Learning in Communities: Understanding Communities of Practice in the development sector

Introduction

The aim of this paper is to examine the theory behind communities of practice as a form of learning, understand the experience of communities of practice in the development sector, and thereby synthesize best practices for building and managing virtual communities of practice in the development space with an eye towards the future. The concept of "communities of practice" is constantly evolving; essentially, it can be defined as a group of people who share a profession or a passion and deepen their expertise in the subject by frequently interacting with one another. Individuals participate in many such communities, often unknowingly; this study will examine how learning by using communities of practice can be encouraged in the development sector. In a world where organizations are geographically spread out and are increasingly conducting business through online means, it is imperative to understand how communities of practice can be best established in the non-physical space. "The world itself has become the ultimate organization, and the challenges that it faces are increasingly related to knowledge," (Wenger E. M., 2002). Within this context, it is important to also be able to facilitate learning through online communities. The insights from this paper will be used to further learning and knowledge sharing in the development sector by creating and sustaining more effective communities of practice.

It is widely agreed that knowledge sharing between professionals plays an integral role in making social development work more efficient and more effective. Foundations such as the Omidyar Network are increasingly funding organizations such as the Global Impact Investing Network (GIIN), dedicated to building and enabling the practice of impact investing. Lessons learned from project implementation must be shared to improve delivery of development projects. Recognizing this possible trend, development agencies are building spaces where knowledge can be documented and exchanged, and terms of reference for projects often request that information be shared amongst organizations. One way to capture and facilitate knowledge sharing is through communities of practice. By understanding how learning occurs through communities of practice, their operations can become more effective and their use can become more formalized and widespread. For this paper, the development sector refers to efforts by individuals and organizations to reduce poverty and inequality and improve health, education and job opportunities around the world.

Method

The method of investigation will be to systematically review the large body of knowledge surrounding communities of practice and to capture the wisdom of individuals who have been managing and developing communities in the development sector. The concept of communities of practice was coined in the early 1990s; since that time, much has been written about situated

learning[1] and the concept has been used to examine learning in various scenarios. These learnings will be applied to the development sector.
The paper will first explore the theory behind communities of practice and will then delve deeper into their practical applications. It will also explore the large impact of technology on knowledge sharing, as well as why communities of practice fail. By investigating four communities of practice through interviews and desk research, the paper will identify practices that have led to success. This paper will also consider whether communities of practice are viable methods for knowledge transfer for the development sector in the future.

Learning theory behind communities of practice

"The notion of a community of practice does not primarily refer to a 'group' of people per se. Rather it refers to a social process of negotiating competence in a domain over time," (Valerie Farnsworth, 2015).

The formulators of the Community of Practice (CoP) theory, Etienne Wenger and Jean Lave, posit that individuals are naturally involved in a number of communities of practice. Communities of practice form organically everywhere we look: discussion boards and working groups populate the internet, schools, and offices around the world are evidence of the use of CoPs. Communities can help people learn, retain, and explore knowledge. Wenger and Lave first identified communities of practice while studying apprenticeship as a learning model. They noticed that the apprentices learn not only from their master, but through a network of relationships with other apprentices and journeymen, and used the term "Community of Practice" to refer to the community that represented a living curriculum for the apprentice. Wenger and Lave "argued that learning does not rest with the individual but is a social process that is situated in a cultural and historical context." (Valerie Farnsworth, 2015).

It is important to understand that "community of practice" also refers to the theory of social learning identified by Wenger and Lave. In his introduction of the concept, Wenger explains that the primary focus of this theory is on learning through social participation, as humans interact with another and develop skills.

According to Wenger, people develop several social practices in their professional and social lives. Such a social practice "includes both the explicit and the tacit. It includes what is said and what is left unsaid; what is represented and what is assumed. It includes the language, tools, documents, images, symbols, well-defined roles, specified criteria, codified procedures, regulations, and contracts that various practices make explicit for a variety of purposes. But it also includes all the implicit relations, tacit conventions, subtle cues, untold rules of thumb, recognizable intuitions, specific perceptions, well-tuned sensitivities, embodied understandings, underlying assumptions, and shared world views," (p 47, Wenger E. , 1998).

Wenger emphaizes the importance of meaning, community, and learning in a social practice. He describes how the tension between participation and reification lead to meaning. Participation

[1] The situated learning theory posits that learning occurs naturally in real-life contexts.

refers to the way in which individuals engage with one another, whereas reification is "the process of giving form to our experience by producing objects that congeal this experience into "thingness," (Wenger E. , Communities of Practice, 1998). Through participation, the activity becomes a part of one's experience and identity, and through reification, the way that one has changed or what one has learned from participating can be communicated to and referenced by others. Participation and thinking go through a process of reification to become transformed into something concrete, like publications and tools. It is important to balance both to create knowledge and learning.

For Wenger, there are three aspects to building and binding a community for learning: mutual engagement, a joint enterprise, and a shared repertoire. The term mutual engagement is not synonymous with a group, team, or a network, nor is it defined by who knows or speaks to one another; instead, mutual engagement "represents the interaction between individuals that leads to the creation of shared meaning on issues or a problem (Li, et al., 2009)." Engagement with one another is the basis for membership in the community. The joint enterprise is the process of pursuing a common goal, and can be a larger discussion within the community. Relations of mutual accountability are created by a joint enterprise, as members look to one another to create and share knowledge. The third part of binding a community, shared repertroire, reflects a history of mutual engagement. A shared repertoire includes linguistic as well as social commonalities; for example, certain jargon used within the community or an expected style of greeting or presenting information. This shared repertoire is developed only through community members' interaction with one another.

A social network analysis of the KM4Dev email discussion group (HyperEdge Pty Ltd, 2013) found that there were 242 active participating individuals on the listserv in 2011, exhibiting mutual engagement. The joint enterprise of practicing of knowledge management in a development context was constantly discussed in the archives in threads on techniques and skills. There is a sense of mutual accountability as members request information from one another on issues of knowledge management. A shared repertoire is also evident through acronyms, references to past discussions, and to common conferences and meetings.

Wenger and Lave also developed the concept of legitimate peripheral participation (LPP) in situated learning. This is the idea that newcomers to a practice will interact with others who are already entrenched in the practice, and this interaction will lead to learning. The newcomers will soon be able to share their own thoughts and experiences, thereby further enabling knowledge sharing within the community. Consistent with this concept, the social network analysis of the KM4Dev group, for example, shows a significant change in who was asking and answering questions between 2008 and 2011 (HyperEdge Pty Ltd, 2013).

Defining a community of practice

Once the theory behind learning through communities of practice has been examined, the term can be further defined. While the term "community of practice" was coined many years ago, the concept continues to evolve. Using the theory and practical applications, this section will seek to

define what a community of practice is, and what it is not. In more recent work, communities of practice have been defined as: "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis." (Wenger, McDermott, & Snyder, 2002).

Wenger and Lave explain that a community of practice should have the following three aspects:

1) The domain: a shared area of interest
2) The community: interactions between members
3) The practice: a shared profession that members seek to advance through participation in the community

"A community of practice is different from a network in the sense that it focuses on a substantive topic; it is not just a set of relationships. A community of practice is different from a work team in that the shared learning and interest of its members keep it together. It is defined by knowledge rather than by an individual task, and exists because participation has value to its members. A community of practice is different from other communities since its members are more likely to share a common profession or work situation." (World Bank). While the communities of practice at the World Bank are limited to employees, they are global across projects. This helps the World Bank document and build on institutional knowledge.

Communities of practice can be situated within an organization or be external to the organization and be focused around a particular practice. In their first publication on the topic, Lave and Wenger described communities of practice amongst midwives, tailors, naval quartermasters, butchers, and alcoholics (Lave & Wenger, 1991). Some of these communities, such as butchers and quartermasters, had a more hierarchical structure, while others were more loosely constructed around their practice. Organizations such as IBM, Microsoft, Xerox, Procter and Gamble, and the World Bank have established communities of practice to serve as spaces for innovation and efficiency.

Table showing examples of communities of practice in various applications:

Application	Example
Communities of practice to explain gender constructs	(Paechter, 2003)
Teaching	(Chua, 2006), (Stepanek, Abel, Gates, & Parsley, 2013), (American Institutes for Research, 2014)
Aviation	(Bates & O'Brien, 2013)
Music	(Gau, 2016)
Development	(Hearn & White, 2009)
Common disease	(Wenger, White, & Smith, Digital Habitats: Stewarding Technology for Communities, 2009)

Table 1: Examples of Communities of Practice

People join and create communities of practice with different intentions; knowing the individual or organizational motivations behind a community can help design the community in a way that would address those motivations. Wenger cites the following reasons for prolonged participation and for reasons to participate (Wenger E. M., 2002):

Reasons for Prolonged Participation	Reason to Participate in the Short Term
Personal development Professional Identity Network Marketability	Help with challenges Access to expertise Confidence Fun with colleagues

Table 2: Reasons for prolonged and short-term participation

The table below summarizes some of the motivations that other researchers have examined for why individuals join communities of practice. This is distinct from reasons why organizations may want to formalize communities of practice:

Motivator	**Source**
Personal development	(Wenger E. M., 2002), (Kimble, Hildreth, & Wright, 2001)
Status and career advancement, professional identity, capacity development	(Ardichvili, Page, & Wentling, 2003),
Networking	(Mahar, 2007), (Wenger E. M., 2002)
Moral obligation to share knowledge	(Ardichvili, Page, & Wentling, 2003), (Zarb, 2006)
Emotional benefits, feeling of attachment to community	(Mahar, 2007), (Ardichvili A. , 2008)
Shared values and vision	(Marathe, 1999), (Zarb, 2006)
Following leaders' example	(Kimble, Hildreth, & Wright, 2001)

Table 3: Motivations for joining communities of practice

Ultimately, participation must lead to meaning and learning. As summarized by White and Hearn, "At their best, CoPs are naturally self-incentivizing. Members tend to stay involved and invested in CoPs because of the inherent rewards of social learning and collaboration." (Hearn & White, 2009). Li et al. discuss why it is difficult to define a group as a CoP, as the term has evolved from "a learning theory that promotes self-empowerment and professional development…to a management tool for improving an organization's competitiveness. The tension between satisfying individuals' needs for personal growth versus the organization's bottom line is perhaps the most contentious of the issues that make the CoP theory challenging to apply." (Li, et al., 2009).

Use of technology in communities of practice

Technology has the potential to break down the geographical barrier to communities of practice. Using the internet, individuals from all over the globe can interact with one another on a regular basis and learn from one another through mutual engagement. Online communities can be particularly useful for novices to reach established professionals and learn from their experiences. Wenger and White discuss how technologies such as Electronic Information Exchange Systems (EIES), bulletin boards, Usenet, and the internet are used to expand the possibilities of what it means to "be together." Technology has also adapted to address the need for online community-building through services such as Wikis, open-source communities, online forums, and numerous chat boards. "Technology has changed how we think about communities, and communities have changed our uses of technology," (Wenger, White, & Smith, Digital Habitats: Stewarding Technology for Communities, 2009).

It is important to select the appropriate technological tool for a virtual community of practice. A variety of options are available to facilitate connections, including Google docs, wikis, Ning platforms, Wordpress, Slack, and Facebook groups. If a CoP decides to use technology to enhance communication, the tool should match the requirements of the group, keeping in mind that the purpose and needs of the group may evolve with time. Wenger, White, and Smith identified nine "orientations" that may guide a community of practice, and suggested tools to match each orientation. While tools can help design a virtual community, the community of practice emerges only when those tools are used and interaction takes place between the members of the community.

Technological tools should enhance meaning, community, and learning, as discussed in the theory section. As such, they should allow for participation and reification, mutual engagement, developing a shared repertoire and sharing an enterprise, and for legitimate peripheral participation. I will use this framework to analyze tools and features that are currently available for building online communities. These platforms have been selected for their ubiquity and their low price and accessibility. Most do not have any related charges to sign up, though the Ning and Wordpress platforms usually require dedicated software developers to build a custom website.

	Features	Google Group	Wiki	Ning platform	Wordpress	Facebook Group
Mutual Engagement	Comments			x	x	x
	Microblogging			x	x	x
	Photos	x	x	x	x	x
	Discussion forums			x	x	x
	Video	x	x	x	x	x
	Screensharing					
	Private messaging			x		x
	Shared calendar	x				
	Videoconference					x
	Newsreaders and Newsfeeds			x	x	
Participation	Participation tracking					x
	Email lists	x		x	x	
	Directories	x		x	x	x
	Profiles			x	x	x
	Approval for posting	x	x	x	x	x
Reification	File sharing	x		x		
	Subspaces				x	
Shared Repertoire	Edit articles	x	x			
	Email archive	x				
	Tag clouds			x	x	
Legitimate Peripheral Participation	Email	x				x
	Access control	x	x	x	x	x
	Translation					
	Subscription and payment			x	x	

Table 4: Technological Tools for Communities of Practice

Many of these features would service a combination of community, meaning and learning. This table can be used to analyze whether a new tool will provide the required features to be able to support the needs of learning through a community of practice. It must also be noted that "It is unlikely that online interaction is sufficient for a CoP since it cannot substitute entirely for face-to-face events that create much of the trust and common purpose within a community. Although online tools can greatly enhance communication and cohesion, they do not by themselves constitute community. Face-to-face events are vital, particularly in the early stages of a community. These events are largely responsible for fostering and personalizing the links

between members," (World Bank). Interviews with four facilitators also highlighted the importance of meeting face to face.

Without participation and mutual engagement, there would be very limited social learning. As such, one of the major concerns for Virtual Communities of Practice (VCoPs) is creating an environment where individuals are able to share comfortably. This includes incorporating tools that are easy to use, and building a safe space for sharing.

The table below summarizes some of the broad tendencies between a traditional CoP and a Virtual CoP:

		Traditional CoP	**Virtual CoP**
Community: Building trust and personal relationships	Geography	Usually share a geographic location	Allow more international participation
	Communication	Face to face, meetings, online	Largely online
		More interaction between greater numbers	Live interaction needs to be planned
		Physical presence may enforce traditional group norms	Relative anonymity with regards to voice, gender, stature
	Trust	Easier to build trust through personal interaction	More difficult to build trust with often anonymous strangers
		Tend to know other members	Don't know who is reading your contributions
		Likely to be similar cultural background	Could be people from many other cultural backgrounds
Domain: Creates common ground and common identity	Rhythm	More organized interactions More focused around the group	Technology provides ability to be online at any time Greater individual control
	Subject matter	More focused	Diversity of viewpoints, needs, interests, priorities
Practice: Body of shared knowledge	Tools for creation	Able to discuss with others face to face and use hard copies of documents	Track changes, sharing documents online, creating repositories of documents
		Body of knowledge includes certain routines	

Table 5: Classic vs Virtual Communities of Practice

As communities increasingly use technology to interact with each other, a role emerges for individuals who organize its use. "Technology stewarding adopts a community's perspective to help a community choose, configure, and use technologies to best suit its needs." (Wenger, White, & Smith, Digital Habitats: Stewarding Technology for Communities, 2009). These individuals take responsibility for the community's technological resources. Their role is not the same as the community facilitator, though the responsibilities will often overlap. The activities of a tech steward include: community understanding, which allows them to respond to needs of the community; technology awareness, allowing them to recognize opportunities; selection and installation – help community make informed decisions; adoption and transition to new technology; and everyday use – knowing the tech well enough to be able to manage, upgrade, and provide trouble-shooting help. A technology steward is not as crucial in a traditional community of practice.

A community of practice may fail to develop due to a lack of participation, or participation may decrease over time. While artefacts produced by the community, such as guides and email archives, may be useful, the practice is no longer being developed once contributions stop. A lack of contributions may be due to barriers to participation, or due to deeper issues related to the building of a community. The following are possible barriers to participating in a VCoP (Ardichvili A. , 2008) and (Wenger E. M., 2002): interpersonal issues, procedural and technological difficulties, cultural barriers, and organizational discouragement.

The above are barriers to participation, and can largely be overcome; however, the most common reason for declining participation is lack of trust, interest or lack of alignment, which could be caused by lack of a core group, limited face-to-face interaction, and lack of identification with the CoP. (Probst & Borzillo, 2008) and (Chua, 2006).

Having considered the theory behind encouraging learning through communities of practice, integrating technology to enhance communication, and examining why communities may fail, the next section will explore communities of practice in the development sector.

Communities of practice in the development sector

Common spaces for knowledge exchange allow professionals to learn from one another across organizations, and the importance of knowledge management in the social sector has become increasingly important, (Heres, 2007). This section will further explore communities of practice in the development sector by answering how CoP can be used to make development work more effective. This section will also analyze communities of practice currently operating in this space.

Wenger and Trayner (Wenger-Trayner & Wenger-Trayner, 2015) highlight two important aspects in explaining how CoPs are used in the social and international develop sectors: 1) knowledge is an essential resource in the social and development sectors; and 2) practitioners look towards communities for knowledge-building. The concept of social learning using the internet can be used to make development work more efficient and more horizontal. Individuals

and companies from around the world can contribute and learn from one another, potentially breaking down silos of learning and encouraging new ideas, while also opening the space to stakeholders who may find it difficult to contribute through other channels.

Recognizing the potential and popularity of online platforms for knowledge exchange, organizations have started collecting information on building successful communities. As a few examples: FHI 360 has published a guide on creating communities of practice for NGOs (FHI 360, 2011), the World Bank has a Question and Answer paper on their wide network of communities of practice, the UN country team in India has developed a knowledge exchange platform called Solution Exchange, and the Food and Agriculture Organization of the UN (FAO) has established a community of practice on food loss reduction (Food and Agriculture Organization of the United Nations, 2016). The popular Pelican Initiative email discussion group hosted on Dgroups.org (https://dgroups.org/groups/pelican/discussions/v4c13cps, March 16) recently featured an active discussion on platforms for communities of practice that garnered over 15 replies from development professionals around the world. The discussion included thoughts on getting buy-in from participants of the community and selecting appropriate technological tools. This discussion is an indicator that communities of practice continue to be used globally in the development sector.

An analysis of four communities in the development sector reveals certain patterns and lessons for encouraging knowledge exchange through online platforms. This study focuses on four online communities with different intents, domains, and practices. The analysis included deep reviews of the communities and interviews with the facilitators. These four communities were chosen for being stable, and because they were in different stages of a community's development. Their differing domains also made them suitable subjects for comparison. All four are also supported by external donors with varying governance structures.

	Description	**Domain**	**Community**	**Practice**
Digital Frontiers Institute (DFI) (2016)	Regional communities tied to online course on FinTech	Financial Technology	Online class with short videos and tests Community interaction through calls and in-person	Best implementation of financial technology
Outcome Mapping (2005)	Global community on method of evaluation	Project implementation and measurement	Discussion forums, webinars, face to face meetings	Implementation of outcome mapping methods in various scenarios
Gender and Evaluation (2012)	Global community on method of evaluation	Evaluation methods	Discussion forums, webinars, face to face meetings, digests	Integrating gender aspects into evaluation methods

SEA Change (2010)	Regional community on climate change and evaluation methods. This community will not request further funding.	Climate change	Discussion forums, face to face, workshops, developing tools	Publications, conference engagements, knowledge products

Table 6: Four CoPs in the development sector

Each of these communities uses different strategies to encourage participation and to create a safe space for participants.

An analysis of four interviews with the community facilitators reveals this common advice:

- Good facilitation: facilitator must be knowledgeable, respected, and have enough time to guide discussions
    - DFI: The CEO of a new startup took on the facilitation role for the community of practice in Ethiopia. He made attendance mandatory, took on a mentorship role, organized sessions at times when others could attend, and was extremely passionate. When selecting a facilitator, DFI examines the background, experience, expertise, and training or interest in facilitation. They also emphasize that leading a community will allow the facilitator to drive their own agenda.
    - Outcome Mapping: "Invest in facilitators before technology", said the steward of the Outcome Mapping community. He explained that there must be engagement and all the technology cannot help if the conversation cannot be encouraged and moderated.
    - Gender and Evaluation: The facilitator must have experience in the focus area of the community. They must be able to identify and highlight areas that are gaining traction, and be able to answer questions. At the beginning of the platform, many questions revolved around basic definitions and understanding of gender, which experienced practitioners may not spend time answering.
- Donor support: All communities were dependent on donor funding. The websites are all supported by donors.
    - Outcome Mapping: The website development and maintenance for the OM community has been supported by two rounds of funding. While IDRC provides funds for the technology, staff are supported by the Overseas Development Institute (ODI). The outcome mapping method is the basis of many ODI projects; thus, the knowledge documented and generated by the OM community is of great interest to ODI, and there is a mutual interest in supporting the success of the community.
    - Gender and Evaluation: The donors for the EvalGender platform require quarterly updates on statistics such as number of visitors, number of members, age and gender distribution of participants. However, the reporting is not restrictive and is not related to targets, it merely keeps track of interest and contribution in the

community. The community coordinator credits the donor with being patient and with not interfering with the management or direction of the community.
    - SEAChange: The facilitator emphasized the importance of a flexible donor. The Rockefeller Foundation was open to other topics that developed through this platform, which were recognized through needs assessments and knowledge gap analyses. He also noted that the donor does need to measure whether any change is taking place (whether the community is successful) in order to continue funding the project. As such, it was important to conduct a baseline assessment of members' knowledge, and carry out monitoring activities to observe change.
- Use the appropriate tools
    - DFI: Some communities have organically started Whatsapp and LinkedIn groups to stay in touch in between meetings and to share ideas.
    - Outcome Mapping: Began as a Dgroup discussion group, following a gathering at a conference, and progressed to a full website to meet members' needs. The website was required to host discussions, video conferences, worksheets and guides. Communication tools should emerge from need.
    - SEA Change: The platform was overhauled to allow one-on-one conversations following feedback from members. SEA Change facilitators also learned that it is easiest for participants to use LinkedIn or Facebook to log-in, rather than having to create another profile.

These experiences from communities of practice in various domains and at different stages of maturity echo the theory and research behind the concept of communities of practice. Using this information, it is now possible to assemble a set of best practices for establishing virtual communities of practice in the development sector, as presented in the next section.

Best practices for creating a VCoP in the development sector

Designing and maintaining a VCoP in the development sector can be a powerful tool. It allows people access to knowledge from others from around the world. The theory and practical review of communities of practice in this sector reveal certain practices that would support the establishment of a successful VCoP in the development sector, as presented below:

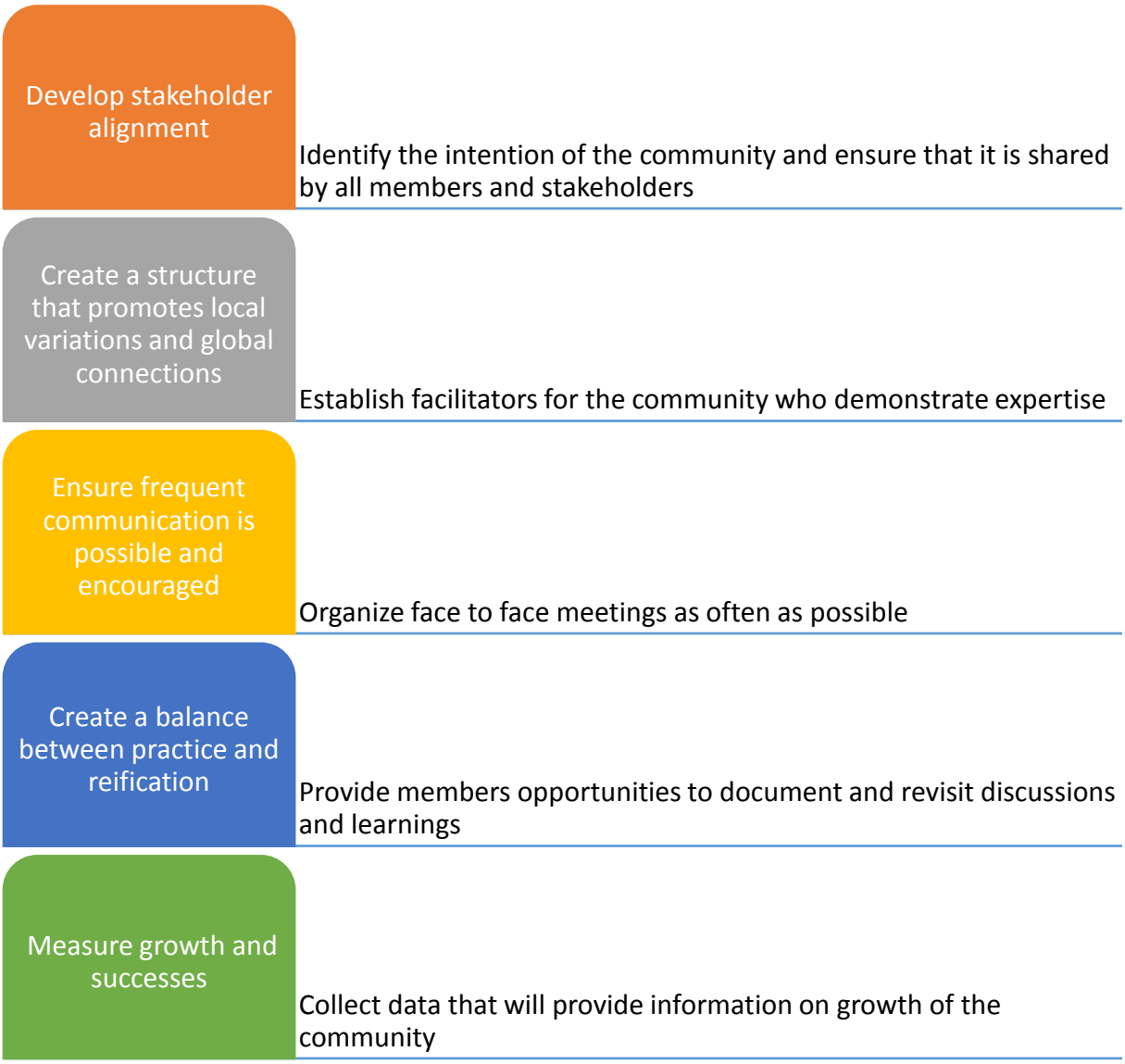

Figure 1 practices that would support the establishment of a successful VCoP in the development sector

Stakeholder alignment has been cited as an essential aspect for successful communities (Wenger E. M., 2002). Community establishers should identify and verbalize the intention of the community by communicating with members to ensure that this intention is shared by all members of the community and by the donors or managers. The OM community facilitator explained that individuals have many opportunities to join different communities; a clearly stated purpose helps participants quickly understand and contribute towards a practice. This emphasizes the meaning of the practice within the community.

Communities should have a structure that promotes local variations and global connections to facilitate learning. Local variations indicate that diverse participants from similar areas should be

encouraged to join the community. Community builders should establish a technological steward who will be responsible for ensuring that the technology is appropriate and easy to use for local as well as global connections. They should ensure, for example, that members can enable logging in from other commonly used platforms, such as Facebook and LinkedIn. Facilitators should also be appointed to guide learning and discussion around specific subjects within a community. These facilitators should demonstrate expertise in their appointed subject. This will legitimize them in the eyes of other members, and allow them to make valuable contributions. Frequent communication between members is absolutely essential for learning in a community. For an online community, face to face meetings are integral for building trust between members and should be organized as often as possible. They could be at conferences, through members at the same regional location, or field trips to relevant places and projects. Teleconference sessions between members can also help build personal relations and establish the trust that is necessary for knowledge sharing. A feedback system must also be created to ensure the platform continues to meet the needs of the members. Without frequent communication, there will be no learning within the community.

Practice and reification are the two gears of a community of practice that work together to produce new meaning and knowledge. There should be a balance between discussing and carrying out the practice and documenting new developments and learnings. The community builders should provide members with opportunities to document and revisit discussions and learnings, such as through archiving and organizing conversations, creating guides and tools, and highlighting important pieces of knowledge on a website or at conferences. The SEA Change community brought members together to create knowledge products, which could be shared with the larger development community. This helped to make the knowledge of the community members accessible.

To better guide the community, facilitators should monitor data that will provide information on growth, including: number of members, number of active members, areas of interest, and patterns of use. Social network analysis can be used to parse and understand some of this information. This data can also be used to identify if legitimate peripheral participation is taking place: for example, it can reveal if new members are becoming more active over time and if the number of participants continues to grow. Another important use of these measures is to help obtain additional funding for the community by using the data to illustrate that the community is facilitating knowledge exchange.

These best practices can be used to build and sustain effective communities of practice.

Conclusion

This aim of this paper was to understand the process of learning through communities, and to apply this understanding to the development sector to establish a set of best practices for the encouragement of learning through communities of practice. While all individuals participate in various communities of practice that help them develop professionally, organizations can use these best practices to further the learning within the sector. Technology can break barriers

against communication, but communities should be wary of becoming dependent on technology to drive discussions. Vibrant communities of practice can play an important role in making development work more effective by facilitating information dissemination, allowing communication across organizations, and helping professionals learn from one another. It is hoped that the results from this study will help development organizations to encourage learning by using communities of practice.

The biggest limitation in this study was the number of existing communities of practice in the development sector that were analyzed first-hand. The study examined four communities of practice in different stages of evolution and in varying domains. While a greater number and larger variety would increase confidence in the conclusions drawn from speaking to facilitators, research on communities of practice in different sectors was also used to distill the best practices. Another limitation was the difficulty in measuring the impact of communities of practice. Comparing communities would be more illuminating if it was possible to assess their influence in the professional lives of the participants.

Future studies on communities of practice in the development sector could sample a greater number of communities. Further research can also be conducted on the archives of online communities to better understand if there were specific reasons that motivated participants to share knowledge, and to explore if and how members used the knowledge they gained from being part of the community. It would also be helpful to conduct a long-term study of communities of practice to observe the impact of knowledge sharing on development projects. This kind of a study could test, for example, whether professionals who participate mindfully in a global, distributed community of practice are more effective than those who do not, and could delve deeper into how VCoP can exclude those with limited access to technology, and how communities can sometimes reinforce power structures between development actors.

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Abstract
The aim of this paper is to examine the theory behind communities of practice as a form of learning, understand the experience of communities of practice in the development sector, and thereby synthesize best practices for building and managing virtual communities of practice in the development space with an eye towards the future. An examination of the theory behind communities reveals that a “community of practice” exists only insofar as the members are learning from one another to improve their common practice. Operationally, a virtual community of practice can remove many barriers to participation; however, virtual and off-line communities face similar challenges in motivating learning exchange between members. The paper combines extensive literature research and interviews with four community facilitators in the areas of financial education, program evaluation, gender, and the environment to extract five practices for building successful online communities of practice. The findings of this research paper are constrained by the small number of communities that were examined. Further research could focus more keenly on qualitative analyses of community archives to better understand the behavior of participants.

About the author

Aditi Sethi is a Master of Arts in Law and Diplomacy graduate from the Fletcher School of Law Diplomacy with a focus on development economics and knowledge management. After obtaining a Bachelor of Arts in Economics and Middle Eastern Studies from McGill University in Canada, Aditi worked at a law firm in Canada, followed by two years at a development consultancy in India. Aditi managed an online and offline knowledge exchange platform for monitoring and evaluation professionals working in South Asia and developed a strong interest in knowledge management, access, and dissemination.