, Soerin	The impact of culture on the business value of it – an examination from two sectors	SOCHG
1787	Sadhya, Harshali	Value co-creation in Airbnb: a social capital perspective	SOCHG
2096	Seidler, Anna-Raissa	Encouraging Pro-Environmental Behaviour: Affordances and Institutional Logics in IS-enabled Organisational Sustainability Transformations	SOCHG
2215	Klecun, Ela	How a paper chart affords collaborative and distributed small data experiments for decision making under uncertainty	SOCHG
1232	Zellhofer, Dominik	A Conventionalist Perspective On Information Security Policies in Organisations	SOCISS
Pot Pourri D		Portland Auditorium	
1035	Kim, Dongyeon	Do Verified Consumer Reviews Always Affect Sales? An Empirical Analysis of Mixed Review Systems in the Film Industry	BAMAP
1691	Trieu, Van-Hau	Decision-Making Performance in Big Data Era: The Role of Actual Business Intelligence Systems Use and Affecting External Constraints	BAMAP
1824	Beese, Jannis	Calculating with Unreliable Data in Business Analytics Applications	BAMAP
1898	Toreini, Peyman	Designing Attention-aware Business Intelligence and Analytics Dashboards to Support Task Resumption	BAMAP
1243	Siegfried, Nils	Seeing Service Certification "Eye to Eye" - The Role of Perceptual Congruence Between Customers and Providers in IS Certification	SIEMA
1842	Billert, Matthias	Grinding a diamond – the iterative development of citizen-initiated services	SIEMA
1110	Schuler, J. Peter M.	Can Self-Tracking Solutions Help with Understanding Quality of Smart, Connected Products?	PIDUI
1368	Muthupoltotage, Udaya	Rules governing the use of personal learning environments for self-regulated learning: an activity theory approach	PIDUI
1964	Eckhardt, Andreas	Unmasking emotions via facial expressions – first insights on the relationship between system use, emotional valence, and is discontinuance	PIDUI
1617	Athanasopoulou, Alexia	Tooling for internet-of-things business model exploration: a design science research approach	BMWORI
1828	Augenstein, Dominik	Designing for business model comprehension – principles for an extended business model tool	BMWORI

ECIS Day 3 Thursday 28th June		11am - 11:30am		
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	1485	Heidt, Margareta	Learning from climate research: applying the finite pool of worry on cyber-related risks	SOCISS
	1707	Azizi, Neda	The Moderating Effects of Organisational Culture on the Relationship between Knowledge Sharing and IT Risk Management Success	SOCISS
	1822	Kurowski, Sebastian	Measuring compliance with specific policy contents - the SRPC- and SRPCC-Scales for a more detailed measurement of positive policy compliance	SOCISS
	1616	Kaiser, Christian	A research agenda for vehicle information systems	BIGPSS
	1722	Berndtsson, Mikael	Becoming a data-driven organisation	BIGPSS
	1843	saltz, jeff	Identifying the key drivers for teams to use a data science process methodology	BIGPSS
	1222	Cha, Jonghyuk	Public Service Provider's Dynamic Capabilities for IT-enabled Government Transformation Projects	LSIM
	1563	Andrias, Mone	Towards a typology of agile ISD leadership in large-scale ISD project	LSIM
	1156	Weidinger, Julian	Analyzing the potential of graphical building information for emergency responses: toward a controlled experiment	ICTCC
Pot Pourri F		**Portland Auditoirum**		
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	1372	Tarafdar, Monideepa	Mobile, Remote and Blue-Collar: Using Information and Communication Technology to Elevate Workplace Well-Being	DOWoB
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	1605	Osterbrink, Lars	Antecedents of Perceived Fairness in Pay for Microtask Crowdwork	DOWoB
	1671	Knop, Nicolas	Adaptation barriers in internal crowdsourcing: a multiple case study	DOWoB
	1810	Jussupow, Ekaterina	AI changes who we are – doesn't it? Intelligent decision support and physicians' professional identity	DOWoB
	1674	Elikan, Dina	Towards a brand identity ontology	ENTMO
	1766	plessius, henk	The Enterprise Architecture Value Framework	ENTMO
	1978	Alter, Steven	A Work System Perspective on Enterprise Modelling: A Thought Experiment	ENTMO
	1180	Wurm, Bastian	Development of a measurement scale for business process standardization	BUPMA

Pot Pourri G		Richmond Auditoriaum	
1584	Boroon, Layla	Exploring the Dark Side of Online Social Networks: A Taxonomy of Negative Effects on Users	DISOC
1739	Rowan, Wendy	The dark side of risk homeostasis when joining health social networks	DISOC
2034	Van den Broek, Tijs	Modelling Online Community Members' Motivation: A Computational Model Based on Social Exchange Theory	DISOC
2169	Arroyo, Javier	Webtool for the Analysis and Visualization of the Evolution of Wiki Online Communities	DISOC
2007	Tavanapour, Navid	The Collaboration of Crowd Workers	OPENIT
2041	Morton, Josh	Open strategy intermediaries? A framework for understanding the role of facilitators in open strategy-making	OPENIT
1055	Croitor, Evgheni	Developing an Instrument to Measure Perceived Input Control on Online Platforms from the App Developer Perspective	OPENIT
1293	Barann, Benjamin	An IS-Perspective on Omni-Channel Management:Development of a Conceptual Framework to Determine the Impacts of Touchpoint Digitalization on Retail Business Processes	DECOP
2014	Grisot, Miria	Infrastructuring IoT for public governance	SIIU

Pot Pourri H		Dennis Sciama Auditorium	
1990	Wederhake, Lars	Decision flexibility vs. Information accuracy in energy-intensive businesses	SUSDI
2086	Schoormann, Thorsten	Design Principles for Leveraging Sustainability in Business Modelling Tools	SUSDI
1042	Pröllochs, Nicolas	Information Processing of Financial News: The Role of Cognitive Dissonance and Information Avoidance	FINTEC
1329	Jung, Dominik	Nudged to Win: Designing Robo-Advisory to Overcome Decision Inertia	FINTEC
1067	Jeong, Jongkil	Enhancing the application and measurement of relationship quality in future it outsourcing studies	ITGOV
1059	Jiang, Qiqi	More than the tone: the impact of social media opinions on innovation investments	ITIBE
1027	Hauser, Matthias	Context Matters: Solving the Challenges of Implementing Recommendation Service Systems in Physical Retail Environments	KISSA
1823	Baumeister, Alexander	Design of an Online Optimisation Tool for Smart Home Heating Control	KISSA
1427	Murad, Abdulaziz	Informing the design of a health virtual community of practice: a knowledge translation approach	KNOMA

OPEN STRATEGY INTERMEDIARIES? A FRAMEWORK FOR UNDERSTANDING THE ROLE OF FACILITATORS IN OPEN STRATEGY-MAKING

Research in Progress

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Abstract

Open strategy is an emerging phenomenon, and has received significant interest by researchers in both information systems (IS) and strategy fields. The term open strategy represents how strategy-making is becoming a more inclusive and transparent process in organizations, often enabled by information technology (IT). Despite the notable attention paid to the role of IT in the facilitation of open strategy, those practitioners who are also central in such socio-technical processes of change have received scant attention to date by scholars. This paper therefore seeks to examine the role of facilitators in IT-driven open strategy. We term these 'open strategy intermediaries'. Using a strategy-as-practice lens and drawing on several empirical cases of IT-driven open 'strategizing', the article highlights six emerging practices by open strategy intermediaries which we call: (i) Initiation, (ii) Provision, (iii) Infrastructure and design, (iv) promotion and communication, (v) mediation and moderation, and (vi) strategy analysis and development. In concluding the paper, we detail how we intend to continue the research evident in this ongoing work.

Keywords: Open strategy; intermediaries; facilitation; IT-enabledness; practice theory

1 Introduction

IT-enabled 'open' phenomena have attracted wide interest by information systems (IS) scholars (Whelan et al., 2014; Schlagwein et al., 2017). This has encompassed publications exploring openness in strategy-making, including in journal special issues (e.g. Baptista et al., 2017) and conferences such as ECIS tracks examining Openness and IT (e.g. Tavakoli et al., 2016; Dobusch et al., 2017). There has been particular focus on how information technology (IT) can facilitate involvement of a wider range of stakeholders in the generation of strategic content (Chesbrough and Appleyard, 2007), and in the practice of strategy (Whittington et al., 2011). Examples include use of strategy wikis (Dobusch and Kapeller, 2017) and social media (Baptista et al., 2017) for including stakeholders in strategy processes. Additionally, IT is being used in organizations to communicate and make the strategy process transparent (Gegenhuber and Dobusch, 2017). This phenomenon has been labelled 'open strategy' or 'open strategizing' (e.g. Doz and Kosonen, 2008; Tavakoli et al., 2017) to reflect the IT-driven shift in how strategies are developed in organizations.

The majority of open strategy research has focused on emphasizing different forms of openness and the actors included in them (Amrollahi & Rowlands, 2017; Morton et al., 2017). In interrogating open strategy, researchers have drawn on practice-theoretical work to help conceptualize openness, and identify specific open strategizing practices in the accomplishment of strategy-making over time (Tavakoli et al., 2017). Emphasis has been centred on potential practices relating to inclusion of both internal and external stakeholders in open strategy, and to analyze how they contribute towards strate-

gy-making through their engagement in strategy praxis. By contrast, little detailed focus has been placed on the (usually external) actors involved in facilitating open strategy in organizations, who enable means by which erstwhile non-strategists can be exposed to strategic contents, and can engage with strategy-making (Morton et al., 2016a). Facilitation and intermediaries of openness in strategy are notable in the literature, and are an important consideration alongside IT in socio-technical change processes such as those of central interest in open strategy work. This includes Bridgespan's facilitation of Wikimedia's strategy Wiki (Newstead and Lanzerotti, 2010), IBM's Jamming events (e.g. Whittington, 2011), and Salesforce's enablement of open strategic discussions at Unilever (Lombardi, 2014). Despite these cases, those practitioners who are active in enabling such facilitation have been largely ignored and little is known about the intricacies of their role in open strategy.

We use this lack of attention paid to those who facilitate openness in strategy as the main motivation for our research, and aim to highlight the practices of facilitators at a more intimate level (Whittington, 2014), as has been demonstrated in wider, practice-based strategy research (e.g. Hendry and Seidl, 2003). We use a practice-theoretical perspective, echoing recent calls to adopt such a lens to explore the use of technologies and the entanglement of social and material in strategizing, focusing more in-depth on specific practitioners and practices (Peppard et al., 2014; Whittington, 2014). Our analysis was guided by the following research question:

RQ. "What is the role of facilitators and their IT-driven practices in open strategy-making in organizations?"

Our initial findings are conceptualized in a framework which demonstrates their role in episodes of strategy praxis. The rest of this paper is structured as follows. In the next two sections, we further emphasize the empirical context of this research-in-progress (open strategy and facilitation), and provide an overview of the theoretical background and rationale for adopting a practice-theoretical perspective. We then explain the research methodology, introducing our empirical cases, including an outline of data collection and analysis. The main analysis then follows, using the practice lens to interrogate the role of intermediaries in open strategy. The final sections outline a (preliminary) framework for understanding the role of intermediaries as the main contribution of this paper, before concluding and highlighting an outlook on our future work.

2 Open Strategy and Facilitation

Research examining the phenomenon of open strategy has emphasized a number of non-technological and IT driven practices which enable greater participation in strategy-making (Amrollahi & Rowlands, 2016; Baptista et al., 2017). In contrast to the more traditional view of strategy being the exclusive role of the corporate elite (Clegg et al., 2004), theories of open strategy to date have primarily illuminated notions of internal (e.g. staff, partners, shareholders) and external (e.g. customers, clients, members) stakeholders involved in strategic inclusion (actively including more people in strategy ideation and/or implementation) and transparency (allowing more people to access strategic content, insights and information) (Whittington et al., 2011). This has been coupled with explication of the central role of IT in driving openness in strategy (Tavakoli et al., 2015) and examination of the episodic nature of open strategy praxis (Morton et al., 2016b; Tavakoli et al., 2017).

Research illuminating such episodes emphasize that open strategy initiatives are typically formally-structured, and time-limited in nature, focusing on achievement of specific goals such as strategic ideation or communication of strategy (Tavakoli et al., 2015). Thus, IT-driven forms of open strategizing are substantively different from established collective notions of who practices strategy and how (Matzler et al., 2014). These insights resonate closely with broader research in the IS field, where researchers have taken particular notice to how different forms of IT enable and drive openness (e.g. Feller and Fitzgerald, 2000; Whelan et al., 2014). This also stems from a motivation to understand how material and social actors are embedded in enabling new forms of inter-intra organizational communication and collaboration, with firms demonstrating new forms of openness; tapping the collective 'wisdom of the crowd' (Surowiecki, 2004) and exploiting alternative sources of knowledge (Chesbrough, 2003; Benkler, 2006).

Despite IT being central to open strategy as a social phenomenon, there has been limited in-depth commentary about how IT is embedded in open strategy processes by those who facilitate open strategy-making. More traditional strategy literature has also long discussed the role of consultants or facilitators in the strategic practices of an organization (Pettigrew, 1985). This revives debate around the role that distinct internal and external agents have in strategy-making, and how collaborating with these can be used as a way of facilitating the generation of higher-level discourse, through separation of strategic practice from mainstream organizational structures (Hendry and Seidl, 2003).

Within strategic practice, for example, Hendry and Seidl (2003, p.185) refer to the role of facilitators in "strategic episodes" as "outsiders", who "bring with them new discursive structures and, through their presence and involvement, disrupt and replace the organizational structures of hierarchy and communication". Research exploring those who facilitate similar knowledge intensive processes as both internal and external stakeholders has also been common in arenas such as technological change (Rosenberg, 1982), user innovation (Von Hippel, 1988) and more recently open innovation (Chesbrough, 2003). This rich literature describes and analyses the role of intermediaries primarily as third parties mediating between firms and their key stakeholders (Kuenne et al., 2013). Intermediaries (e.g. strategy/technology consultants, IT teams), connecting actors with different sources of knowledge and ideas, is a central consideration in open strategy. In strategy processes, intermediaries can open-up new forms of strategic dialogue between management (e.g. CEO, top management teams) and other internal and external stakeholders (e.g. staff and/or customers) (Whittington et al., 2011). Specific examples of intermediaries of open strategy in the literature, such as the aforementioned examples of Bridgespan and Wikimedia (Newstead and Lanzerotti, 2010), IBM Jamming (e.g. Whittington, 2011), and Salesforce and Unilever (Lombardi, 2014) fail to go beyond mentioning these groups and little is known about the intricacies of their role in practice. We use the core empirical contribution of this paper to address the lack of explicit focus on intermediaries and their entanglement with material artifacts in enabling open strategy-making to occur. A central focus here is thus on social and IT facilitation practices in the open strategy process.

3 Practice Theory

We draw on practice theory, specifically the strategy-as-practice (SaP) literature, in this paper to understand the role of intermediaries in open strategy. This is useful here in identifying specific *practices* by those *practitioners* who facilitate open strategy-making in episodes of *praxis* over time.

The approaches connected with the SaP approach conceptualize strategy as a situated, socially accomplished activity constructed through interactions of many actors (Jarzabkowski, 2010). Thus, strategy is not understood as a fixed property of an organization (something they have), it is something organizational actors do. The SaP approach switches focus to a micro-level analysis of the strategy phenomenon. The SaP lens emphasizes the importance of narrowing the focus to the study of praxis, practices and practitioners. These three individual elements help us to explain the phenomenon of open strategizing activity; that is the people strategizing or 'doing' strategy (strategy practitioners), the strategy tools/artifacts and practices used to do strategy (practices) and the actual stream of activity in which strategy is accomplished over time (praxis) (Jarzabkowski, 2010).

Although open strategy has been closely linked with the practice perspective of strategy (e.g. Whittington et al., 2011), there have been few studies focusing on specific, tightly defined 'episodes' of open strategizing. Wider strategy literature has, on the other hand, adopted a more in-depth focus on practices and practitioners in different forms of strategy praxis, for example strategy meetings (Jarzabkowski and Seidl, 2008), and the strategic use of PowerPoint (Kaplan, 2011). Whilst a traditional focus in strategy practice work has been on humanistic stances (Jarzabkowski, 2010), there have been increasing calls for strategy to adopt a sociomaterial perspective, where the social and the material are not considered as separate, but as an entanglement constituting and shaping strategy practices (Orlikowski, 2010; Whittington, 2014). This is the stance adopted in our work, and in this paper the SaP framework is central to bounding intermediaries as practitioners of open strategy and understanding their practices in distinct episodes of open strategy-making over time.

4   Research Method

We adopted a research approach relevant for examining a complex and emerging phenomenon like open strategy. Instead of assuming a rigid external meaning and building theory disconnected from the lived experience, an interpretive approach gives voice to those directly involved, and the researcher's interpretation of events (Myers, 2013). Our research-in-progress is based on data collected in 13 organizations, explored for their relevance to the phenomenon at hand; in particular the involvement of facilitators in enabling openness in strategy-making (see Table 1, names of organizations and intermediaries have been anonymized where appropriate). We decided that bounding our research as in-depth, case studies (Miles and Huberman, 1994) would be beneficial considering our high-level access to organizations and the different channels available for data collection within episodes of strategy praxis (Tavakoli et al., 2017). We selected our cases based on their relevance to the phenomenon at hand (open strategy and facilitation) and also their use of IT, to provide a rich overview of strategy practices in the process of strategy-making (Kouame and Langley, 2017).

The selected research method combines a number of data collection techniques. The primary mode of data collection was semi-structured interviews with intermediaries to interrogate their role in open strategy processes. We also interviewed strategy planners, such as members of top management teams, for their insight into facilitation, e.g. why they chose to use intermediaries to facilitate open strategy, what the facilitation process involved. Due to the ongoing nature of this work some of our interviews with case organizations have not yet been conducted, although a total of 41 have been completed to date. We also had privileged access to various IT platforms used, primarily for ideation in open strategy, in several of our cases (e.g. online surveys, online platforms, online discussion groups, online ideation forums), in addition to the data held within. Where possible, we were granted opportunity to 'observe' these platforms being used in real-time through netnography approaches to understanding social interaction on IT platforms (Kozinets, 2015). These primary forms of data were coupled with secondary data, such as planning and analysis documentation relating to open strategy (e.g. marketing materials, draft and final strategic plans, meeting agendas, board meeting minutes).

Case organization	Overview of open strategy-making and intermediary	Associated data (primary and secondary)
Coventry City Council	A strategy Jamming event focused on smart cities. Facilitated externally by IBM.	1 semi-structured interview, planning and analysis documentation.
EU and NATO	A strategy Jamming event focused on strategy for security policy. Facilitated externally by IBM.	2 semi-structured interviews, planning and analysis documentation.
Griffith University	An online forum for strategic idea submission and idea refinement. Facilitated externally by researchers.	1 semi-structured interview, action research based observation notes. Access to open strategy forum platform.
Hampshire County Council	An open strategy consultation regarding the council's future services. Facilitated externally by Opinion Research Services.	1 semi-structured interview, access to online questionnaire data, planning and analysis documentation.
IBM	A series of strategy Jamming events, discussing strategy across levels. Facilitated by internal Jamming team.	2 semi-structured interviews, data from internal platforms, planning and analysis documentation.
Oxfam	A strategy consultation focused on new CEO and strategic direction. Facilitated externally by OpenConsulting.	1 semi-structured interview, planning and analysis documentation.
U3A North Gold Coast	An online forum for strategic idea generation and refinement. Facilitated externally by researchers.	8 semi-structured interviews. Access to the online ideas platform.
UK-based Professional	A two-hour Twitter strategy discussion	4 semi-structured interviews, 1655

Body	event with the CEO, as part of a wider open strategy consultation. Facilitated externally by an independent professional interest group.	Tweets captured relating to open strategy discussion, planning and analysis documentation.
UK Government Defence Organization	A strategy Jamming event to discuss strategic direction with employees. Facilitated externally by IBM.	2 semi-structured interviews, access to IBM Jamming platforms, planning and analysis documentation.
UK Public Research University	A strategy consultation focused on learning and teaching strategies. Facilitated internally by IT and project group teams.	1 semi-structured interview, planning and analysis documentation.
Vienna Tourist Board	A strategy ideas forum aimed at developing a new tourism strategy. Facilitated externally by Innofocus.	1 semi-structured interview, access to online ideas platform, planning and analysis documentation.
Wikimedia UK	An open strategy consultation to devise a new strategic plan. Facilitated internally and externally by Wikimedia staff and volunteers.	1 semi-structured interview, access to online strategy wiki, planning and analysis documentation.
Xamin Open Source Project	An online forum for strategic idea generation and refinement. Facilitated externally by researchers.	16 semi-structured interviews. Access to the online ideas platform.

Table 1.   Overview of case organizations and data collected to date

The analytical procedure followed the approach of Miles and Huberman (1994), as frequently used practice-theoretical studies (e.g. Balogun, 2004; Jarzabkowski et al., 2007). This approach was consistent with practice-theoretical research's aim of achieving rich understanding of individuals and IT involved in everyday strategizing activity. The analysis consisted of three central activities: data reduction, data display, and conclusion drawing and verification and is suited to an inductive approach to analyzing qualitative data (Miles and Huberman, 1994). We also added a fourth activity - comparison with theory- helping align emerging findings and conclusions with current theories (Balogun, 2004; Myers, 2013). The three activities of the data display and analysis method translated into a number of stages in the analysis process for this research.

The first stage involved early-stage analysis and reduction of the interview and observation data by the authors, mostly through referring to memos, and by producing first-cycle codes from sentences and paragraphs within interview transcripts to capture richness (Saldana, 2009). The second stage built on the progress made in the early-stage analysis, and involved detailed coding and mapping the IT strategizing activity and entanglement of participants and IT through development of rich narratives (Langley, 1999). Detailed coding was continued in Nvivo software, with first-cycle codes refined through second-cycle coding to develop a greater sense of categorical organization of data relating to intermediaries. Categorization was based on both the research focus outlined, and the guiding practice-theoretical lens, emphasizing the entanglement of intermediaries and IT, and their practices in strategy praxis. Subsequent themes were developed inductively, and to ensure dependability and inter-coder reliability, the narratives and meanings of the themes were negotiated and then grouped into six specific practices.

Stage three consisted of further developing the narratives in relation to the findings with the aim of understanding intermediaries and IT, and related practices as more distinct groupings (Whittington, 2006). This involved grouping identified strategy practices into praxis episodes as broad and finalized themes (Tavakoli et al., 2017), and conceptualizing these as a framework as the main contribution of this paper. This meant that the output could be summarized, emphasizing the principle episodes of open strategy. Stage four was key to grouping the previous stages and drawing preliminary conclusions. Briefly discussing initial outcomes of the work in relation to extant theory and practical implications was central here (Myers, 2013).

To ensure validity and reliability in our work, and justify a qualitative approach, we integrated a number of considerations into our analysis using the framework by Guba and Lincoln (1985). Specific techniques included triangulation for establishing credibility, thick description to ensure transferability, multiple stages and researchers involved in coding to aid dependability, and having clear stages in the analysis to provide an empirical audit trail (Guba and Lincoln, 1985).

5 Preliminary Empirical Findings

In this section, we briefly introduce and outline preliminary findings in relation to the research question for our study. In doing so, we identify six practices through the entanglement of intermediaries and IT in open strategy-making (see table 2). The occurrence of these practices has so far varied in exploration of our cases, demonstrating that the role of intermediaries and IT might rely more on a selection of these in different stages of strategy-making, and that equally these might overlap and have different significance across contexts. Insight into different practices within the process of strategy-making in different organizational contexts is important for advancing practice-based strategy work, again as is a consideration for our range of case selection here (Kouame and Langley, 2017).

Practice identified	Description	Examples
Initiation	Discuss open approaches to strategy with managers.	Meetings to market use of open approach, discussions regarding rationale for open strategy and needs of the organization.
Provision	To provide the required information for strategic planning.	Conduct market research, competitive analysis, market trends, and understand corporate identity.
Infrastructure and design	Design/select the required IT infrastructure for open strategy. Design a sequence of activities required for strategy-making.	Design online platforms, devise processes for engagement, ideation and refinement, and reflection.
Promotion and communication	Communicate with stakeholders about the purpose of an open strategy approach.	Workshops about initiatives, updating stakeholders about progress.
Mediation and moderation	Actively host/run open discussions and moderate where appropriate.	Manage infrastructure, create trust, and ensure diversity of participation and ideas.
Strategy analysis and development	Help managers to develop strategic plans based on submitted ideas.	Analyze and review strategic ideas and content, and develop strategic plans based on these.

Table 2.   Identified practices of open strategy intermediaries with illustrative examples from analysis of data

The first two identified practices relate to the initiation and provision of information for open strategy, whereby intermediaries were involved in early stage discussions with organizations and their top management regarding the potential benefits of using open strategy approaches. Here, intermediaries demonstrated marketing of their own approaches and potential IT platforms for use in open strategy-making, and also discussed rationale and needs of the organization to understand best options for proceeding with an open strategy approach. For example, in the case of Oxfam the intermediary worked closely with the organization to understand their needs, market, and to discuss available solutions for use in open strategy.

The next practice identified related to appropriate infrastructure (e.g. IT platforms) being selected and/or designed for use in open strategy. Here, intermediaries were involved in designing how strategy-making would occur as a distinct sequence of events. For example, the intermediary for the Vienna

Tourist Board's strategy initiative worked closely to ensure a suitable IT platform was designed and process outlined to fit their needs and corporate identity.

The next practice identified related broadly to the active promotion of open strategy activity. For example, in the IBM strategy Jamming events the promotion was a central part of the process, to ensure maximum participation on the Jamming platforms provided. In the case of the UK-based Professional Body Twitter strategy discussion, the intermediary was central in providing articles and 'Tweeting' information about the event in advance of it commencing.

The practice of mediation and moderation related to the main undertaking of open strategy-making. Here, intermediaries and IT interacted to directly communicate with participants in open strategy as a means of mediating the process to enable conversations between key stakeholders involved. It was also important in some cases for intermediaries to moderate on platforms, afforded by features of IT, and help guide conversations and move participants through different sequences of strategy-making. This was the most common practice by intermediaries, present across all of our cases.

The final practice relates more explicitly to stages of strategy analysis and implementation, where strategic ideas were analyzed towards realized strategy outputs (e.g. strategic plans, implementation of new programmes). Here intermediaries and IT were found to be an essential part of strategy 'sense-making' and potential implementation. For example, in Hampshire Council's open strategy consultation the intermediary and IT had a clear role in analysis to outline and report the opinions and arguments of those who responded to the consultation.

In sum, we have concisely introduced six notable practices in our preliminary findings here.

6 Discussion and Framework: The Role of Open Strategy Intermediaries

In discussing the main findings identified in our preliminary analysis, and structuring these in a framework, we draw on extant theory which has illuminated IT-driven stages of open strategy (Tavakoli et al., 2015; 2017). The developed framework is particularly beneficial for use as a lens to display the stages in which intermediaries might be present in open strategy-making when considering our data collected to date. The proposed framework aligns our outlined practices of intermediaries into three established episodes of open strategizing, and offers a more holistic picture of their role in open strategy facilitation. Figure 1 shows these core points, conceptualized according to the three main episodes of: (i) preparing and planning, (ii) generating and synthesizing, and (iii) communicating and implementing (Tavakoli et al., 2017).

To summarise in relation to our framework, the practices of initiation, provision, and infrastructure and design were related to the praxis episode of preparing and planning, where intermediaries were particularly central to ensuring organizations had an appropriate plan for open strategy, and a process and platform(s) to do so. The practice of promotion and communication was also significant in this episode, but also continued throughout generating and synthesizing. Here, intermediaries were central to ensuring participation and providing clear understanding about the purpose of strategy initiatives.

The practice of mediation and moderation was the primary concern in this second episode, where intermediaries were essential in ensuring a smooth process of discussion and knowledge sharing as part of open strategy-making. Moderation was particularly important to ensure conversations stayed focused and IT platforms were working as required. Finally, through the identified practice of strategy analysis and development, intermediaries were central in helping organizations make sense of the conversations and information developed during open strategy-making. This included providing detailed statistics, visuals and reports, and in some cases providing further support with continued implementation of key strategic priorities highlighted in initiatives.
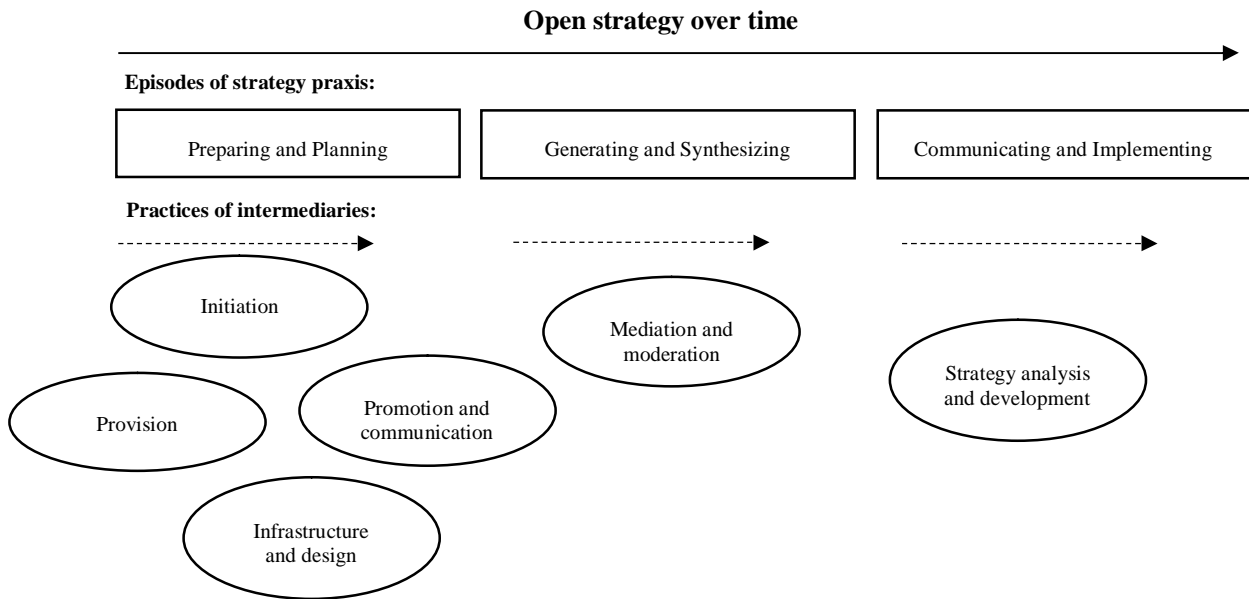
Open strategy over time

Episodes of strategy praxis:

| Preparing and Planning | Generating and Synthesizing | Communicating and Implementing |

Practices of intermediaries:

Initiation

Provision

Promotion and communication

Mediation and moderation

Strategy analysis and development

Infrastructure and design

Figure 1.   The role of open strategy intermediaries in episodes of strategy praxis

Our preliminary analysis here not only conceptualizes the practices central to the role of intermediaries in open strategy, it also emphasizes where these groups and individuals are situated in the practice of open strategy over time, and alludes to the entanglement between the social and material in strategy praxis. To our knowledge, no other study has formally identified open strategy intermediaries, or positioned their practices in established episodes of open strategy. Overall, the conceptualization is useful in accentuating the relevance of intermediaries by emphasizing their significant role in the facilitation of open strategy-making. Illumination of preliminary findings leads to our conclusion, and how we intend to develop this research area towards a more substantiated contribution long-term.

7   Conclusion and Future Research

This ongoing research has started to uncover the role of intermediaries and IT, through their strategizing practices in open strategy-making. We contribute to open strategy and IS literature by bringing to light the significance of these facilitators in open strategy, whilst emphasizing how the entanglement of social actors and IT is central to their emerging role and associated strategic practices. We build on a notable gap in previous open strategy studies to deepen the level of analysis in relation to these important practitioners and IT (Morton et al., 2016a), and argue that they warrant closer attention in the development of this growing area of research. Whilst this is suitable for this research-in-progress, we also recognize the need to build on this and carve out a more substantiated contribution arising from our work, and insights into the role of intermediaries, in the future.

In progressing this research, we intend to further deepen our analysis, and ultimately use these emerging insights about the role of intermediaries in open strategy to inform further data collection, and potential identification of further practices. We will likely narrow the number of cases to ensure balance and focus on quality of data, and focus more on creating a process model which links strategy practices with actual outcomes of strategy relevant to IS and strategic management theory, as is important in practice-based work (Kouame and Langley, 2017). We also plan to improve the developed framework by integrating more of our data obtained from exploring practices of open strategy, and show in more detail the prominence of practices in each episode. It is also notable that this early version of the research is primarily aimed at an academic audience, and we plan to improve the implications of this research for practitioners in the future. This will help ensure our study provides a more explicit, detailed account of how open strategy is enacted, including by those who might be active or interested in mediating such processes.

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