

EXECUTIVE SUMMARY

Governments worldwide are recognizing the benefit of online communities to support their programs and this leads to the increasing effort by governments to sponsor the development of such communities. On the other hand, citizens have also taken advantage of social media tools to create communities with similar interest, including on government-related issues. This is what is experienced by the population studied here, a community of practice (CoP) that was formed due to their commonality as the 2014 cohort of the overseas doctoral scholarship recipients funded by the Ministry of Research, Technology and Higher Education of Indonesia.

This study seeks to find out the scholarship recipients' patterns of membership in the various online community platforms they use as a community, as well as finding the themes that arise from their discussion of those various platforms.

To answer the first inquiry, a list of a population consisting of all the 259 scholarship recipients was compiled. This list became the basis for identifying their online profiles and membership to the various online communities related to the scholarship. The second inquiry uses an approach based on grounded theory where sixteen diverse scholars were chosen and interviewed about their access to peer support. The data became the basis for determining the themes which arise from the discussion about the various platforms they used to converge.

Three different platforms were found to be used by the community. The first is a bulletin board platform which supported the official government-led group called the Forum. The second is the social networking site, Facebook, which supported several groups where the community members subscribed to. The third is the instant messaging smartphone application, Whatsapp.

Three major themes came up in their discussion, including 1) information, 2) the qualities of the CoP in the different platforms, and 3) participation. These themes are made up of sub-themes which provide a more detailed explanation of the platforms. The first theme can be divided into the sub-themes of the platforms' informativeness, the sharing of information, and the citizen-led groups as points of reference. The second theme can be divided into the sub-themes of inaccessibility, the reliability of the CoP, responsiveness, inefficiency, affordances, and platform preferences. The third theme can be divided into subthemes which discuss participation level, apprenticeship learning, multiple communities or overlaps, personal connection, and the secrecy of the community.

Based on the patterns of membership to the various platforms as well as the themes of the discussion, the study suggests that the government-led group platform is the least effective due to the lack of effort by the government to respond to inquiries. To fulfill the need of information sharing and other support, citizen-led groups are created and maintained by the population using social media platforms available to them.

One tribe, many venues: The use of multiple online community platforms by Indonesian government scholarship recipients

Abstract

A Community of Practice (CoP) develops through the collective learning among its members. This work-in-progress research looks into a population of a CoP bound by the commonality of receiving a specific Indonesian government scholarship. It looked into the patterns of membership of the CoP in the various platforms that it uses to communicate. Sixteen interviews from a diverse range of scholarship recipients were analyzed. It was found that there are three different platforms used by the CoP, including a government-led bulletin board group, and two social media-based citizen-led platforms. Three major themes came up in their discussion: 1) information, 2) the quality of the CoP in the different platforms and 3) participation. The findings suggest that the government-led group platform is the least effective due to the lack of effort by the government to respond to inquiries. To fulfill the need of information sharing and other support, citizen-led group platforms are created and maintained by the population using social media tools available to them.

1. Introduction

Tapping from the knowledge of others is a form of learning as a social phenomenon, and it is “as much a part of our human nature as eating or sleeping, that it is both life-sustaining and inevitable” (Wenger, 1998: 3). The advancement of ICT has enabled individuals to learn from their social network. Ridings asserts that the Internet’s structure makes it easier for people to find others in similar situations and meet with them online rather than in real life, especially when the interest may be highly unusual or unique (Ridings, 2006).

This study focuses on a Community of Practice (CoP) described by Wenger and Snyder as “groups of people informally bound together by shared expertise and passion for a joint enterprise” (2000: 139). The specific CoP here consists of doctoral students who began their study in 2014 with the funding from the Overseas Graduate Scholarship from the Ministry of Research, Technology and Higher Education of Indonesia. The scholarship program has shifted

to e-government processes for its communication with its applicants and recipients. To facilitate the communication between the scholarship recipients and the Ministry, an online community accessible through their individual scholarship account was created for current scholarship recipients from all cohorts. Besides this official platform, scholarship recipients also converge as a community in other venues provided by different social media platforms. Two research questions posed in this study are: 1) What are the patterns of membership in the various online community platforms used by the scholarship recipients? and 2) What are the themes that arise from their discussion of the various platforms?

2. Theoretical background

2.1. Communities of Practice and the practice of sharing

The term Communities of Practice (CoP) was coined by Lave and Wenger to refer to communities where learning is a central component (1991). Learning in CoP refers to social learning where individuals learn by participating in communities. Such participation helps to develop the community and refines their practices (Lave and Wenger, 1991). Central characteristic to learning in a CoP is what is referred to as *legitimate peripheral participation* which broadens the concept of apprenticeship learning from master to student or mentor to mentee. The specific group studied here is a CoP due to its characteristics whose purpose is to develop members' capabilities, to build and exchange knowledge, whose membership is self-selected, that holds together due to passion, commitment, and identification with the group's expertise, and would last as long as there is interest in maintaining the group (Wenger and Snyder, 2000: 142).

Kasemsap (2016) argues that strong CoPs facilitate social interactions and encourage the willingness of members to share knowledge and ideas in the workplace. As asserted by Lave and Wenger (1991), “CoPs have been identified as effective loci for the creation and sharing of knowledge”. In a study of CoP on a Twitter platform, Gilbert (2017) identified three important social motivations to participate in the CoP which is to tap into a social network of people with common interest, developing personal and professional relationships, and the community ethos. The members' participation is not solely for information sharing but also for other social resources, including the exchange of emotional support, companionship and advice (Wellman and Gulia, 1999).

Trust among community members is an important factor towards knowledge sharing behavior. It is suggested that “where relationships are high in trust, people are more willing to engage in ... cooperative interaction” (Nahapiet and Ghoshal, 1998). Trust is one of the many facets of social capital studied by Chiu et al. (2006) that influences knowledge sharing in online communities that also include social interaction ties, norms of reciprocity, identification, shared vision, and language.

2.2. E-government's use of Communities of Practice

Simple knowledge management systems such as online communities are adopted in many e-government projects worldwide. Wagner et al. (2003) argue that such simple system is most appropriate while enterprise solutions are not, particularly in the context of developing countries. Their argument is that the ability for online communities to load from multiple content sources is what makes it most appealing and most suitable where the communities can benefit from the

combined knowledge in the community instead of relying on the government to be the sole provider (Wagner et al., 2003).

The move by governments to develop online communities to support its programs has become a global trend (Wilkins et al., 2002). It provides advantages to governments, including reducing cost, increasing accountability, meeting rising expectations for timely response, meeting rising expectations of accessibility, improving competitiveness/eliminate favoritism, increasing technological feasibility, enhancing the use of technology in public domain, and promoting a universal technical standard (Wilkins et al., 2002; Baim, 2006). There are also disadvantages that arise from the sponsorship of virtual communities, including 1) sharing information through virtual community could be considered favoritism as it is not available through public domain, 2) there may be reluctance of users who prefer direct way of getting information through customer service representatives, 3) over-reliance on electronic information transfer may overlook the need for document maintenance (Baim, 2006). The free flow of information in virtual communities too would be under threat if the government as the main sponsor of virtual communities insists of having central control rather than distributed control (Wagner et al., 2003).

Despite the cons of virtual communities for e-government programs, virtual communities are expected to sprout in support of or as a consequence of the government programs where the public can communicate with each other and find support in relation to the program. A recent study by Henman et al. (2014) which analyzes large scale web crawling data that map the hyperlink network structure between government websites and the broader Web ecology in the UK found that online communities can occur on different policy topics or along institutional or

jurisdictional boundaries. They found that social media and government portals are some of the most significant communities based on information flows (Henman et al., 2014).

Community participation in e-government can be categorized based on who developed the online communities. Sæbø et al. (2009) discuss two forms of e-Participation, one that is driven by government and another driven by citizens. There is a general misconception that e-Participation is the responsibility of the government because many of e-Participation projects are indeed sponsored by governments rather than initiated by citizens. But if citizens are not involved in designing the services, it tends to lead to the failures of many e-Participation projects (Sæbø et al., 2009). As argued by O'Brien, design features should encourage a sense of community to create public value by promoting civic engagement and enabling the creation of a public that could understand their own interests (O'Brien, 2015). Government-led participation usually has a weak dialectic of control where it is the government who solely shapes the system due to the assumption that citizens have weak knowledge (Porwol et al., 2013). Sæbø et al. (2009) argue that in order for governments to provide effective eParticipation services, they would need to consider the demand from the citizens, and use the tools and technologies that are deemed appropriate and effective by citizens. Porwol et al. (2013) assert that a salient principle of citizen-led participation is that the government continually attempt to reach out to citizens on their preferred media, such as the less formal social networking platforms rather than on dedicated e-Participation solutions. Social networking sites (SNS) are now widely adopted by the global population and present considerable potential for e-government. Jalonen (2016) argues that SNS can be exploited as smart platforms for fostering public service innovation.

2.3. The platforms

The platforms used by the CoP studied here can be differentiated into two categories: government-led and citizen-led. In the former, it is the government who provided the resource that enabled the venue for the CoP interaction, while in the latter, the venues are created organically by the participants using the resources available to them from social media platforms. Porwol et al. (2013) argue that in government-led participation, although citizens are provided with resources in the form of e-participation tools, their authoritative resources are significantly limited. This would result in the government largely missing out on the real needs of the citizens which consequently lead to the lack of engagement and the lack of the sustainability of the platform (Porwol et al., 2013).

The first and the only official platform used is called Forum, a government-initiated venue which is based on a bulletin board system (BBS). The scholarship recipients can access the Forum by logging in through their individual e-government account and participate by asking and responding to the questions posted on the board, or simply lurk and read the discussions that are posted. Bulletin boards are popular in the early Internet but with limited transactional ability in comparison to the recent social networking site platforms. It is important to note that Forum is the only platform that the government has access to.

The second platform used by the scholarship recipients is a citizen-initiated platform which utilizes the social networking site (SNS), Facebook. boyd and Ellison (2008) argue that what makes SNSs unique is its ability to make visible their social networks. They can communicate one-on-one through the integrated instant messaging, Facebook Messenger, and they can also congregate in Facebook groups that can be created by the users. boyd and Ellison noted that the rise of the SNSs indicated a change in the organization of online communities which were earlier dominated by interest-centric websites to people-centric SNS (2008).

The third platform used by the scholarship recipients is another citizen-led platform, an instant messaging smartphone application, WhatsApp. O'Hara et al. (2014) argue that WhatsApp constitutive of a felt-life of being together with those close by, a digital dwelling where the togetherness and intimacy are enacted through small and continuous narrative, of tellings and tidbits, noticings and thoughts, shared images and lingering pauses.

3. Method

To answer the first research question on the patterns of membership, a list of the population was compiled from several files containing data of the scholarship recipients that were made available through the Forum. The list became the basis to identify their online profiles and memberships to the Facebook and WhatsApp groups.

To answer the second research question, an approach based on grounded theory is used to discover patterns in the data. Data was collected from a purposive sample of 16 scholars that were chosen from a total population of 259 scholars. They were interviewed for their use of online communities that are specific to the scholarship.

Glaser and Strauss (2006) refer to grounded theory as the discovery of theory from data. Their concern is on how to obtain and analyze the data systematically. To produce a theory that would fit well in a study, Glaser and Strauss suggested an initial, systematic discovery of the theory from the data. They argue that “generating grounded theory is a way of arriving at theory suited to its supposed uses” (2006: 3).

This study employed the technique of thematic analysis in the attempt of trying to make meaning from the data. Thematic analysis is not a research method but an analytic approach and synthesizing strategy towards meaning making process used in many methods. Boyatzis (1998)

explains of the five purposes of systematic analysis, that it is a means 1) of seeing, 2) of finding relationships, 3) of analyzing, 4) of systematically observing a case, and 5) of quantifying qualitative data.

3.1 Data collection

The identification of the population's online profile and analysis of their membership to the Facebook and WhatsApp groups were conducted from November 2016 through to February 2017.

Sixteen interviews were collected and analyzed. The respondents were chosen based on the characteristics relevant to the study, including gender, the location of their home university of whether they were working in private or state universities, and of their SNS membership. The interview was conducted between February to November 2016.

4. Findings and Discussion

4.1 Patterns of membership of the CoP members in various platforms

Most of the population studied (N=259) comes from Java (61%) reflecting the island's population density in comparison to the rest of the country. About 75% of the scholars originate from state universities while only 25% from private universities. Gender of the population is almost balanced, with 53% male and 47% female.

Three different platforms are used by population to communicate. The first is the Forum, a government-led bulletin board system accessible through individual scholarship account. The second platform is the SNS, Facebook, where the population joined groups via their individual

Facebook accounts. The third platform is the mobile application WhatsApp where members are identified via their individual mobile phone numbers.

Membership to the Forum

The Forum was set up and maintained by the government for all current scholarship recipients from all cohorts. The bulletin board system allowed the government and scholars to communicate and all communication is visible to all with access. It was also used as a repository where documents pertaining to the scholarship are disseminated and kept.

All scholarship recipients should have access to the Forum, but many expressed difficulties to log in. A workaround was set up by a scholarship recipient by giving his access information through a Facebook group site. This is reflective of the high level of trust and helpfulness between community members. The workaround was ended after the log in problem was fixed by the government, upon input from members. This issue of access was detrimental to the sustainability of the Forum since it deters scholarship recipients to participate in the Forum. At the time of writing this paper, the Forum no longer existed.

Membership to Facebook groups

It was found that at least 90% of the population studied here owns Facebook accounts. The gender proportion of the account owners is similar to the gender proportion of the scholarship recipients, with 54% males and 46% females. The following table detailed the groups used by the population:

Table 1. Comparison of Facebook groups

Name of Group	<i>Group 1</i>	<i>Group 2</i>	<i>Group 3</i>
Time of establishment	Feb 11 th , 2011	June 7 th , 2012	May 22 nd , 2014
Privacy setting	Secret group	Closed group	Closed group
Total members	1,349	756	293
% of population who are members	74%	36%	90%

The three Facebook groups are chosen to be explored based on their popularity. The first and second groups were created in 2011 and 2012, by scholarship recipients who began their study in 2011. Both these groups are popular among all scholarship including the population studied. About 74% of the population joined the first group while only 36% joined the second group. Some of the population joined the first group before they even started their scholarship, suggesting the occurrence of apprenticeship learning. The third group was specifically created for the 2014 cohort. This group allows discussions that are more relevant for the population in relation to their progress, showing the importance of cohorts as a commonality. Aside from these three venues, members of the CoP also converge on other Facebook groups created based on their institutional and geographical boundaries, among others.

The privacy settings for the groups are quite high, either a secret or a closed group. But this may only have to do with the community's effort to avoid government surveillance and not to put off scholarship recipients or potential scholars from joining the community. For example, Group 3 was set up only for the 2014 cohort, but it also consists of scholars from earlier cohorts as well as potential scholars who may want to learn about the current scholarship processes.

Membership to WhatsApp groups

A WhatsApp group was created specifically for the population which began with an email blast from the government. The email initiated a discussion and an idea to set up a

WhatsApp group was raised. The WhatsApp group was then created on October 6th, 2015 by a scholarship recipient. At the time, there was a restriction of 100 members in a WhatsApp group which prevented many people from joining. When WhatsApp expanded the participants limit to 246 members, the group had only 11 additional new members, suggesting that the enthusiasm in joining the group was high at the group's early stage but not so much at a later stage. In total, the WhatsApp group only contained 43% of the total population.

4.2. Themes in the discussion of the CoP

We ask the respondents about their access to peer support and found that most were received through various online communities. This is to be expected particularly considering that the population is scattered across the globe where online communication is the only means of communication. Three major themes related to their use of online communities came out of the interviews, including 1) things pertaining to *information*, 2) the *qualities* of the CoP in the different platforms, and 3) *participation*. The following table summarizes the categories of themes and their sub-themes:

Table 2. Themes and sub-themes of the CoP's use of communities

Information	The qualities of the CoP in the different platforms	Participation
<ul style="list-style-type: none"> • Informativeness • Sharing of information • Citizen-led groups as points of reference 	<ul style="list-style-type: none"> • Inaccessibility • Reliability of the CoP • Responsiveness • Inefficiency • Affordances • Platform preferences 	<ul style="list-style-type: none"> • Participation level • Apprenticeship learning • Multiple communities/overlaps • Personal connection • Secrecy of the community

4.2.1 Information

The Information theme can be broken down into three sub-themes, including informativeness, sharing of information, and citizen-led groups as points of references.

Informativeness

The groups in the Facebook platforms are considered most informative as they provide useful and relevant information. Respondents also find it sufficient to be members of the Facebook groups without having to participate in the other two platforms. The groups on both the Facebook and WhatsApp platforms are favored due to their fast information dissemination.

Sharing of information

Two types of information are shared on all platforms, including sharing answers from the government and sharing experiences. The first, answers that are obtained from the government through personal communication, are shared with other members of the citizen-led platforms. Respondents also communicate with the government through the Forum so others can learn about their issue:

“I used the Forum in addition to my emailing the government when I have questions. So besides personal contact. It is so others can read my question and read the answer”
(Respondent 7).

The second type of information shared are experiences of the CoP members. This sharing has the potential to garner other scholars' experiences as they would join in the discussions with their experiences on specific matters. To know of the experiences of others is important for the members as it creates a sense of togetherness, that there are others who are in a similar situation.

A respondent explained:

“We need to have friends who can share about the current situation, for example, those sharing whether their fund has been released or not. So at least it becomes a source of hope for us” (Respondent 16).

Citizen-led groups as points of reference

The members rely on citizen-led groups as points of reference for all types of information, including information initially posted up in government’s official venues such as their website or the Forum. Those who regularly check the official venues would forward any new information to the citizen-led groups. A respondent mentioned that they would go to the official venues when it is necessary to do so:

“Depends on Facebook or WhatsApp [where I get the information]. But if then there are those who wrote that “there’s this on the web,” then I will open up the [government’s] web. If not, I never open” (Respondent 10).

4.2.2 The qualities of the CoP in the different platforms

Several sub-themes arise on the quality of the CoP in different platforms. The respondents gave their opinion as to how accessible, reliable, responsive, and efficient the platforms are. They also discussed of the affordances in the platforms. These leads to some respondents discussing their preferred platform.

Inaccessibility

The issue of inaccessibility came up in the discussion about the Forum. Three respondents expressed that they were not able to access the platform despite being able to access their individual account and have been given user name and password. The government was not aware of this technical issue but after reports from members, the problem was identified and solved.

Reliability of the CoP

Facebook is the platform that respondents rely on the most. The Facebook groups are considered reliable because it is the scholars themselves who are maintaining the group, where any new information that members came across is immediately disseminated through the group.

As explained by a scholar:

“My friends are already checking [for information] anyway. They would surely post in in Facebook if they found any information.” (Respondent 4)

Responsiveness

The lack of response from the government dominates the discussion about the Forum, with six respondents mentioning this problem. Questions posed by scholars in the Forum are responded late or not at all. Despite the potential of the Forum to reach all the scholarship recipients, the lack of effort by the government to respond to inquiries prevents the platform from reaching its full potential. The following sums up many of the frustrations by the scholars in using the Forum:

“they’re just using Forum as an announcement board. It is not interactive at all in my opinion. The response is very slow. Even I wonder if the Forum has any benefit at all. I go in, there are many posting, many questions that are not answered. Many people ask but not answered. So I think it is useless. So just think of it as an announcement board. I think it is one way only, a one-way announcement. So when an announcement is given out, at least we would know about it. If that’s the case why do we even need to go to the Forum? We could just use [..], no need to use the Forum” (Respondent 14)

On the contrary, the respondents’ discussion about the responsiveness of the Facebook and Whatsapp groups were all positive, where the platforms allow for faster dissemination of information as well the fact that questions posted would be answered by many of the members.

Inefficiency

Inefficiency comes up in the discussion about the Forum. This venue has the potential to reduce government effort in communicating to the scholarship recipients, particularly to reduce the individual inquiries sent to the government via email. As explained by a respondent:

“It would be better if the government write directly to Forum so they won’t be overloaded by hundreds of emails, all asking about the family allowance” (Respondent 7).

Affordances

The affordances of the Facebook platform seemed to make it the better choice from the other two platforms. It is comprehensive as it allows individual messaging to other scholars who own individual accounts. The Facebook platform also accommodates those who choose not to be part of the groups, where they may choose to use the platform only to contact their peers individually rather than conversing groups. It is through individual contact with their peers that they can remain in the loop about current issues discussed in the group.

Preferences of use

Thirteen respondents prefer to use Facebook groups rather than other platforms. They argue that it is sufficient to converge in this platform alone without joining other the venues offered on other platforms:

“And I found that anyway people in the Facebook group would provide you with any important information so from that I don’t rely on the Forum anymore.” (Respondent 1)

What is interesting is that respondents who prefer personal communication rather than converging in the citizen-led groups also utilize these networking platforms for the one-on-one communication, showing the versatility of these social media tools.

4.2.3 Participation

The theme of participation found in the discussion can be categorized into subthemes of apprenticeship learning, participation level, personal connection, multiple communities, and formation and secrecy of the citizen-led platforms.

Apprenticeship learning

Apprenticeship learning occurs in the CoP with potential scholars joining already existing Facebook groups to find information related to the scholarship. For example is the following:

“There’s a negative image among our peers, they’re afraid to apply for the government scholarship. I looked for information, update on how the scholarship is managed by the government by also going through the Facebook group, not the 2014 but the earlier one”
(Respondent 9).

Participation level

Five respondents prefer to be passive observers or not participating at all in the Forum.

One respondent prefers to participate in the citizen-led groups:

“I am passive in Forum, only observing. Because there’s already the Facebook group”
(Respondent 4).

Personal connection

Respondents stated that their involvement in the CoP has to do with the need to make a personal connection with those in a similar situation and to receive emotional support from one another. This is particularly necessary because the population consists of international students who perhaps struggle with adjusting to a foreign place and require support from those who goes through the same situation.

Multiple communities

Membership to the Forum is automatic for all scholarship recipients but memberships to the citizen-led groups are optional. The citizen-led groups are created and maintained based on the population's needs. The Facebook and WhatsApp groups discussed caters to the population but there are other groups that are created with more specific boundaries such as the scholars' current location and their home institutions. The platforms allow the population to create and join many groups that would cater to specific needs and preferences.

The secrecy of the citizen-led groups

The citizen-led groups are organically formed which stems from the need to communicate with fellow scholars using platforms that they are already familiar in using. This includes the need to communicate in secrecy, away from the surveillance of the government:

“I think that I rely the most on the Facebook group, which is a secret group actually. You need to get a reference from a friend in order to get into the group” (Respondent 1).

6. Conclusion

In this study, we have looked into the patterns of memberships of the CoP in the various platforms that it uses, which include a government-led bulletin-board platform named the Forum, and citizen-led platforms using two different social media tools, Facebook and WhatsApp. Apprenticeship learning occurs where potential scholars may join pre-existing unofficial groups to seek information about the scholarship. Newly admitted scholars were then given access to the official government-led group but abandoned the group for the unofficial citizen-led groups. The slow response from the government, both in solving the problem of access and in responding to

inquiries lead to the failure of the platform. The citizen-led groups were able to fill in this gap and do even more by allowing the CoP to communicate freely without government supervision.

From the interview, we found three themes in the discussion of the online communities used that are related to the scholarship program. This includes the themes of information, the qualities of the CoP in different platforms, and participation. Respondents provided different accounts of these themes in their discussion of the different platforms which did not go in favor of the government-led platform but towards the citizen-led platforms that utilize social media tools.

7. Limitation of study

This study is limited as it only relied on the self-reporting of the respondents as well as analysis of the memberships through the population's social media profiles, without looking at the actual contents discussed by the CoP due to the nature of the groups that are privately set. Also, this study utilizes a grounded theory approach. Given the qualitative nature of the study, it is hard to make generalizations based on this study's findings.

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