Exploring archived artifacts and member conversations related to leadership within KM4Dev 2011-2016

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Introduction

KM4Dev (Knowledge Management for Development) is a "community of international development practitioners who are interested in knowledge management and knowledge sharing issues and approaches" (Knowledge Management for Development, 2012). This self-organized (i.e., peer produced) virtual community, created in 2000, has over 4,000 registered members from all over the world who use various online channels (i.e., wiki, Ning network, DGroups email discussion group) and face-to-face channels (i.e., annual meeting, regional meet-ups) to communicate and organize themselves. This community is self-organized; it has no formal organizational sponsor that determines the goals and structure of this group of professionals. Instead, the community operates on principles of self-selection: people choose how and when they want to participate. The governance of KM4Dev (i.e., the negotiation and implementation of the tasks associated with maintaining a mission-oriented and geographically distributed group of professionals) is managed by the Core Group (CG), a group of members who volunteer (i.e., self-select) to dedicate a portion of their community participation toward supporting the needs of members and building the community with the other CG members.

KM4Dev is a large, mature community that has had continuous membership growth and weathered many structural changes over the last 17 years. Prior to 2004 KM4Dev did not have a formal governance group. The KM4Dev Core Group was created in 2004 to create a space for members to practice self-governance and support the needs of a continuously growing membership, which was being supported by a paid moderator at the time. The first author of this article joined the Core Group in October 2011, just as the current Core Group members published Terms of Reference (ToRs) for Core Group Members on the community wiki in order "to clarify the role of a core group member and to recruit more people into an active leadership role" (KM4Dev Core Group, 2011). In 2011, the Core Group no longer had the support of a paid moderator, and the organizational sponsorship that paid the costs associated with maintaining an online community (e.g., Ning Network hosting costs, wiki maintenance) was ending would soon stop. Currently, KM4Dev is member-governed and member-funded. Members choose for themselves how they want to participate in KM4Dev, which can be done through time (i.e., effort) and/or monetary commitments.

Grappling with community governance and issues related to leadership in a community with a flat organizational structure, where formal authority neither exists nor resides in one person, is a topic often revisited by KM4Dev community members. Since 2011, the community has held

several conversations about leadership, including questions about leadership in community surveys and engaging in asynchronous discussions on topics such as CG succession and who can be a leader. This focus on leadership should not be overlooked. Implementing deliberate change (Norskov, Kesting, & Ulhoi, 2017), facilitating member participation (Brinck & Tannggard, 2016), fostering relational interdependence (Turton & Wrightson, 2017), and increasing member reputation (Faraj, Kudaravalli, & Wasko, 2015) are all associated with member leadership in online communities. Member-leaders are an integral part of the ongoing functioning of a successful online community. Yet it is not clear what leadership is or how leadership functions in an online community without hierarchy or a formal position imbued with power. In this article, we will explore this question using archived discussions and survey results related to leadership within KM4Dev. We will then consider this evidence in relation to current theorizing on leadership within online communities. We conclude by reflecting on how a more complex understanding of leadership within peer produced online communities could impact the growth and sustainability of both KM4Dev, in particular, and peer produced communities of practice, in general.

Table 1 Perceptions of Leadership Within the KM4Dev Membership 2011-2017

Table 1: Archived Data Related to Leadership 2011-2017

	Core Group Terms of Reference (TOR)[1]	Learning and Monitoring Survey[2]	"Important Discussion for All Members on Leadership"[3]	Chart "Pathways to Involvement and Leadership"[4]	KM4Dev Futures: Charles Dhewa Journey with KM4Dev[5]	KM4Dev Survey[6]	Discussion "Understanding Leader-ful Activities Over Time in KM4Dev"[7]
Timing	October 28, 2011	May – October 2012	February 2014 – March 2014	February 2014	January 21 – January 30 2014	July – October 2016	March 2017
Description of the Data	Formal guidelines and responsibilities associated with volunteering as a Core Group member	Questions examining the general membership's perceptions of existing leadership and community inclusion	Explores KM4Dev Core Group succession	Table that demonstrates the potential pathways in which the general membership can participate and contribute	Leverages personal story of becoming involved in KM4Dev to gear the discussion toward the community's future	Questions examining the general membership's patterns of participation and levels of contribution	Explores the general membership's perceptions of leadership and leadership behaviors within the context of peer production

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In 2011, the KM4Dev Core Group (CG) outlined and posted to the wiki Terms of Reference (TORs) for "community members who are volunteering or thinking of volunteering to be members of the Core Group" (KM4Dev, 2011). The purpose of creating these TORs, was to more clearly articulate to the general membership and current CG members the bounds of service associated with being a member of the CG, which current CG members hoped would enable more people to join the CG. Since then, several discussions, surveys of the KM4Dev membership, and member created artifacts about leadership have emerged from community interactions (see Table 1). We compile them here in order to develop a better understanding of what leadership means within KM4Dev, a peer produced community of practice where no formal authority dictates the group's ongoing existence. Later, we compare member-reported

perceptions of leadership to different theoretical perspectives of leadership within peer produced communities in order to make sense of the different member perceptions collected about leadership.

Table 2 Quantitative data on participation and leadership in KM4Dev

Table 2: Quantitative Data on Participation and Leadership in KM4Dev

Study	Articulation of Participation and Leadership

2012 Learning and Monitoring Survey	Asked the following:
	• To what extent do you manage to…
	  ▪ Commit yourself to implement community activities?
	  ▪ Take part in important discussions in the community?
	• Does the existing leadership (Core Group)…
	  ▪ Seek feedback from the community?
	  ▪ Incorporate it into activities?
	  ▪ Encourage new leaders to step in?

2016 Survey of the KM4Dev Membership	Asked the following: • Most members in online communities are simply registered members. However sometimes there are opportunities to take on greater responsibility, such as lead a community initiative, assist in the community's moderation and administration, or organize a meetup off list. Have you ever taken on responsibility greater than being a registered member? • Please describe both when and what you did when you took on more responsibility within the community.

The KM4Dev community has a rich history of discussing how leadership may be enacted, how governance should be structured, and how active participation can be encouraged for the sustainability of the community. The 2012 Learning and Monitoring Survey was distributed by the Learning and Monitoring Group (an adhoc committee comprised of members from the Core Group and International Fund for Agricultural Development) in order to examine the general membership's perceptions of existing leadership and community inclusion. The survey included a list of questions asking about the general membership's perceptions of the existing leadership (Core Group) and the extent to which they seek and incorporate feedback from the community, encourage new leaders, and make Core Group activities accessible to the general community members (see Table 2). These questions from the Learning and Monitoring survey appear to draw on a more traditional, positional understanding of leadership by attaching it solely to the Core Group. Although a few questions touched on members' own involvement in the community, respondents' comments about the CG unearthed a view that the general membership tended to look to the Core Group to initiate activities and greater community inclusion.

Table 3 KM4Dev Community Member Reflections on Leadership

Theme	Exemplar
Important Discussion for All Members on Leadership (2014)	

The role of the core group is not universally agreed upon.	*"While I agree with Nancy that all of the 'secretariat' functions can be shared within and without a Core Group, what of the stewardship – the Governance element? –Pete Cranston* *"The Core Group does not have much of a formal division of labour among its members…Each member does what he or she does…based on his/her interest and availability…" –Riff Fullan* *"…whatever role we give to the CG, and whatever other roles we define for other types of members of the community, the issue of how we want to make sure the roles are performed sustainably is still a valid one." –Jasmin Suministrado*
Leadership practice can occur beyond the core group.	*"There are many spaces in which leadership can happen (and more can be created…). If something is important to you, go for it." -Philipp Grunewald* *"I think this is the beauty of the community; the opportunities are there, you can stand up and say, "I'd like to do this!" whether you are on the Core group or not." –Lucie Lamoureux* *"Informal contributions as a form of leadership (Nancy, John)…There are many examples of non-core group engagement (Nancy, John, Valerie): - act as monthly online facilitator, synthesize a thread on the wiki, notice what is happening/link across NING and DGroups conversations, spot great resources and share them, organize a local or global meeting, write a longer piece for the Journal, etc." – Benedict Rimando*
Importance of linking as a leadership practice for both core group and non-core group members.	*"But do you foresee the need for getting back to the whole community for local activities, for whatever reasons—to inform other local KM4De sub-communities of what's happening…to cross-fertilize?" –Jasmine Suministrado* *"Feedback [from local events to the larger community] is a good thing for cross-fertilization. I see no special prerogative for a Core Group; all should encourage sharing of experience." – Jaap Pels* *"Personally, I also think that it is important that there is someone on the core group with strong links to the journal…Ewen has been a core group member…and he is one of the journal editors…which is often very useful" –Sarah Cummings*
KM4Dev Futures: Charles Dhewa Journey with KM4Dev (2014)	
Journey of purposeful engagement	*"Personally, I was looking for new ways and words to inspire fresh forms of expression and engagement beyond the traditional mass communication which I was finding too one-sided for its own good. Knowledge Management sort of crystallized my new trajectory." – Charles Dhewa* *"Around 2010 I had become so much part of KM4Dev that when an invitation for members to join the Core Group was circulated, I embraced it. It was Lucie who actually nudged me to move into this decision-making role. Although I have not been a regular participant on the Core Group's skype conversations, I have followed conversations with keen interest, contributing ideas here and there." – Charles Dhewa*

	"It was a marvel to stumble on KM4Dev and details of people who were behind it. In between browsing around, I downloaded as much information about KM4Dev as I could get. I also read about people who were the public face of KM4Dev, for example, Lucie Lamoureux... Although my interest on KM had been ignited during my stint with DFID Crop Post-Harvest Programme, I started digging around KM more purposefully on coming across the KM4Dev website and associated publications. This digging phase preoccupied me for much of 2007." *– Charles Dhewa* *"On 8 March 2012 I started an eventful six months stint with IFAD [Rome Headquarters]... During my IFAD days, I pulled strong KM4Dev punches – selling KM4Dev to internal staff most of whom were torn apart by years of doing the same thing." – Charles Dhewa*
Understanding Leader-ful Activities Over Time in KM4Dev (2017)	
The coexistence of different leadership ideals.	*"I think this is an interesting and sometimes problematic issue for KM4Dev, also made more complicated by the fact that KM4Dev doesn't have a formal organisational centre." – Sarah Cummings* *"I think we have implicit expectations about "leadership" that may not be relevant to KM4Dev. Most definitions/mindsets come from an institutional perspective." – Nancy White*
Perceptions of core group authority vary.	*"I think the (ex) core group members are in a leadership role. Recently I was scanning the list on the website, I know a lot of the names by the mails." – Martina Hetzel* *"What the core group is doing is rather facilitating or managing some "stuff" but not necessarily "leading" because no one can claim the direction the community is going, since the community is all of us together." – Ewen Le Borgne*
Range of contributions considered leaderful.	*"Although the Core group has some kind of gate-keeping role, almost every member can ignite a conversation or a question that gets picked by another member. Another leadership moment has been every member's capacity to pull new members into the KM4Dev collective pool. I also sense lurking is also a leadership quality. An additional expression of leadership is when members ask questions that provoke a lot of thinking and several responses." – Charles Dhewa* *"While the lurker is observing others are leading; within km4dev there are no defined roles or levels of participation… I'm one of the happy and inspired lurkers (and an attentive and faithful one) of the global km4dev community; and I played an active and co-leading role in the local Swiss community."-Nadia von Holzen*

In 2014, a focused discussion on core group succession management lead to a more encompassing discussion archived on the wiki as, "Important discussion for all members on leadership." The focused conversation asked the KM4Dev membership to reflect upon the sustainability of the Core Group through succession management. The discussion uncovered differing opinions regarding the function of the Core Group, but it also revealed a larger idea that

the practice of leadership within KM4Dev was not restricted to members who join the CG (see Table 3).

Charles Dhewa's personal narrative demonstrates some of the ways he practiced leadership within KM4Dev both before and after he became a CG member. In 2014, CG member Charles Dhewa shared his personal journey in KM4Dev as a part of a series of focused conversations exploring KM4Dev futures. His narrative was meant to be a reference point for others to share their story of KM4Dev engagement, but it was also used to gear the discussion toward the community's future. Dhewa's story exemplifies purposeful engagement (see Table 3) and the ways in which Core Group member encouragement (and funding) can support members interested in enriching their KM4Dev journey.

Dhewa's story is positive; he appears satisfied with his engagement in KM4Dev. In 2016, the first author surveyed the KM4Dev membership in order to test a model of member satisfaction within peer produced CoPs. Although the study did not focus on leadership, questions in the demographic section of the survey related to members taking on responsibility greater than simply being a registered member (see Table 2) appeared to reflect a theme from the 2017 discussion on "leaderful activities." The question lists many of the tasks cited by KM4Dev members as leadership within that discussion and it represents a shift from traditional, exclusive definitions of leadership used in the earlier quantitative studies of KM4Dev to a definition of leadership that can include the entire membership.

Finally, in 2017, the first author hosted the discussion "Understanding Leader-ful Activities Over-Time in KM4Dev," in order to gain a better understanding of what actions and behaviors community members considered "leaderful" within KM4Dev. Participants in the discussion coalesced around three major themes, (1) the coexistence of different leadership ideals, (2) varying perceptions of the Core Group, and (3) members reported a large range of activities and behaviors they considered leader-ful (see Table 3).

Making Sense of KM4Dev Members' Perceptions of Leadership

In order to make sense of these different community artifacts related to leadership, we looked to the literature to see how others have examined the practice of leadership within peer produced CoPs. Below we identify three different perspectives on leadership that are prevalent in the study of peer produce communities of practice, (1) a traditional view of leadership whereby perceptions of leadership are entwined with ideas of expertise and positional power, (2) a distributive perspective on leadership that acknowledges that leadership behaviors and tasks may be enacted by anyone in a community, and (3) a social learning perspective on leadership that disentangles ideas of power and leverage from leadership and focuses individual's personal and community-oriented leadership within social learning spaces.

Many studies of leadership in peer produced communities of practice, focus on the role of the moderator or community leader in sustaining successful CoPs (e.g., Butler, Sproull, Kiesler, & Kraut, 2007), a traditional view of leadership that ignores the principles of peer production associated with a peer produced community of practice, like KM4Dev. Peer produced efforts

focus on creating a range of possible volunteer efforts that can appeal to the widest audience of interested participants (Benkler, 2006). In this sense, peer produced communities of practice are not concerned with incentivizing people to participate. By opening participation to anyone who chooses (i.e., through the use of the advanced information and communication technology environment) and by lowering the effort needed to participate (i.e., creating ways of participating suited to different skills and interests), successful peer produced CoPs work because enough people participate in the manner that best suits them. Authority is decentralized. In this type of system, self-selection becomes the most efficient mechanism for assigning work because peer production allows individuals to self-identify for tasks, roles, etc., that appropriately fit their skill and motivation.

The discussions regarding leadership provide evidence that peer production principles are present, although they exist alongside other, more traditional views, representing a coexistence of different leadership ideals. This coexistence of different leadership ideals is further elaborated upon through the debate regarding the role of the CG. While P. Cranston advocates for a governance function for the CG, R. Fullan acknowledges the peer production spirit driving CG members, "Each member does what he or she does…based on his/her interest and availability" (see Table 3). Finally, the number of different ways that members believe leadership may be enacted represents ideas associated with task modularity; tasks are divisible into components and some of those components enable members to take on leadership. This may be seen in a popular discussion thread on Dgroups where the members who participate in the thread aren't necessarily leaders, but the members who "ask questions that provoke a lot of thinking and several responses (C. Dhewa, Table 3)" do display leadership by facilitating others' learning. In other words, just as there are many ways to contribute to or be involved in the KM4Dev community (Smith, 2014) there are likely many ways for members to perform leadership within a peer produced community of practice.

Although traditional, positional attitudes about leadership do not appear to fit within a peer produced community, the archival evidence demonstrates a variety of views on leadership, including more traditional perceptions of (former) Core Group members as community leaders. The visibility of Core Group members and the initiatives that they are involved in make it easy for other people to name these members as leaders. However, this does not mean that they are in fact the only members practicing leadership within the community (Faraj, Kudaravalli, & Wasko, 2015). The opposite appears to emerge with the data showing the community embracing a wider understanding of leadership from 2011-2017.

The lack of positional power (i.e., formal authority) within a peer produced CoP means that leadership is unlikely be found in a single person or set of people within a peer produced community. If this is the case, then it becomes instructional to identify how members can enact leadership (i.e., capacity to lead) in such a context. Nørskov, Kesting, and Ulhø (2017) study the feasibility of deliberate change in open source software (OSS) communities and identify change agents as holding an informal leadership role. Since formal leadership does not exist in a horizontally organized OSS community, the authors suggest that expertise, persuasion power, and reputation among peers are the main ways that members may exert influence. Change agents, in their study, ushered deliberate community change intiatives through using only the

tools of informal power, such as persistance, leading by example, redirecting attention and work efforts toward the initiative, obtaining endorsement by high-status members in the community, proactively recognizing and supporting initiatives by high status members, and informing/educating the community about the initiative. This list of tools provides a good starting point for understanding what behaviors are practiced by members displaying leadership. Similarly, KM4Dev community members cite a number of different ways that ordinary members may practice leadership within the community through influential activities/behaviors, including recruiting new members, starting a conversation thread, and helping to organize local KM4Dev spaces. However, in order to truly embrace the peer production perspective the idea that leadership often resides within one person should be reexamined. Recognizing that the responsibilities of leadership can be distributed by leaders to members and/or members can distribute these responsibilities amongst themselves, through self selection, when leaders fail (Jameson, 2009), moves in this direction.

The distributed leadership perspective is a view that leadership need not only reside within people who hold formal authority. Instead, the behaviors and tasks associated with leadership may be separated from "the people in charge" and enacted by community members. Within a peer produced CoP this would occur through member self-selection. P. Grunewald's post to the 2014 leadership discussion captures this idea, "There are many spaces in which leadership can happen (and more can be created…). If something is important to you, go for it." The distributed leadership perspective challenges community members to articulate the different behaviors and tasks of leadership that can be distributed throughout a group's membership. For example, members of peer produced CoPs who start a discussion thread that catches on with other community members may be considered part of the community's leadership, during the duration of the active discussion within the thread, because their initial post garnered the community's attention. If that member does not post again and the conversation veers off topic, then members who keep the conversation civil and/or on topic when the discussion leader does nothing, assume these leadership behaviors in the leadership's absence. Hence, discussion leadership exists alongside site leadership (e.g., hosts) and sub leadership, all of whom may or may not hold formal authority or higher status within the community membership. Furthermore, the pattern of presence and absence of members practicing leadership within an online CoP influences other community members' behaviors (Jameson, 2009).

The distributive perspective articulates the possibility that any community member may be a leader by taking on community (tacitly) agreed upon behaviors of leadership (e.g., facilitating member participation). Thus, leadership practice can occur beyond the CG. However, it does not explicitly address the knowledge and learning-based mission of most peer produced CoPs. When CoPs are able to foster social learning spaces, "places of genuine encounters among learners where they can engage their experience of practice (Wenger, 2009, p. 2)", the interactive nature of learning and leadership is clarified. For example, creating and maintaining a social environment that encourages open, engaged participation (i.e., acting as a social artist) requires care and attention, as does committing to participate (i.e., learning citizenship) within the space. Both contribute to the quality of the learning interactions members experience and expose learning as "a process inherent in our participation in social systems (Wenger, 2009, p. 2)".

Thus, Wenger-Traynors' ideas related to social learning capability in complex social systems and the social learning leaders who foster social learning among peers in these spaces offer another dimension to our understanding of what leadership can look like in a peer produced CoP. Given the membership size of most open-membership CoPs, including KM4Dev, it is unlikely that every member actively manages their engagement in and across their social learning spaces. Yet, actively managing ones' engagement in social learning spaces, knowing when to step back from a social learning space, brokering connections across ones' social learning spaces, and convening new social learning spaces are all learning citizenship behaviors that influence the other members within a social learning space (Wenger, 2009). Therefore, learning citizenship may be considered a form of leadership because members who practice it understand the influence their own, visible, learning (i.e., engagement) within the community has on other members. Indeed, one of the themes from the Important Discussion for all Members on Leadership acknowledges the role of leadership in linking people (i.e., brokering connections) who should be connected with one another.

Charles Dhewa's personal narrative about his own purposeful engagement in KM4Dev exemplifies the construct of learning citizen and suggests that a personal journey of purposeful engagement within a peer produced CoP can enable spaces for personal and public leadership. Dhewa's journey, although not pre-planned, always had career and personal growth related focus. This growth, he acknowledges, occurred from his interaction with community artifacts and community members. Not only does his narrative show his active engagement with the KM4Dev community, it also shows him brokering connections across the people he works with and the KM4Dev community. Plus, he describes convening new learning spaces by leading discussion threads and holding a meeting of local African professionals to learn about KM4Dev. By convening new learning spaces Dhewa continues to develop his own leadership practice potentially taking on the role of social artist. Social artists take on leadership within social learning spaces by encouraging greater learning citizenship through their own skills and actions, inviting participation from members as opposed to depending upon followers for a cause. Hence, the social learning perspective on leadership uncovers learning citizens and social artists as other ways to perform leadership within a peer produced community of practice.

Conclusion

We began this article with the intention of better understanding what leadership is and how it functions in a peer produced community of practice, such as KM4Dev, where neither hierarchy or nor formal authority organizes the direction of the group. The different community artifacts related to leadership shed light on this issue demonstrating the ongoing negotiation the community is involved in related to what leadership within KM4Dev looks like. While the formal research of the membership during 2012 tended to emphasize a traditional view of leadership as situated in the CG or peer perceived experts within the community, community discussions about leadership that occur between 2014-2017 reveal a more complex understanding of leadership that does not tie it to positional authority. A peer production ethos related to leadership emerges. Members list possible actions that they consider leadership, suggesting that leadership functions can be modular, and that any member who is willing may volunteer in those ways; the actions need not be performed by CG members. Hence, the

principles of peer production, modularity and granularity of task (Benkler, 2006), can inform our understanding of how leadership may be performed in the absence of formal authority and an all volunteer community. Community members must first identify the different functions of leadership (break the functions into modules) and then find a way to make those modules of leadership both big and small (i.e, high granularity). In this way, members who want a deeper experience and members who need a less intense experience with leadership may all find a way to take on the functions of leadership.

We conclude with our thoughts on how the complexity of member perceptions related to leadership within KM4Dev can impact the growth and sustainability of the community and how future research related to leadership in peer produced communities of practice may benefit from employing a more complex perspective that moves beyond traditional organizing structures. Within an open-membership CoP, where the membership size is unbounded, utilizing self-selection as an organizing mechanism makes sense because it reduces the transaction costs associated with matching members to appropriate tasks and behaviors (Benkler, 2006). However, it also introduces a potential for community cleavages if the mission, culture, and goals of the community are not championed, reiterated, and publicly negotiated to constantly reflect the current (and growing) memberships' ideals. The data we gathered suggests that this is one of the major functions of leadership within KM4Dev. Leading discussions asking members to reflect on the community, not just the topic the community is organized around, can invite greater community identity by enabling members to take part in the negotiation of the community's purpose. Stepping into discussions that do not fit the community spirit (e.g., mean-spirited comments) in order to redirect the conversation or creating initiatives that reflect and therefore reify the community's mission are other ways that the membership may take on this form of leadership.

In order to embrace the complexity that a large, diverse membership brings to a CoP, the modularity of leadership functions should also be embraced by all members who participate in peer produced CoPs. Learning to purposefully function within a non-hierarchical space, experimenting with taking on leadership functions (small and large), and embracing a learning citizen approach to one's membership within a peer produced CoP can produce returns beyond one's personal contribution to the community. Especially in today's organizational environment, where traditional, hierarchical organizations now work with less structured networks (as we saw with members of IFAD and members of KM4Dev comprising the membership of the Learning & Monitoring Group) experience in both peer produced and traditional hierarchies can inform everyday professional practice.

Finally, an interesting aspect of the data we compiled for this article is the number of different ways the community has archived their thoughts on leadership. There were two different quantitative studies of the membership that touched on leadership, two separate discussions that had been archived on the wiki (and perhaps more that had not), a community member's reflections on his own pathway to leadership, and formalized documents outlining leadership related topics. This complexity of artifacts mirrors that of the memberships' perceptions of how leadership functions and is practiced within the community. Likewise, when looking for relevant perspectives on leadership for a peer produced CoP we found perspectives that enabled anyone

within a community to practice leadership, employed context dependent flexibility in understanding how leadership is practiced, and viewed leadership as part of a larger system (as opposed to guiding or controlling the system) the most informative in helping us understand the compendium of leadership perspectives we gathered. We suggest the need for research related to leadership within peer produced CoPs to take into account the complex social environment that a space governed by member self-selection (i.e., voluntary participation) and informal authority structures presents. Furthermore, the learning and knowledge-related nature of peer produced CoPs should not be overlooked. For instance, the concept of learning citizen enlightened our understanding of Dhewa's personal narrative, originally written to spur thinking on the hidden impact membership within KM4Dev has had on participants. Thus, utilizing perspectives and theories that take the context of the peer produced community into account (e.g., the social learning perspective on leadership) when studying leadership within peer produced CoPs, may provide the nuanced insight that is most helpful for practitioners while also furthering the development of theory.

References

Benkler, Y. (2006). The Wealth of Networks: How Social Production Transforms Markets and Freedom. New Haven, CT: Yale University Press.

Brinck, L., & Tanggaard, L. (2016). Embracing the unpredictable. Leadership, learning, changing practice. Human Resource Development International, 19(5), 374-387.

Butler, B., Sproull, L., Kiesler, S., & Kraut, R. (2007). Community effort in online groups: Who does the work and why? Human-Computer Interaction Institute, Paper 90. Retrieved from http://repository.cmu.edu/hcii/90

Faraj, S., Kudaravalli, S., & Wasko, M. (2015). Leading collaboration in online communities. MIS Q., 39(2), 393-411.

Jameson, J. (2009). The visibility/invisibility paradox of trust: Developing distributed educational leadership for online communities. Paper presented at the BELMAS International Conference 2009: Educational Leadership - Where do we go from here?, Sheffield, UK.

KM4Dev Core Group. (2011, October 28). Terms of Reference (TORs) for Core Group Members. Retrieved from http://wiki.km4dev.org/Terms_of_Reference_(TORs)_for_Core_Group_Members

Nørskov, S., Kesting, P., & Ulhø, J. P. (2017). Deliberate change without hierarchical influence? The case of collaborative OSS communities. International Journal of Organizational Analysis, 25(2), 346-374. doi: doi:10.1108/IJOA-08-2016-1050

Smith, J. (2014, February 20) Pathways to involvement and leadership. Retrieved from http://wiki.km4dev.org/Pathways_to_involvement_and_leadership

Turton, L., & Wrightson, H. (2017). Challenging positional authority: Navigating leadership as collaboration. He Kupu. The Word, 5(1), 21–27.

Wenger, E. (2009). Social learning capability: Four essays on innovation and learning in social systems. Retrieved from http://wenger-trayner.com/wp-content/uploads/2011/12/09-04-17-Social-learning-capability-v2.1.pdf

Abstract
In 2011, the Knowledge Management for Development (KM4Dev) Core Group (CG) outlined the Terms of Reference (TORs) for "community members who are volunteering or thinking of volunteering to be members of the Core Group" (KM4Dev, 2011). The purpose of creating these TORs, was to more clearly articulate to the general membership and current CG members the bounds of service associated with being a member of the CG, which current CG members hoped would enable more people to join. Since 2011, the community has held several conversations about leadership, including questions about leadership in community surveys and engaging in asynchronous discussions on topics such as CG succession and who can be a leader. We gather this archival evidence here in order to show the evolution of KM4Dev members' perceptions on leadership within the community and to begin to think about how this data may help us articulate how community members practice leadership in the absence of hierarchical structures and formal authority.

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[1] KM4Dev Core Group. (2011, October 28). Terms of Reference (TORs) for Core Group Members. Retrieved from
http://wiki.km4dev.org/Terms_of_Reference_(TORs)_for_Core_Group_Members
[2] Camacho, B., Le Borgne, E., Staiger, S., Alvarez, S., Bettink, W. (2013) Results Knowledge Management for Development baseline survey for learning and monitoring 2012-2013. Retrieved from
http://wiki.km4dev.org/images/KM4Dev_Learning_and_Monitoring_final_baseline_report.pdf
[3] Important Discussion for all Members on Leadership. (n.d.). Retrieved from
http://wiki.km4dev.org/Important_Discussion_for_all_Members_on_Leadership
[4] Smith, J. (2014, February 20) Pathways to involvement and leadership. Retrieved from
http://wiki.km4dev.org/Pathways_to_involvement_and_leadership

[5] Dhewa, C. (2014, January 16) KM4Dev Futures: Charles Dhewa Journey with KM4Dev. Retrieved from
http://wiki.km4dev.org/KM4Dev_Futures:_Charles_Dhewa_Journey_with_KM4Dev

[6] Bator, M. (2016) Presentation KM4Dev Vienna. Retrieved from
https://ucsb.app.box.com/v/KM4DevPreliminaryResults

[7] Understanding Leader-ful Activities Over-Time in KM4Dev. (n.d.). Retrieved September 02, 2017, from http://wiki.km4dev.org/Understanding_Leader-ful_Activities_Over-Time_in_KM4Dev