Open strategy-making with crowds and communities: Comparing Wikimedia and Creative Commons

Leonhard Dobusch [a, *], Jakob Kapeller [b]

[a] *University of Innsbruck, School of Management, Department of Organization and Learning, Universitätsstr. 15, 6020 Innsbruck, Austria*
[b] *Johannes Kepler University Linz, Institute for Comprehensive Analysis of the Economy (ICAE), Department of Economics, Altenbergerstr. 69, 4040 Linz, Austria*

ARTICLE INFO

ABSTRACT

In the wake of new digital technologies, organizations rely increasingly on contributions by external actors to innovate or even to fulfill their core tasks, including strategy-making processes. These external actors may take the form of crowds, where actors are isolated and dispersed, or of communities, where these actors are related and self-identify as members of their communities. While we know that including new actors in strategy-making may lead to tensions, we know little about how these tensions differ when either crowds or communities are concerned. Investigating this question by analyzing open strategy-making initiatives conducted by two non-profit organizations (Creative Commons and Wikimedia), we find that tensions with communities may be resolved with increasing openness in strategy-making, while crowds are better compatible with more exclusive strategy-making practices.

© 2017 Elsevier Ltd. All rights reserved.

Introduction

Although many organizations already relied on contributions by external actors before the digital era, the advent of new digital technologies has fueled the proliferation of 'openness' as an organizing principle (Tkacz, 2012). Approaches such as 'open innovation', 'open collaboration' or 'open government' deliberately seek and invite active participation of novel actors in the creation (Dell'Era and Verganti, 2010), improvement (Baldwin and von Hippel, 2011) and dissemination (Schau et al., 2009) of products and services.

While relying on external actors constitutes a form of "open strategy" (Chesbrough and Appleyard, 2007; Fosfuri et al., 2011; 2013), such reliance does not necessarily imply that organizational *strategy-making* itself is also more open in such cases. However, in the recent strategy literature, we can observe a growing interest in various forms of open strategy-making processes (Hautz et al., 2017; Whittington et al., 2011; Doz and Kosonen, 2008). Open strategy-making refers to the inclusion of actors in the strategy-making process, who customarily do not take part in such processes and are often situated outside of an organization's formal boundaries. While the inclusion of external actors typically gives rise to novel practices intended to organize or facilitate collaboration in strategy-making (Luedicke et al., 2017; Whittington et al., 2011), the challenges associated with opening up strategy-making are significant. As strategy-making is generally conceived as a conflict-prone political process (March 1962; Knights and Morgan, 1991), a greater involvement in strategy-making implies that the conflicts and

judgments underlying strategic considerations become transparent and relevant to a greater number of stakeholders (Fosfuri et al., 2011; Tkacz, 2015).

Against this general background, it does not come as a surprise that the recent literature on open strategy-making has identified several tensions (e.g., regarding empowerment or disclosure) arising from the inclusion of novel actors in the process (Hautz et al., 2017; Heracleous et al., 2017). According to Heracleous et al. (2017: 2), tensions are inherent to open strategy processes given "the directive, focused, convergent qualities of traditional conceptions of strategy and the non-hierarchical, expansive and often divergent nature of dialogic approaches", which are characteristic for open strategy-making practices. Hautz et al. (2017), in their typology of tensions, or 'dilemmas' as they call it, argue that the complications and challenges associated with open strategy-making are always coupled to potential advantages. Building upon these works, we intend to show that tensions have an impact not only on the organization opening up its strategy-making, but also, and possibly more importantly, are related to the group of actors targeted or invited for taking part in strategy-making (for a similar endeavor in the realm of innovation see Seidel et al., 2017).

In line with the recent literature, we argue that the nature and intensity of tensions in open strategy-making are not uniform across cases and would suggest that the past literature already provides some guidance with regard to the importance of different groups of actors. For instance, the growing importance of informal communities in IT-contexts, which has been studied extensively (O'Mahony and Ferraro, 2007; O'Mahony and Bechky, 2008; Faraj et al., 2011), led O'Mahony and Lakhani (2012) to conclude that "organizations" reside "in the shadow of communities" (see also Seidel and Stewart, 2011; Felin et al., 2017). However, in addition to communities, where external actors are not only related to an organization, but also among themselves, another stream of research deals with organizations harvesting contributions from crowds (Afuah and Tucci, 2012; Bauer and Gegenhuber, 2015; Haythornthwaite, 2009; Jeppesen and Lakhani, 2010; Surowiecki, 2004). Although crowds and communities both reside outside the formal organization, they differ with respect to their specific relational setup: while communities are networks of interrelated actors, who may engage in interpersonal exchange and share social ties or a common identity outside an open strategy-making process, crowds mostly comprise actors who do not share interpersonal ties but are mainly related to the organization in some form or another (e.g. being a client, supplier or interested individual; see also Seidel et al., 2017). While this distinction between crowds and communities is implicitly present in the literature on open strategy-making, so far no specific research efforts have been undertaken to analyze whether it actually matters for understanding open strategy-making and, if so, how it relates to the practices and tensions emerging from 'opening up' organizational strategy-making.

In this paper we aim to address this issue. By analyzing six cases of open strategy-making initiatives by two organizations — Creative Commons and Wikimedia — that rely heavily on contributions from external audiences to fulfill their core organizational missions, we want to explore which difference it makes whether an open strategy initiative addresses either a crowd or a community of newly included actors. Thereby, we focus on differences in two respects: differences in terms of various *open strategy-making practices* and in terms of *tensions* emerging in the course of the open strategy-making process. The cases under study are especially suitable for this task as both organizations are subject to demands from both, a community surrounding and sustaining the organization as well as a larger crowd of users and adopters of the organization's services.

Analyzing these cases allows us to contribute to the literature on openness in organizational strategy-making in three ways. First, we find that increasing openness in strategy-making leads to a greater variety of strategy-making practices. The relative merits of this increase in variety are context-dependent, as the consequences of increasing openness in our cases relate to the fit between types of newly involved actors and strategy-making practices. This aspect is illuminated further by our second finding that communities strive for participation in those practices, which exhibit a higher degree of openness with regard to decision-making, whereas crowds display the opposite tendency. Finally, our third finding documents that in the cases under study the tensions identified by Hautz et al. (2017) do indeed emerge out of the interaction between core organization and external actors (as suggested by Hautz et al., 2017) but differ with regard to actor types. Hence, in what follows we show how the dynamics of these tensions depend on the interplay between organization, crowd and/or community.

Theoretical background

From open innovation to open strategy-making

Over the past decade, we have observed a growing interest in and diversity of increasingly open forms of innovation. Initially, pioneers such as Chesbrough (2003; 2006) or von Hippel and von Krogh (2006) defined open innovation negatively in demarcation from 'traditional', 'proprietary' or 'closed' models of innovation. According to Chesbrough (2006: 1), open innovation combines "internal and external ideas into architectures and systems". Subsequent works have focused on different approaches to open innovation such as "selective revealing" (Alexy et al., 2013; Henkel et al., 2014) or "crowd-sourcing" (Afuah and Tucci, 2012; Bayus, 2013; Jeppesen and Lakhani, 2010), all of which deal with various governance strategies involving different types of external actors in previously internal innovation processes (see also Felin and Zenger, 2014).

While applying a form of open innovation to a certain degree constitutes something that could be called "open strategy" (Chesbrough and Appleyard, 2007) or "community-focused strategy" (Fosfuri et al., 2011; 2013) in the sense of strategically

introducing openness, openness in innovation need not extend to openness in strategy-making itself. Nevertheless, openness in innovation may also lead to the inclusion of additional and often external actors − stakeholders (Dunham et al., 2006) − in strategy-making processes. For example, Bayus (2013: 228) analysis of Dell's crowdsourcing initiative "Ideastorm" lists suggestions provided by the crowd and considered by the organization, which address issues of corporate strategy such as M&A ("buy Lenovo") or investment decisions ("invest in miniprojectors"). Yoo et al., (2012: 1402) also consider this potential transgression from open innovation to open strategy-making by pointing to "opportunities for forging new organizational and strategic relationships" in the context of open, "distributed" forms of innovation. These examples can be understood as aiming to incorporate novel perspectives in the strategy-making process.

Such a perspective aligns well with the viewpoint of those scholars dealing with openness in strategy-making, which explicitly − and similarly to open innovation − demarcate open strategy-making from "traditional", "exclusive" or "opaque" modes of developing and executing strategy (Hautz et al., 2017; Stieger et al., 2012; Whittington et al., 2011). The main commonality of open innovation and open strategy-making processes resides in the idea of increasing the quality of outcomes by expanding the scope of actors invited to participate in the underlying processes (Aten and Thomas, 2016). Such a view also explains obvious differences between these streams of research, e.g. the fact that some studies on open strategy-making only deal with increased employee participation in strategy-making enabled by new information technologies without looking outside of organizational boundaries (e.g. Stieger et al., 2012).

In this article, in turn, we are only interested in forms of open strategy-making that invite external actors to contribute. Specifically, organizations that already pursue a community- or crowd-focused strategy (Fosfuri et al., 2011), such as those engaging in open innovation and crowdsourcing practices, seem to be particularly prone to inviting external actors to participate in strategy-making processes, as well. Since these organizations already collaborate with certain external audiences, their respective importance for the organization may be the reason to include them in strategy-making. Further, as evidenced by some open innovation studies (e.g. Bayus, 2013; Yoo et al., 2012), these actors may already provide strategically relevant information that could be integrated more systematically in strategy-making processes.

Tensions in open strategy-making with external actors

However, the mere 'opening up' of strategy-making will have some ramifications by itself and quite independent of the specific questions asked (Birkinshaw, 2017; Heracleous et al., 2017). According to March (1962), an organization's goals are subject to continuous bargaining processes and, hence, the "business firm" can be understood "as a political coalition" (March 1962: 662). Organizational strategy-making processes thus exhibit a "political character" (Knights and Morgan, 1991: 251). In this context, opening up strategy-making offers both the opportunity and challenge to include additional actors in these bargaining processes (Tkacz, 2015). Such a promotion of "potential participants" to "actual participants" (March 1962: 672), implies a change in quality and breadth of the "political coalition" governing the organization in question. Recent empirical studies of organizations opening up their strategy-making processes have further underlined the need to account for tensions associated with increasing openness in strategy-making (Heracleous et al., 2017). Summarizing contributions of a special issue on open strategy-making, Hautz et al. (2017) list five "dilemmas", which are partly overlapping but point to distinct tensions that might result from engaging in open strategy-making.

The dilemmas of *process* and of *escalation* point to the fact that access to wider sources of knowledge and realizing benefits of openness might come at the cost of "compromising speed, flexibility and control" and of "creating escalating expectations about increasing openness" (Hautz et al., 2017: 5). In other words, increasing openness might render current (*process*) or future (*escalation*) decision-making on strategic issues more demanding in terms of time, effort and expectations towards strategy-making (Collier et al., 2004), while bearing the potential of improving decision quality (Malhotra et al., 2017).

Also related are the dilemmas of *empowerment* and of *commitment*. Inviting contributions empowers wider audiences in the context of strategy-making, but also requires commitment of these newly included actors to strategic processes and outcomes (Mantere and Vaara, 2008; Stieger et al., 2012). Hence, empowerment might also (over-)burden wider audiences with the pressures of strategy (Luedicke et al., 2017) and, can undermine potential gains in commitment when expectations by external actors are not met (Baptista et al., 2017). Finally, Hautz et al. (2017) add tensions regarding *disclosure* of information as a fifth dilemma. While being more transparent might contribute to legitimacy (Whittington et al., 2011) or function as an impression management tool (Gegenhuber and Dobusch, 2017), it could also endanger competitiveness (Appleyard and Chesbrough, 2017) and even understanding due to information overload (Ripken, 2006).

Taken together, all five dilemmas identified by Hautz et al. (2017) summarize the challenges associated with increased openness in strategy-making. However, what is missing in this account is a systematic assessment of the interplay between the focal organization and various types of external audiences invited to contribute.

Open strategy-making in the shadow of crowds and communities

While current research on open strategy-making incorporates the differentiation between internal and external actors (Whittington et al., 2011), it does not ask whether these newly included actors are part of either a crowd or a community. In the case of communities, external actors are related and self-identify as mutually dependent community members (see, for example, Jarvenpaa and Lang, 2011; O'Mahony, 2007; O'Mahony and Lakhani, 2012), whereas in crowds, individuals adopt a common service, feature or attitude, but remain isolated despite these commonalities (Bonabeau, 2009; Surowiecki, 2004;

Jeppesen and Lakhani, 2010). While members of communities may interact directly with each other, communication within crowds is largely absent — at least as long as it is not directed or facilitated by an organization serving as a central node. We argue that introducing such a distinction is important for understanding the ramifications of open strategy-making, in particular in the context of organizations that rely on crowd- or community-related practices in some form or another.

One justification for this claim can be derived from recent literature on open strategy-making, which emphasizes the crucial role of factors like 'transparency', 'inclusiveness' and centralized decision-making power in open strategy-making applications (Whittington et al., 2011; Matzler et al., 2014). While we agree that these factors are of considerable importance, their actual impact is subject to social dynamics, which differ systematically between crowds and communities. Specifically, we expect communities, which form *a network of their own,* to exhibit demands for more *transparency* and increased *inclusiveness* as well as to question influential *central authorities* and established *decision-making routines* due to this network-property.

Various previous studies support this claim. O'Mahony and Ferraro (2007: 1100), for instance, describe how interactions among members of a peer-production, open source community resulted in "blending democratic with bureaucratic mechanisms […] to adapt its conceptualization of authority to the changing conceptions of its members." In this case, the whole strategy of formalizing organizational rules and structures was community-driven. In another example, Verganti (2008: 445) distinguishes between user-centered design — which focuses on eliciting needs from a dispersed crowd of users — and design-driven innovation, which requires engaging with pre-existing networks of 'key interpreters' during the design discourse, thereby already resembling the distinction between crowds and communities in open innovation. Similarly, research on user participation in software development and testing (Davis and Venkatesh, 2004; Glenford et al., 2012) has found that openness among interconnected actors may lead to agenda setting by participants, which reduces the initiating organization's scope of control. These examples illustrate that differences between internal dynamics of crowds and communities play an important role in the unfolding of open strategy-making initiatives.

Our summary of these findings is that many examples from the recent literature already provide ample evidence for the applicability of the crowds versus communities distinction in an empirical setup, even when the main focus of these contributions was not directed toward the impact of crowds versus communities in open strategy-making. As a result, past contributions only implicitly address the question whether a certain practice is coined by either crowds or communities and do not look at the idiosyncrasies arising in cases of a 'co-presence' of crowds and communities within the same discourse. In this paper we not only aim to make these relationships explicit, but also try to theoretically substantiate this differentiation by exploring which difference it makes whether an open strategy initiative addresses either a crowd or a community of newly included actors.

Method

Research design and setting

This study uses a comparative case study design to investigate open strategy-making initiatives based on the inclusion of crowds and communities. Gerring (2004: 342) defines a case study as "an intensive study of a single unit for the purpose of understanding a larger class of (similar) units." Our basic research strategy aims to examine a combination of similarity and variation (Flyvbjerg, 2006), where the variation relates to the issue of involving either a crowd or a community, or both in an open strategy-making initiative. By comparing practices associated with open strategy-making in six embedded cases (Yin, 1994) equally divided between two organizations, we can focus explicitly on the distinction between crowds and communities in open strategy-making.

In concretu, the six open strategy-making initiatives we examine are embedded in two transnational, non-profit network organizations — Creative Commons and Wikimedia. The similarities between Creative Commons and Wikimedia in terms of founding dates (2001 and 2003 respectively), location (US) and organizational form (non-profit network organization), as well as in terms of their central missions (creating and fostering digital commons) make them suitable candidates for a comparative approach. Both organizations are also "born globals" (Knight and Cavusgil, 2004), meaning that the goods and services they provide online have been available globally since their inception, potentially attracting users and contributors from all over the world. At the same time both organizations started to transnationalize their formal organization soon after their foundation by developing a network of locally rooted organizations. Finally, the fact that both organizations depend heavily on contributions by volunteer contributors (Wikipedia) or dispersed license users (Creative Commons) makes them ideal cases for studying strategy-making in organizations that strongly depend on community- and crowd-related practices. The fact that both organizations are not-for-profit does not necessarily limit the applicability of our findings. While non-profit organizations may follow different and potentially more diverse sets of organizational goals than for-profit corporations (O'Mahony and Bechky, 2008; Ruef and Scott, 1998), both organizations under study also pursue typical entrepreneurial goals such as, for example, increasing market share, facilitating product innovation or enhancing consumer satisfaction (see, for instance, Jemielniak, 2014; Creative Commons, 2013).

In the case of Wikimedia the identification of the two most relevant groups of external actors is rather clear-cut: the contributors to Wikimedia's main output — the online encyclopedia Wikipedia — are connected to each other via collaborative editing practices, thereby forming a community of Wikipedians that self-identify at least partly as such (e.g. Schroer and

Hertel, 2009; Jemielniak, 2014). The group of Wikipedia readers, in turn, represents a highly differentiated and amorphous crowd of largely unrelated actors.

The adopters of Creative Commons licenses are similar to Wikipedia readers insofar as they constitute a group of unrelated actors, which stay in only loose contact (if any) to each other as well as to the formal organization and simply use the licenses for their own purposes. License users, thus, carry the typical characterizations of a crowd. Drafting, revising and porting the Creative Commons licenses, on the other hand, is conducted by an informal group of experts in law, arts and computer science. These copyright experts and activists form an informal community, closely connected to the formal body of Creative Commons, which serves as a node for these relationships.

Both organizations, Wikimedia as well as Creative Commons, rely on the contributions of crowds and communities to thrive. This reliance on crowd- and community-based inputs in daily operations led the organizations to invite the participation of crowds and communities in strategy-making, which allowed us to identify different open strategy-making initiatives embedded in each of the two cases.

Case selection: selected open-strategy initiatives over time

The core responsibility of the organization Creative Commons is to act as a license steward, maintaining and developing its set of standardized copyright licenses. In the course of developing Creative Commons' modular copyright licenses, the design, interpretation and application of its non-commercial (NC) license module emerged as one of the core subjects of debate both within the core organization, its close-knit community of experts and proponents, and the crowd of adopters of Creative Commons licenses. A Creative Commons manager even referred to it as "the single biggest thing that everybody who engages with Creative Commons grapples with" (CC-Int#19).[1]

The strategic relevance of the NC module for Creative Commons mainly results from three facts. First, the NC module allows others to reuse Creative Commons licensed works in non-commercial settings while preserving rights for commercial use. The NC module is therefore key to developing business models based upon Creative Commons licenses and, thus, the long-term sustainability of the Creative Commons approach in the commercial sphere. Second, after launching its licenses, Creative Commons recognized that a variety of different interpretations of the specific legal implications of the 'non-commercial' clause have been applied in practice, which was perceived as a danger for the whole mission of developing and disseminating alternative copyright license. Third, despite this ambiguity with regard to the intention and implications of the non-commercial module, the NC module has become the most popular module for licensing (Creative Commons, 2009). Any changes with regard to the NC module would therefore impact on large proportions of Creative Commons users in general and on the strategically important subset of license-adopters with commercial applications in particular.

In attempts to resolve the uncertainty with regard to the NC module, Creative Commons repeatedly turned to its related crowd of license users as well as its community of copyright experts and activists to develop and assess respective strategic options. As depicted in Fig. 1, we identified three noteworthy open strategy-making initiatives with regard to the NC module over time. In the first initiative, *Explaining NC*, Creative Commons relied on public and transparent mailing-lists to facilitate
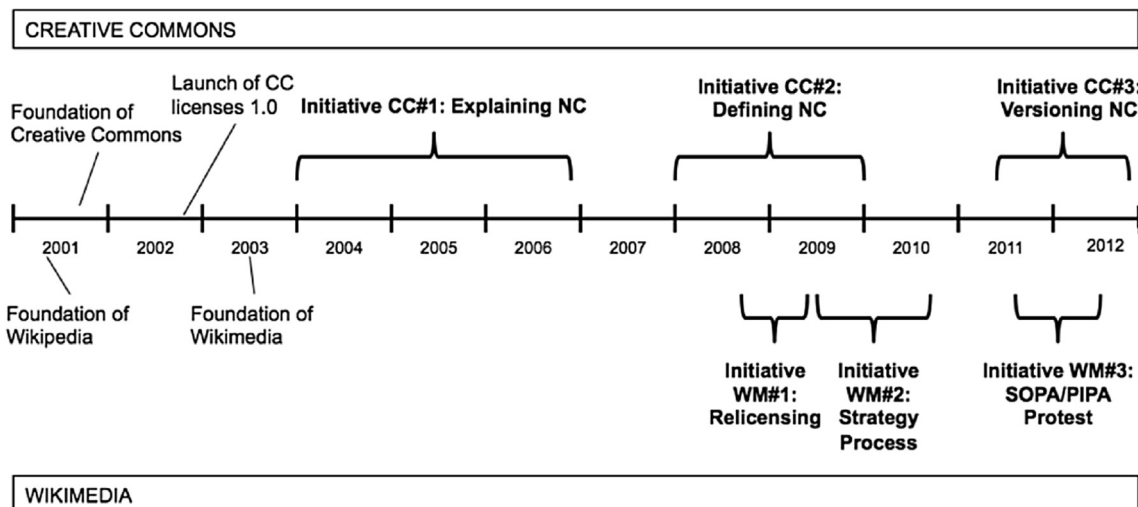

Fig. 1. Selected open strategy-making initiatives.

---

[1] See Table A1 in Appendix A for a list of references to empirical sources.

discussion and exchange among adopters and proponents of Creative Commons licenses to eventually agree on a common understanding of "non-commercial". In the second initiative, *Defining NC*, Creative Commons advanced a broad survey on licensing and usage practices among the general online population as well as its crowd of adopters and proponents. In the third and most recent initiative, *Versioning NC*, Creative Commons again changed the tools applied for open strategy-making, complementing mailing-lists with a wiki to debate strategic re-orientation for the NC module in the context of re-versioning its set of licenses to version 4.0. While all these three strategy-making initiatives are "embedded" (Yin, 1994) in the overall case of the Creative Commons NC module, their clear temporal separation (Langley, 1999) allowed us to apply a comparative lens on each embedded case.

The Wikimedia Foundation was founded as the formal organizational carrier for Wikipedia only in 2003, two years after Wikipedia had been up and running. It took several years for the newly set-up body to consolidate and internationalize before the first attempts were launched to include the community of Wikipedia editors in strategy-making (Jemielniak, 2014). Similar to Creative Commons, Wikimedia also deployed different tools to allow participation in strategy-making for members of the community of volunteer Wikipedia authors and the crowd of Wikipedia readers respectively. Again, we selected three open strategy-making initiatives, each of which dealt with different issues.

Relicensing, the first open strategy-making initiative we identified in the case of Wikimedia, was related to the licensing strategy of Wikimedia. In this context the community of Wikipedians was invited to vote on whether to re-license the whole of Wikipedia under a Creative Commons license. Also in 2009, Wikimedia launched the second strategy-making initiative under study: a one-year *Strategy Process* with over 1000 contributors resulting in a five-year strategic plan; the main tool for collecting, categorizing and discussing ideas during the process was a separate strategy wiki (see also Dobusch et al. (2017) and Heracleous et al. (2017) for finer-grained analyses of this initiative). The last strategy initiative we chose to investigate was the debate over whether and how Wikimedia should weigh in on protests against the Stop Online Piracy Act (SOPA) and the PROTECT IP Act (Preventing Real Online Threats to Economic Creativity and Theft of Intellectual Property Act, or PIPA) respectively. In this *SOPA/PIPA Protest Initiative*, strategic options were also discussed via wiki-software. However, by contrast to the Strategy Process initiative, the discussion was hosted directly in the Wikipedia wiki (WM-Wiki#1) and not in a separate strategy wiki (see also Jemielniak, 2016).

Data collection

We use two main data sources for reconstructing these initiatives' strategy-making practices: interviews and archival data from sources such as websites (including wiki-pages) and public mailing-list archives. We incorporated both interview transcripts and archival data into a case study database, as summarized in Table 1. Our main data collection methods were as follows:

Table 1
Case study database.

Case	Creative Commons	Wikimedia	Total
Interviews (total)	52	47	99
>Focal organization	5	12	17
>Local affiliates/chapters	47	35	82
Mailing-lists	2	1	3
>Number of mails analyzed	536	926	1462
Wiki platforms	1	3	4
>Estimated number of pages	~50	~350	~400

First, during the course of a larger research project, we conducted 99 semi-structured, open-ended interviews with actors from both the focal organizations (Creative Commons and Wikimedia Foundation), as well as with representatives of local affiliated and chapter organizations respectively. In selecting our interview partners in the organizational headquarters we focused on leading executives involved in the strategy-initiatives under study such as the deputy CEO or project managers in the case of Creative Commons and the deputy secretary general and staff facilitators of strategy initiatives in the case of Wikimedia. Similarly, we selected representatives of those local affiliated and chapter organizations that were actively involved in at least one of the strategy-initiatives under study.

In these interviews — the majority of which were conducted via phone — we tried to inspire narrations by asking relatively open-ended questions, followed by increasingly focused questions as the interviews proceeded (Scheibelhofer, 2008; Smith, 1995). Among these more specific questions were some that asked explicitly which communities interviewees recognized or perceived themselves to be part of, and questions addressing the different strategy-making initiatives under study. Interview lengths varied significantly - ranging from 15 min to 2 h (with an average of 35 min). Interviews conducted early in the research process and with members of the focal organizations were slightly longer than later interviews, as we approached saturation (Strauss and Corbin, 1990).

Second, a significant proportion of the discussion and coordination of work within both organizations occurs online, via publicly accessible mailing-lists and wiki pages, i.e. websites that can be edited collaboratively. Although the public nature of mailing-list and wiki discussions may have had moderating effects on the tone and issues raised, the fine-grained

chronological ordering of mailing-list archives and wiki page histories that we developed allowed for a very accurate reconstruction of these organizations' strategy-making processes. In selecting mailing-lists for investigation we focused on international mailing-lists that involved significant levels of participation (see Table 1). In both cases, mailing-list data that cover the whole periods of their existence and thus all strategy-making initiatives under study are publicly available, while collaboratively edited wikis were only used in two of Wikimedia's and one of Creative Commons' strategy-making initiatives respectively. Overall, online data sources allowed us to triangulate data collected via personal interviews by cross-checking for ex-post rationalizations.

Data analysis: open strategy-making practices and tensions

We undertook three steps to analyze our multiple sets of data, the first being a tabular chronology of important events and decisions in each of the two organizations. In the course of this chronological reconstruction (see Miles and Huberman, 1994; Langley, 1999), we identified the open strategy-making initiatives that would be theoretically interesting to examine as well as being sufficiently substantiated by empirical data. In doing so we arrived at the six embedded cases of open strategy-making initiatives described in the case selection section above, for each of which we individually wrote "thick descriptions" (see Geertz, 1973; Miles and Huberman, 1994; Jarzabkowski, 2008). In doing so, we tried to capture which actors contributed to each of the strategy-making initiatives and whether these actors could be considered to be part of a crowd or a community. On the other hand, we tried to identify which open strategy-making practices emerged in the course of these initiatives and how these practices related to the actors participating (see Fig. 2).
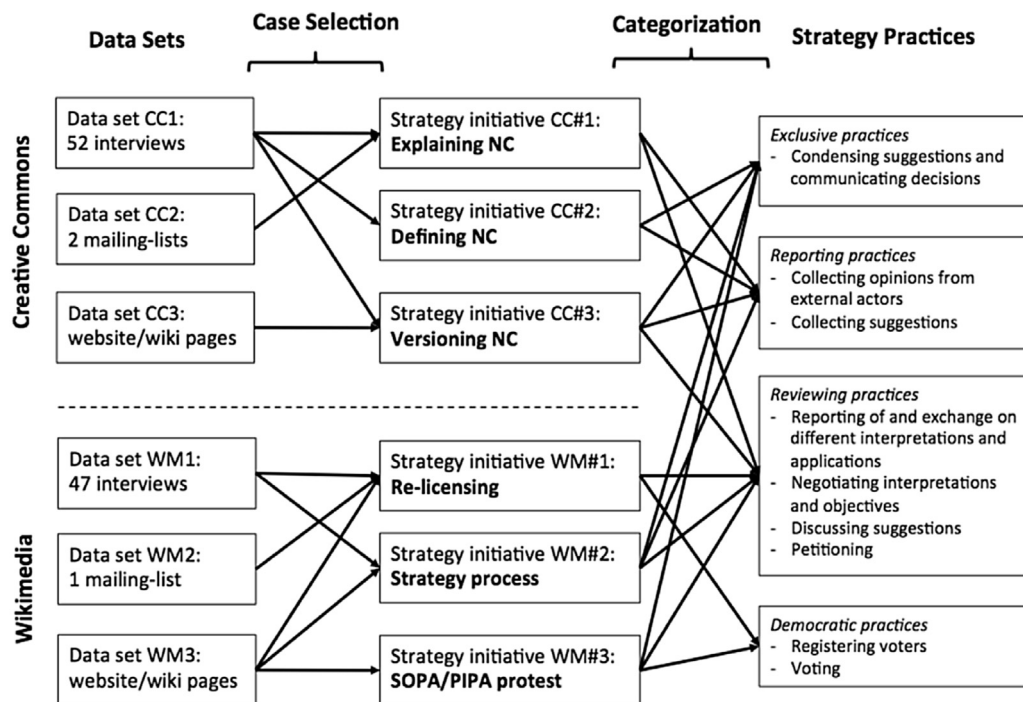

Fig. 2. Schematic depiction of data sets and analysis.

In our second data analysis step, we categorized open strategy-making practices across all six initiatives, arriving at nine different sets of empirically emerging open strategy-making practices such as 'collecting suggestions' or 'petitioning' (see Table 2 below for coding examples and logic). To further aggregate these sets of practices, we compared our findings to the concepts we found in the literature (see Jarzabkowski, 2008). The procedure of condensing inductively generated sets of practices (see Table 2) led us to four theoretically grounded categories of open strategy-making practices (see Fig. 3).

Exclusive practices refer to those instances where the openness of strategy-making is confined (Mantere and Vaara, 2008) and the core organization condenses suggestions and communicates decisions in a centralized manner. *Reporting practices* may be either tournament-based or collaboration-based (Afuah and Tucci, 2012), and restrict the openness to collecting inputs such as suggestions or opinions from actors who customarily did not take part in such processes, but without necessarily being transparent, i.e. sharing intermediate or even final results. *Reviewing practices*, in turn, rely on the contribution of inputs to allow for commenting and debating these inputs or intermediate results. Such reviewing of ideas

Table 2
Coding examples and categorization of open strategy-making practices across cases.

Exemplary Quotes	Emerging open strategy-making practices	Practice categories	Degree of openness
"After much consideration, we are settled on preserving the existing 3.0 treatment of NonCommercial for 4.0."(Creative Commons wiki page, CC#3) "And then I did participate, towards the end, in some discussions about the final recommendations. But not really the final, I mean, what they called the final recommendations." (Interview, volunteer, 2012, WM#2)	- Condensing suggestions and communicating decisions.	**Exclusive practices:** centralized strategizing by representatives of core organization	very low
"We know that about 20 percent of the accounts that were started on the strategy Wiki had not ever edited before" (Interview, Wikimedia employee, 2011, WM#2) "To create a submission, put the title in the form below and press the "create page" button." (Strategy Wiki suggestion box page, WM#2) "The primary discussion forum for issues relating to the 4.0 versioning process will be the CC license discuss email list. Please subscribe and add your voice to this important effort." (Creative Commons wiki page, CC#3)	- Collecting suggestions.	**Reporting practices:** providing inputs for strategy- making	
"The study was comprised of two components — an empirical study of understandings of Internet users in the [US], and an informal study for comparison purposes of a broader, worldwide group of Internet users consisting of those generally more familiar with [Creative Commons]" (CC 2009, S. 10, CC#2)	- Collecting opinions from external actors.		
"[What about] a website distribut[ing] many music files, which is the main focus to the site. The site makes money on advertising." (Creative Commons Mailing list, external actor, 2006, CC#1) "To me, it still seems that artists just don't get a big enough payback from copylefting and free-licensing their work with existing copyleft licenses. And that's why NC remains attractive" (Creative Commons Mailing list, external actor, 2006, CC#1) "The goal in protesting should be to raise awareness. […] Locking down Wikipedia does not advance our first goal of a free encyclopedia. Nor does it stop the passage of SOPA." (Wikipedia page, WM#3) "Because the attribution issue is quite divisive, I want us to dedicate some more time to reconsidering and revising our approach." (Wikimedia employee, Wikimedia mailing-list, WM#1)	- Reporting of and exchange on different interpretations. - Negotiating interpretations and objectives.	**Reviewing practices:** interaction among participants on strategy-making	
"The nice thing about the strategic planning was that it attracted a lot of activity and attention and it allowed us to rediscuss some things and to link discussions which happened in many places and from all language communities." (Interview, volunteer, 2012, WM#2) "To create a submission, put the title in the form below and press the "create page" button." (Strategy Wiki page, WM#2)	- Discussing suggestions.		
"Strong Support. This seems like a rational response to SOPA. Dmarquard (talk) 18:23, 14 January 2012 (UTC)" (Wikipedia page, WM#3)	- Petitioning.		
"In order to vote, users who have made more than 25 edits prior to March 15, 2009 on any Wikimedia project can visit a special page which will transfer them to a third party server […]. The server is administered by Software in the Public Interest, Inc. (SPI) to guarantee the integrity of the vote. " (Official Wikimedia blog, referred to on Wikimedia mailing-list, WM#1)	- Registering voters.	**Democratic practices:** Inclusion in strategic decision-making (transfer of decision power)	
"Total ballots cast and certified: 17462" (Wikimedia employee, Wikimedia mailing-list) "Eventually, the discussion led to a decision strongly in favor of a 24 h global blackout of the site on January 18, […] affirmed in a vote of approximately 1800 editors" (Wikipedia page, WM#3)	- Voting.		very high

	Exclusive Practices	Reporting Practices	Reviewing Practices	Democratic Practices
	←——————— degree of openness ———————→			
Archetypical Practice	Crafting Strategy	Collecting/ Delivering Input	Commenting on Input	Ranking Inputs, Voting
Archetypical Tool(s)	Strategy Meeting	Survey, Suggestion-box	Mailing-list, Forum, Jamming	Elections
Example(s) in the Literature	Mantere & Vaara (2008)	Afuah & Tucci (2012)	Franzoni & Sauermann (2014)	O'Mahoney (2007)
Transfer of Decision Power?	None	None	Possible (agenda-setting)	Possible (agenda-setting) or Explicit (formal commitment)

Fig. 3. Degree of Openness of different open strategy-making practices.

may happen via online tools (Aten and Thomas, 2016; Franzoni and Sauermann, 2014) or offline in 'strategy jams' (e.g. Palmisano, 2004) and, while no explicit transfer of decision power is intended, obviously these setups can open up the possibility of, or even directly invite "agenda-setting" (Autio et al., 2013: 1353). In contrast, *democratic practices* go beyond the mere reviewing of inputs and explicitly invite participation in agenda-setting by introducing ranking or voting procedures (e.g. Stieger et al., 2012). Empirical cases of such far-reaching openness other than the ones presented in this paper can be found in the open source software realm, where "communities may start as direct democracies and move towards representative democracies as they mature," (O'Mahony, 2007: 146). Overall, the resulting continuum of practice categories resembles similar categorizations of various forms of participation as developed in the political science literature (see, e.g., Rowe and Frewer, 2005).

In our third and final step, we went back to our case descriptions to identify tensions emerging from open strategy-making practices being conducted by different types of actors, i.e. members of the core organizations, of crowds or of communities. First, we separately tried to identify whether one or more of the five tensions described in the theory section of the paper, i.e. tensions of process, escalation, empowerment, commitment, and disclosure, could be assigned to various instances of open strategy-making in each of the embedded cases. Second, in discussing the coding of tensions together we not only resolved inconsistencies in our respective analysis but also tied together strategy-making practices and the various tensions. This allowed us to compare differences with regard to the occurrence of tensions as far as crowds, communities or both were involved in open strategy-making, as we will show in the subsequent findings and discussion sections (see also Table 3 below).

Results: crowds and communities in strategy-making

In each of the two organizations under study, we present our findings by first giving some additional background on the relation between the focal organizations and the respective crowds and communities, followed by an in-depth analysis of open strategy-making initiatives involving either a crowd or a community or both.

Open strategy-making in the context of Creative Commons

The external copyright experts and activists related to Creative Commons contribute not only by drafting, revising and porting licenses but also by engaging in outreach work, propagating the licenses to potential adopters, as described by a former deputy CEO of Creative Commons:

> [T]he most successful [affiliates] have actually managed to find their own funding […], have done the porting, […] and are always doing their own outreach events […] Korea is a good example of that, Australia is a good example of that, Netherlands, Taiwan, Spain, Italy, etcetera. (CC-Int#18, 2008)

Taken together, the copyright experts and activists around Creative Commons international affiliate network form a relatively close-knit *community* connected to the formal Creative Commons body, which serves as a node for their relationships. However, copyright experts and activists are not the only groups of actors that Creative Commons relies on in fulfilling their mission of spreading alternative copyright licenses. Since its licenses can be applied to all kinds of copyrightable material — from audio and video to educational and scientific works — Creative Commons has to deal with the demands of fast growing and highly diverse groups of license users. Using the license is thereby strictly decentralized:

Table 3
Strategy-making practices and respective actors across six open strategy-making initiatives.

	Involved actors	Practices	Tensions
CC#1: Explaining NC	- Focal organization. - Crowd of license adopters. - Community of copyright experts/activists.	- *Reporting:* collecting opinions from external actors. - *Reporting:* reporting of and exchange on different interpretations and applications. - *Reviewing:* negotiating interpretations and objectives.	- *Empowerment:* provided to both, crowd and community, thereby facilitating their interaction. - *Commitment:* tasks and input of community overburden the crowd. - *Disclosure:* Focal organization is pressed to add clarifications.
CC#2: Defining NC	- Focal organization. - Crowd of license adopters.	- *Reporting:* collecting opinions from external actors. - *Exclusive:* condensing suggestions and communicating decisions.	- *Empowerment:* provided to crowd only, thereby resolving past tensions of *commitment* and *disclosure*.
CC#3: Versioning NC	- Focal organization. - Community of copyright experts & activists.	- *Exclusive:* condensing suggestions and communicating decisions. - *Reporting:* collecting suggestions for specific problems. - *Reporting:* reporting of and exchange on different interpretations and applications.	- *Empowerment:* provided to community only. - *Process* and *commitment:* tensions arising due to time-constraints and the need for finalizing decisions.
WM#1: Re-licensing	- Focal organization. - Community of Wikipedians.	- *Reviewing:* negotiating interpretations and objectives. - *Democratic:* registering voters. - *Democratic:* voting.	- *Process:* tensions arising due to time-constraints. - *Empowerment:* mandate for final-decision making resolves partial overburdening as well as tensions of *process,* but contributes to *escalation.*
WM2: Strategy process	- Focal organization. - Crowd of Wikipedia readers. - Community of Wikipedians.	- *Exclusive:* condensing suggestions and communicating decisions. - *Reporting:* collecting suggestions for specific problems. - *Reviewing:* discussing suggestions.	- *Empowerment* of both crowd and community, where the former is mostly overburdened. - *Commitment* and *escalation* within community due to deviation from previous decision procedures. - *Process:* need for final decision.
WM3: SOPA/PIPA protest	- Focal organization. - Community of Wikipedians.	- *Exclusive:* condensing suggestions and communicating decisions. - *Reviewing:* negotiating interpretations and objectives. - *Reviewing:* petitioning. - *Democratic:* voting.	- *Empowerment* of community leads to quasi-democratic activities. - *Process:* exogenously imposed time constraints (bill approaching in congress). - *Commitment:* tensions within community due to deviation from previous decision procedures.

it simply requires referencing the correct license by name and providing a link to the license text. Since license use is free of charge, there is hardly any direct interaction between Creative Commons and the users of its copyright licenses.

Strategy-making initiative CC#1: Explaining NC

In *Explaining NC (Initiative CC#1),* the first attempt to deal openly with strategic questions about its NC license module, Creative Commons specifically aimed at engaging with its crowd. In doing so it invited actual or potential license users to contribute to the discussion on the NC module via mailing-lists, which had been established already for the use of the closer-knit community of copyright experts and activists. This kind of "pooling" of actors from the organization's crowd and community led to a pattern of conversations with two distinct clusters: questions and requests by the crowd of potential and actual adopters, and debates spurred by the community of copyright experts and activists. By making conflicting interpretations, evaluations and applications of the NC module transparent, the underlying parallel empowerment of crowd and community did not lead to any kind of convergence of understanding. Quite the contrary: often, relatively simple and clear-cut questions posed by license adopters (e.g. "Is it appropriate to use [an NC license] on a website with Google Adwords?", CC-Mail#1, 2005) could not be answered conclusively by the community of experts, but instead induced sophisticated and highly specialized debates, which deterred further questions by more lay people from the crowd of license-adopters. See, for instance, the following short excerpt from an answer to the simple question just quoted:

> CC hasn't clarified what exactly 'commercial' means on the grounds that explaining their licenses is legal advice. Since the sliver of information from CC about CC-NC was that the NonCommercial license allows monetary exchange as long as it is not-for-profit, I would like to suggest a new license which would effectively be what everyone on this list THOUGHT CC-NonCommercial was. (CC-Mail#2, 2005)

In short, the *reviewing* practices arising out of the empowerment of the closer-knit community of copyright experts and activists were not only ill-suited to achieving Creative Commons' aim of attaining more conceptual clarity, but also created demands for disclosure on the side of the formal organization.

> Just to clarify a topic that has been the subject of some discussion on this list over recent days — the intended meaning of non-commercial as drafted in the CC-NC licenses is [authors' note: to prohibit] any use in a for-profit environment. (CC-Mail#3, 2005)

However, these suggestions did not foster the intended integration or convergence. While the intention of the Creative Commons headquarters was to make a strategic decision, this step was perceived as 'taking sides' in an open debate, thereby undermining the commitment of experts and activists in the community.

> Money changes hands, you break the license. Seemed pretty clear to me. Now, they're saying it's OK as long as you don't make a profit? I'm not a lawyer, but where the hell did that come from? This is so bogus. (CC-Mail#4, 2005)

Additionally, the *reporting* practices developed by the crowd of actual or potentials license-users collided with the community's *reviewing* practices and undermined the former's commitment to the open strategy process. This delicate interplay between tensions of commitment and disclosure led Creative Commons to fundamentally change its NC strategy as a result of this initiative. The idea of trying to arrive at an unambiguous common definition of the NC module via successive collaborative clarification was replaced by a more pragmatic attitude, accepting that different actors would hold complementary interpretations of non-commerciality in different contexts.[2] In short, CC aimed to reduce tensions by simply scaling down openness. At the same time, Creative Commons officials hoped that successful functional interpretations of it would emerge among community practitioners.

> We don't really have the ability to define non-commercial for everybody. What we want to do is [create] enough of a kind of consensus around it, so people begin to understand it in a certain way and this begins to drive practice and usage. (CC-Int#4, 2007).

Strategy-making initiative CC#2: Defining NC

This focus on understanding the NC module in practice gave rise to a subsequent open strategy-making approach that was driven by a survey entitled *Defining Non-Commercial (Initiative CC#2)*. This initiative consisted of a comprehensive survey intended to encompass a representative sample of the general online population,[3] as well as an open online survey for Creative Commons affiliates and license adopters.[4] Creative Commons not only invited anyone to participate in the survey but also decided to publish all the results, including raw data, online after completion of the study. The main aim of the study was to collect information on actual usage-practices, and it resembled a kind of market-analysis, asking why users adopted this standard rather than others. In doing so, the study also served to evaluate the claim that compatible usage-practices would arise in different application fields:

> We don't intend to use this to then produce the definitive non-commercial definition. I think what will happen is […] that non-commercial means very different things to different people. (CC-Int#19, 2008)

From a strategic viewpoint, the two most important results of the *Defining Non-Commercial* study (Creative Commons, 2009) were: first, the study demonstrated convincingly that the NC module was an attractive license component for a broad range of license users, and, second, it indicated that — in sharp contrast to the conflict-laden previous mailing-list discussion — compatible interpretations of the NC text had, in fact, been established over a broad range of application fields. This compatibility of interpretations was evident not only at the general level (where more than 85% of the respondents from the online population saw their own definition of non-commercial as compatible with the text of the NC module), but also in more specific cases. For instance, the understanding among creators with higher incomes from licensed works correlated with comparatively tolerant definitions of NC (Dobusch and Kapeller, 2012: 71). Since the recourse to a crowdsourcing tool significantly limited the amount of dialogical interaction and restricted the scope of arising practices to mere *reporting*, it allowed Creative Commons to differentiate much more clearly between crowd and community and thereby to retrieve the information it originally aimed to retrieve. In doing so Creative Commons effectively managed to resolve the tensions of disclosure and commitment arising within the first initiative by reducing overall openness in strategy-making.

---

[2] For instance, some creators used the NC clause to restrict others from using their work, even when these creators did not intend to earn money from its use: "Beyond money, there is certainly a concept of control here. I don't necessarily want my work being used for the benefit of organizations I don't agree with, so I'm not ready to give blanket permissions that would allow that." (CC-Mail#5, 2006)

[3] Targeting the U.S. online population, the firm Greenfield online — now part of Toluna — provided a stratified random sample based on a joint distribution of age/gender categories through the duration of data collection (n ≈ 2000, see Creative Commons, 2009: 20-28).

[4] The survey of license adopters was conducted via an open online questionnaire that included some additional questions compared to the survey of the U.S. online population designed to address licensing behavior (n ≈ 3770; see Creative Commons, 2009: 20-28)

Strategy-making initiative CC#3: Versioning NC

While these results convinced Creative Commons officials that there was no urgent need for reform, several sub-groups of license users were still dissatisfied with the situation. Their concerns resurfaced in 2011, when Creative Commons started publicly debating the updating of its set of license modules to version 4.0. Mike Linksvayer − then deputy CEO of Creative Commons − described the versioning process at an international Creative Commons meeting in Warsaw as "a once-in-a-decade-or-more opportunity" to adapt the licenses, and listed a number of issues that the new version 4.0 licenses needed to address, which included the strategic question of how to deal with the NC module. In this course of *Versioning NC (Initiative CC#3)* Creative Commons again opened up its strategy-making and reserved a special section for doing so on its public wiki as well as on the relevant mailing-lists. In contrast to the former initiatives, *Versioning NC* was not targeted primarily at the crowd of license users, but Creative Commons did invite its community of experts and activists to take part in the discussion on version 4.0 of its licenses. While the wiki was open to anyone, participants in the discussion were asked to be cautious and use their real names to better avoid conflicts similar to those encountered during Initiative CC#1, arising from empowering both community and crowd at the same time.

> CC has pre-populated the wiki with key topics identified to date. We ask contributors to be thoughtful about placement of additional and related topics, and the creation of new pages altogether. […] We would also prefer that contributors use their real names when editing the wiki. (CC-Wiki#1)

Ultimately, the community of Creative Commons experts and activists provided most of the proposals documented in the wiki; only a few came from outside groups such as the network Students for Free Culture (CC-Ext#1). The participating actors not only engaged in *reporting* by providing suggestions but also pursued *reviewing practices* when debating different threads of argumentation and condensing them into specific proposals. The relevant sub-section related to the NC module (CC-Wiki#2) lists twelve proposals, ranging from abandoning the license model completely to re-branding it, for example as "Commercial Rights Reserved" (CC-Wiki#3) to avoid misinterpretations. Creative Commons Headquarters published intermediate results regularly on the wiki during the versioning process, justifying their decisions. The final statement (for the NC module) reads as follows:

> Draft 2 Treatment: After much consideration, we are settled on preserving the existing 3.0 treatment of NonCommercial for 4.0. This will be a disappointment for some, a relief for others. However flawed the current definition may be, it is one that our community has become accustomed to and relies upon. (CC-Wiki#4)

While the discursive approach in *Versioning NC* was indeed suitable to generate and condense a series of strategic suggestions, the survey approach carried out in *Defining NC* had a potentially greater impact on the core organization's final decision. Ultimately, its results helped to legitimize a result reached by an *exclusive practice*, namely the centralized decision to retain the status quo of a variety of interpretations of the license module. At the same time this use of exclusive decision-making power allowed for resolving tensions of empowerment, process (i.e. the need to make a final decision), and commitment (i.e. the risk of alienating contributors) by pointing to the survey results as a powerful justification for sticking with the prevailing interpretation.

Hence, in the case of Creative Commons the least inclusive open strategy-making initiative led to the most important results for actual strategic decision-making, since this less ambitious setup allowed for a clear separation between the organization's crowd and community. The recourse to these comparatively uncontroversial survey results was used to calm tensions arising in the course of open strategy-making as they allowed to avoid an entanglement between the viewpoints and practical needs of more lay users in the crowd with those more sophisticated and theoretical approaches found in the community of copyright experts and activists.

Wikimedia: community, crowd and open strategy-making

Even though Wikimedia was founded to support the community of volunteer Wikipedia editors, relationships between members of the formal organization and Wikipedia editors have been conflict-prone ever since. Slides of a talk given at the Wikimania conference 2010 in Gdansk summarize common prejudices on both sides as follows:

What [Wikimedia] chapters think of communities […]

- 'They don't appreciate our efforts'
- 'They sit at home in pajamas and write stupid articles.'
- 'They don't understand the Eternal Wisdom of the Foundation'

What communities think of [Wikimedia] chapters.
- 'They are a bunch of self-important assholes who want jobs in government'
- 'The last time they edited in Wikipedia was in early 2006'
- 'They want to fly around the world and sip cocktails' (WM-Con#1, 2010)

In addition to the ongoing exchange with the community of Wikipedians, Wikimedia also aims to address the amorphous and highly differentiated crowd of Wikipedia readers. A growing number of readers is thereby not only an end in itself; the crowd of readers also serves as a recruiting ground for new contributors and is the main source for collecting donations. With rapidly growing numbers of Wikimedia staff around the world (from two employees in 2003 to 285 employees in 2015), a rising rate of donations is increasingly important for the core Wikimedia Foundation.

Strategy-making initiative WM#1: Relicensing

In the first strategy initiative related to the question of *Relicensing* all Wikimedia-content under a Creative Commons license, Wikimedia strove for maximal openness with respect to its community and explicitly invited 'Wikipedians' to participate in strategic decision-making by means of a democratic referendum, which served to empower the community of 'Wikipedians' by means of *reviewing* as well as *democratic* practices.[5] As in the Creative Commons' *Versioning NC* initiative, Wikimedia discussed re-licensing Wikipedia via its public mailing-list and on a sub-section of its 'Meta-Wiki', which had been founded in the first year of Wikipedia's existence as "a multilingual discussion forum used by all Wikimedia language communities" (WM-Wiki#3). The *Meta*-Wiki and the mailing-lists served different purposes in managing the *reviewing practices*, which emerged in the run-up to the licensing decision. The mailing-list archive chronologically documented several discussion threads. The following mail, for instance, opened a discussion thread with 44 responses by 19 participants:

> "The moves to try and get some form of [license] merger appear to have ground to a halt. So what can we do[?] Ignoring the situation isn't a long-term viable option." (WM-Mail#3)

This formulation points to an underlying tension of empowerment ("ignoring the situation isn't […] viable") affecting the community, which is accompanied by a tension of process on the side of the formal organization ("moves […] have ground to a halt"). The need for finalizing a decision is mutually related to the potential overburdening of external actors.

The *Meta*-Wiki 'Talk' pages, in turn, were used to summarize partial results by providing access to a 'List Summary Service', which decreased the barriers of entry in the context of this open strategy-making initiative:

> The mailing lists are a good place to get information about WMF projects; but they are also very high-traffic and can be hard to keep up with, especially for those with just a casual interest in the projects. For readers, the list summaries should serve as a way to find when issues are being discussed that are of interest. (WM-Wiki#4)

By systematically cross-referencing mailing-list discussions onto the relevant *Meta*-Wiki pages, the latter functioned as a comprehensive and thematically structured platform for suggestions and criticism about Wikimedia's licensing strategy. The 'Licensing Update' Talk page lists 55 different sections in total, dealing with a great variety of issues, which illustrates the tensions arising from the conflict between empowering the community and the need for finalizing decisions (tension of process) experienced by the focal organization. These tensions fueled heated debates on the intention and procedural requirements of this open strategy initiative as documented below.

> If this vote *does* pass, […] then must you give credit to Wikipedia? Or will you be able to use the GNU Free Documentation License with any content? (WM-Wiki#5, 2009)

> Shame on Wikipedia for so exploiting its contributors and back-stabbing them. (WM-Wiki#5, 2009)

In the end, 17,462 votes were cast and the proposal to re-license Wikipedia's content was accepted with a 75.8% majority (13,242 Votes). In turn, the Wikimedia foundation took up this result to legitimize a large-scale effort to re-license all Wikipedia content and thereby managed to resolve the underlying tension of empowerment and process not by scaling down openness, but rather, by making use of an even more radical take on openness by explicitly drawing on democratic practices. However, this introduction of radical openness has, in turn, shaped expectations about future open strategy initiatives and, hence, contributed to an arising tension of escalation.

Strategy-making initiative WM#2: Strategy process

In its next open strategy-making initiative — a one-year *Strategy Process* with the goal of crafting an overall long-term (5-year) strategic plan — Wikimedia adopted a different approach, departing from the previous focus on direct participation with democratic practices. Facilitated by a consulting firm specializing in non-profits, Wikimedia launched a separate Strategy Wiki as the focal "hub for collecting, analyzing, and synthesizing information relevant to strategic planning" (WM-Wiki#6) to more explicitly foster *reporting* and *reviewing practices* among its community of 'Wikipedians'. While this specific take on community empowerment was justified by the assertion that the *Meta*-Wiki was too "high-level" (WM-Wiki#7) for general discussions, another reason for setting up a separate wiki mentioned in interviews was the deliberate attempt to invite new and different contributors to join the extant *Meta*-Wiki community:

---

[5] All contributors with at least 25 edits in any Wikimedia project prior to a cut-off date were allowed to vote in this referendum. This threshold was rather low and hence inclusive compared, for instance, to the board members' elections, where contributors needed to have made more than 400 edits in order to participate (WM-Wiki#2).

> We know that about 20 percent of the accounts that were started on the Strategy Wiki had not ever edited before in any of our projects […] We know that there were some people who came from nowhere. (WM-Int#28)

Wikimedia also implemented new tools on the Strategy Wiki, such as a suggestion box, to also provide modes of empowerment for the crowd of Wikimedia readers, who are mostly not familiar with the syntax necessary to engage in editing wikis. However, even motivating Wikipedia contributors — let alone mere Wikipedia readers — to engage in the strategy process was difficult, which led to a predominance of *reporting practices* among 'Wikipedians':

> I would say that 90 percent of the people who participated on the strategy Wiki participated like a suggestion box, where they dropped off ideas, and less like really active participants. Maybe 10 percent were active and did engage much deeper. (WM-Int#37,)

To condense and synthesize the total of 842 proposals suggested and categorized in the Strategy Wiki, Wikimedia established 14 different task forces comprising between 3 and 23 members. In a final step, the consulting firm integrated the recommendations provided by these task forces into a final strategic plan, featuring five strategic priorities: stabilizing the infrastructure; increasing participation; improving quality; increasing reach; and encouraging innovation. This final integration process reflected the need for centralized closure by means of *exclusive practices* as the sheer mass of suggestions overburdened crowd and community, while the focal organization was pressed to deliver some final outcomes. Hence, we find again a co-occurrence of a tension of empowerment, visible mostly in the organization's environment, with a tension of process, affecting mostly the focal organization.

To resolve these tensions, the final set of goals included specific recommendations and numerical targets subsumed under broad umbrella terms — a format, that allowed Wikimedia headquarters to keep control of the process and accentuate certain results and suggestions at will. For instance, the final formulation of the 'increasing reach' priority read as follows:

> **2015 Goal:** Wikimedia has at least 680 million online visitors per month and **54%** of those visitors will represent the Global South (2010: 42%). (Bold in original, WM-Wiki#8).

In sum, the strategy process was successful in generating and discussing a series of proposals relating to the organizational aims of Wikimedia. At the same time, however, the absence of an explicit transfer of decision power as well as the strong prevalence of exclusive practices led to tensions of commitment and escalation slightly alienating to the community of 'Wikipedians', which relies strongly on a collaborative culture within its daily working routines. Some interview partners articulated these tensions by arguing that the outcome of the Strategy Process had become too detached from the community at large:

> Some of the questions that were hard to resolve were whether the final strategy was going to represent the strategy for the whole movement or will it just be the strategy for the foundation. (WM-Int#34)

Such concerns addressed the possibility that the strategy process could be ineffective for strategically (re)orienting the community of Wikipedians due to unresolved tensions, regardless of its effect on the focal organization.

Strategy-making initiative WM#3: SOPA/PIPA protest initiative

The last strategy initiative considered in this study was hosted neither on a *Meta*-Wiki nor on Strategy Wiki but rather directly within Wikipedia. The strategic question at stake in the *SOPA/PIPA Protest Initiative* was whether Wikimedia, for the first time in its history, should openly take a stance in a political controversy against copyright enforcement laws that were widely perceived as overreaching. Compared to the previous strategy initiatives, a few Wikipedia pages were the only tool applied for discussing a large number of different proposals for protest activities and related issues. Again, the main focus was directed towards empowering the community of 'Wikipedians' and the central node for discussion was the SOPA Initiative project page, featuring a "Call for comment from the community" (WM-Wiki#1), which led to about 80 different — mostly lengthy — discussion threads on its related talk page (WM-Wiki#9).

Similar to the *reviewing* and *democratic practices* established among Wikipedians — where community decisions are used to decide whether to retain or delete particular Wikipedia pages (WM-Wiki#10) after an exchange of arguments —, community members were invited not just to provide statements of opinion, but also to support or oppose certain proposals. Although "an emerging consensus that the community wants to do 'something' to demonstrate concern about this bill" (WM-Wiki#1) was quickly evident and created a tension of process mostly affecting the focal organization, many questions raised by Wikipedians about the scope and style of protest actions remained open. For example, the question as to whether a Wikipedia blackout plus an accompanying banner was an appropriate action or not - and if so globally or only in the US - led to an intense debate triggering the launch of six different petitions clarifying the different options (from "no blackout or banner" to "global blackout and banner"; see also WM-Wiki#1). The community hence tried to resolve the underlying dilemma of empowerment by democratic approaches similar to those used in the decision on licensing (WM#1).

However, this effort suffered from the lack clear decision-making rules, and with the vote on the relevant bill in Congress approaching, pressure to make a decision grew to the point where Wikipedia founder Jimmy Wales spelled out this tension of process by urging "users to quickly come to a consensus so the site can move forward" (WM-Ext#1). Only few days after that intervention, Sue Gardner, Wikimedia Foundation Executive Director, announced the definite decision to black out the English-language Wikipedia for 24 h, worldwide. Although this decision was finally made and executed by

the formal Wikimedia organization, Gardner stated explicitly that "the Wikipedia community announced its decision" (WM-Wiki#1).

In summarizing this case it appears that the original democratic impetus of Wikimedia was indeed a good fit to the demands of the community addressed, while a series of procedural problems − such as the lack of clear decision rules, lack of time and the difficulties in dealing with such a fine-grained set of options − eventually forced the core organization to resort to *exclusive practices* to reach a final decision. This move managed to resolve the underlying tension of process for the focal organization, but also brought forth tensions of commitment and escalation among Wikipedians, as the community's impact on final decision-making eventually remained unclear.

Before we discuss our findings in the light of the literature, Table 3 offers a summary and an overview of actors, practices and tensions in each of the embedded cases under study.

Discussion

Analyzing six cases of open strategy-making initiatives embedded in two organizations, which rely strongly on inputs from external actors, we are able to derive three main insights on openness in strategy-making in general and on respective differences regarding crowds and communities in particular.

First, we observe that openness in strategy-making in most cases complements rather than substitutes closed forms of strategy-making (*exclusive* practices), although such a substitution is indeed possible as shown in case WM#1 (for another such example see Luedicke et al., 2017). Having theoretically captured various forms of open-strategy making by identifying open strategy-making practices, we find that a higher degree of openness in terms of participating actors is accompanied by a greater variety in open strategy-making practices. Specifically, *exclusive practices,* which are, by definition, carried out by the core formal organization, arose in four out of six cases (CC#2-3, WM#2-3). *Reporting practices* such as collecting suggestions also emerged in four cases (CC#1-3, WM#2), while *reviewing practices* such as debating and evaluating ideas played a significant role in five of these six cases (CC#1, CC#3, WM#1-#3). The emergence of *democratic practices*, which we observed in two cases, was either intended by the formal organization *a priori* (as in WM#1, where a referendum was planned from the very beginning), or emerged as a reaction to the demands or suggestions articulated by members of the specific community during the process (WM#3, when the upcoming vote on the SOPA/PIPA law required closure and led to a community vote on different suggestions).

Taken together, involving new (types of) actors in strategy-making seemingly requires additional strategizing practices, resulting in new configurations of such practices. These configurations cause the emergence of tensions or "dilemmas" typically associated with opening up strategy-making (Hautz et al., 2017; Heracleous et al., 2017). However, greater *openness* in terms of practices (see Fig. 3 and Table 2 above for our respective classifications) does not necessarily result in more severe tensions. Rather, it is the (lack of) fit between types of newly involved actors and strategy-making practices, which to a large degree explains how tensions emerged or could be resolved in our cases. Thus, the relative merits of the increase in variety of open strategy-making practices are context-dependent. A greater variety of practices and, hence, more openness in strategy-making is associated with intensified interaction, increased transparency and a growing number of options to tackle or resolve strategic issues. Whether this increase in openness tends to resolve or create tensions eventually depends on the relative fit between types of newly involved actors and configurations of strategizing practices − the specific "forms of sociality and openness" (Felin et al., 2017: 132). Taking the distinction between crowds and communities into account is therefore advisable for any organization willing to involve external groups of actors, particularly in the digital realm.

This leads us to our second main insight, namely the observation that communities tend to actively suggest − or even enact − strategy-making practices that are more open regarding decision-making, while crowds exhibit the opposite tendency. In other words, as more open approaches come with more demanding practices they may lead to an overburdening of crowds (see also Hautz et al., 2017), while more open practices are often suitable to organize the participation of communities in strategy-making. Specifically, we observe the pattern that crowds participate predominantly in *reporting practices* and communities participate primarily in *reviewing and democratic practices,* which exhibit a relatively higher degree of openness. For instance, in the case of *Explaining NC* (CC#1), the use of existing mailing-lists to address an unconnected *crowd* of largely isolated license users required users to enter into demanding and bidirectional exchanges with members from the closer-knit community. The resulting dominance of community-driven reviewing practices in turn explains why Creative Commons largely failed to incorporate the views of the crowd of license users, who restricted their participation largely to the provision of singular inputs. The survey-based open strategy-making initiative *Defining NC* (CC#2), on the other hand, was more suitable for the participation of crowds because it restricted the scope of action strictly to *reporting practices.* Similarly, this proposition explains why democratic practices emerge only from communities in our cases (as in WM#1 or WM#3) or why tensions of commitment and escalation in the context of communities lead to unintended practices, conflicts and outcomes.

This finding in turn explains the context-dependence of the relative merits of openness in strategy-making (see also Heracleous et al., 2017) as summarized in Fig. 4. While increasing openness may come with all the various tensions described in the literature, Fig. 4 captures tensions emerging from certain combinations of open-strategy practices with crowds and/or communities. For example, traditional forms of closure in open strategy-making work well with crowds (CC#2, CC#3). Moreover, across our cases, more open and decentralized forms of decision-making with communities (WM#1) proved to produce less tensions of commitment and contributed to positively resolving tensions of empowerment, but brought forth tensions related to escalation (Hautz et al., 2017). The latter resulted from expectations created by experiences with
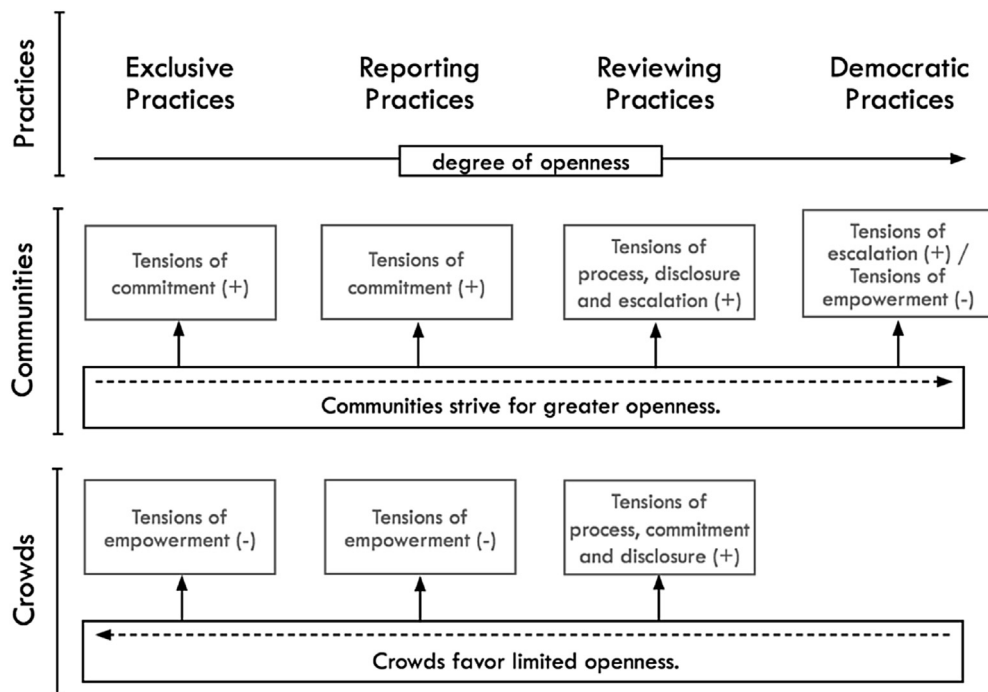
Fig. 4. Patterns of tensions typically associated with crowds and communities along various degrees of openness.

democratic decision-making practices (see also Collier et al., 2004). Hence, if an organization first promotes "potential participants" to "actual participants" just to turn down their demands (March 1962), openness might well backfire and destabilize the political coalition governing an organization (see also Tkacz, 2015).

Following from these difficulties in closing open strategy-making is the third main insight of our analysis: the various tensions identified by Hautz et al. (2017) tend to dynamically interact in different ways, depending also on the type(s) of external actors involved. Fig. 4 maps the typical relationships between groups of external actors, degree of openness and the dynamics of tensions observed in our cases. In addition, we found that across all cases, openness in strategy-making is connected to some tension of empowerment as newly including actors in the strategy-making process always entails some "burdening of wider audiences with the pressure of strategy" (Hautz et al., 2017, 5). In the cases under study, these tensions of empowerment transform into and trigger tensions on several levels; hence they serve as a prime anchoring point for the further unfolding of an open strategy initiative. It follows that how to deal with and positively resolve tensions of empowerment is a key issue in open strategy-making, implying a systematic relation between the different tensions identified by Hautz et al. (2017).

For instance, since external actors often do not succeed in producing final results, tensions of empowerment easily transform into tensions of commitment, disclosure and process (see Fig. 4 as well as Baptista et al., 2017). Specifically, we find that reviewing practices continuously proved to be too demanding for crowds in the cases analyzed, which brings forth tensions of commitment (combined with tensions of disclosure in case CC#1 and tensions of process in WM#2). In contrast, as far as communities are concerned, tensions of commitment are more strongly associated with tensions of process due to closure via traditional, centralized decision-making in the form of exclusive practices (cases WM#2 and WM#3). Therefore, as is also evidenced by the case of "radical openness" studied by Luedicke et al. (2017), democratic practices, be they intended by the core organization or emerging from community dynamics, offer an alternative way of achieving closure in open strategy-making by means of either an implicit and informal or an explicit and clearly regulated transfer of decision-making power to external actors customarily not part of strategy-making processes.

However, this result does not necessarily imply that it is impossible to incorporate crowds into reviewing or democratic practices; rather, it seems to require special efforts and tools to achieve this kind of "collaboration-based crowdsourcing" (Afuah and Tucci, 2012). Collaborative forms of "design-driven innovation" (Verganti, 2008) would thereby require *interlinking* isolated actors to establish the possibility of mutual feedback, which would effectively constitute an attempt to transform a crowd into a community (see also Autio et al., 2013; Dolata and Schrape, 2016; Bauer and Gegenhuber, 2015; Dobusch et al., 2017).

With regard to potential implications for practice, we could see a benefit in developing and marketing tools with a clear focus on either crowds or communities. Actually, current tools for open innovation or strategy such as the ones used in the case described by Stieger et al. (2012) already implicitly cater more to either crowds or communities (see also Seidel et al., 2017). The more such tools allow their users to access and review peer contributions, the more these cater to

communities (see also Seidel and Stewart, 2011). And while both our cases do not represent traditional firms, our findings might help those to make the "governance choice" (Nickerson et al. (2017: 275) of involving external actors customarily not part of internal strategy processes. Increasingly, the question is not whether to involve external actors but rather how to identify and involve actor groups, with the distinction between crowds and communities as a categorization potentially guiding related governance choices (see also Felin et al., 2017).

Conclusion

In this paper we have analyzed six open strategy-making initiatives conducted by two organizations to examine how organizations that rely on crowd- and community-related practices perform strategy. We have described the open strategy-making practices involved in those six cases, and found that greater openness in strategy-making is accompanied by an increasing variety of strategy-making practices with exclusive strategy-making practices still prevailing in more open forms of strategy-making. While we show the importance of exclusive practices for reaching closure in strategy-making, we also found that democratic decision-making practices might allow for more open forms of strategic decision-making, which provide an alternative means to reach closure in open strategy-making with external communities. In this context the theoretical distinction between crowds and communities proves useful for understanding the emerging dynamics across our cases, as we find that communities strive for greater openness (and thereby also develop new open strategy-making practices), whereas crowds exhibit the opposite tendency. The latter finding has implications for understanding the endogenous dynamics of open strategy initiatives and their respective tensions.

Some limitations of our study point to opportunities for further research. First, both our cases are non-profit organizations, which are highly dependent on contributions from related crowds and communities; it seems promising to compare our results to those in cases where for-profit organizations engage in strategy-making with external actors in the form of crowds and communities. Second, we consider it worthwhile to investigate cases where a formal organization seeks to transform a crowd (or some part of it) into a closer knit community: our findings indicate that the introduction of reviewing practices — which lead to a considerable degree of openness in strategy-making — could help to transform a crowd of isolated agents into a community. Third, having identified crowds and communities in a case, one could apply quantitative tools such as text and data mining to analyze differences in emerging topics over time. Generally, incorporating a clear and careful account of the groups of actors addressed seems to be an important suggestion for practicing open strategy-making as well as a promising avenue for further research.

Appendix

Table A1
List of References to Empirical Sources

ID code	Link
CC-Ext#1	External webpage, linked from Creative Commons Wiki, http://freeculture.org/blog/20—12/08/27/stop-the-inclusion-of-proprietary-licenses-in-creative-commons-4-0/
CC-Int#4	Interview with chairman of the Creative Commons board, USA, 2007
CC-Int#18	Interview with deputy CEO of Creative Commons, USA, 2008
CC-Int#24	Interview with head of Creative Commons affiliate, Denmark, 2009
CC-Int#45	Interview with head of Creative Commons affiliate, Italy, 2009
CC-Int#19	Interview with Creative Commons staff member, USA, 2008
CC-Mail#1	License mailing list, external actor, http://lists.ibiblio.org/pipermail/cc-licenses/2005-April/002243.html
CC-Mail#2	License mailing list, copyright activist, http://lists.ibiblio.org/pipermail/cc-licenses/2005-April/002244.html
CC-Mail#3	Community mailing list, Creative Commons general counsel, http://lists.ibiblio.org/pipermail/cc-community/2005-April/000427.html
CC-Mail#4	License mailing list, external actor, http://lists.ibiblio.org/pipermail/cc-licenses/2005-April/002170.html
CC-Mail#5	License mailing list, external actor, http://lists.ibiblio.org/pipermail/cc-licenses/2006-March/003307.html
CC-Wiki#1	Creative Commons Wiki, http://wiki.creativecommons.org/index.php?title=4.0&oldid=61005
CC-Wiki#2	Creative Commons Wiki, http://wiki.creativecommons.org/index.php?title=4.0/NonCommercial&oldid=58959
CC-Wiki#3	Creative Commons Wiki, http://wiki.creativecommons.org/index.php?title=Com—mercial_Rights_Reserved&oldid=61913
CC-Wiki#4	Creative Commons Wiki, http://wiki.creativecommons.org/index.php?title=4.0/NonCommercial&oldid=58959
WM-Ext#1	External webpage, http://truth-out.org/news/item/6083:wikipedia-users-talk-blackout-to-protest-internet-attack-bill
WM-Int#28	Interview with Wikimedia staff member, USA, 2011
WM-Int#34	Interview with Wikimedia Board member, USA, 2012
WM-Int#37	Interview with Wikimedia Board member, USA, 2012
WM-Mail#1	Wikipedia mailing list, http://marc.info/?l=intlwiki-l&m=104216592605802&w=2
WM-Mail#2	Wikipedia mailing list, Wikipedia co-founder Jimmy Wales, http://lists.wikimedia.org/pipermail/wikipedia-l/2003-June/010743.html
WM-Mail#3	Wikipedia mailing list, thread on re-licensing Wikimedia content, http://lists.wikimedia.org/pipermail/wikipedia-l/2008-October/093180.html
WM-Con#1	Slides of talk given at Wikimania conference in Gdansk, Poland, 2010, http://pt.slideshare.net/Harelc/conflicts-between-local-chapters-and-respective-editor-communities

Table A1 (*continued*)

ID code	Link
WM-Wiki#1	Wikipedia page, http://en.wikipedia.org/w/index.php?title=Wikipedia:SOPA_initiative&oldid=503683511
WM-Wiki#10	Wikipedia page, http://en.wikipedia.org/w/index.php?title=Wikipedia:Deletion_process&oldid=531736060
WM-Wiki#2	*Meta*-Wiki page, http://meta.wikimedia.org/w/index.php?title=Board_elections/history&oldid=2461634
WM-Wiki#3	*Meta*-Wiki page, http://meta.wikimedia.org/w/index.php?title=Meta:About&oldid=4912568
WM-Wiki#4	*Meta*-Wiki page, http://meta.wikimedia.org/w/index.php?title=List_Summary_Service&oldid=2690031
WM-Wiki#5	*Meta*-Wiki page, https://meta.wikimedia.org/w/index.php?title=Talk:Licensing_update&oldid=3561145
WM-Wiki#6	Strategy Wiki page, http://strategy.wikimedia.org/w/index.php?title=Process&oldid=84651,
WM-Wiki#7	*Meta*-Wiki page, http://meta.wikimedia.org/w/index.php?title=Meta:About&oldid=4912568
WM-Wiki#8	Strategy Wiki page, http://strategy.wiki-media.org/w/index.php?title=Strategic_Plan/Movement_Priorities&oldid=85874
WM-Wiki#9	Wikipedia page, http://en.wiki-pedia.org/w/index.php?title=Wikipedia_talk:SOPA_initiative&oldid=518601114

References

Afuah, A., Tucci, C.L., 2012. Crowdsourcing as a solution to distant search. Acad. Manag. Rev. 37 (3), 355–375.

Alexy, O., George, G., Salter, A.J., 2013. Cui Bono? The selective revealing of knowledge and its implications for innovative activity. Acad. Manag. Rev. 38, 270–291.

Appleyard, M.M., Chesbrough, H.W., 2017. The dynamics of open strategy: from adoption to reversion. Long Range Plan. 50, 310–321.

Aten, K., Thomas, G.F., 2016. Crowdsourcing strategizing: communication technology affordances and the communicative constitution of organizational strategy. Int. J. Bus. Commun. 53 (2), 148–180.

Autio, E., Dahlander, L., Frederiksen, L., 2013. Information exposure, opportunity evaluation, and entrepreneurial action: an investigation of an online user community. Acad. Manag. J. 56 (5), 1348–1371.

Baldwin, C., von Hippel, E., 2011. Modeling a paradigm shift: from producer innovation to user and open collaborative innovation. Organ. Sci. 22 (6), 1399–1417.

Baptista, J., Wilson, A.D., Galliers, R.D., Bynghall, S., 2017. Social media and the emergence of reflexiveness as a new capability for open strategy. Long Range Plan. 50 (3), 322–336.

Bauer, R.M., Gegenhuber, T., 2015. Crowdsourcing: global search and the twisted roles of consumers and producers. Organization 22 (5), 661–681.

Bayus, B.L., 2013. Crowdsourcing new product ideas over time: an analysis of the Dell IdeaStorm community. Manag. Sci. 59, 226–244.

Birkinshaw, J., 2017. Reflections on open strategy. Long Range Plan. 50, 423–426.

Bonabeau, E., 2009. Decisions 2.0: the power of collective intelligence. MIT Sloan Manag. Rev. 50 (2), 45–52.

Chesbrough, H.W., 2003. Open Innovation: the New Imperative for Creating and Profiting from Technology. Harvard Business School Press, Boston, MA.

Chesbrough, H.W., 2006. Open innovation: a new paradigm for industrial organization. In: Chesbrough, H.W., Vanhaverbeke, W., West, J. (Eds.), Open Innovation. Oxford University Press, Oxford, pp. 1–12.

Chesbrough, H.W., Appleyard, M.M., 2007. Open innovation and strategy. Calif. Manag. Rev. 50 (1), 57–76.

Collier, N., Fishwick, F., Floyd, S.W., 2004. Managerial involvement and perceptions of strategy process. Long Range Plan. 37 (1), 67–83.

Creative Commons, 2009. Defining Noncommercial. Full Report and All Appendices. Online: http://wiki.creativecommons.org/Defining_Noncommercial. (Accessed 14 January 2013).

Creative Commons, 2013. The Future of Creative Commons: Realizing the Value of Sharing in a Digital World. Online: https://wiki.creativecommons.org/images/c/ce/Future-of-creative-commons.pdf. (Accessed 28 August 2014).

Davis, F.D., Venkatesh, V., 2004. Toward preprototype user acceptance testing of new information systems: implications for software project management. IEEE Trans. Eng. Manag. 51 (1), 31–46.

Dell'Era, C., Verganti, R., 2010. Collaborative strategies in design-intensive industries: knowledge diversity and innovation. Long Range Plan. 43, 123–141.

Dobusch, L., Kapeller, J., 2012. Regulatorische Unsicherheit und private Standardisierung: koordination durch Ambiguität. Managementforschung 22, 43–81.

Dobusch, L., Dobusch, L., Müller-Seitz, G., 2017. Closing for the benefit of openness: the case of Wikimedia's open strategy process. Organ. Stud. in press.

Dolata, U., Schrape, J.F., 2016. Masses, crowds, communities, movements: collective action in the internet age. Soc. Mov. Stud. 15 (1), 1–18.

Doz, Y.L., Kosonen, M., 2008. Fast Strategy: How Strategic Agility Will Help You Stay Ahead of the Game. Pearson, Harlow.

Dunham, L., Freeman, R.E., Liedtka, J., 2006. Enhancing stakeholder practice: a particularized exploration of community. Bus. Ethics Q. 16 (1), 23–42.

Faraj, S., Jarvenpaa, S.L., Majchrzak, A., 2011. Knowledge collaboration in online communities. Organ. Sci. 22 (5), 1224–1239.

Felin, T., Lakhani, K.R., Tushman, M.L., 2017. Firms, crowds, and innovation. Strateg. Organ. 15 (2), 119–140.

Felin, T., Zenger, T.R., 2014. Closed or open innovation? Problem solving and the governance choice. Res. Policy 43, 914–925.

Flyvbjerg, B., 2006. Five misunderstandings about case-study research. Qual. Inq. 12 (2), 219–245.

Fosfuri, A., Giarratana, M.S., Roca, E., 2011. Community-focused strategies. Strateg. Organ. 9 (3), 222–239.

Fosfuri, A., Giarratana, M.S., Roca, E., 2013. Building and sustaining a product differentiation advantage through a community-focused strategy. Ind. Innov. 20 (2), 114–132.

Franzoni, C., Sauermann, H., 2014. Crowd science: the organization of scientific research in open collaborative projects. Res. Policy 43 (1), 1–20.

Geertz, C., 1973. The Interpretation of Cultures. Basic Books, New York.

Gegenhuber, T., Dobusch, L., 2017. Making an impression through openness: how open strategy-making practices change in the evolution of new ventures. Long Range Plan. 50, 337–354.

Gerring, J., 2004. What is a case study and what is it good for? Am. Polit. Sci. Rev. 98 (2), 341–354.

Glenford, J.M., Sandler, C., Badgett, T., 2012. The Art of Software Testing, third ed. Wiley, New York.

Hautz, J., Seidl, D., Whittington, R., 2017. Open strategy: dimensions, dilemmas, dynamics. Long Range Plan. 50 (3), 298–309.

Haythornthwaite, C., 2009. Crowds and communities: light and heavyweight models of peer production. In: Proceedings of the Hawaii International Conference on System Sciences, pp. 1–11.

Henkel, J., Schöberl, S., Alexy, O., 2014. The emergence of openness: how and why firms adopt selective revealing in open innovation. Res. Policy 43 (5), 879–890.

Heracleous, L., Gößwein, J., Beaudette, P., 2017. Open strategy-making at the Wikimedia foundation: a dialogic perspective. J. Appl. Behav. Sci. 0021886317712665.

Jarvenpaa, S.L., Lang, K.R., 2011. Boundary management in online communities: case studies of the nine inch nails and ccMixter music remix sites. Long Range Plan. 44 (5/6), 440–457.

Jarzabkowski, P., 2008. Shaping strategy as a structuration process. Acad. Manag. J. 51 (4), 621–650.

Jemielniak, D., 2014. Common Knowledge? an Ethnography of Wikipedia. Stanford University Press, Stanford.

Jemielniak, D., 2016. Wikimedia movement governance: the limits of a-hierarchical organization. J. Organ. Change Manag. 29 (3), 361–378.

Jeppesen, L.B., Lakhani, K.R., 2010. Marginality and problem-solving effectiveness in broadcast search. Organ. Sci. 21 (5), 1016–1033.

Knight, G.A., Cavusgil, S.T., 2004. Innovation, organizational capabilities and the born-global firm. J. Int. Bus. Stud. 35, 124–141.

Knights, D., Morgan, G., 1991. Corporate strategy, organizations, and subjectivity: a critique. Organ. Stud. 12 (2), 251—273.

Langley, A., 1999. Strategies for theorizing from process data. Acad. Manag. Rev. 24 (4), 691—710.

Luedicke, M.K., Husemann, K.C., Furnari, S., Ladstaetter, F., 2017. Radically open strategizing: how the premium cola collective takes open strategy to the extreme. Long Range Plan. 50, 371—384.

Malhotra, A., Majchrzak, A., Niemic, R.M., 2017. Using public crowds for open strategy formulation: mitigating the risks of knowledge gaps. Long Range Plan. 50, 397—410.

Mantere, S., Vaara, E., 2008. On the problem of participation in strategy: a critical discursive perspective. Organ. Sci. 19 (2), 341—358.

March, J.G., 1962. The business firm as a political coalition. J. Polit. 24, 662—678.

Matzler, K., Füller, J., Koch, B., Hautz, J., Hutter, K., 2014. Open strategy — a new strategy paradigm? In: Matzler, K., Pechlaner, H., Renzl, B. (Eds.), Strategie und Leadership. Festschrift für Hans H. Hinterhuber. Springer Gabler, Wiesbaden, pp. 37—55.

Miles, M.B., Huberman, A.M., 1994. Qualitative Data Analysis: an Expanded Sourcebook. Sage, Thousand Oaks.

Nickerson, J.A., Wuebker, R., Zenger, T., 2017. Problems, theories, and governing the crowd. Strateg. Organ. 15 (2), 275—288.

O'Mahony, S., 2007. The governance of open source initiatives: what does it mean to be community managed? J. Manag. Gov. 11, 139—150.

O'Mahony, S., Bechky, B.A., 2008. Boundary organizations: enabling collaboration among unexpected allies. Adm. Sci. Q. 53, 422—459.

O'Mahony, S., Ferraro, F., 2007. The emergence of governance in an open source community. Acad. Manag. J. 50 (5), 1079—1106.

O'Mahony, S., Lakhani, K., 2012. Organizations in the shadow of communities. Res. Sociol. Organ. 33, 3—36.

Palmisano, S., 2004. Leading change when business is good. Interview by Paul Hemp and Thomas A. Stewart. Harv. Bus. Rev. 82, 60—70.

Ripken, S.K., 2006. The dangers and drawbacks of the disclosure antidote: toward a more substantive approach to securities regulation. Bayl. Law Rev. 58, 139—204.

Rowe, G., Frewer, L.J., 2005. A typology of public engagement mechanisms. Sci. Technol. Hum. Values 30, 251—290.

Ruef, M., Scott, R., 1998. A multidimensional model of organizational legitimacy: hospital survival in changing institutional environments. Adm. Sci. Q. 43 (4), 877—904.

Schau, H.J., Muñiz, A.M., Arnould, E.J., 2009. How brand community practices create value. J. Mark. 73, 30—51.

Scheibelhofer, E., 2008. Combining narration-based interviews with topical interviews: methodological reflections on research practices. Int. J. Soc. Res. Methodol. 11 (5), 403—416.

Schroer, J., Hertel, G., 2009. Voluntary engagement in an open web-based encyclopedia: Wikipedians and why they do it. Media Psychol. 12, 96—120.

Seidel, M.-D., Stewart, K.J., 2011. An initial description of the C-form organization. In: Marquis, Christopher, Lounsbury, M., Greenwood, R. (Eds.), Research in the Sociology of Organizations, pp. 37—72 (Emerald).

Seidel, V.P., Langner, B., Sims, J., 2017. Dominant communities and dominant designs: community-based innovation in the context of the technology life cycle. Strateg. Organ. 15 (2), 220—241.

Smith, J.A., 1995. Semi-structured interviewing and qualitative analysis. In: Smith, J.A., Harré, R., van Langenhove, L. (Eds.), Rethinking Methods in Psychology. Sage, London, pp. 9—26.

Stieger, D., Matzler, K., Chatterjee, S., Ladstaetter-Fussenegger, F., 2012. Democratizing strategy: how crowdsourcing can Be used for strategy dialogues. Calif. Manag. Rev. 54 (4), 44—69.

Strauss, A.L., Corbin, J.M., 1990. Basics of Qualitative Research. Grounded Theory Procedures and Techniques. Sage, Newbury Park.

Surowiecki, J., 2004. The Wisdom of Crowds: Why the Many Are Smarter than the Few and How Collective Wisdom Shapes Business, Economies, Societies and Nations. Anchor Books, New York.

Tkacz, N., 2012. From open source to open government: a critique of open politics. ephemera 12, 386—405.

Tkacz, N., 2015. Wikipedia and the Politics of Openness. University of Chicago Press, Chicago.

Verganti, R., 2008. Design, meanings, and radical innovation: a metamodel and a research agenda. J. Prod. Innov. Manag. 25, 436—456.

von Hippel, E., von Krogh, G., 2006. Free revealing and the private-collective model for innovation incentives. R&D Manag. 36 (3), 295—306.

Whittington, R., Cailluet, L., Yakis-Douglas, B., 2011. Opening strategy: evolution of a precarious profession. Br. J. Manag. 22, 531—544.

Yin, R.K., 1994. Case Study Research. Sage, Thousand Oaks.

Yoo, Y., Boland, R.J., Lyytinen, K., Majchrzak, A., 2012. Organizing for innovation in the digitized world. Organ. Sci. 23, 1398—1408.