An Exploratory Study of the Relationship between the Openness and Effectiveness of Strategic Planning

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Abstract

This paper focuses on a new approach for facilitating the participation of stakeholders in a process of strategic planning known as open strategic planning (OSP). OSP is recognised through three characteristics: inclusiveness, transparency, and the use of information technology (IT) tools. Drawing on the theoretical foundations of OSP, the research explores moderating factors impacting the relationship between these characteristics and OSP effectiveness by referring to qualitative data obtained from two open strategic planning projects. A secondary aim was to examine how stakeholders interpret the effectiveness of OSP in an organisational setting. Results indicate various moderating factors (level of trust, IT literacy, and diversity of participants) impacted the relationship between the characteristics of OSP and strategic planning effectiveness. The study formulates eight propositions, each is discussed in relation to the existing literature on strategic planning effectiveness. This paper is significant as it is the first exploratory research linking openness and strategic planning outcomes.

Keywords: Open strategic planning, open strategy, inclusiveness, transparency, IT-enabledness.

1 Introduction

Inclusion of stakeholders in the process of strategy formulation has been a key debate throughout the strategic planning literature (Amrollahi & Rowlands, 2017; Hautz, Seidl, & Whittington, 2017). Although there were a number of calls in the literature before 2000 for the inclusion of stakeholders other than management in the process of strategic planning (Hamel, 1996; Mintzberg, 1994a, 1994b), *technical obstacles* for inclusion of other stakeholders in a faceto-face strategy forum hindered their inclusion (Langley, 1988; Mitroff, Barabba, & Kilmann, 1977). However, the use of Information Technology (IT) tools for the purpose of strategic planning (Liinamaa, Nuutinen, Sutinen, & Vanharanta, 2004) facilitated collaboration with all stakeholders leading to the development of a new concept called Open Strategic Planning (OSP).

OSP is recognised through the three characteristics: *inclusiveness, transparency* and the *use of Information Technology (IT)* (Tavakoli, Schlagwein, & Schoder, 2017; Whittington, Cailluet, & Yakis-Douglas, 2011). Implementing these characteristics as part of a process to formulate "how an organisation is going to compete, what its goals should be, and what policies will be

needed to carry out those goals" (Tavakoli, Schlagwein, & Schoder, 2015a, p. 5) constitutes a recent working definition for OSP.

Surveys on the use of management tools and techniques indicate that strategic planning is one of the most frequently practised techniques since the 1990s (Berry & Wechsler, 1995; Rigby, 2001), and remains of great importance among practitioners (Kalkan & Bozkurt, 2013; Rigby & Bilodeau, 2013). Furthermore, in response to a dominant perspective in the management literature focusing on the outcomes of strategic planning (Golsorkhi, Rouleau, Seidl, & Vaara, 2010; Wolf & Floyd, 2013), there are recent calls to develop a processual perspective for OSP relying on practice that considers strategy as a process of actions, and an interplay between tools and people, rather than focussing primarily on strategy outcomes (Jarzabkowski & Paul Spee, 2009).

For these reasons, the evolution of strategic planning research and practice has been of key interest to researchers, as new topics such as strategy as practice, decentralisation of strategy formulation, and IT-enabled strategic planning have emerged and altered the landscape of strategic planning (Chesbrough & Appleyard, 2007; Wolf & Floyd, 2013). OSP is one of these new topics extending the domain of strategic planning research by incorporating computerised information systems and recommending new IT tools for this purpose (Amrollahi & Rowlands, 2018).

Accordingly, this paper claims that the notion of OSP can benefit from contributions from IS research. There are three reasons for this: firstly, the concept of OSP is driven by the notion of open innovation and its reliance on collaborative and open source research in the IS domain (Gegenhuber & Dobusch, 2017; Von Krogh & Spaeth, 2007). Chesbrough and Appleyard (2007) in one of the earliest work introduced the concept of OSP through applying the notion of open innovation at a strategic level. However, open strategy goes beyond innovation in terms of topic range and purpose (Leonhard Dobusch, Kremser, Seidl, & Werle, 2017; Hautz et al., 2017). Some authors even claim that open innovation is a subset of open strategy focusing on innovative strategy processes (Whittington et al., 2011).

Secondly, IT is now acknowledged to be core to the OSP concept (Amrollahi, Najafikhah, Morton, & Sarooghi, 2019; Morton, Wilson, & Cooke, 2016b) having been developed through advances in social IT technologies such as Web 2.0 (Haefliger, Monteiro, Foray, & von Krogh, 2011). Thirdly, IT and IS models of collaboration such as crowdsourcing (Amrollahi, Ghapanchi, & Talaei-Khoei, 2014), jamming (Bjelland & Wood, 2008), and wiki (Leonhard Dobusch, 2012) have played a crucial role in the implementation of the OSP concept. Developments in these new technologies add weight to applying an IS research perspective when exploring the notion of OSP.

Despite many advancements in OSP, existing literature has yet to focus on the impact of openness on effectiveness of strategic planning. To address this shortcoming, we investigate the factors moderating the impact of openness on strategic planning effectiveness.

The remainder of this paper is structured as follows. The next section presents the study aims and scope, followed by an introduction to the concept of OSP and its characteristics. The research method and details of our approach to data collection and analysis are then presented. Next, we present the research findings in the form of eight related propositions. The paper concludes with a comparison of the findings with the literature, presents a summary of the contributions, and discusses future research directions.

2 Study Aims and Scope

This study addresses a call by Matzler, Füller, Koch, Hautz, and Hutter (2014) to investigate the complex phenomenon of OSP from a technical, social, and political perspective focussing on how openness can impact the effectiveness of strategic planning. Currently, the three characteristics of open strategy – inclusiveness, transparency, and the use of information technology – are widely accepted in the strategic planning community. A number of theoretical studies (Chesbrough & Appleyard, 2007; Whittington et al., 2011) and numerous empirical studies (Amrollahi & Rowlands, 2017; Aten & Thomas, 2016; Leonhard Dobusch & Kapeller, 2013; Gegenhuber & Dobusch, 2017; Hutter, Nketia, & Füller, 2017; Kendall, Nino, & Staley, 2008; Liinamaa et al., 2004; Mantere & Vaara, 2008; Morton, Wilson, & Cooke, 2016a; Stieger, Matzler, Chatterjee, & Ladstaetter-Fussenegger, 2012) have reported that openness improves the effectiveness of strategic planning.

In this study, our assumption is that the concept of OSP can be understood through these three characteristics, that they impact on the effectiveness of strategic planning, and there is a relationship between openness and the effectiveness of OSP. Figure 1 illustrates this relationship. Building on these assumptions, the next stage of knowledge accrual is to study what moderating factors facilitate the impact of OSP characteristics on the effectiveness of strategic planning, and to explore how OSP can be employed in an effective manner in organisations.

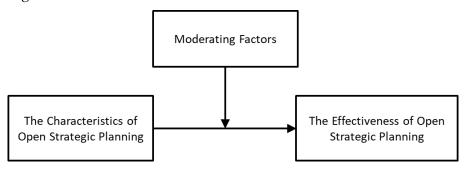


Figure 1 Outline of the current study

Studying moderating and mediating factors is common in both strategic management (Boyd, Haynes, Hitt, Bergh, & Ketchen, 2012; Ketchen, Boyd, & Bergh, 2008) and IS research (Carte & Russell, 2003; Smith & Keil, 2003). In the strategic management literature, moderating and mediating concepts have been differentiated. Mediation refers to a variable transmitting the impact of an independent factor to an outcome, whereas moderation points out the conditions impacting the magnitude of a relationship (Aguinis, Edwards, & Bradley, 2017). Moderating factors are common in quantitative and meta-analysis research, but they are less utilised in qualitative research as they are difficult to interpret inductively from research data. However, as the aim of this study is to explore the conditions under which a set of principles can impact a desired outcome, the term moderating factors has been preferred over contingency factors. Previous studies have examined certain aspects of OSP, but little is known about the factors making these aspects effective. Hence, this study seeks to answer the following research question:

RQ1. What factors moderate the impact of openness on the effectiveness of OSP?

The effectiveness of strategic planning (in general) has been studied through various indicators such as financial performance (Capon, Farley, & Hulbert, 1994; Kargar, 1996),

profitability (Griggs, 2002; Robinson, 1982), and market performance (Schäffer & Willauer, 2003). Using these indicators, however requires the implementation of the plan and measuring them until the conclusion of its time horizon. While the time horizon of strategic plans typically is more than one year, using the above measures of effectiveness for this study was not feasible due to time constraints.

The inherent difference between OSP and conventional approaches of strategic planning may impact the consequences of such a process (Sailer, Schlagwein, & Schoder, 2017). Therefore, there is no guarantee that the indicators developed for traditional strategic planning can accommodate specific dimensions of OSP. For example, the literature asserts that organisational culture that values transparency and inclusiveness (L Dobusch & Müller-Seitz, 2015), cultural factors such as trust (Matzler et al., 2014), and specific types of organizational structure (Amrollahi & Ghapanchi, 2016; Friis, 2015) as preconditions of OSP are not required in conventional strategic planning. Furthermore, the literature has identified new consequences and benefits for OSP such as creating commitment, a sense of ownership (Aten & Thomas, 2016), and motivation among the stakeholders (Hautz et al., 2017) that cannot be found in the conventional strategic planning literature. Finally, the suggested process of OSP is different from traditional strategic planning (Amrollahi & Rowlands, 2017; Sailer et al., 2017; Tavakoli et al., 2015a) and these differences will impact the way strategy effectiveness is perceived and measured especially from a strategy as practice point of view (Golsorkhi et al., 2010; Whittington, 1996). In addition, there are differences between the two approaches considering the number of strategy makers, a longer process of planning, and a more dynamic nature of OSP compare to conventional methods of strategic planning.

Finally, considering inclusiveness of stakeholders forms a significant characteristic of OSP, paying attention to stakeholders' opinion on the effectiveness of strategic planning is crucially important in this area (Amrollahi & Ghapanchi, 2016). For this reason, this study is focused on the "perceived effectiveness of strategic planning" and employs a grounded theory approach to identify how stakeholders articulate their perception about the effectiveness of strategic planning. Accordingly, the second research question guiding this study is:

RQ2. How do stakeholders interpret and perceive the effectiveness of OSP?

This research is, to the best of the authors' knowledge, the first study to empirically examine the moderating factors that may lead to improving the effectiveness of open strategic planning with a focus on the impact of openness. The main contribution of the study is to produce a sound theoretical basis in the form of tentative propositions for future research on OSP and strategic planning effectiveness, by recognising the micro mechanisms that originate from OSP characteristics. The study also informs future practices of OSP by pointing out the impact of openness and how it can improve the effectiveness of open strategic planning in organisational settings.

3 Open Strategic Planning

The concept of decentralisation in the strategy process (i.e. inclusion of middle managers and other stakeholders) first came under the spotlight during the 1990s. Mintzberg (1994a), for example, criticised the differentiation between the concepts of strategic formulation and strategic implementation by highlighting the fact that this differentiation is in fact "to separate thinking from doing". Mintzberg also termed the information barrier between strategy planners and implementers as "the fallacy of detachment" (Mintzberg, 1994b). Hamel (1996)

followed this stream of work by calling for a "democratic process of strategic planning" through stakeholders' participation in the process.

Further studies of actors in strategic planning attracted the attention of scholars and made decentralisation of the strategy process a key topic (Wolf & Floyd, 2013). Empirical studies of decentralisation in the 1990s and 2000s addressed topics such as the role of middle managers (Jarzabkowski & Balogun, 2009; Spee & Jarzabkowski, 2011; Vilà & Canales, 2008; Wooldridge, Schmid, & Floyd, 2008) and the participation of more stakeholders (Aldehayyat & Al Khattab, 2012; Kargar, 1996; Phillips & Moutinho, 1999, 2000; Segars, Grover, & Teng, 1998).

These studies led to the development of principles of open innovation i.e. the use of both inflows and outflows of knowledge to improve internal innovation (Chesbrough, 2006) in strategic planning research and the formation of the OSP concept (Chesbrough & Appleyard, 2007). Although various terminology has been used, namely: open source strategy, democratic strategy, strategy as practice of thousands, and open strategising; scholars have adopted these terms to explain a similar concept (Morton, Wilson, & Cooke, 2015a; Tavakoli, Schlagwein, & Schoder, 2015b). These characteristics forming the core of the OSP concept (inclusiveness, transparency, IT-enabledness) are summarised in Table 1.

Characteristic	Description	
Inclusiveness	Receiving strategy ideas from people outside of the management team	
inclusiveness	(Whittington et al., 2011).	
Transparency	Providing people outside the management team with access to strategy input,	
	process, and outputs (Whittington et al., 2011).	
IT-enabledness	Using IT tools to open participation as an essential element of the strategy process	
	(Tavakoli et al., 2015a).	

Table 1 Characteristics of open strategy

Various benefits of OSP have been suggested in the literature. For instance, Whittington et al. (2011) suggested OSP is an approach for improving commitment and understanding in strategy implementation through widening the scope of strategy ideas. Liinamaa et al. (2004) reported on the IT enactment of OSP to make the strategy process more effective. Leonhard Dobusch and Kapeller (2013) also proposed that greater openness in the strategy process leads to a greater diversity of open strategy practices. Further studies have also mentioned various benefits for using OSP such as: creating a dialogue about strategy (Stieger et al., 2012), leveraging customers' knowledge for strategy formation (Newstead & Lanzerotti, 2010), increase innovation (Morton, Wilson, & Cooke, 2015b), integrating diverse perspectives (Malhotra, Majchrzak, & Niemiec, 2017), creating a sense of community (Hutter et al., 2017), and better firm performance (Tackx & Verdin, 2014).

Despite the increased attention paid to the OSP concept in recent years from both an IS and Management perspective, a number of topics remained under-studied. These topics include the social and organisational aspects of OSP, and the contingency factors impacting the effectiveness of using such approaches in practice. The current research addresses this gap by exploring the moderating factors facilitating the impact of OSP. Focusing on the moderating factors for achieving effectiveness goes beyond the characteristics of OSP with a focus instead on contextual, social, and organisational factors. Furthermore, this study is unique in that it focuses on identifying and understanding effectiveness from a stakeholder perspective and extends the literature about strategic planning effectiveness and OSP.

4 Research Method

The purpose of this section is to argue for and justify the methodological orientation, design, procedures and data analysis used in this research. The current study uses the principles of a *Grounded Theory (GT)* approach to identify and understand the moderating factors improving the effectiveness of OSP characteristics. According to Strauss & Corbin (1990), grounded theorising is well suited to capturing the interpretive experiences of stakeholders and developing theoretical propositions from them. GT is an inductive and qualitative method seeking to discover and develop a theory grounded in systematically gathered and analysed data (Martin & Turner, 1986; Petrini & Pozzebon, 2009; Urquhart, Lehmann, & Myers, 2010).

Considering the explorative nature of the research focus specifically, as well as the historical relevance of a GT approach in both information systems and strategic planning research (Lind & Goldkuhl, 2006; Rowlands, 2005) more generally, this paper claims that using the principles of grounded theory analysis is both relevant and needed to identify moderating factors based on the experiences of stakeholders. In this study, we use a Straussian approach to coding in GT permitting a degree of flexibility regarding priori theoretical concepts through axial coding (Gasson, 2009; Strauss & Corbin, 1998).

Based on guidelines for conducting grounded theory research by noted methodologists (Corbin & Strauss, 1990; Urquhart et al., 2010), the following five steps were followed to develop a tentative theory: (1) iterative data collection and analysis; (2) concept development (open coding); (3) development of concept categories (axial coding); (4) theoretical sampling; and (5) theoretical integration. An overview of the process of data collection and analysis is illustrated in Figure 2.

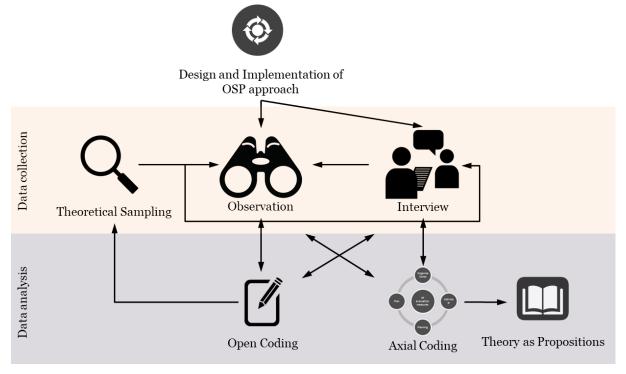


Figure 2 Research process involving data collection and analysis

As depicted in Figure 2, this research commenced with the design and implementation of the OSP concept in two cases. In both cases several interviews were conducted after the

implementation of the designed approach and after the development of the strategic plan. The following section introduces both case studies.

4.1 The Case Studies

As the notion of open strategy was new and less practiced at the time of conducting this study, the authors decided to present this approach and its potential benefits to several organisations. The approach we undertook at this stage is similar to the principles of "action research" highlighting the two stages of *diagnostic* and *therapeutic* (Baskerville, 1999). Similarly, we performed an analysis of the social situation in collaboration with managers, and after considering contextual elements in each organisation, proposed a solution for strategic planning in each case. Two organisations accepted our invitation to apply the OSP concept and the related online tools for developing their strategic plan. This paper, however, concentrates on the second stage (therapeutic) by highlighting the effects of the proposed solution.

At this point, the issue of the number of cases or sample size deserves comment. Different logics undergird sampling approaches. Qualitative inquiry typically focuses in-depth on relatively small samples which are selected purposefully to illuminate the questions being studied. In a multiple-case approach there is no ideal number of cases, but Yin (1994) suggests, that because sampling logic is not being used, typical criteria regarding sample size also are irrelevant. He concluded by saying that the number of replications is a matter of discretionary, judgmental choice. The two cases featuring in this research were selected to provide replication logic by providing variety and contrast among the cases (Yin, 1994).

The first case was an open source software (OSS) project. At the time of strategic planning, it was almost four years since the initiation of the project. This organisation had experienced several changes during its lifetime highlighting the need to formulate a strategic plan for managers. At the time of conducting the case study, more than 30 developers were working in the team and five major organisations were using their software. Managers and sponsors, software and service developers and users were stakeholder groups in the first case.

According to managers, previous attempts to develop a strategic plan for the project did not succeed for several reasons including lack of access to all stakeholders, logistical problems in developing workshops, and a lack of consensus among stakeholders about the topics to be included in the final plan. However, managers and interviewees from other stakeholder groups all agreed that developing a strategic plan is necessary for the project to remain sustainable in the highly competitive environment of software development.

To minimise and manage future changes in the project, the management team decided to develop a two-year strategic plan in 2014. The specific structure of the project and the importance of factors such as the role of software and service developers made OSP relevant to this context. Given these circumstances, and after presenting this approach and its potential benefits to management, they approved the OSP project to commence.

In this case, three groups of managers, developers, and users were invited to include their ideas about the future strategic directions of the project. After two months, a total of 78 ideas and comments were submitted in the online planning system. The ideas were collected in a transparent manner and they were available to all participating stakeholders to view and comment on. These ideas resulted in identification of 34 strategic themes. These themes were then submitted to project managers who were asked to approve/reject each theme to be

considered in the strategic plan. Finally, a two-year strategic plan was developed and published through the planning system. The developed plan was made available to all designated stakeholders using the same strategic planning system.

The second case was conducted in a not-for-profit provider of life-long learning services. This organisation was found in 1991 with 19 members (working as both student and tutor) and reached 540 members in 2015. Different groups of members, including management committee, tutors, and volunteers were stakeholders in this case.

Strategic plans are also a crucial document for not-for-profit organisations to help them meet complex missions while facing severe resource and personnel constraints (Reid, Brown, McNerney, & J. Perri, 2014). Despite this necessity, the managers in this case had no experience in developing a strategic plan. As most not-for-profit organisations (including the 2nd case) are reliant on members and volunteers, their role was crucial for the future of the organisation and hence should be involved in any form of long-range planning. This research argues the important role of members and volunteers, and the not-for-profit motive of this case made the open strategy approach suitable in this context. For this reason, managers in the second case quickly adopted the idea of open strategic planning and confirmed project commencement.

In the second case study, four groups participated in strategic planning (managers, volunteers, tutors, and members). During the idea submission phase, almost 100 ideas were submitted. Each idea was then sent to two reviewers (who knew the organisation and its limitations well) and the reviewers commented on the appropriateness of each idea to be included in the final strategic plan. The ideas and comments were then sent to the President for final approval and based on submissions a strategic plan with four goals, ten objectives, and 27 strategies were formulated. All stakeholder groups have access to the output of strategic planning through the planning system as well as their internal newsletter system.

A web-based information system was developed to facilitate the strategic planning process in both case studies. This information system included a multi-layer architecture enabling various capabilities including: idea submission, idea review, commenting and scoring ideas, idea approval, and managing users who participated.

4.2 Data Collection

The main source of data within a case was a set of interviews administered after the development and publication of the strategic plan. The interviews in this research were conducted with a variety of stakeholders with different skill sets and different understanding of the concept of open strategic planning. For this reason, a conversational interview technique (Neuman, 2011) helped the research team to better articulate the concepts during interviews and make sure both interviewer and interviewee had a mutual understanding of the conversation. A set of leading questions asked during the interviews are listed in Appendix 1.

As the main goal was to study the effectiveness of the planning approach, interviewees were selected regardless of their participation in the planning process. The first author of this paper conducted all the interviews and each interview took between 30 to 40 minutes in duration. Data collection was stopped when little new evidence was being obtained, a situation known as theoretical saturation (Shiau & George, 2014). After finalising the interviews, the process of transcribing and coding started. Table 2 represents the number of interviewees in each category.

First case		Second case	
Position	Number of respondents	Position	Number of respondents
Managers	7	Managers	2
Developers	6	Volunteers and Tutors	3
Users	3	Members	3
Total	16	Total	8

Table 2 Number of respondents in each case

In addition to the interviews, observations by the research team during the planning period and activities prior to planning formed a second source of data collected. This source of observational data, including notes from design and planning sessions, interaction with stakeholders, and interaction with managers during the planning period, helped the research team to better interpret the interview data during the data analysis phase.

4.3 Data Analysis

Data analysis was performed simultaneously with data collection. This type of analysis helped the research to find "where to sample from next in the study" known as *theoretical sampling* (Urquhart et al., 2010, p. 369). For example, the focus of the interview questions changed at the end of interviews in the first case study to better capture interviewees' opinion on contextual factors. In the first round of interviews, the theme of trust was highlighted and for this reason researchers asked questions related to this theme in the following interviews.

The collected data was first analysed through an *open coding* approach. This process involved condensing data to identify significant themes and finding abstract representations for it (Corbin & Strauss, 1990). To satisfy constant comparison or continuous interplay between data collection and analysis as emphasised in GT method (Urquhart et al., 2010), open coding started after the first interview and the open codes were gradually developed and refined after each interview iterating toward the final analysis findings. For example, in early stages of coding, different codes of *self-confidence*, *involvement* and *participation* (not included in final list of codes) were assigned to retrieved excerpts later merged to one code (*motivation*).

Data analysis continued with a focus on a process called *axial coding* (Strauss & Corbin, 1998). This phase of data analysis mainly focused on relating the codes (from open coding) together; rather than focusing on the textual excerpts in order to produce a more nuanced explanation about the phenomena of study (Strauss & Corbin, 1998). Throughout the axial coding process the hypothetical relationships among emerging themes were checked deductively to ensure credibility of the claims (Allen, 2017). In order to perform axial coding, extracted codes during open coding were reviewed, and each characteristic of OSP was selected to represent a number of codes. These concepts were then selected as priori theoretical concepts or seed categories, as suggested by Gasson (2009). For example, two codes of *System efficiency* and *IT literacy* are both related to the technological factors and for this reason were categorised under the *IT-enabledness* code.

Interview excerpt	Open and axial codes	Interpretation of the codes
It seems a fantastic idea to ask for developers' feedback on strategic issues and everyone can freely indicate his/her idea. However, there is an issue here and that's the potential uncertainty that idea submitter may feel: according to both technical infrastructure and people position, people can be traced based on their idea. This is more highlighted for people who have been here for long and this may prevent the system to be completely open and everybody does a trade-off when submitting an idea.	Motivation Inclusiveness Trust Transparency	Although the online system provides an anonymous approach for stakeholders to submit their ideas, but some ideas are still traceable as they have been previously mentioned in other communications by the same person. The research team observed a number of cases that managers made a guess after reading an anonymous idea. This may prevent stakeholders to submit their real idea.
It's the first time we have done anything like that. It's new to members and the committee as well. I would say the focus of it, because we are clearly focused on how we are going to grow and to develop, I would say that was successful. It-covered the main-important areas of development and because it has focused on minds very much or where we are going in terms of the organization. I would say that would be most certainly the case.	Awareness Inclusiveness Organizational effectiveness Effectiveness Effectiveness Effectiveness	The novelty of OSP approach was a challenge in both cases. Although a portion of stakeholders were contacted about this approach, some of them were still unaware or were not sure about the importance of their role in the process.
So they really feel ownership and they were interested in ongoing development of the strategic plan. How to do that is a challenge. Maybe the only way to do that was to devote a lot more time going to talk to individual classes and become a much more one on one experience but again that takes a lot of time and manpower and right kind of manpower.	Organizational effectiveness Effectiveness Awareness Inclusiveness	This excerpt indicates that participation of people in the planning has recognised as a success factor that can lead to a sense of involvement for stakeholders and better communication is recognised as an approach to improve this participation.

Table 3 Coding examples

Table 3 contains samples of interview text and how open and axial codes were assigned and interpreted. As explained in Section 4.2, in many instances, the research team's observations helped the interpretation or added to the data collected during interviews. For example, interviewees raised a concern about the possibility of tracking their identity through their

submitted ideas. Notes from the strategic plan development sessions between planning facilitators and managers also confirmed the legitimacy of this privacy concern.

The following section discusses relevant guidelines to ensure methodological rigor when employing a grounded theory method.

4.4 Study Rigor

Scholars engaged in subjective research should provide the readers with some assurance regarding the validity of their investigations. Urquhart, Lehmann, and Myers (2010) offer a set of criteria that can be applied to gauge the validity of interpretive research. See Table 4 for our evaluation of the interpretive methods used in this study, and how our research stands against such criteria. While the principles of GT method were used in this study to explore the moderating factors, similar guidelines are used to evaluate the rigor of the research undertaken.

Guideline for GTM	Summary from (Urquhart et al., 2010, p. 369)	Application in this research
Constant comparison	The process of constantly comparing instances of data within a category.	Conducting open coding at the same time with data collection and reflecting the new pieces of data on established categories.
Iterative conceptualisation	Increase the level of abstraction and relate categories of data to each other.	During the axial coding process, categories of codes emerged reflecting elements of strategic planning process.
Theoretical sampling	Deciding the theoretical grounds where to sample from next in the study.	Changing the focus of interview questions during and revising them after the first case study.
Scaling up	The process of grouping higher-level categories into broader themes in order to relate them to the broader literature.	Following the coding step and developing four concepts grounded into the three characteristics of OSP and the concept of effectiveness ended in creating a level of abstraction applicable to different contexts.
Theoretical	Relating the theory to other theory in	Enfolding the literature in theoretical
integration	the same or similar field.	integration in Section 6.

Table 4 Comparison of Guidelines for GTM

Secondly, to help ensure credibility of data analysis, a triangulated approach (Mingers, 2001; Myers, 1997) was used where the second member of the research team reviewed the coding process and in several cases assigned different codes to some of the excerpts or commented on the relevancy of the performed interpretation. These differences were then discussed in regular meetings and the authors arrived at an agreement regarding the assigned codes.

Although a replication logic (Yin, 1994) was used in this study, both cases reflected an acceptable level of diversity with respect to many variables. For example, they represent different industries (software vs. education), have different number of potential participants (smaller team of less than 50 in the first case, compared to a relatively bigger team of 540 in the second), different demographics (mainly middle eastern participants in the first case with all participants aged less than 35, compared to the second case in Australia with an average age of 69).

Despite this diversity, the study does not make any claim about the generalizability of the findings. Rather, we generalise to theory based on the context of studies where the data was

collected. This insufficiency is due to the exploratory nature of the study where effectiveness of OSP has not been researched. Therefore, claims about generalisability of the substantive theory can be made when further findings are derived from multiple studies (Gasson, 2009). This study's focus is on transferability of findings and how the results can be adapted in other contexts (Gasson, 2004). For this reason, in Section 6.2 about future research we have made several recommendations for the application of the findings in other contexts by taking into account contextual factors impacting on transferability.

5 Results

Twenty-four interviews with different stakeholders in two case studies were conducted and after the open coding process, the codes were assigned to the characteristics of OSP, or stakeholders' interpretations of strategic planning effectiveness. This section describes and explains the extracted codes.

5.1 Strategic Planning Effectiveness

Based on their position, interests, and attitude, stakeholders in an organisational setting can have different understandings about the effectiveness of OSP. Stakeholders' inclusion in the strategy process and considering the transparency of the process to them are mentioned as characteristics of open strategy. This participation highlighted the importance of understanding stakeholders' interpretations about effectiveness, and numerous text referring to stakeholders' interpretation of effectiveness were found.

5.1.1 Planning efficiency

The degree of efficiency as a result of using the OSP approach is considered an indicator of effectiveness according to our data. For example, the fact that the planning process led to the development of a plan was considered an indicator of success for many participants:

"I believe this [strategic planning] project has been successful because I can see a plan in front of me containing a number of strategies which can be implemented".

Furthermore, the impact of using an OSP approach to save the required time for planning was highlighted as an indicator of planning efficiency, as one of the interviewees described:

"According to my experience always a collaborative approach arrives to a faster output compared to when you limit the strategic planning to a couple of people in the top organisational levels."

Although efficiency and effectiveness were identified as different concepts in the management literature, stakeholders tended to compare OSP with conventional approaches of strategic planning, and for this reason, they frequently referred to efficiency as an indicator of OSP effectiveness.

5.1.2 Plan effectiveness

The contents of the developed plan formed another dimension for planning effectiveness in our interviews with stakeholders. For example, one of the managers criticised the effectiveness of the plan because its content did not cover certain aspects:

"I had a broader definition of strategic plan in my mind. Although I believe the current plan can be beneficial for us, I expected prioritising of the strategies and a model of implementation to be included in the final plan."

In one of the cases, the set objectives in the plan were the subject of attention for a respondent and she expressed concerns about this:

"One thing concerns me: if we develop a very high standard for tutors we cannot get them."

Although different interviewees mentioned different indicators for the effectiveness of the plan, they all agreed that the content of the developed plan formed an integral element when evaluating its effectiveness.

5.1.3 Organisational effectiveness

The potential impact of the developed strategic plan on the organisation was the most common explanation for strategic planning effectiveness. Regarding the indicator of effectiveness, a manager in the first case identified OSP to be effective as it can potentially contribute to creating "stakeholder alignment" in the organisation:

"The collaborative model for strategic planning helped the organisation to align the stakeholders and this will help the organisation to attract attention of all stakeholders to the final product and this will help us to succeed in the market."

Another instance of an organisational indicator for OSP effectiveness was its impact on increasing stakeholders' involvement in the achievement of organisational long-term objectives. The extent to which this objective had been attained was considered by many stakeholders as an indicator of success. For example, a manager mentioned:

"The planning project has resulted in aligning stakeholders and this will make them involved in the organisation which is absolutely beneficial for us."

Although organisational effectiveness appeared to be a prominent indicator, measuring it could be problematic as it depends on the organisational context and can differ from case to case.

5.2 Transparency and Strategic Planning Effectiveness

When reviewing the results of open coding, we found two concepts as instances of transparency. These codes were trust and power, and according to the results of our study they played a moderating role on the impact of transparency on OSP effectiveness:

5.2.1 Trust

During our analysis, the theme of trust emerged regarding the impact of transparency on strategic planning effectiveness. Here trust was coded in accordance with stakeholders' concerns about whether their ideas were going to be used in the strategic plan and how they believed their participation in OSP could impact their organisational position. One of the developers mentioned that:

"There is an issue here and that's the potential uncertainty that the idea submitter may feel: according to both technical infrastructure and people position, [idea submitter] can be traced based on their idea. This is more highlighted for people who have been here longer and this may prevent the system to be completely open so everybody thinks about possible consequences when submitting an idea."

Further, some interviewees believed that the strategic planning project had been initiated by managers as a means of pretence that they were following up on stakeholders' ideas, but in fact stakeholders' voices have not been heard in practice. There was even a lack of trust among

participants about the planning team. Many respondents expressed the opinion that as this project was not initiated by them, they couldn't trust it and did not consider the process transparent. These trust issues prevented stakeholders to accept the transparency within the planning project or interpret its impact on the effectiveness, as one interviewee said:

"This is a project started and continued outside of the team. Therefore, you should not expect the team to fully participate and stay motivated about the process and the outcome of the planning project."

5.2.2 Power

The effectiveness of using a transparent approach for strategic planning was questioned by some respondents because they thought their input wouldn't be considered in the decision-making process because of a lack of influence. Many stakeholders believed that an open and transparent approach would be incomplete without the power and influence to implement the plan and to put it into practice. One of the interviewees for example said:

"It's all up to the committee to make this strategic plan effective. Strategic plan is a document until an action or actions are built on those strategies and the timelines on how to achieve those. People at the top level are those who can do this."

Another interviewee, in the first case, mentioned that:

"This planning approach can be effective only when you see managers using these strategy ideas. They have the power to decide about the organisational strategies and we have not seen any decision other than manager's [decision], therefore, I can't see any transparency in the strategic planning process."

These excerpts indicate that without sharing decision making power, the transparency of strategic planning won't be perceived to improve the effectiveness of strategic planning. The reason given is that some stakeholders believed that transparency is only limited to the planning phase in their organisation and subsequently their voice won't be heard after planning or during the implementation of the plan. For this reason, transparency of planning is believed to have little impact on effectiveness when power is not shared within the organisation.

5.3 Inclusiveness and Strategic Planning Effectiveness

The second characteristic of OSP developed during open and axial coding was inclusiveness. Although inclusiveness was suggested as an important principle in the literature, the results of our study indicate that a call for inclusion is not enough to impact strategic planning effectiveness. In this study, three codes were recognised to moderate the relationship between inclusiveness and effectiveness.

5.3.1 Awareness

Stakeholders' awareness about the concept of open strategy, its potential benefits, and details about the practice of this approach in the organisation was regarded as an important factor influencing the way stakeholders perceive the impact of inclusiveness on the effectiveness of OSP. Awareness is highlighted by a developer in the first case:

"It will take time for people to understand this approach and after that it may help the planning process in time. The benefits of this approach are less perceived at the moment but the long-term benefits will be understood in the future."

It appeared that stakeholders' awareness about the project can be improved through improving the quality of communication and increasing the number of communication channels with designated stakeholders. Using communication channels other than electronic communication was suggested in the first case where most of the communication with stakeholders was performed through the strategic planning system and their email addresses:

"There was no one to follow up this and ask people to submit their ideas. I received a couple of emails but if you could meet people in person and ask them to participate, people would feel more committed to visit the website and submit their ideas. I feel that it was not identified as a duty for me."

To address this type of comment, the communication approach was revised in the second case and more attention was paid to face-to-face communication (including several workshops). Increased communication resulted in minimising the number of comments about awareness. A similar excerpt was coded in the interviews in the second case:

"Maybe the only way to do that was to devote a lot more time going to talk to individual classes and become a much more one on one experience but again that takes a lot of time and manpower and right kind of manpower."

The importance of quality communication for participants indicates how informing stakeholders about the OSP concept and practice can impact their perception regarding participation and effectiveness.

5.3.2 Diversity

This study found diversity of participants as an important factor influencing the impact of inclusiveness on OSP effectiveness. Our definition of diversity goes beyond simple demographic diversity, as we focus on the concept of "cognitive diversity" meaning the difference in beliefs and preferences by various stakeholders in the organisation (Miller, Burke, and Glick (1998)). While studying the effectiveness of OSP, interviewees mentioned that many aspects were not covered in the strategic plan. For example, one of the interviewees mentioned that:

"The user viewpoint is not highlighted in this plan. This organisation is developing a product but our developers usually look at the supply side and ignore the demand side. And while in the planning (for any reason) developers have participated more than users, now the plan has a tendency toward the development process and has ignored mechanisms for attracting users."

The impact of diversity was perceived to be important as a result of paying attention to certain groups of stakeholders. Contacting all groups of stakeholders and persuading them to participate in the strategy process was however a big challenge for the strategy development team that could be dealt with by better communication.

5.3.3 Motivation

According to the excerpts in our study, the motivation of stakeholders can impact the perceived effectiveness of inclusion in strategic planning. It was evident that many stakeholders were not motivated to participate in strategic planning as one of the interviewees in the second case mentioned:

"I think a lot of members come specifically to do that course and they are not worried about what is going on outside the classroom."

Moreover, many stakeholders mentioned that (for different reasons) they thought participation in the strategy process was not part of their duty. For example, one of the developers in the first case mentioned:

"I have not been here for so long, and I am not really well informed about the organisation even on technical topics... for this reason, I thought it's better to let managers decide [about strategic planning]."

How to increase stakeholders' motivation was another important topic identified. Intrinsic motivations were suggested to be effective in the context of OSP. One of the interviewees mentioned that:

"When they asked me to submit my ideas for future directions of the project, I feel myself in managers' position and it gives me a good feeling that my ideas can be constructive."

Research team observations during the planning period also indicated that intrinsic motives such as acknowledging contributors' names in the plan can better impact the number of participants compared to extrinsic factors such as a prize draw.

5.4 IT-enabledness and Strategic Planning Effectiveness

The use of IT tools for strategic planning was also a focus while studying OSP effectiveness. However, according to the context and level of IT knowledge in the two cases, different aspects of the IT system were highlighted. Two factors were retrieved to indicate a moderating relationship between IT-enabledness and the perceived effectiveness of OSP:

5.4.1 System efficiency

The efficiency and user-friendliness of the planning system were highlighted as an important moderating factor. In particular, the first case (software project), where most of the stakeholders were technology-savvy people with high levels of IT literacy, these stakeholders were mainly concerned about visual aspects and the user interface of the planning system:

"I believe the system was not user-friendly at all! When the user enters the portal, she should understand what is going on and what to do."

In this study, the planning system was more than a simple system for entering strategy ideas. Many different activities such as informing participating stakeholders and managing the flow of ideas from submitter to the final plan were conducted through the planning system. For this reason, extra attention should be paid to the development of the user interface.

5.4.2 IT literacy

In the second case (lifelong education community), age of stakeholders, the level of IT literacy and the ability of users to work with an online system were the main concerns. The average age of members, in this case, was 69 while members came from a variety of educational backgrounds and levels. Based on this situation, and during the initial stages of developing the plan concerns were raised about those members who may have problems of accessibility to and ability to work with an online system. For this reason, an alternative approach of submitting strategy ideas on paper was considered for the members who were less familiar with online technologies. In spite of this alternative solution, there were still members who felt they had been ignored in the strategy process by having to use an online system:

"I think you don't need to drag everybody to the 21st century. A lot of people are very happy and very proud of the fact that they are not IT literate. These people shouldn't be shut out because they are different."

Statements like the above indicate the extreme importance of IT literacy in the effectiveness of an OSP approach. In other words, ignoring demographic and cognitive diversity in IT literacy may cause some stakeholders to feel excluded during the planning process.

In summary, a number of moderating factors leading to OSP effectiveness were identified from the case interviews. Table 5 provides a summary of the codes retrieved during data analysis, and the identified moderating factors with sample excerpts supporting each moderating factor.

Categories	Measure / Moderating factors	Definition	Sample of retrieved text
Strategic planning effectiveness	Planning efficiency	The degree of efficiency as a result of using the OSP approach.	I believe the collaborative approach can be quicker than conventional approaches of strategic planning.
Strategic planning effectiveness	Plan effectiveness	The quality of the plan and its content.	Strategies are attainable and they are aligned with our current policies. We are at the moment doing our best to achieve these goals.
Strategic planning effectiveness	Organisational effectiveness	The potential impact of a developed strategic plan on the organisation.	The planning project has resulted in aligning stakeholders and this will make them involved in the organisation which is absolutely beneficial for us.
Transparency	Trust	Stakeholders' concerns about the way they believe their participation in OSP could impact their organisational position.	The reason for the lack of participation was the fact that this idea was coming from somewhere outside the team.
Transparency	Power	Stakeholders' concerns about whether their ideas will be considered in the decision-making process considering their level in the organisation.	When in practice there is no decision other than manager's [decision], I can't see any good on this strategic plan.
Inclusiveness	Awareness	Stakeholders' information about the concept of open strategy and the practice of this approach in the organisation.	It will take time for people to understand this approach and after that it may help the planning process in time.
Inclusiveness	Diversity	Cognitive and demographic diversity of stakeholders participating in the OSP initiative.	I cannot see a single comment in the planning system indicating a user concern.
Inclusiveness	Motivation	Stakeholders' willingness to take part in the OSP project.	You've got 350 members who didn't have any contribution and you need to think why you have lost them.

Categories	Measure / Moderating factors	Definition	Sample of retrieved text
IT-enabledness	System efficiency	The efficiency and user-friendliness of the planning system.	I found it very easy to use. It was quite simple. I was able to access easily and type in my answer and I used it in a number of occasions. So I had no problem.
IT-enabledness	IT literacy	Stakeholders' knowledge and ability to use the planning system.	So, with this background comment, I think the demographic of this club may have been a bit of challenge to do an online survey.

Table 5 Codes retrieved during data analysis; and moderating factors

6 Discussion of Findings

Based on the findings presented from our analysis, this section proposes eight propositions and discusses the results by way of reference to the strategic planning and OSP literature. It does so by returning to the literature to note consistencies with and departures from findings of earlier research. This process involves asking what it is similar to, what it contradicts, and why. In pursuit of this objective, for each proposition, the paper indicates the extent to which it was supported by previous research and the extent to which the findings have added some new perspective or idea when thinking about the effectiveness of Open Strategic Planning.

At this juncture it worth to mentioning that we have identified three different topic areas when discussing our propositions in relation to the available literature. These three topic areas are: (i) strategic planning; (ii) strategic planning effectiveness; and (iii) open strategic planning (OSP). Considering the research questions and aim, our discussion is primarily focused on the two last two topic areas.

6.1 6.1 The Propositions

Proposition 1. Effectiveness of open strategic planning is perceived through (a) its impact on organisational long-term objectives, (b) the quality of developed plan, and (c) the efficiency of the planning process.

The various factors impacting the effectiveness of strategic planning have been previously studied in the literature. Although the focus of this study is on the moderating factors between the openness and OSP effectiveness, comparing the findings with factors leading to strategic planning effectiveness can provide insight regarding the similarities and differences between OSP and conventional approaches of strategic planning.

It is important once again to emphasise that the focus of this study is on the "perceived effectiveness of strategic planning". This perspective on strategy effectiveness is leveraged in the literature (Bantel, 1993; Bolton & Leach, 2002; Simpson, 1998) and in this study has been employed for the sake of widening the traditional measures of strategic planning effectiveness to those more focused on the principles and characteristics of openness. This approach is also aligned with a practice perspective (the dominant perspective in open strategy (Tavakoli et al., 2017)) that necessitates consideration of practitioners (instead of solely focusing on organisational aspects) in evaluating the effectiveness of strategic planning (Whittington, 1996).

Among the three perspectives in this proposition, *organisational effectiveness* of OSP is highlighted in the literature as (i) the ability of OSP to result in a continuous rejuvenation of a collective identity (Luedicke, Husemann, Furnari, & Ladstaetter, 2017), (ii) increase the legitimacy of decisions that stand on morally ambiguous grounds (Luedicke et al., 2017), and (iii) enhanced organisational learning (Hutter et al., 2017). Also, the OSP literature confirms that using an inclusive approach to strategizing indirectly leads to better strategies, improved understanding, and better implementation of the strategies (Hutter et al., 2017). Therefore, the literature supports our finding suggesting that organisational effectiveness is an indicator of the effectiveness of open strategic planning.

Perceived success of strategic planning was also studied in the strategic planning effectiveness literature through different factors such as *self-assessing effectiveness* (Griggs, 2002) and *planning success* (Bunning, 1992). Moreover, many studies have referred to subjective measures for evaluating the financial effectiveness of the plan (Ghobadian, O'Regan, Thomas, & Liu, 2008; Green Jr & Medlin, 2003; Suklev & Debarliev, 2012) mainly managers are surveyed in these studies whereas a broader range of stakeholders are surveyed in the current paper.

Focusing on each of the measures identified in this study about strategic planning effectiveness, the literature tends to focus on organisational effectiveness in terms of financial performance (Elbanna, 2016; Phillips, 1996; Rudd, Greenley, Beatson, & Lings, 2008). In contrast, our findings suggest that OSP effectiveness is more focused on social aspects such as aligning individual goals with organisational strategies. Similarly, the extant literature on conventional strategic planning is less concerned with the practice of strategic planning (plan efficiency as named in our study) as a measure of effectiveness. The few studies that focused on plan efficiency mainly considered the formality of planning (Falshaw, Glaister, & Tatoglu, 2006) and cost (Skokan, Pawliczek, & Piszczur, 2013) with an absence in the literature focusing on agility and responsiveness of the planning process.

This study also proposes plan efficiency as a new indicator of effectiveness that is currently under-reported in the literature. Plan efficiency deals with the practice of strategy (how the strategy is developed) and considers whether using an open approach for strategic planning can impact time and cost.

Proposition 2. The transparency of strategy process impacts the perceived effectiveness of strategic planning when there is high level of trust between managers and stakeholders.

This study finds trust to play a moderating role on the impact of transparency on strategic planning effectiveness. The theme of trust has been frequently mentioned in the strategy literature as a factor improving collaboration (Kumar & Paddison, 2000), as a product of ethical strategic planning (Hosmer, 1994); and as a prerequisite for inter-organisational strategic planning (Lai, Lee, & Hsu, 2009). Although trust has not been directly addressed in the strategic planning literature with regards to the effectiveness of the planning attempt, similar constructs such as attention to legal and ethical principles have been frequently mentioned in the related literature (Al-Turki, 2011; Bunning, 1992; Galbreath, 2010; Hendrick, 2003). Also, trust has been found to impact high-level actions (but not necessarily strategic plans) in organisations including organisational learning (Schäffer & Willauer, 2003), decision-making effectiveness (Petersen, Ragatz, & Monczka, 2005), and organisational change (Morgan & Zeffane, 2003).

This study suggests building trust among all participating stakeholder groups (planning experts, managers, selected crowd, crowd, and individuals) is an effective approach to increasing the effectiveness of OSP. A recent study by Birkinshaw (2017) confirms that "common-based production" of strategy content and "collective decision making" about the strategy will lead to a better understanding of the strategy indirectly supporting the moderating impact of trust on OSP effectiveness proposed in this research.

Proposition 3. The transparency of strategy process impacts the perceived effectiveness of strategic planning when stakeholders have a certain level of power when making organisational decisions.

Prior studies have scarcely examined the impact of *power* on strategic planning effectiveness. Exceptions include, Dean Jr and Sharfman (1996) who studied the strategic decision-making process and found political behaviour (including asserting power) as part of this process to impact the effectiveness of the final decision. Other studies have focused on power in terms of giving priorities to a specific group of stakeholders. (Cooper & Downer, 2012; Faehnle & Tyrväinen, 2013).

Our finding on the role of power is also consistent with studies on innovation (Napierkowski & Parsons, 1995) and change management. For example, Fichter (2009) investigated the role of power in the formation of innovation communities and found that certain groups have the power to promote innovation. Another study by Mathieu, Gilson, and Ruddy (2006) found evidence that empowering staff mediates the relationship between their involvement and the effectiveness of organisational change.

However, recent studies on OSP, in general, have focused on power. For example, Hautz et al. (2017) mentioned empowerment as a central dilemma of open strategy referring to the fact that although an OSP approach can potentially grant more power to stakeholders, it subjects them to the burdens of strategising. Hence, it can be inferred that in an organisation without a culture of power sharing, this burden may negatively impact stakeholders' interpretations about OSP effectiveness.

Mack and Szulanski (2017) also identified stakeholders' power over decision-making as a factor impacting the degree of openness in OSP. On the other hand, managers' loss of power and control over the organisation is mentioned as a potential risk in OSP (Birkinshaw, 2017; Malhotra et al., 2017). Managers' fear about losing their power over strategy and strategic decisions is another factor impacting their interpretation. This concern is reflected in prior literature on open strategy as a challenge when considering strategy as a secret and strategists as elite staff in conventional work (Whittington et al., 2011).

Proposition 4. Inclusiveness in strategy process impacts the perceived effectiveness of strategic planning when there is high level of awareness about the strategy process among all stakeholders.

Stakeholders' awareness about the strategic planning project and the resultant plan has also been highlighted as an important moderating factor in the strategic planning effectiveness literature (Adams, 2005; Bunning, 1992; Dyson & Foster, 1982) with less emphasis recently.

In the OSP literature, although awareness about the planning project is not explicitly mentioned as a factor impacting effectiveness, a sense of virtual community has been reported

to moderate the relationship between participation and *organisational sense of community* (similar to organisational effectiveness in this study) (Hutter et al., 2017).

Proposition 5. Inclusiveness in strategy process impacts the perceived effectiveness of strategic planning when diverse groups of stakeholders participate in strategy formulation.

With regards to inclusiveness, this study recommends paying attention to the cognitive diversity of participating stakeholders as well as demographic diversity. Diversity is consistent with the strategic planning effectiveness literature where the variety of stakeholders was considered as a success factor for strategic planning (Owolabi & Makinde, 2012). Participation of stakeholders other than managers was also suggested in various studies (Adewale & Esther, 2012; Cooper & Downer, 2012; Giffords & Dina, 2004; Hendrick, 2003).

The demographic diversity factor has also been mentioned as a potential risk in OSP where internal stakeholders are reluctant to implement strategies and ideas submitted by external stakeholders (Malhotra et al., 2017). Our research contradicts this finding, where we suggest the diversity of participating stakeholders is a factor increasing OSP effectiveness. In other words, this study found including stakeholders from diverse groups should be considered as an opportunity in an OSP project, as diversity may help the organisation to see the future from a different perspective and may improve a sense of inclusion among stakeholders.

Proposition 6. Inclusiveness in strategy process impacts the perceived effectiveness of strategic planning when stakeholders are motivated to participate in strategy formulation.

A number of motivational factors such as *resistance to planning* (McLarney, 2001) and a *will to succeed* (Wasilewski & Motamedi, 2007) have been mentioned to influence strategic planning effectiveness. These factors are similar to the *motivation* factor identified in this research, as they both refer to a sense of willingness among stakeholders to participate in the planning process and to embrace the outcomes. The OSP literature is however relatively silent about the impact of motivating stakeholders. The only exception is the work of Hutter et al. (2017) who refer to a *sense of virtual community* as a motivator of OSP effectiveness.

Proposition 7. Using IT tools in strategy process impacts the perceived effectiveness of strategic planning when the planning system is considered to be efficient.

There is a debate in the literature about the possibility of openness without IT (Schlagwein, Conboy, Feller, Leimeister, & Morgan, 2017). While the management literature is less inclined to consider IT as a vital component of open strategy (e.g. Hautz et al. (2017)), the IS literature considers IT as a critical characteristic of open strategy (Tavakoli et al., 2015b) forming one of the preconditions of OSP (Sailer et al., 2017).

Further to this disagreement, the literature about using IT tools in strategic planning is limited; and the impact of IT on OSP also remains under-studied. However, in the broader IS literature, stakeholders' perception about IT infrastructure (in terms of accessibility) is listed as a factor influencing social inclusion (Tambulasi, 2009), while gaining feedback from stakeholders about IT is suggested as an approach to improve the perception of effectiveness (Jaeger, 2006). The proposed system for collaborative strategic planning can be identified as an example of a Group Decision Support System (GDSS). Therefore, our findings on the efficiency of the IT component can be compared with the literature in this area, confirming the same (Kim,

Godbole, Huang, Panchadhar, & Smari, 2004). The results of this study support the importance of IT tools in creating a transparent and inclusive strategic discourse while emphasising the importance of the perceived effectiveness of the planning system aligned with the literature on social inclusion.

Proposition 8. Using IT tools in a strategy process impacts the perceived effectiveness of strategic planning when the participating stakeholders are IT-literate and able to work with the system.

The impact of IT literacy has been essentially ignored in the strategic planning effectiveness literature. This may be a result of less attention being paid to IT tools in the strategy literature (as explained when discussing Proposition 7). However, this research claims that by extending the inclusion of stakeholders to wider societies, special consideration should be given to less IT literate people.

This research is the first to focus on the exclusion factor for stakeholders. By reference to a wider IS literature, the use of IT tools have been found to widen exclusion in certain contexts (Tambulasi, 2009; Trauth & Howcroft, 2006). Although IT has been mentioned as a crucial social phenomenon in the OSP literature (Tavakoli et al., 2017), there is a limited in-depth commentary about the impact of IT literacy on the ultimate effectiveness of OSP. Accordingly, this study recommends a more detailed analysis of the impact of using IT in the open strategy making process (see Section 6.2).

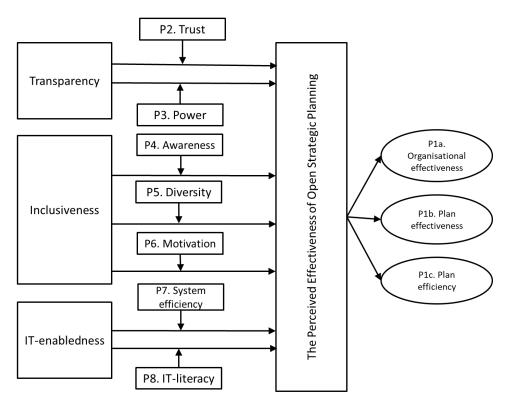


Figure 3 Graphical representation of open strategic planning effectiveness, including the eight propositions

In sum, comparing the findings of this research with the literature indicates that in these two cases of OSP some of the factors outlined in the propositions have previously been identified

as success factors for strategic planning, even though different titles or terms may have been used. Furthermore, individual factors such as trust and awareness, and factors related to IT-enabledness have attracted little attention in the strategic planning effectiveness literature. Figure 3 provides a graphical illustration of the findings represented as codes, moderating factors, and propositions developed from this research.

6.2 Implications for Research

This research presented eight propositions facilitating the participation of stakeholders in a process of strategic planning known as OSP. These propositions are based on empirical results and focus on conditions moderating the impact of three characteristics of OSP on strategic planning effectiveness.

While the topic of OSP is relatively new and is lacking studies from a social and political perspective (Matzler et al., 2014), this study focused on identifying micro-level conditions relating to effective OSP practice. The paper's main contribution, outlined in Figure 3 and in the eight propositions, is a substantive theory of the effectiveness of OSP. Our study investigated the impact of using IT for the purpose of including more stakeholders in the strategic planning process. Although the importance of using IT tools is a critical dimension of open strategy (Morton & Amrollahi, 2018; Morton, Wilson, Galliers, & Marabelli, 2019); IT as a tool to attract stakeholders (Sailer et al., 2017; Schlagwein et al., 2017) has been widely studied in the open strategy literature. However, to best of our knowledge, IT tools have not previously been reported in connection with the effectiveness of OSP. Future studies may want to focus on this aspect and can benefit from the available theoretical work on topics such as gender (Broome, DeTurk, Kristjansdottir, Kanata, & Ganesan, 2002; Trauth, 2013) investigating how the application of IT tools can impact the interpretation by less-privileged groups such as aged people or stakeholders with lower levels of IT literacy, regarding their inclusion in highlevel organisational forums such as OSP. Also, the effectiveness of the planning system in isolation or as part of the whole OSP ecosystem can be investigated in future work by potentially considering the theoretical work on generic IS success factors (Delone & McLean, 2003).

As this work is an exploratory study, future studies can further develop the propositions in a variety of contexts using OSP. For example, while this study documented different interpretations of OSP effectiveness (organisational effectiveness, plan effectiveness, and plan efficiency), future studies may benefit from a re-examination of what our interpretation of OSP effectiveness means. This can be done by referring to the available theory in the IS and strategic management literature. For example, regarding different interpretations and impressions of an OSP system, the theory of impression management (Dillard, Browning, Sitkin, & Sutcliffe, 2000) could be helpful to investigate the dynamic motivations of humans in their understanding about the effectiveness or success of an OSP endeavour as a reality. This theory can further explain in what way stakeholders perceive the openness of strategy making process and how it can impact their understanding about the strategy and its effectiveness.

We also advocate a different approach to doing future strategic planning research — one that considers the interaction over time of intentions, context, process, and action around the effectiveness of OSP. This research has essentially been a cross-sectional study focussing on identifying a set of moderating factors and a specific outcome (effectiveness), whereas process models aim to understand the sequence of events leading to some result over time. While our research has identified some of the important moderating factors, it has not examined the

dynamic set of contextual elements that interact with one another over time leading to OSP effectiveness. What needs to be researched next, this paper claims, is the interplay of conditions and process by which stakeholders come to be involved with OSP for the first time.

Process research and methods that track activities over time are needed to fill this gap. Previous reviews on open strategy have identified a lack of experimental and longitudinal studies in this area (Morton, Wilson, Galliers, & Marabelli, 2017; Sailer et al., 2017). The propositions in this research can form a basis for process studies by suggesting components of OSP effectiveness and the factors impacting effectiveness. There is a rich literature on organisational and contextual factors that can be referred to as a basis in future studies. We recommend considering forms of involvement (Morgan & Zeffane, 2003) in organisational change and the impact of such involvement (Hussain et al., 2018; Mathieu et al., 2006).

Furthermore, and considering the interrelationship between OSP and innovation as a potential area of research, future studies could benefit from and adapt the literature on innovation as a theoretical frame. For example, studies in diffusion of innovation have focused on the outcome of innovation (De Vries, Bekkers, & Tummers, 2016) that could be beneficial for future studies to compare and contrast with OSP. The level and type of openness in OSP could also be mapped with patterns in the open innovation literature (Dahlander & Gann, 2010) with respect to the effectiveness of OSP. Finally, given that the findings of our study mainly focus on the diversity of internal stakeholders, a further avenue of research could be to focus on both internal and external stakeholders (Amrollahi, 2018; Whittington et al., 2011). Diversity of external stakeholders is a promising research topic as it differentiates various forms of openness and further investigates the impacts of these patterns.

6.3 Implications for Practice

This study and the propositions have several implications for practice. First of all, the propositions provide practitioners wanting to implement the notion of OSP with insight on how to improve the effectiveness of their project. Similarly, OSP is expected to produce new opportunities for strategy consultants (Whittington et al., 2011) and by considering the propositions will help practitioners to implement an OSP approach in a more effective way.

In the first case, an imbalance among stakeholders submitting strategic ideas occurred as a result of one group's better access to and communication with the plan. This finding is reflected in proposition five as *diversity*. Based on this finding, we recommend future practices of OSP to consider the diversity of stakeholders (besides the number of participating stakeholders) to accommodate all possible perspectives in developing open strategic plans.

This study also found stakeholders' awareness a significant moderating factor of effectiveness in OSP. This finding suggests the importance of quality communication (Adams, 2005; Spee & Jarzabkowski, 2011) with all stakeholders about the anticipated outputs of planning. In the second case, increasing stakeholders' awareness through improved communication lead to more effective planning and a higher level of inclusiveness in the planning process. We recommend, practitioners pay attention to increasing stakeholders' awareness about both the planning process and the formulated plan. Increasing awareness about the planning process can be done through workshops and/or training material on OSP before and during idea submission phase. The developed plan should be introduced to all stakeholders, and implementation plans, and revisions should be prepared with their active participation.

Recent studies (Amrollahi & Rowlands, 2016; Morton et al., 2016b; Tavakoli et al., 2015a) have highlighted the use of IT tools as a critical characteristic of open strategy. Using an online system is regarded as essential in attracting more stakeholders to participate, as well as providing a trustworthy and anonymous platform for them to submit their ideas. However, this study warns practitioners about the 'dark side' of using these technologies for less IT literate stakeholders. Our findings reveal that people with less IT ability and limited access may feel excluded when these technologies are used for strategic planning and feeling excluded can negatively affect their perception about the effectiveness of the approach. Designing an "easy to use" planning system and providing stakeholders with alternative tools for submitting their ideas e.g. on paper or through participation in focus groups and other types of facilitated meetings may help in preventing a feeling of exclusion.

Lastly, this study found conflicting viewpoints about what is required as part of the plan and different ways the plan was interpreted. As the content of the plan and its interpretation are suggested as key elements of effectiveness (as reflected in the propositions), practitioners should first consider developing a shared understanding of the strategic plan among different groups of stakeholders. Approaches such as benchmarking of similar plans prior to the idea submission phase, post development workshops, and implementation focus groups could help to facilitate a common understanding. Following these suggestions may result in stakeholders forming a positive interpretation about the project and potential benefits of an OSP approach.

7 Conclusion

Using an exploratory approach helped this study uncover various interpretations about the effectiveness of OSP, at the same time recognising moderating factors that lead to effectiveness. As stated in the Introduction, a lack of established theoretical work about the effectiveness of OSP necessitated the generation of new propositions, new perspectives and empirical insights adding to an existing body of knowledge in this arena. As the characteristics of open strategy have been studied in previous research (Leonhard Dobusch & Kapeller, 2013; Stieger et al., 2012), this study went further and extends previous research by focusing on moderating factors strengthening the impact of the so-called three open strategy characteristics.

While stakeholders have a critical role in new paradigms of strategy, including strategy as practice and open strategy, it is crucial to understand stakeholders' interpretation about the effectiveness of strategic planning. Based on an available review of past literature, the outcome measures of OSP have mostly come from firm-specific metrics such as increased loyalty and an improved image for the firm (Sailer et al., 2017). However, this research comes from the perspective of stakeholders involved in OSP. This perspective assisted the research to better explore open strategy from the perspective of those who created the plan and from those that implemented it.

In conclusion, this exploratory research achieved its goals by identifying how stakeholders interpreted the effectiveness of an OSP approach by identifying moderating factors linking the openness with effectiveness through the generation of eight propositions.

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Appendix 1. Interview questions

- 1. Are you agreeing with this statement: "this approach has helped people to be more involved in the organization"? Why and How?
- 2. How efficient and easy to use did you find the planning system?
- 3. How do you think this approach decreased the planning cost?
- 4. How do you think this approach improved the required time for strategic planning?
- 5. From your perspective, what is the most important business goal for this organization? (examples: customer service, productivity, increase market share, customer satisfaction, customer retention, better competitive position, Shareholders satisfaction) Do you think this goal is highlighted enough in the developed plan?
- 6. Which strategy in the final plan you think is the most important? From your perspective, is this strategy explained completely? From your perspective, is this strategy achievable in the mentioned time frame?
- 7. Do you think: "this project was generally successful"? Why?
- 8. Do you think this plan will improve the performance of the organization? Why?

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