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Foreword | *Online communities are increasingly being recognised as a way of sharing ideas and knowledge among different practitioner communities, particularly when practitioners are not able to meet face to face. This paper explores the considerations associated with establishing online communities for crime prevention practitioners, drawing on research from across the community of practice, online community and knowledge management sectors.*

The paper provides an overview of the administrative considerations of online community development, as well as the key barriers and enablers to practitioner engagement in an online community, and the potential implications for a crime prevention-specific practitioner community. As such, it is a useful tool for those in the crime prevention sector wanting to maximise the influence of an existing online community or to guide those contemplating the implementation of an online community of practice in the future.

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Online communities: Utilising emerging technologies to improve crime prevention knowledge, practice and dissemination

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Communities of practice (CoPs) are 'groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly' (Wenger 2006: 1). In recent years, online technologies have emerged as an important way of disseminating good practice and have often been developed to support CoPs. Online CoPs allow the transmission of tacit knowledge, which can form a crucial part of learning (Harman & Koohang 2005), particularly in relation to areas such as crime prevention (Ekblom 2010; Teng & Song 2011). From a technical perspective, online CoPs are relatively straightforward to establish, although in reality, the ongoing time and effort required to attract and sustain members can be resource intensive. Key considerations for the planning and establishment of online CoPs are explored in this paper, with a particular focus on the effective implementation of such communities for crime prevention practitioners. In some cases, CoPs emerge without external planning and establishment and this paper's exploration of issues that may affect ongoing participation can be applied to situations where a CoP is identified and supported, rather than specifically being established.

What is an online community of practice?

In this paper, the understanding of online communities (OLCs) is based on broader CoP research that focuses on the links between likeminded professionals. There are three characteristics that define a CoP from other day-to-day interactions:

- there must be a shared interest in an area;
- members interact and learn together but do not necessarily work in the same organisation or work together on a regular basis; and

or approaches (Contandriopoulos et al. 2010). It is important to be clear on the different types of knowledge that will be disseminated via an OLC to ensure that the OLC is designed to allow for the appropriate capture, storage and retrieval of different forms of knowledge.

Ultimately, the type of knowledge to disseminate in a crime prevention OLC should be guided by the purpose of the OLC. Potential objectives would most likely include one or more of the following:

- facilitating knowledge dissemination between practitioners;
- sharing experiences and solutions in crime prevention with practitioners;
- offering networking and professional development opportunities;
- improving the uptake of crime prevention evidence-based practices and good practices;

- providing an opportunity for those implementing crime prevention strategies to seek advice from other practitioners, industry experts and academics;
- improving the collection of evidence based practices and lessons learned on the practical implementation of these initiatives; and/or
- offering relevant and practical resources that can assist with crime prevention implementation.

The purpose of the OLC needs to be clear to practitioners and its aims should be aligned with their needs. This can be a balancing act. The previous OLC trial undertaken by the Australian Institute of Criminology suggested that having a very narrow focus (in this case closed circuit television) may have contributed to reduced engagement of practitioners (Anderson & McAtamney 2010). However, having no clear purpose or boundaries can leave

participants feeling that a CoP is too broad (Iaquinto, Ison & Faggian 2011), which may make it difficult for participants to identify its relevance to their work.

Online communities' audience: Who is the online community trying to engage?

Ascertaining the key practitioner audience is perhaps the most complex consideration for implementing a crime prevention OLC. Consideration must be given to the potentially diverse range of practitioners who are being targeted, limitations specific to their role, different skill levels and their different needs.

Who are crime prevention practitioners?

Crime prevention practitioners are not a homogenous group with easily definable needs. Therefore, selecting a specific audience for an OLC may be difficult. Although some local government areas

Table 3 Enablers and barriers in knowledge dissemination

Enablers		Barriers	
Individual level			
<ul style="list-style-type: none"> • Ongoing collaboration • Values research • Networks • Building of trust • Clear roles and responsibilities 	<ul style="list-style-type: none"> • Lack of experience and capacity for assessing evidence • Mutual mistrust • Negative attitude towards change 		
Organisational level			
<ul style="list-style-type: none"> • Provision of support and training (capacity building) • Sufficient resources (money, technology) • Authority to implement changes • Readiness for change • Collaborative research partnerships 	<ul style="list-style-type: none"> • Unsupportive culture • Competing interests • Research incentive system (ie peer review publishing, grant selection swayed to more academic rather than applied research) • Frequent staff turnover 		
Related to communication			
<ul style="list-style-type: none"> • Face to face exchanges • Involvement of decision makers in research planning and design • Clear summaries with policy recommendations • Tailored to a specific audience • Relevance of research • Knowledge brokers • Opinion leader or champion (expert, credible sources) 	<ul style="list-style-type: none"> • Poor choice of messenger • Information overload • Traditional, academic language • No actionable messages (information on what needs to be done and the implications) 		
Related to time or timing			
<ul style="list-style-type: none"> • Sufficient time to make decisions • Inclusion of short-term objectives to satisfy decision makers 	<ul style="list-style-type: none"> • Differences in decision makers' and researchers' timeframes • Limited time to make decisions 		

Source: Adapted from Mitton et al. 2007: 737

can have specific community safety or crime prevention officers employed, it is not uncommon for crime prevention projects to be led by professionals in a range of other roles, including community engagement officers (Anderson & Tresidder 2008; Clancey, Lee & Crofts 2012), council rangers (Anderson & Tresidder 2008), health and wellbeing officers, engineers, or town planners. While local governments tend to provide the principal role of coordinating and facilitating community crime prevention strategies (Clancey, Lee & Crofts 2012; DCPC 2012), other agencies, including the police, NGOs and other government agencies, play an important role in crime prevention (DCPC 2012; National Crime Prevention 1999).

Many practitioners who are responsible for the implementation of crime prevention projects could also be classed as transient practitioners because often, their primary work is not directly concerned with crime prevention activities. On completion of a given project, they may cease to have an interest and/or ongoing role in crime prevention, having satisfied their need for certain knowledge acquisition. This characteristic could affect their motivation and capacity to locate and use available crime prevention knowledge when developing and implementing crime prevention activities.

Both transient and non-transient practitioners are likely to share a basic need for greater knowledge exchange and connection with other practitioners (Anderson & McAtamney 2010). Given the disparate mix of practitioners with different motivations for participating in crime prevention, it may prove difficult to meet all their knowledge dissemination needs through a single OLC. It may therefore only be feasible to target one practitioner group (such as the existing local government crime prevention practitioner networks outlined in Table 1) with the potential to expand the audience if viable.

Motivating practitioners: Identifying and addressing enablers and barriers to online participation

Once the purpose of an OLC is established and the key audience is identified, the next step is to start identifying ways to engage practitioners to use the OLC and where possible, sustain their engagement. The diverse nature of crime prevention practitioners could mean more proactive recruitment and engagement of OLC members is necessary in order to keep the OLC site sustainable. How much effort this entails would have to be explored, but consideration should be given to the different professions that participate in crime prevention and their roles, as described above.

Practitioner interest in an OLC being developed does not always equate to a willingness to engage (eg Anderson & McAtamney 2010). Engagement in dissemination activities is likely to increase if the perceived benefits of participation are greater than the perceived cost of participating (Contandriopoulos et al. 2010). Further, perceived costs will be reduced if the OLC is considered easy to use (Sharratt & Usoro 2003).

There are different types of participant in OLCs. These include those who only read posts ('lurkers'), those who only ask questions, as well as active contributors who post new information, drive discussions and do not need to be solicited to post (Bishop 2007; Wang & Yu 2012). In addition, participant behaviours can change over time (ie from lurker to active contributor). Lurking is normal behaviour in an OLC (Preece, Nonnecke & Andrews 2004), with most participants only reading most of the time, which is often all they need to do to get what they want from the OLC (Seddon, Postlethwaite & Lee 2011). A significant proportion of lurkers are sustainable if there is a sufficient number of contributors to maintain new content and discussions. While lurking derived from a choice to not participate is acceptable, a lack of contribution due to other barriers should be

minimised (eg technological, not knowing what to post; Seddon, Postlethwaite & Lee 2011).

Enablers and barriers to participation can occur on multiple levels (Mitton et al. 2007). Identifying factors that inhibit OLC participation is essential because it can interfere with new information being understood and interpreted (Paulin & Suneson 2012). In an assessment of 83 research papers on dissemination across health care, Mitton et al. (2007) summarised the key facilitators and barriers (see Table 3). All factors determine the sustainability of the project and each factor influences participants differently, often shaped by their professional views and practices (Lilleoere & Holme Hanson 2011).

Participation drivers for individuals

Motivations for OLC participation have been documented widely within the literature, although this is primarily sourced from the education field. What users expect to derive from joining an OLC varies not only between different forums and users, but also depends on the varied needs and motivations of each OLC member (Shi et al. 2009). Knowledge sharing can have an emotional driver, with pride and empathy being linked to eagerness and willingness of individuals to share knowledge (van den Hooff, Schouten & Simonovski 2012). Personal factors, such as being willing to work with others, being aware of political and value issues, and how the participants perceive the quality of relationships with other CoP members can also contribute to the willingness to engage (Bowen, Martens & The Need to Know Team 2005). Individuals tend to determine what knowledge to use based on how they perceive its relevance, accessibility and legitimacy (Contandriopoulos et al. 2010). Demographic differences (such as age and gender) can also influence willingness to engage in an online environment (Andrews, Preece & Turoff 2001).

In a study of successful and unsuccessful CoPs within one organisation, where

all had access to similar resources, the more successful CoPs 'created personal networks, fostered discussions of relevant topics and created standards of practices [that were] perceived by its members as worth participating [in]' (Wolf, Späth & Haefliger 2011: 35). Participants from successful groups also had more influence in the decision-making processes (Wolf, Späth & Haefliger 2011).

Most importantly, trust was found to be essential for encouraging ongoing communication, with the enhanced communication in turn fostering trust (Ardichvili, Page & Wentling 2003; Bowen, Martens & The Need to Know Team 2005; Contandriopoulos et al. 2010; De La Rue 2008; Lilleoere & Holme Hanson 2011; Sharratt & Usoro 2003; Teng & Song 2011). This trust can relate to the integrity of other participant(s) in their knowledge, expertise and motivation for posting a reply (De La Rue 2008). Trust is built at an interpersonal rather than organisational level (White-Cooper et al. as summarised by Miller et al. 2012). In their study of knowledge dissemination between researchers and practitioners for violence against women research, Wathen et al. (2011: 11) highlighted the importance of the 'three T's—talk, trust and time' to facilitate knowledge dissemination. Complementing any knowledge base/OLC with the potential to meet fellow community members to help create both social and formal links could improve engagement and learning (eg Andrews 2002; Conrad 2002; De La Rue 2011, 2008). There have also been suggestions that adding a degree of social element to OLCs can help to develop a sense of community, particularly for participants who may be isolated from other OLC members (Conrad 2002). However, it has been noted that this is not always appreciated by participants, so a balance should be established between the topic/theme-focused communications and more social communication (Conrad 2002). McInerney and Roberts (2004: 78) also suggest three protocols to aid online social interaction:

- 'use of synchronous communication;
- the introduction of a forming (ie warm-up, get to know you) stage; and
- the adherence to effective communication guidelines'.

In addition, it is suggested that improved uptake could be embedded in making OLC participation a 'vital part of the job' of crime prevention (de la Rue 2011; Li 2010) and should be considered part of crime prevention responsibilities. This may be difficult to introduce for crime prevention practitioners, particularly as their role in crime prevention is often an adjunct to their main profession.

Individuals will not necessarily engage in OLCs even if they know and engage with the same practitioners offline. Certain demographic groups may prefer face-to-face engagement and OLCs do not offer the visual clues that are an important part of communication (Andrews, Preece & Turoff 2001).

Cultural differences in how knowledge is exchanged on an OLC can exist, such as preferences for visual versus verbal ways to communicate (Ginsburg, Posner & Russell in Ardichvili et al. 2006). However, differences are not restricted to cultures and nationalities—different learning styles can exist within the same cultural group or agency (Li 2010). As such, identifying the most appropriate method for engaging with a disparate mix of crime prevention practitioners is further complicated.

Improving the knowledge and performance of groups (which in this case are the varied crime prevention practitioners) has been suggested to include the group having diverse membership, ability for members to have independent thought and a way to collate knowledge (Surowiecki summarised by De La Rue 2011). Collectivism and reciprocity combined were the most common motivation to engage in knowledge sharing in a study across three different OLC professional practices (nursing, web development and literacy education; Hew & Hara 2007). A study of a six year online collaboration between European teachers

found that the following additional motivational factors contributed to the longevity of the OLC and participant engagement:

- sense of belonging;
- approval via collaboration;
- opportunities for negotiation and problem solving;
- clear, feasible mastery goals (ie goals that focus on growth of knowledge/skills rather than solely goals that showcase current proficiencies); and
- content built on appreciation of wider issues related to the issues being discussed (Seddon, Skinner & Postlethwaite 2008).

In addition, the simple pleasure found in learning can be a contributing factor (Seddon, Skinner & Postlethwaite 2008).

Occupational influences

Dissemination practices may also be influenced by job roles, with individuals who do not consider dissemination as part of their duties less likely to participate than those who do. Motivation to participate can be strongly influenced by participants seeing the value of dissemination to their job (Li 2010). Organisational support of an OLC is also important, as is the ability to provide career advancement opportunities (Sharratt & Usoro 2003). This can be enhanced if the OLC values are in line with personal or organisational goals (Sharratt & Usoro 2003).

Wariness of posting 'permanency' could exist for some potential OLC participants (ie once a comment is posted, it is then available to anyone and cannot be taken down; Conrad 2002; Preece, Nonnecke & Andrews 2004). This could be an inhibiting factor for many practitioners in government agencies in particular, as they may risk posting information that may be contrary to the agency's position. In such cases, closed forums may help facilitate greater engagement. Similarly, certain information may not be able to be shared among different practitioners (eg police information with non-law enforcement agencies). Depending on the OLC's size and purpose, this could be overcome by creating different

levels of access within an OLC and/or restricting some discussion forums for sensitive content. This will be contingent on whether the technology is available to implement these conditions.

The role of incentives

Incentives may be a way to promote engagement of the key target audience. Indeed, promoting incentives has been raised by some OLC participants as a way to encourage participation (McPherson, Baptista Nunes & Harris 2002; Preece, Nonnecke & Andrews 2004). Identifying appropriate incentives is an essential component of the process (Sharratt & Usoro 2003), particularly within crime prevention if the audience is a disparate mix of practitioners rather than specific practitioner groups (eg local government crime prevention and community safety officers). In addition, Wenger (1998) cautions that using incentives in a CoP, which relies on self-sustaining participation by practitioners, could in fact have the potential to hinder community development. That is, the very nature of the OLC is more likely to be sustainable if founded on the desire of the practitioners to engage in the community for its intrinsic value, rather than being reliant on a moderator's ability to entice participation.

Every crime prevention OLC will be different, so there is no simple answer to how to address each enabler and barrier. What is essential is that OLC moderators understand their target audience and become familiar with their needs.

Crime prevention online communities: Worth the effort?

OLCs are not necessarily difficult to establish, but ongoing maintenance and sustainability may prove challenging. Their benefit is their potential to facilitate greater knowledge dissemination within what is typically a fragmented and diverse crime prevention sector and to therefore play a significant role in improving the uptake of evidence-based strategies and good practice. One risk may be that misinformation, bad knowledge and ineffective practices are disseminated that

will then need to be unlearned (Nutley, Walter & Davies 2007). Despite this risk, ineffective practices have already proliferated in crime prevention without OLCs (see Grabosky 2006; McCord 2003). An OLC may provide an opportunity for the reinvention of these 'flat tyres' (Ekblom 2001) to be picked up and addressed by attentive moderators and other community members. This highlights the appeal of including experts such as academics in OLCs who have the expertise to identify whether actions are good practice or may cause unintended harms.

In light of the growing number of crime prevention practitioner networks, it is timely to consider whether it is worthwhile investing in a national crime prevention OLC. Establishing a national crime prevention OLC is attractive for numerous reasons. First, as mentioned above, no online network linking practitioners across Australian jurisdictions exists. Second, existing networks appear primarily limited to local government practitioners; thus practitioners from other fields or areas are likely excluded from accessing similar networks. This is not to infer that existing local government networks should expand to include others. However, crime prevention is widely recognised as interdisciplinary (Homel 2009) and some studies have indicated that diversity in participants may positively expose practitioners to potentially innovative practices (De La Rue 2011, Malik 2004).

This paper provides a useful starting point for understanding how to approach OLC development in crime prevention in that it has briefly described the factors required to enhance dissemination and engage practitioners in functioning, useful OLCs. The broader knowledge management field has examined these issues more comprehensively and is a useful source for more detailed material. However, given the paucity of crime prevention OLCs and research on their effectiveness, further lines of enquiry should include:

- investing in a greater understanding of who crime prevention practitioners are and their dissemination needs;
- identifying why crime prevention

practitioners participate in an OLC, what facilitates their engagement and how their interest can be maintained;

- ensuring that crime prevention OLCs do, in fact, promote good practice;
- creating a framework for evaluating the effectiveness of OLCs; and
- identifying characteristics of effective OLCs specific to crime prevention practitioners.

As existing OLC and CoP literature focuses on communities that are qualitatively different from crime prevention practitioners, there may be some lessons that are not transferrable from CoP research. With the emergence of OLCs in the crime prevention sector, there is potential to start investigating this further.

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