Communities of Practice:
How Individual Motivations Can Influence Structural Integrity

Abstract

The purpose of this study is to explore the different variables that influence the rate of participation in communities of practice. The level and quality of participation in a community of practice largely determines the success or failure of the community. This study seeks to answer the research question, How can a community of practice organizer create, maintain, and evaluate a community of practice to ensure the maximum amount of participation contributed from the 'Active' and 'Occasional' members, as defined by Jean Lave and Etienne Wenger? By grouping together foundational literature in categories based on the chronological period the community of practice is in, creation, sustainment, and evaluation, I will demonstrate how individual motivations largely influence the success of a community of practice. I will then rely on literature supporting structural capital as a tool organizers can use to help prop up the community of practice and influence the personal motivations of those to increase participation in the community.

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Introduction

Communities of Practice (CoP), not to be confused with communities of interest, have been organically created throughout history, in the forms of medieval guilds, professional associations, and in some cases, school classes. However, with social media becoming more present in day-to-day interactions, more CoPs have been forming online. As a member of the Opportunity Project for Cities (TOPC), I have wondered if an online CoP could help facilitate the development of curriculum materials, while also improving the TOPC inclusivity and accessibility through the engagement of cities that have not yet qualified for the Sprint through the spread of shared learnings. A successful community of practice is marked by individual participation, one that is started from curiosity rather than obligation. Many organizations beyond TOPC have in-organically created CoPs, some leading to great success, and others dying out the very same way that they started; participation and discussion only being contributed by founding members and direct stakeholders.

In my research, paying close attention to what I have framed as the 'life cycle' of a community of practice, I have determined that it is individual motivation that contributes most heavily to the success of a CoP. However, I have also determined that individual motivations can be greatly swayed throughout the life cycle of the CoP, largely through the structural capital of the community of practice. Structural capital, as defined by this study, includes both the organic and formal channels through which users engage with each other. In the following sections, I will demonstrate how a CoP organizer can use structural capital to increase community engagement and sway personal motivations.
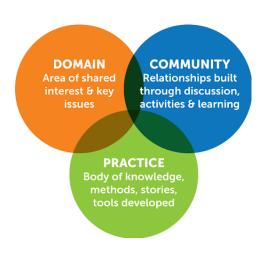
Creation

The creation of the CoP is the most important stage of the CoP's life cycle. The creation not only is the debut of the new space, but also sets the intentions of the engagement and community that is fostered. The CoP initiates with the formation of its core: a team that commits to facilitating the development, implementation, and regulation of the CoP throughout its lifecycle. The qualifications of the different members of this core group will vary depending on the subject matter related to the CoP. However, the CoP must always consist of a manager who takes ownership over ensuring all of the steps of the formulation of the CoP are done in a timely, and relevant, manner. The members of the core group additionally must be committed to the understanding that successful CoPs are for the large part informal, and self managing by design, with the core group implemented for the purpose of focusing on the health of the community.

Once the core group is designated, it is up to that core group to create a CoP charter, in which the core values and expectations of the CoP will be considered. Further, the domain of the CoP will be clearly defined. The domain of a community of practice refers to the subject matter of interest for the CoP. Research supports that creating a domain is a structural element that encourages engagement in the CoP, as well as clearly develops the value proposition regarding the specifics of the CoP[1]. Creating a charter with a clear set of commitments and intentions creates the initial structural elements that will allow for individuals to gravitate towards the CoP seeing a clearly outlined topic and intention of the platform. Those specialized in similar subjects will join a CoP that is clearly defined, as they will tangibly be able to see their specialized interest that will fill a niche in the larger CoP structure.

The initial creation of the CoP is an appropriate time to designate the scope of a CoP, scope referring to the platform that hosts the CoP, as well as the set up of the formal channels that users will use for communication. The domain of the CoP may give insight into the platform to be designated for the CoP: for a lecture series, it may be beneficial to create communication channels solely through email, whereas a discussion group may find it productive to launch an initiative on Slack, or a similar workstream. It may also be important to consult individuals on what streams they already previously use for their work; using a Facebook group may be considered a productive format, but is inappropriate if the website is blocked by one's day job.

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1   Wenger, Etienne, "Communities of Practice a Brief Introduction" (np, 2011), 1-2.

DOMAIN
Area of shared interest & key issues

COMMUNITY
Relationships built through discussion, activities & learning

PRACTICE
Body of knowledge, methods, stories, tools developed

The Human Centered Design process suggests we gather insights from those in the community we hope to build this platform for, so understanding the websites, apps, and media that these users already most commonly engage with will be a crucial step in setting up the CoP.

Forming a management structure, charter, and selecting a domain and scope for the CoP are vital steps in its creation. However, it is just as important to remember that CoPs also consist of organic channels, and there cannot be too much structure as to limit the possibilities for these natural streams of communication to form. A management team, as well as charter, remains in place as a structural exterior to the CoP, but the true workflows that develop within the CoP will be generated by the members of the communities themselves. (Graphic created by Impact WV.)

Sustainment

Training programs at many businesses often consist of top-down resource development, generally with upper management writing tools for lower management, sometimes even for those who interact directly with clients. Although these formal processes exist within many institutions, research has demonstrated that management training designed without the regard for those who are intended to use it, is not just ineffective, but often redirects the working relationship into a place of distrust and uncertainty between upper and lower management[2]. The lower management or other groups receiving these tools often find them ineffective to the tasks that involve them in their normal workday. These staff members often have a better understanding of what client interaction may look like, and have a unique access to better understanding a company's workplace culture. When their insights are not taken into account while designing training programs, these programs often seem to be ineffective, and end up not being implemented by the lower management staff after completion. Citing the lack of change after training as incompetency amongst lower management, future training programs developed by upper management tend to become more basic, sometimes insulting in nature to those in lower management. Multiple terms of this back-and-forth relationship can lead to severe distrust within an organization, a simple issue however that could have been fixed through readjusting the training programs based on the needs of lower management by actually conversing and evaluating with them.

A community of practice is designed in its first stage to be a platform to fit the needs of the community. However, it is natural, in fact encouraged, for those needs to be adjusted throughout the lifespan of the CoP. Like in the management training example, getting feedback in the early stages of the CoP between the users and management will not only create a CoP that is more user-centered, but also will create the relationships that formulate the backbone of the community. Within a community of practice, there are multiple different tiers that will make up the different circles of engagement, as outlined by Jean Lave and Etienne Wenger, two of the major contributors in literature on effective CoP. The first ring is the Core Team, which can initially be the founding members of the CoP, but will change over time to reflect all of those most invested in the CoP. This group serves to nurture and take ownership over the platform. The next circle consists of the Active Members, which consists of all of those who greatly influence the Core Team's development of the CoP in its initial stages of sustainment as well as those who help define the shared vision, communication, marketing, strategy, and roles within the CoP. Next consist of those who are referred to as the Occasional Members. The Occasional Members often make up the largest population of the CoP, mainly including members who only engage in certain topics, or when the CoP uniquely serves one of their private interests. The key to a successful CoP is really capturing the engagement of these Occasional Members. The last two rings are defined as the Peripheral and Transactional Members.

2   Brown, John Seely, and Paul Duguid. "Organizational Learning and Communities-of-Practice: Toward a Unified View of Working, Learning, and Innovation." Organization Science, vol. 2, no. 1, 1991, pp. 40–57

The Peripheral Members feel a connection to the CoP and its mission, but only have the capacity to engage on a minimal basis. The Transactional Members are those who are the most removed from the CoP, but who will engage on it exclusively to get something out of it, such as resources, or a facilitated introduction to another member. It is noted that the descriptions of these different circles in the CoP are arbitrary, and there are not clear defining features to separate one circle from another. But, a healthy CoP includes all of these different circles, and it is quite common and encouraged for members to move throughout these levels during their time engaging with the CoP.

CoP members exhibit multiple levels of participation and can move freely across the levels as needs and interests evolve.

For the health of the CoP, understanding that not all members can be a part of the Active and Occasional Member circles is critical. "Individual learning cannot be separated from collective learning," suggests Brown and Duguid, two authors of leading literature on organizational learning, and collective learning cannot be done without the formulation of individual learning channels[3]. Insights and advice that are accumulated through sharing in the CoP is not of private substance, but rather a knowledge that is distributed amongst all engaged. Understanding these fundamental principles behind the act of sharing, a CoP must have the breathing space necessary to organically form its own ways in allowing these processes to take place. Formal channels should exist to designate where learning should take place, but should have little influence on how that learning is conducted. As the individual shares stories and experiences, the perception of that community member in the eyes of others increasingly holds a more expert title. Those who seek to gain knowledge will naturally join the CoP, but those who hold experiences in the subject manner will contribute as well, especially for the desire to gain recognition in one's practice. The concept of identity is important in constructing a community of practice, so understanding your user and allowing them to build the network within your CoP reaps more desirable results.

However, one unique circumstance of the TOPC CoP is that it strives to be a platform for those to gain resources who were not at the capacity to formally join the sprint. To allow the TOPC program to be more inclusive, these resources need to be distributed to all. Yet, it is of concern that members may simply take resources without staying for contribution.[4] The structure of the CoP, although needing to be flexible enough to allow for users to navigate the space in their own way, still needs to facilitate conversations that encourage these users to move from the Peripheral and Transactional level to the Occasional Members. Exploring ways to facilitate conversation through the structure of the CoP, and then checking in with the community for revisions, is a great way to use structural capital as a way to capture the attention of certain users.

The fear that participants will take knowledge without contributing to discussion is a concern that exists at all levels in a CoP: Why do individuals engage in discussions within the CoP when there is no immediate reward for sharing information with others? This problem finds a solution in ensuring the strength of the structural capital that creates community.

3   Brown, Duguid, "Organizational Learning and Communities-of-Practice: Toward a Unified View of Working, Learning, and Innovation" 40-57
4   Pyrko I, Dörfler V, Eden C. Thinking together: What makes Communities of Practice work? Human Relations. 2017;70(4):389-409

Social Exchange Theory claims that individuals engage in social interaction based on an expectation that it will lead in some way to social rewards. Recent literature touches upon this theory which has been deemed as the Influence of Social Capital Hypothesis, the idea that knowledge is exchanged when individuals are motivated for the exchange.[5] That motivation is created through the structural links that promote it (structural capital), the cognitive ability to understand and apply the knowledge (cognitive capital), and finally, through the growth of strong relationships (relational capital).

In this paper, we have discussed structural capital, such as through setting up formal channels for communication, or creating a CoP charter, as a mechanism to promote relational capital. However, structural capital can greatly influence cognitive capital as well. Often, CoPs are formulated around subject matters or problems that are complex by nature. TOPC includes resources on open data, prototyping, Human Centered Design, and other concepts that may be unfamiliar to many users not directly involved with the project. In order to promote the dissemination of materials for learning, we must ensure that there are mechanisms in place to help those more unfamiliar get over the language and terminology barrier that stems from this type of work. This may mean reminding knowledge experts to further elaborate on some of the terms they've published in documents, creating tools such as short pamphlets, guides, or supporting a channel solely for the discussion of what these terms or concepts mean. Facilitating a community that is open to the discussion of these topics is one that will unlock the barriers and allow the CoP to have a tremendous amount of cognitive capital.

When managing a CoP, focusing on the structure of the community is a balancing act between ensuring there are enough formal channels to promote engagement, while also not restraining innovation and the ability for users to truly connect. By staying intentional around constructing based on the motivations of users, CoPs can use their structure as a way to increase shared learnings. However, the most key part of the CoP is ensuring that the CoP is truly designed taking into account the needs stemming from potential users, while being flexible enough to adjust the structure based on the fluctuating needs of the community.

Evaluation

Although continuously evaluating and adapting a CoP is vital, it is important to take note that there is no exact science of measuring the impact of a CoP, but the literature suggests that best practices, such as setting measurable objectives and surveying, do exist. When adapting a CoP it is important to do it based on the genuine reactions and feedback from users, rather than from what you may predict that the users want. Sometimes, through the accumulation of all of these insights, the CoP will transform into something completely different than from when it first started out, and despite that being a positive advancement, it should not be one intentionally sought after. The fundamental innovationing element in a CoP is in the nature of a CoP itself: that it allows for an exchange between members of different systems. Practitioners, students, researchers, community members and others all have the opportunity to exchange in a meaningful way, and actually put their ideas into practice together.

That being said, the evaluation process of the CoP is one that will be catered towards the specific features of the community, but nonetheless, we can turn to common practices on how to conduct broad evaluations. The CDC provides resources on how to evaluate CoPs, as medical CoPs can often mimic the same functions as the ones used for other purposes, such as for TOPC. One resource that the CDC recommends to use when evaluating a CoP is called SMART objectives. The term SMART is actually an acronym, meaning to define the specific task, measuring the progress, gauging if the task is achievable, ensuring that the goals set are realistic, and finally, setting up a time estimate for the completion of that task. When evaluating and making additions or changes to a CoP, it may be helpful to use SMART objectives in carrying out that work.

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5   Wasko, Molly McLure, and Samer Faraj. "Why Should I Share? Examining Social Capital and Knowledge Contribution in Electronic Networks of Practice." MIS Quarterly, vol. 29, no. 1, 2005, pp. 35–57.

Additionally, it is always important to create a value proposition for your CoP. This means to identify what makes the CoP unique, and what elements the CoP has that sets it apart from other CoPs in similar fields. In order to make sure your CoP continuously matches the needs of the community, it can be helpful to complete a SWOT analysis of the CoP at the formulation of the CoP, the midpoint, and as well as the conclusion. A SWOT analysis refers to measuring the strengths, weaknesses, opportunities, and threats to your CoP. In measuring the strengths, we see the CoPs value proposition, and can better understand what makes users choose to engage with our CoP. In addressing the weaknesses, we can attract more users and better serve pre existing ones. Finding opportunities to expand may also be beneficial for ensuring the longevity of the CoP. And finally, looking at threats to the CoP, or other CoPs (granted, in this line of work they are not necessarily the same threats as there may be in the business-world), we can see what they're doing that works so that we avoid unnecessarily reinventing the wheel.

There are also other much less analytical ways to evaluate a CoP, and that starts with designing a series of questions that correspond to what may be measures of success within a CoP. Questions such as 'Is the CoP amplifying voices that are poorly understood' or 'Is the community meeting or interacting regularly, and if so, does it bring together both practitioners and interested parties?' may help identify the key successes and failures in a CoP. Evaluating a CoP is something that is very particular to the scope and domain of the CoP, but through using these general frameworks, it is possible to see trends on what networks are helping and hurting the CoP.

Conclusion

Understanding a CoP under the framework of a lifecycle can be beneficial to creating a balance between the formal and organic channels that exist within a successful CoP. Starting off with a formal set of leadership in the core group will help nourish the structural capital in the CoP, and allow it to stay intact despite potentially initially having only limited participation. Overtime, these formal channels will become organic, and a successful CoP will be one that creates its own shape and formulates into something that works for all users. Despite the emphasis on this natural progression and flow, there are things that core CoP members can do to initiate and sustain the flourishing of the CoP, such as creating an inclusive charter, setting up channels that are a balance of both social and intellectual conversations, and ensuring that all users have the same access to the resources that they need, in a language that they understand.

To ensure the longevity of a CoP, the core members will also routinely check in with the community to make sure that the CoP is still fitting the needs of everyone involved. Since there are limited best practices for doing this, each core member will have to take time to understand the different groups that make up the community as to form those relationships and channels. Understanding the underlying framework of a community of practice, from the structures that sustain it, as well as the motivations of the users that make up it, will help shed light on how best to evaluate and implement new practices within the community.

About the Beeck Center for Social Impact + Innovation

The Beeck Center for Social Impact + Innovation at Georgetown University brings together students, expert practitioners, and extended networks to work on projects that solve societal challenges using data, design, technology, and policy. Our projects test new ways for public and private institutions to leverage data and analytics, digital technologies, and service design to help more people.