Exploring leaders' value of participating in virtual leadership communities of practice

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'I, Samantha Mathis, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.'

Abstract

The research study explores a leader's perceived value in participating in a virtual leadership community of practice. This research applied narrative inquiry by examining value creation stories through the lens of Wenger, Trayner and de Laat's (2011) value creation framework to explore how leaders within the Foreign Commonwealth and Development Office apply learning from these communities to their leadership practice. It explores how emerging, mid-level and senior leaders engage in their virtual leadership communities and what influences the value that the leaders find within them. Fieldwork includes an online survey blended with semi-structured, in-depth interviews.

Findings reveal that leaders' participation in leadership communities can traverse multiple cycles of value creation and similar experiences can be experienced and valued by leaders at all levels. Although leaders find immediate value with the interactions and immediate connections within their leadership communities, more find benefit from the 'potential and future value' of virtual leadership communities, especially if influential to their own leadership development practice.

Developing and supporting leadership communities is increasingly a focus of leadership development efforts in organisations. However, evaluating leadership communities and networks is a challenge, especially when staff are dispersed across wide geographical areas. Similarly-intended communities vary depending on environmental and contextual characteristics and influences, such as the maturity of the community, the ability to develop trust, engagement and motivation, as well as delivering value applicable to a leader's work and leadership practice. These differing influences lead to different strengths and challenges, which can be addressed by learning professionals and organisations. This research shows that, in order to ensure success, decisions and actions have to be fine-tuned towards the unique personalities of the virtual leadership communities.

Impact Statement

This research aims to make a positive contribution to the profession's understanding of ways in which leaders create value in virtual leadership communities of practice. It offers insight in terms of exploring a leader's value in participating in a virtual leadership community of practice and provides a pathway forward for a framework for understanding what influences the value the leaders find in the community and how learning is applied to their leadership practice.

Although there exists a large body of research on communities of practice for professional learning, there are few studies on the transfer of learning in virtual leadership communities. Documenting the value creation of leaders in a virtual community presents an opportunity to contribute to this emerging body of literature. For organisations and learning professionals, this study offers a form of developmental evaluation for organisational learning that could be used to improve communities of practice and programmes of learning to determine aspects of the community that may need development and support. Organisations may want to consider sharing value creation stories within learning programmes or communities of practice as a way of promoting the value creation and sharing the benefits. Furthermore, these stories can help demonstrate the value of communities in learning and developing leadership practices, as well as providing a framework to build on. This analysis helps illuminate the potential, and intangible, value of communities of practice to leaders and the wider organisation as well as understanding some of the influences that make virtual communities successful.

I aim to use the findings from this study to feed in to my professional role and work on informal learning, design and delivery of leadership and management development programmes and supporting communities of practice and online communities. The outcomes of this research will be shared across the International Academy, the Foreign Commonwealth and Development Office and relevant UK Government departments via online webinars during 2022, supporting HMG staff who work in the UK and overseas. Furthermore, outcomes will be shared via the global consulting work of the researcher and her affiliate coaching organisations in

their work in the United Kingdom, United States and internationally via blended learning workshops, podcasts and other events. The researcher will develop a proposal for an article in a peer-reviewed journal, subject to the successful defence of the thesis.

The research was conducted pre the COVID-19 pandemic, although the analysis was conducted during this time period. Therefore, the data analysed refers to leader's experiences prior to remote working and increased virtual interactions. It would be interesting to explore how the leaders would value their virtual learning programmes and communities after having worked and learned virtually during the COVID-19 crisis of 2020. Would their experiences and mindsets have changed at all and would the realised or reframed value be harder to achieve or look different? Further research into lessons learned during the COVID-19 crisis can help address the existing limitations to realise the full potential of virtual learning.

490 words

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Preface

Darwin Holmes (2020) cautioned researchers to be aware of and acknowledge that they bring their own biases, background, and experiences to the subject under study. I have a personal interest in three specific areas with respect to this study. First, I am a learning and development professional, second, I am Head of the International Academy (Americas) region for the organisation under research, the Foreign Commonwealth and Development Office within the UK Government. Finally, I have been involved in the design and delivery of the organisation's leadership development programmes.

I have been developing people throughout my professional career, from being a secondary school teacher, to a training development officer in the Royal Air Force, to learning in the global development sector and my current role. The development of people is satisfying, meaningful and rewarding. These experiences have taught me that there are at least two sides to every story and both of them can be true. We often seek data, or disregard data, in order to make our perception true. And sometimes there are many more than just two sides. I know my own beliefs of what is true plays into my own biases. I enjoy developing people, am good at it, am passionate about it, and am by any standards a successful learning and development practitioner. Although my intention has been to explore what is present and draw meaning from it, rather than look for what I am expecting to find, I am aware that my position in the research means that the outcomes may be biased. The insider role will allow for opportunities to collaborate with leaders on their needs, strategies, and intended outcomes for improving their leadership practice. The position will also allow the researcher the opportunity to communicate the findings and standardised best practices for future implementation in other contexts.

Chapter 1. Introduction

This research explores a leader's perceived value in participating in a virtual leadership community of practice. The research provides a pathway forward for a framework to understand what influences the value the leaders find in the community and how learning within the community may be applied to their leadership practice. A community of practice (CoP) is a group of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly (Lave and Wenger,1991). A CoP is called "virtual" (VCoP) when its members use Information Communication Technology (ICT) as their primary mode of interaction (Dubé, Bourhis and Jacob, 2005).

In this chapter, I define key concepts explored in the research, explain the purpose of the study, discuss the context and research focus along with gaps in the current research concerning virtual communities of practice and leadership practice. The chapter ends with an outline of the methodology underpinning the research.

An explanatory sequential mixed methods design (Creswell, Ivankova and Stick, 2006) is used, collecting and analysing first quantitative, and then qualitative data in two consecutive phases. The preliminary quantitative phase of the study will collect data from leaders that have undertaken a Foreign, Commonwealth and Development Office (FCDO) leadership programme to identify leaders more universal experiences of communities of practice. This will include perceived benefits and value in participating in communities for work purposes and for their leadership development. The quantitative data will be collected through a survey, and the data analysed with a Likert scale and descriptive statistics.

The second qualitative phase will explore and interpret the results obtained in the first, quantitative phase. Data will be collected through interviews with selected leaders from the preliminary phase. To enhance the depth of qualitative analysis, this research applied narrative inquiry by examining value creation stories through the lens of Wenger, Trayner and de Laat's (2011) value creation framework to explore how emerging, mid-level and senior leaders co-construct new forms of learning in ways that are valuable to their leadership practice. Value creation is

defined by five elements identified in the 'Assessment Value Creation Framework' (Wenger *et al.*, 2011): immediate, potential, applied, realised and reframed value.

A key characteristic for the success of an organisation is its ability to learn and develop a learning culture where people can learn and think (Argyris and Schön, 1996; Billet, 2002; Eraut, 2000; Marsick, 2001; Senge, 1990). High performers in organisations usually build their capabilities through experience, practice and utilising a rich network of support rather than exclusively through structured training and development away from the workplace (Marsick, 2001). The role of the leader is changing too: leaders need to be more agile, responsive and adaptive in their approach (De Smet, Lurie and St George, 2018). Leadership networks provide resources and support for leaders and increase the scope and scale of impact leaders can have (Hoppe and Reinelt, 2010). Researchers and learning practitioners are trying to understand how work and learning can therefore, be better integrated, and what role communities and networks play within this (Billet, 2002; Daly, 2010, Eraut, 2004; Le Clus, 2011; Marsick and Watkins, 1999; Skule and Reichborn, 2002).

There are many different types of workplace learning such as experiential, incidental, informal, non-formal, action learning, transformative, self-directed as well as formal organisational learning (Billet, 2002; Boud, 1999, Eraut 2004; Kolb, 1984, Lave and Wenger, 1991; Marsick and Watkins, 1999, Mezirow, 1991). One challenge is that learners may not be conscious of learning (implicit learning, according to Eraut, 2004), or aware of a particular intent (Boud, 1999) as learning activities may occur as a result of a daily workplace activity, experience, observation, or social interaction, such as learning from a mistake, problem solving or trial and error. Situated learning focuses on everyday learning and the interactions between employees and their working environment (Lave and Wenger, 1991). For example, it can be promoted through observation, coaching, scaffolding, dialogue, modelling, action learning sets and opportunities for reflection on practice. This makes it more difficult to examine the informal learning aspects.

Creating an environment that helps employees solve increasingly complex and often ambiguous problems holds considerable performance implications.

However, such initiatives often undervalue crucial knowledge held by employees and the network of relationships that help dynamically solve problems and create new knowledge (Borgatti *et al.*, 2009). Communities of practice help foster an environment in which knowledge can be created and shared to improve the effectiveness of existing practices in organisations (Lesser and Everest, 2001). The presence of technologies in organisations to support learning has expanded exponentially (Venkatesh, Morris, Davis, & Davis, 2003) but can differ in how learners use the technology. Collaboration and innovation are increasingly central to organisational effectiveness, so it is important to understand the value that people place on learning, and the technologies that they use in these types of communities to accomplish their work.

1.1 Concepts and terms used in the research

Community: Members pursue this interest through joint activities, discussions, problem-solving opportunities, information sharing and relationship building. A strong community fosters interaction and encourages a willingness to share ideas (Wenger, 1998).

Domain: Community members have a shared concern or passion that distinguishes them from others. This shared domain creates a common ground, inspires members to participate, guides their learning, and gives meaning to their actions (Wenger, 1998).

Practice: Members are actual practitioners in this domain of interest. The practice is a specific focus around which the community develops, shares and maintains its core of collective knowledge (Wenger, 1998).

Leadership Practice: While there are differing definitions of leadership practice, this study focuses on the organisational practice of leadership development and expanding one's capacity to be effective in a leadership role by acquiring new mindsets and behaviours (McCauley and Van Velsor, 2004).

Value Creation: Value creation is the "value of learning enabled by community involvement and networking" (Wenger, Trayner and de Laat, 2011: 7). Distinct

from a business perspective whereby communities create value in the form of improved organisational efficiency or financial gain (Prahalad and Ramaswamy, 2004; Tsai and Ghoshal, 1998), the term 'value creation' in the context of this research is viewed from the perspective of the leader and is defined as personal learning enabled through community involvement, knowledge sharing and networking (Wenger *et al.*, 2011).

1.2 Purpose

Individuals who work in a collaborative workgroup, share a passion for something they know how to do, and interact regularly form a Community of Practice (CoP) (Wenger, 1998). A CoP is a specific kind of community focused on shared knowledge in which individuals, over time, gain expertise in areas the community supports (Cook-Craig and Sabah, 2009; Wenger 1998). While CoPs were previously conceptualised as a phenomenon emerging spontaneously in organisations, it is now believed that organisations play a critical role in nurturing these communities (Brown, Duguid and Seely, 2001; Wenger, McDermott and Snyder, 20021). Indeed, nurturing and catalysing leadership networks are increasingly a focus of leadership development efforts. Examining the CoP will involve identifying how the leaders interact and apply any learning that enables them to address problems and share knowledge. Research into virtual communities is a rapidly growing field. However, defining and examining social and collaborative learning is challenging as populations tend not to be bounded, so assessing a community's context can be difficult. Organisational leaders use communities of practice to improve knowledge management in organisations and strengthen communities by allowing communities to share knowledge (Wenger, 1998).

Developing and supporting leadership communities is increasingly a focus of leadership development efforts as social and virtual networks are a way to strengthen relationships among leaders. However, evaluating leadership communities and networks is a challenge in leadership development as it is difficult to see and assess the cultural and social relations that characterise informal learning in the workplace. Although leaders are often adamant that they know their organisation, they can have different levels of accuracy in understanding, and therefore leveraging the value of the networks around them (Borgatti *et al.*, 2001).

They may be removed from certain day-to-day work interactions that generate an organisation's informal structure, and so may have an inaccurate understanding of the actual patterns of relationships and potential of learning that takes place. These perceptions are potentially increased within global organisations and virtual working, where employees are engaged in work relationships increasingly invisible to others.

Reviews of the literature frequently point out that little empirical work has been conducted around the value leaders ascribe to learning in virtual communities (Balkundi, Kilduff, Michael, Barsness and Lawsen 2005; Brass, Galaskiewicz, Greve, and Tsai, 2004). Yet, while research indicates ways managers can influence informal networks at both the individual (Baker, 1990) and whole network levels (Krackhardt and Hanson, 1993), senior leadership in organisations seem to do relatively little to assess and support critical, but often invisible, informal networks. As Head of the International Academy Americas region for the FCDO within the UK Government, I also know how difficult it is to detect, assess, manage and support informal learning activities (De Laat and Schreurs, 2013), especially when staff are dispersed across wide geographical areas. CoPs bring many benefits to dispersed groups but guiding and supporting them is not always successful.

Technological advances in virtual communications and social networks have created additional opportunities for CoPs to expand beyond traditional workgroups. Fernback and Thompson (1995) referred to a virtual community as a set of social relationships forged in the technology of cyberspace through repeated contact with a specific boundary. Technology bridges geographic distances, and virtual CoPs enable virtual groups to gain knowledge by using the virtual environments to reinforce an organisation's collective operational knowledge (Cook-Craig and Sabah, 2009).

Therefore, to understand the experiences in this research, social constructivism is a lens to develop the meaning behind the experiences of the leaders in their community. The constructivist view manifests in the phenomenological approach, whereby participants describe their experiences. Narrative inquiry can provide an insight into the value of these informal networks. In this study, 'narrative' is the

phenomenon being studied and is the method used to analyse the stories being told by the leaders (Clandinin and Connolly, 2000; Clandinin, 2007) as we need to understand the context in which the narrative is embedded, i.e., the virtual leadership community that the leaders are experiencing. Leveraging the potential of virtual leadership communities requires a greater understanding of the value that leaders find through their participation. Wenger *et al.*'s (2011) value creation framework is applied as a tool to better understand cycles of value creation in virtual leadership communities, and explore whether leaders co-construct new forms of meaning and understanding in ways that are individually and collectively valuable, and how they apply that knowledge to their professional practice. This is discussed further in chapter three.

1.3 Context

There are a number of different leadership development programmes available to staff within Her Majesty's Government (HMG) and the FCDO. This study focuses on three of these programmes that were developed by the FCDO and are available to any HMG leader working on the FCDO platform, either in the United Kingdom (U.K.) or overseas. These programmes are described below to reflect their format during the fieldwork phase of this research. All of these programmes changed format during the later COVID-19 pandemic, which is out of scope of this study.

Overseas Leadership Programme (OLP)

Heads of Mission (HOMs) and Deputy Heads of Mission (DHMs) within the FCDO attend an OLP prior to taking up a new posting to an Embassy or Consulate overseas. The OLP is an 18-month blended programme, before and during posting, that focuses on a broad cross-section of leadership theories and job-specific learning to prepare these senior leaders for the specific leadership challenges of their role. Two weeks of the programme are delivered face-to-face in London, with the rest of the programme undertaken virtually. HOMs and DHMs are senior diplomats within the FCDO and usually remain in a post between 3-4 years. There is an internal online community site for HOMs and DHMs respectively to access before during and after their leadership programme. These sites have been established since mid-2016. This study will focus on the value of these communities

in their learning journeys. These networks of leaders were chosen to see if, and how, they form an online community to embed their learning and develop their leadership skills. This group also brings an international and comparative dimension to the study, as they will be residing in different locations across the globe once they have started their posting.

Global Leadership Programme (GLP)

The GLP is a practitioner level leadership programme that aims to improve leadership skills by building on, and sharing, leadership experience. It also aims to increase self-awareness, build confidence and motivation, and strengthen resilience through regional working so that leaders can develop a meaningful vision and ensure its delivery by inspiring, influencing and empowering others It is a 12-month blended programme with two modules face-to-face of two days, at the beginning and mid-way through the programme. Between modules, participants lead and participate in monthly peer-learning sets to discuss leadership themes of their choosing, working with other leaders across their region. There is a developing online community for GLP participants, but it is not widely used at this stage. The programme has been around for approximately four years overseas and for approximately two years in the U.K. Entry to the programme is by application and is aimed at mid-level HMG leaders, UK-based (staff who are diplomats, civil servants or work within HMG overseas) and locally employed staff, known as country-based staff, who are employed at local embassies and consulates.

Emerging Leaders' Programme (ELP)

The ELP is a foundation level leadership programme that aims to build understanding of leadership and how it applies to leaders' roles. It also aims to increase self-awareness and confidence so that new leaders can develop a meaningful vision and ensure its delivery by inspiring, influencing and empowering others. Similar to GLP, it is a 12-month blended programme with two modules face-to-face of two days, at the beginning and mid-way through the programme. Between modules, participants lead and participate in monthly peer-learning sets to discuss leadership themes of their choosing and work with others across their region. The programme has been around for approximately three years overseas and had not been delivered in the U.K at the time of the field work. Entry

to the programme is by application and is aimed at emerging HMG leaders, who are just starting out on their leadership journey or are leading a project, UK-based and country-based staff.

For the context of this research the leaders are referred to as 'HMG leaders' or 'leaders' at the different leadership levels – emerging leaders, mid-level leaders and senior leaders.

International, intercultural or comparative dimensions of the study

Programmes focused on developing global leaders should include leaders from a variety of geographic regions, backgrounds and roles. Leaders within these networks must often collaborate effectively across functional, hierarchical, geographic or departmental boundaries for the organisation to benefit despite the fact that they may reside in different physical locations. The value creation framework can provide an insight into the value of leadership communities, within and across boundaries, that may also lead to other performance or practice improvement opportunities. The population sample in this research will be global leaders who completed, or are completing, one of the afore-mentioned leadership programmes. Interviewees will be selected ensuring a span across geographic, functional, departmental and grade levels and is discussed further in Chapter 3. Taking populations from different continents will allow for an international and intercultural comparison in this study, along with the fact that the leaders are from different countries and cultures within their own regions.

1.4 Research Questions

Principal research question:

What value do leaders attribute to participating in virtual leadership communities of practice?

Supplementary research questions:

- How do leaders engage in virtual communities of practice to develop their leadership practice?
- What influences the value that leaders find in their virtual leadership community?
- How is learning from engaging in a virtual leadership community applied to a leader's leadership practice?

Gap in the research

One of the critical factors in realising the potential of virtual leadership communities is understanding the value that leaders find through their participation. Through analysing the value leaders ascribe to their experience of learning in a virtual community, the data analysis may be able to offer interventions to help improve a CoP's ability to create and share knowledge for leaders. Although there exists a large body of research on communities of practice for professional learning, there are few studies on the transfer of learning in virtual leadership communities. Documenting the value creation of leaders in a virtual community will present an opportunity to contribute to this emerging body of literature. The research will also provide some insights into whether the leaders can influence learning culture within an organisation by effectively building relationships and using online communities for learning. It may offer insights into the ways in which actions of organisations and leaders can support and facilitate value creation for leaders. I aim to use the findings from this study to feed in to my professional role and work on informal learning, design and delivery of leadership and management development programmes and supporting communities or practice and online communities. My professional role led me to want to explore

more fully potential benefits of professional reflection and learning that might arise and share results with colleagues across HMG.

Leadership research for CoPs and VCoPs has mainly focused on leading and coordinating CoPs (Aghion and Tirole, 1997; Hermalin, 1998 and Rotemberg and Saloner, 1993). This research does not provide a comprehensive analysis of leadership theories, for which a number of studies are available that detail the different ways scholars have approached the topic of leadership (Bass, 2009; Northouse, 2012). Furthermore, the scope of the study does not cover all the methods of leader development or the many different characteristics of CoPs. The research was conducted pre the COVID-19 pandemic, although the analysis was conducted during this time period. Therefore, the data analysed refers to leader's experiences prior to remote working and increased virtual interactions.

1.5 The Research Focus and Theoretical Underpinnings

Leadership programmes are designed for social learning, so a theory which aims to understand social learning is relevant to this study. During the process of developing the conceptual framework for the research I considered cognitive and social constructivist theories of learning. Each have underpinnings in Dewey's (1938) learning cycle, for example, the Experiential Learning cycle developed by Kolb (1984) and Knowles theory on Andragogy (1968). While the theories and models are relevant to studies of CoPs, none, specifically focus on the value learners attribute to learning within communities. Given that my research concentrates on the leaders' value and experiences in leadership VCoPs, I deemed Wenger and Lave's (1991) situated learning theory and Wenger *et al*'s value creation framework (2011) to be of most relevance. Situated learning essentially is a matter of creating meaning from the real activities of daily living (Stein, 1998).

Chapter Two, the Literature Review, grounds the research in the literature of cognitive and social constructivist learning and discusses its importance for this study and explores how that relates to learning in VCoPs and leadership development. The chapter continues by examining what the research says about informal, formal and blended learning and the relevance to leadership development. It looks at the positive and negative characteristics of VCoPs,

particularly the differences in technology use, and value creation as a method for analysing the VCoPs. Finally, this chapter explores the practice of leadership development.

The study adopts a mixed-methods methodology for the main study data collection and analysis. The Methodology Chapter first addresses the theory behind the selection of the mixed-methods approach and discusses the research design and the methods chosen for each of the phases in the main study. Stage one (online survey) provided both an opening and a supporting role in collecting quantitative and attitudinal data (Creswell, 2014). Stage two (interviews) provided the main emphasis of the research overall. The chapter then details the qualitative and quantitative methods that were used to collect data to address each question and analysis phase. The data collection began with a survey of leaders and continued with a semi-structured interview phase in which the sample was drawn from the survey respondents and the interview schedule was developed based on survey data. It also provides details of the sampling, development and implementation of the survey and semi-structured interviews.

In this chapter I have provided the rationale and purpose of the study, and have described the context within which Wenger's framework of CoPs will be examined. Chapter Two offers a review of the important literature on cognitive learning theories, CoPs, VCoPs, value creation as a method for analysing the VCoPs and the practice of leadership development. In Chapter Three I outline the methodology to be used in conducting this study. Chapter Four provides the findings and analysis of the findings from the study. Chapter Five offers a discussion of implications for practice, and suggestions for possible future research. Chapter Six concludes the study.

Chapter 2. Literature Review

2.1 Introduction

This review underpins the conceptual framework discussed in the methodology chapter by focusing on three key areas that explore the research questions, around the value of practices within a VCoP in a leadership development programme. These areas are 1) theories of learning, 2) communities of practice, focusing on virtual communities of practice and 3) leadership development practice. The literature reviewed in this research informs and identifies relevant theories and concepts through which the field of inquiry can be explored (Ravitch and Riggan, 2017).

2.2 Theories of Learning and Communities of Practice

It is not the intention to provide a comprehensive or detailed review of learning theories, which can be found in other studies (Leonard 2002; Mower and Klein 2001). The theoretical ideas here were chosen to underpin the concept of the community of practice and which increasingly inform analyses of informal and workplace learning.

Cognitive approaches to learning focus on the role of the individual in the learning process, which are important to understanding how the leaders in this research value the learning in their VCoPs. They are predicated on the notion that learners process information and then use this information as a stimulus to progressively change the mental models they hold of the world in order to make them more accurate (Wortham, 2003). Whereas pure cognitivists hold the view that knowledge is an absolute value which is assimilated by the learner (Harasim, 2017), constructivists contend that knowledge is constructed in the mind of the learner out of their experiences in the world (Swan, 2005). Therefore, constructivists recognise to a greater degree the active role of the individual in the learning process (Barton and Tusting, 2005). Social cognitivists have similarities to both, but their main emphasis is that a full understanding of learning must include the study not only of changes in an individual's mental models but also their transformation through social activities (Wortham, 2003).

The development of cognitive theories of learning, including cognitivism, cognitive constructivism, and social cognitivism is the work of many prominent theorists. I have chosen to review a selection of these, i.e., Dewey, Piaget and Vygotsky, whose work has influenced the field over time and may be pertinent to the design of leadership development programmes. These thinkers differ with respect to their views on the nature of knowledge, the role of experience, and whether the process of creating meaning from an experience is primarily individual or social (Merriam, Caffarella and Baumgartner, 2012). Yet what unites them is a belief that learning is a learner-centred process in which the learner interacts with the environment in the construction of knowledge. Dewey (1929) is considered the originator of cognitivist theory and suggests that students build onto prior experiences, and therefore the educator's role is to create educative experiences. This implies that the educator, or facilitator in the case of leadership development programmes, can help leaders learn by finding a way to ground unfamiliar concepts and ideas within the scope of their life experience. Cognitive constructivism theories, such as those developed by Piaget (1970), suggest a learner-centred model whereby learners must be allowed the autonomy to learn in their own way, with the learning process being different for each learner (Barton and Tusting, 2006; Wortham, 2003). In a leadership development experience, the instructor is someone who facilitates learning as a guide through questioning. This is important to helping us understand how leaders may construct meaning and value in their VCoPs and on their leadership practice, especially as a process over time.

Social constructivist theories, as proposed by Vygotsky (1978), imply the need for meaningful interaction between people for real development to occur (Barton and Tusting, 2003; Wortham, 2003). Vygotsky's (1978) social development theory identifies the social environment as important in the development and learning of individuals. He sees interaction with peers as an effective way to develop skills, particularly within the zone of proximal development (ZPD): the difference between what a learner can achieve independently and what a learner can achieve with guidance from a skilled partner. This is important to understanding whether the leaders value the VCoPs as a zone where they may receive support. The importance of the social system is also acknowledged by Rogers (1995), who states the social structure "can affect the diffusion and adoption of innovations" (p. 25- 26). Roger's innovation theory is discussed later in this chapter. As this

study explores the meaningful interaction of leaders in VCoPs, it is important to draw on these social constructivist theories.

Andragogy

Andragogy is the "art and science of helping adults learn" (Knowles, 1968, p. 351) and is probably the best-known set of principles to guide adult learning practice. In andragogy, a learner is someone who a) has a need to be self-directing and is therefore in charge of their own learning, b) has an increasing reservoir of experience and attaches more meaning to learning through experience than other ways of learning; c) is ready to learn something only when there is a need to learn it based on real-life problems, and, d) wants to apply knowledge that was gained in order to improve performance (Knowles, 1970). Similarly, transformative learning theory (Mezirow, 1991) is often described as learning that changes the way individuals think about themselves and their world, and that involves a shift of consciousness, or a rational process.

Indeed, Knowles' model is powerful because of its very practical and direct consequences in terms of the design, implementation and evaluation of communities of practice and leadership development experiences (Pratt, 1988). The use of blended learning in the leadership development context allows for more self-determined learning and involves a greater use of exploratory and self-paced learning, such as communities of practice, implying that leaders take responsibility for their own learning (Bonk, Kim, and Zeng, 2005).

Situated Learning Theory

Building on Vygotsky's (1978) work on social learning, situated learning models emphasise the importance of learning through 'doing'. Learning therefore takes place through a process of concrete experience, reflection on observation and active experimentation (Kolb, 1984). Social learning theory is developed out of situated learning (Lave and Wenger, 1991) and conceptualises learning as participation, in the form of a negotiation of meaning and identity, in communities of practice (Wenger, 1998). Social interaction and collaboration are key components of situated learning theory. Through communities engaged in sharing and group co-construction of knowledge, individuals continuously improve their practice (Cobb & Bowers, 1999). Making the connection between social practice and the theory of

learning is one of Lave and Wenger's main achievements (Brown, Duguid and Seely, 1991) and helps to distinguish them from other social practice theorists such as Bourdieu (1977), whose notion of social space does not include an explicit view of learning.

Building off the concepts laid down by Dewey (1938), Knowles (1970), Piaget (1970) and Vygotsky (1978), it can be argued that informal learning is at the heart of adult education because of its learner-centred nature and its association with learning from real-world experiences (Eraut, 2004, Marsick and Watkins, 2001). Informal learning can be defined as being 'primarily in the hands of the learner', compared to formal learning which is 'institutionally sponsored, classroom based, and highly structured' (Marsick and Watkins, 1999, p.12). However, defining informal learning is complex. What distinguishes informal from formal learning is that it is not highly structured and results from interacting with, and learning from, other colleagues (Boud and Garrick, 1999; Eraut, 2004; Le Clus, 2011; Marsick and Watkins, 1999). But, like formal learning, informal learning can be deliberately encouraged by an organisation, for example, coaching, mentoring and communities of practice (Marsick and Watkins, 1991). It can also take place in the spaces surrounding people, activities, practices, processes and events in the workplace. Therefore, learning is situated in the context of social practice (Le Clus, 2011), where the workplace provides the opportunity for employees to acquire knowledge that connects theory to practice (Lave and Wenger, 1991). Yet, if most of organisational learning is occurring outside the traditional formal learning environment, finding a way to facilitate, manage, track and measure the learning, especially when it takes place during real-time collaboration and in groups and workspaces, is challenging (Moore, 2020). This has implications for the research in this study and identifying the value of learning in the leadership VCoPs.

Experiential (or Reflective) Learning

The combination of reflection on context and reflection on self is understood to be a powerful force in promoting learning for adults (Mezirow, 1991; Wenger, 1998). Mezirow (1991) theory of transformative learning posited that individuals engaging in reflective discourse can generate a new understanding of their current learning situations but need to challenge each other's assumptions and encourage group members to consider various perspectives. Learning from experience involves

learners connecting what they have learned from a current experience to what they have experienced in the past, and then applying the learning derived from this process of reflection to future situations (Merriam, Caffarella, and Baumgartner, 2012). Knowles (1970) believes it is the process of relating new learning to past experience that gives learning its meaning. Building on Knowles' work and that of other scholars including Dewy and Piaget, Kolb (1984) defined an experiential learning model rooted in reflection that is perhaps the most well-known and influential to this day. Schön (1983, 1987) also developed thinking about the importance of reflection as part of the learning process. He discussed the concept of reflection-in-action, describing it as the critical step of thinking about "what we are doing while we are doing it" (Schön, 1987, p.26). Schön argues that this unique type of reflective practice allows professionals to practice their craft and create new ways of thinking.

However, critiques of andragogy and transformative learning theory emerging from empirical studies suggest that "reflection is more than a rational process, and that it is not always easy to carry out" (Mälkki, 2011, p43). Emotions and safe relationships have been shown to be important factors entangled within the process of reflection (Brookfield, 1994; Mälkki, 2011; Taylor, 1997, 2000, 2007, 2008). Building off Mezirow's (1991) theory of transformative learning, she posits that the challenges of reflection require further analysis concerning the social dimension, especially the relations between the cognitive and emotional dimensions. Research from Daly and Ahmetaj (2020) around corporate learning reported a stronger decline in the ability of learning and development teams to facilitate social and collaborative learning. They also reported that 66% of organisations with high impact learning cultures had learning spaces where staff could learn collaboratively compared to the average organisation at 20%. For this reason, the theoretical foundations established by social development theory (Vygotsky, 1978) and situated learning theory (Lave and Wenger, 2001; Wenger, 1998) will be used to explore the VCoP of the leaders as effective learning is shaped by workplace culture as well as from the leaders' engagement in authentic activities, and through interacting with other employees (Billet, 2002; Lave and Wenger, 1991; Marsick and Watkins, 1999). As practice level collaboration takes place online which is difficult to facilitate, monitor and track suggests that this phenomenon should be studied.

Blended and Online Learning

The leadership development programmes in this study use blended learning. It is a method of instruction in which face-to-face teaching is combined with a mix of other elements, most predominantly online interaction (Fleck, 2012). Kerres and De Witt (2003) referred to blended learning as a mix of different didactic methods and delivery formats, arguing that these two are independent. Bonk and Graham (2006) proposed that blended learning is the process of chunking a programme into modules and deciding which medium is best for delivering each module to the learner. Garrison and Kanuka (2004) described blended learning in terms of the objective of the learning itself. An example that is particularly relevant to leadership development, Garrison and Kanuka (2004) also defined attitude-driven learning as that which mixes different events and media to develop certain mindsets and behaviours. Finally, Graham (2006) adopted what is the broadest definition of blended learning, by describing it as "the combination of two historically separate models of teaching and learning: traditional face-to-face learning systems and distributed learning systems" (p.18).

Research from Towards Maturity (2018) showed that organisations not using technology relied heavily on classroom/face-to-face leadership development programmes and were therefore, limiting individuals with opportunities to build and improve their leadership capabilities and progress within the organisation. Matzat (2010, 2013) also suggests that participation in online environments is reinforced by face-to-face contact. Organisations that succeed in using technology and tools were more likely to embed learning in the flow of work, promote a flexible learning culture and encourage continuous learning (Towards Maturity, 2018). These organisations also facilitated online communities and learning groups for leaders and managers, where individuals could learn at their own pace, connect to peers and solve problems together. This would support the theories of Vygotsky (1978), Piaget (1970), Dewey (1929), Kolb (1984) and Knowles (1968).

Online learning can be a valuable ally, allowing the engagement of learners that are spread out across the globe through such platforms as communities of practice, which make learning available to a larger network across the organisation (Graham, 2006; Singh, 2003). It also requires methodologies that facilitate the application of learning to real organisational issues, sometimes over an extended

period of time and with participants engaging remotely. The use of technology can be particularly effective for the development of these types of contextualised, situated learning processes. Jackson, Farndale and Kakabadse (2003) argue that online learning offers the possibility to extend the learning experience beyond the classroom walls, and in so doing provide participants time for reflection and conceptualisation as well as the opportunity to experiment with new insights in their work context. This has major implications for organisational learning and development, as employees now expect technology to play a significant role in the learning in which they participate (Hernez-Broome and Hughes, 2004). Technological advances create new opportunities for learners to have more control over their learning and when and how they engage in it (Moore, 2020), which aligns with the principles of self-determined learning. Many organisations have adopted the blended learning approach for leadership development programmes, incorporating a virtual component into the design of their courses (Bersin, 2013).

An important shift involves the integration of formal development opportunities with workplace activities. Leadership development programmes are no longer viewed as separate from day-to-day work, requiring the sole attendance at off-site courses (Van Velsor *et al.*, 2004). Many leadership development programme designers believe that that these development experiences have the greatest impact when they can be linked to or even embedded in a person's day-to-day work (Hernez-Broome and Hughes, 2004; McCauley and Van Velsor, 2010). As a result, the delivery mechanism of formal developmental opportunities has shifted away from pure off-site, traditional classroom training to an on-the-job, action-based learning approach. Classroom training can still be a component of these experiences, but it is now heavily complemented with opportunities to practice within the real world and work on live business challenges and objectives (Leskiw and Singh, 2007). This is a significant departure from previous learning models in which what happened in the classroom was of primary concern, and participants of the learning experience were solely accountable for applying their new knowledge to their work upon their return (Mumford, 2006).

A theme in the literature surrounding online learning environments, both in formal and informal situations, is that participants learn incidentally through their interactions (Eraut, 2004; Lave and Wenger, 1991; Marsick and Watkins, 2001;

Pratt, 1988). Situated learning theory has taken on new relevance with the development of online platforms for learning. Yueh-Min, Yi-Wen, Shu-Hsien, and Hsin-Chin (2014) examined mobile device platforms used as student learning tools and noted that student learning outcomes improved through collaborative learning while using mobile devices. Literature also suggests that participation in online communities can lead to positive changes in professional practice (Gray, 2004; Vavasseur and MacGregor, 2008). However, online communities often struggle with engaging in authentic practice due to the disconnect between the community and the members' individual practice. Edwards (2005) makes the important point that 'participation', on its own, fails to account for how new learning comes about and how new knowledge is produced. Therefore, we can surmise that there may be a shift from just examining the individual learner's cognitive meaning-making reflection process towards the study of the context in which learning, and thus an experience, takes place. This line of research, situated cognition, recognises the importance of the social and cultural context of learning (Merriam, Caffarella, and Baumgartner, 2012). One of the central ideas to this situated approach is the concept of communities of practice, developed by Lave and Wenger (Lave and Wenger, 1991; Wenger, 1998).

2.3 Communities of Practice

Community is a term used to describe many different types of groups to communicate with each other. Definitions of community focused on close-knit groups in a single location prior to the advent of communications technology. Lave and Wenger (1991) define communities of practice as "formed by people engaged in a process of collective learning in a shared domain of human endeavor" (p. 1). This learning community can be anywhere, from the workplace to the classroom to an online group. Lave and Wenger's work (1991), heavily influenced by Vygotskian (1978) thinking, demonstrates that the context in which the learning takes place is crucial, as are the tools in that setting and the social interaction with others.

Studies show that researchers now consider the strength and nature of relationships between individuals to be a more useful basis for defining community (Haythornthwaite and Wellman, 1998; Wenger 2002). CoPs emerge more or less spontaneously from informal networking among groups of individuals who share similar interests or passions (Lave and Wenger, 1991). CoPs are networks as they

include connections between members. However, not all networks are CoPs. Communities and networks are often thought of as two different types of social structure (Wenger, 1998). A community usually involves a network of relationships and many networks exist because members are all committed to some type of shared enterprise. However, Pastoor (2007) and Pemberton, Mavin and Stalker (2007) argue that a limitation of CoPs is the difficulty of differentiating them from other groups. For Wenger (1998), the difference between a CoP and any social or collaborative learning network is that social relations are formed, negotiated and sustained around the activity that has brought people together. A difficulty with this approach lies not so much in the underpinning theory of learning but in the process of defining measurements of a phenomenon that is not directly measurable. This would support Moore's (2020) argument earlier about managing, tracking and measuring informal learning in the workplace.

Stoll *et al.*, (2006) concur that learning within CoPs involves active deconstruction of knowledge 'through reflection and analysis, and its reconstruction through action in a particular context, as well as co-construction through collaborative learning with peers' (p233). The value of collective learning in the group lies in the competence of the group's expertise in the community, whether long or short-term. This notion of knowledge sharing in a learning community closely relates to Fish's (1980) theory of interpretive communities. The CoP creates identity and meaning of the group existence through communal negotiations and determines the internal value systems of the group. A combination of individual skill and community expertise develops member identity, giving individuals the sense of value personally and collectively (Brown, Duguid and Seely, 1991; Stoll *et al.*, 2006;).

Wenger (2002) identified three key elements that need to be present for a community to be called a CoP - domain, community and practice.

Domain is the area of knowledge that gives the community identity and defines the key issues that members need to address (Wenger, 2002). The fact that a community is focused on a shared practice implies that members share a common level of knowledge of the domain. A community does not merely consist in a network of acquaintances or a group of friends.

Community is the group of individuals for whom the domain is relevant; community includes the relationship between members and the operational boundaries of the group. Interactions among members of a community of practice are frequent: by being bound together by a common interest, they freely devote to joint activities, try to help each other, exchange advice and share information. Bogenrieder and Nooteboom (2004) pointed out the fact that interactions among members are characterised by being rich, stable and long-lasting. The richness and density of interactions are further favoured by the existence of a common domain and knowledge shared by the members. The existence of dense interactions is central since it differentiates communities of practice from other types of communities such as people having the same job or the same title or people belonging to the same social class.

Practice is the body of knowledge, methods, stories, and documents that members share and develop together (Wenger, 2002). Members of a community of practice develop a shared repertoire of resources. This repertoire summarizes the contributions and is made up of experiences or tools. It contains knowledge and information that have circulated in the community and may, in some sense, constitutes a summary of its cognitive advancement.

Wenger *et al.*, (2002, chapter 2) acknowledge that CoPs can take several forms: they identified size, life span, geographic dispersion, boundary span, creation process, and degree of institutionalised formalism as important characteristics whose combinations produce different types of CoPs. While this initial list is a useful beginning, the literature shows that (1) it is not exhaustive and does not allow a complete differentiation among CoPs, (2) this list was created to distinguish among CoPs and does not take into consideration the specific characteristics introduced by information technology into VCoPs, and (3) Wenger and his colleagues fall short of demonstrating the importance of these characteristics to the CoPs' daily life (Dubé, Bourhis, and Jacob , 2005).

A CoP functions by the talent, trust, and collaboration in the group to allow the group to adjust to change, using the knowledge strategies of domain, community, and practice. Trust is the result of building relationships through personal interactions in the group and enables knowledge transfer as members provide assistance to other members. This implies that contributions are the product of the

members' free will: they are able to decide whether or not to contribute to the community and their type of contribution. The process of learning to improve individual intellect occurs through the social collaborative processes in a specific context (Ropes and Tholke, 2010). Communities rely on the existence of trust relationships among members (Cohendet and Diani, 2003; Bogenrieder and Nooteboom, 2004). This is due to the fact that the environment of communities is commonly evolving. This is discussed further in the next section.

2.4 Virtual Communities of Practice

According to Dubé *et al.*, (2005), "A CoP is called 'virtual' when its members use ICT as their primary mode of interaction" (p. 6). Dubé *et al.*, (2005) view face-to-face and VCoPs as the same type of social structure, differentiated mainly by the means used to communicate, although VCoP members may also meet face-to-face. Chiu *et al.,* (2006) concur that VCoPs are social networks online where people with a common interest, goal or practices collaborate to share information and knowledge and engage in social interactions. Online communities may use any form of electronic communication which provides the opportunity for online synchronous or asynchronous communication between an individual and their peers, and to which the individual has some commitment and professional involvement over a period of time (Leask and Younie, 2001).

Online communities have several drawbacks but do have the advantage of more efficient operational capabilities than those of traditional communities due to enhanced abilities of information exchange, storage, and processing. Chiu *et al.*, (2006) state that it is primarily the content of the social interaction and the resources in the network that maintain the VCoP. Online communities can provide immediate value to individuals by offsetting the isolation they may feel in the workplace (Duncan-Howell, 2010; Vavasseur and MacGregor, 2008), as well as provide opportunities to both give and receive support, encouragement and, or advice (Vavasseur and MacGregor, 2008). These virtual communities may share some common features, but their various structuring characteristics, such as enrollment and geographic dispersion, make them unique. Participants of CoPs and VCoPs experience very different environments because of the media through

which they primarily interact (Venkatesh, Morris, Davis and Davis, 2003). Collaboration platforms differ in terms of users or purpose, but they all seem to share a number of common characteristics. VCoPs can be defined by a series of characteristics, many which are made at the launching of the VCoP and together define what the VCoP really is. While some will positively influence the VCoP's life, others will create challenges such as issues of visibility and presence, size, affiliation, priorities, and cultural differences. Wenger (1998) states that successful CoPs are primarily based around social, cultural, and organisational issues, and secondarily with technological features. It is important therefore in this study to understand the basic characteristics of VCoPs, reviewed in this section, and whether any of these may influence and impact the value leaders have of the community.

Life span and age

Only two structuring characteristics of CoPs, age and level of maturity, will change without any intervention (Wenger *et al.*, 2002). While it may initially be indeterminate, a VCoP can be assembled on a temporary basis to accomplish a specific purpose but is usually created on a permanent basis with no definite time frame in mind, as an on-going mechanism for information sharing. As part of any organisational strategy a CoP can be deliberately established with a purpose and selected members, a top-down approach, or be spontaneously emerging and created by a number of interested members, a bottom-up approach, (Fontaine, 2001). However, as commented by Schwen and Hara (2003), sharing and learning however cannot be legislated into existence. An intentionally created VCoP may therefore encounter more difficulties than a spontaneously formed one; fostering and sustaining members' interest may require greater effort.

Dubé *et al.*, (2005) define the age of VCoP as varying from young (less than a year) to old (more than 5 years). Launching a new VCoP is more challenging, as assembling people, identifying common interests, choosing technology, developing norms and processes will prove difficult. A VCoP may also face some difficult challenges when, at the end of the cycle, it has to reinvent itself. VCoPs go through different phases throughout their life (Gongla and Rizzuto, 2001; McDermott, 2000; Wenger *et al.*, 2002). They all describe the same process but differ in terms

of the timing of their stages, the elements emphasised, and the vocabulary used. It is divided into five stages (Wenger *et al.*, 2002, p. 69):

1. *Potential* - A loose network of people juggles with the idea of forming a CoP; structure, members, and common interests are identified, selected, and agreed upon.
2. *Coalescing* - The CoP is officially launched. The CoP activities are starting. The main focus is on establishing value.
3. *Maturing* - The CoP develops a stronger sense of itself. While its core practice is better defined, members see gaps and develop new areas of knowledge. The CoP goes from sharing tips to developing a comprehensive body of knowledge. Members know each other; a level of trust has developed.
4. *Stewardship* - The CoP goes through a stage where the biggest challenge is to sustain its momentum.
5. *Transformation* - An event – a major change in practice or work organisation, a large influx of new members, a leadership change, or a high decrease in energy level – will trigger the need for renewal. The CoP may start all over again on a new basis or simply fade away and die.

As time goes by, the VCoP will naturally age; the passage of time, however, does not necessarily guarantee a higher level of maturity. While it is expected that a VCoP will progress and reach a higher level of maturity, some VCoPs take more time than others to evolve; they may stall at one phase or progress rapidly to a high level of maturity (Gongla and Rizzuto, 2001; Wenger *et al.*, 2002). Identifying the phase that a VCoP is in may help explain its specific challenges and issues, and the decisions and actions that are needed to lead it to success.

Purpose, context and structure

VCoPs are usually launched by organisations with a defined objective and theme in mind (McDermott, 2000). Usually based on 'practice networks' (Pan and Leidner, 2003), their membership commonly crosses boundaries across work groups, organisational units and organisations to promote collaboration, learning, and information sharing (Wenger and Snyder, 2000). Boundary crossing can be considered low if only similar work group members are involved, medium if

different groups or units from the same organisation are part of the community, and high if members of different organisations are involved in a VCoP (Wenger *et al.*, 2002). However, a high level of boundary crossing may make it more difficult to develop an adequate level of trust and to buy into the idea of sharing knowledge (Wenger *et al.*, 2002). Online communities are not constrained by time either, thereby allowing members to move through periods of high to low activity over longer periods of time.

The larger organisational context in which the VCoP exists may shape its very existence, the challenges it faces, and its outcomes (McDermott and O'Dell, 2001). The launching of a VCoP is more likely to be successful in an organisation that designs the VCoP in accordance with its culture and its environment (McDermott and O'Dell, 2001). However, VCoPs that start off within an organisation may use unofficial platforms or social media applications outside of more official organisational platforms. This research will explore which platforms leaders use, whether formal or informal, and the value they perceive from these platforms for their practice.

Membership

A VCoP is usually constituted of a core group of members who provide intellectual and social leadership (Wenger and Snyder, 2000), and peripheral members, who often get great value from their lurking activity (McDermott and O'Dell, 2001). A lurker may be defined as someone who has never contributed to an online community (Preece, Nonnecke and Andrews, 2004). A large community is more likely to include people with contingent, diverse, and distributed interests, and as a result, it may be more challenging to meet the needs of all members (Mitchell, 2002. Krogh (2002) argues that in a large CoP, the marginal contribution of each member is lessened and the rational, self-interested individual may choose to free ride. Hence, very large VCoPs are usually structured into subgroups (by topic or region) to encourage active participation (Wenger *et al.*, 2002).

Geographic dispersion refers to the physical location of the participants (Dubé *et al.*, 2005). Members of a VCoP may all be physically located in the same building (low dispersion) or scattered around the world (high dispersion), such as the focus for this study. A high level of dispersion may increase the cultural diversity of a

VCoP but brings about additional challenges. Physical distance encourages psychological distance; it takes more intentional participation efforts from members to keep the community alive (Wenger *et al.*, 2002). In such a context, it also becomes more complicated and expensive for members to participate in regular, face-to-face meetings. High geographic dispersion may mean that members are in different time zones, making synchronous communications all the more difficult.

A VCoP may also choose to have a closed membership which permits better control over its size and more control over the characteristics of its members, making managing, identifying common interests, and meeting easier (Dubé *et al.*, 2005). An open membership VCoP, however, may be more in line with the idea of organisation-wide knowledge sharing. In an open-access VCoP, lurkers may learn interesting things that will prove useful in the long run (McDermott, 2001; Preece *et al.*, 2004), while their status, at the time, may not have allowed them to become members, had the VCoP had a closed-membership policy.

Members' enrollment can take many forms, from voluntary to strongly encouraged, to compulsory. Volunteers are generally more motivated than conscripted members (Dubé *et al.*, 2005; Mitchell, 2002). Schwen and Hara (2003) agree in that compulsory participation is more likely to be found when management builds the VCoP in a top-down approach and may have unintended negative impacts.

An existing network of individuals may be the instigator of a new VCoP (Lesser and Everest, 2001) or an organisation can build on an existing network as a basis for a new VCoP (McDermott, 2000). In such a case, members already know each other and are used to collaborating and sharing information among themselves. Prior community experience may vary from being extensive (when the community is based on an existing network), to medium experience (when members of the community have worked in groups, although those groups may not be identical to the VCoP), to low or no experience. Despite possible drawbacks, an experienced group has an advantage over a newly created VCoP. While some resistance may be encountered, the group already has a purpose, some legitimacy, established roles and defined norms, easing the passage to the development of a real virtual community (Lesser and Everest, 2001).

Technology and technological expertise

Social media has gained popularity among researchers and practitioners. According to Bernabe-Moreno *et al.*, (2015), social media started as a space where individuals could interact with other users, share content, and express their personal views. Social media comes in various forms, such as social networking sites (Facebook, LinkedIn, Yammer), blogs, microblogs (Twitter), collaborative projects (Wikipedia), content communities (YouTube), virtual social worlds (Second Life), and virtual game worlds (Olsen and Christensen, 2015). Social media has changed the way that people interact with each other and with companies (Hanna, Rohm, and Crittenden, 2011). A VCoP may use a large array of traditional media (phone, teleconference, etc.) and more or less sophisticated technological tools, such as e-mail, videoconference, newsgroup, on-line meeting space, common database, Website, intranet (Barrett, Cappleman, Shoib and Walsham, 2004; Wenger, 2001) to establish a common virtual collaborative space. Online communities are now mainstream business tools. There are many online environments for organisations to use, such as internal organisational platforms and sites, whether internally produced or externally sourced and adapted such as Yammer to external ones, such as Facebook, LinkedIn and WhatsApp.

The internet has been associated with both increased and decreased social capital. Some researchers assert that the internet has diminished social interactions, specifically face-to-face interaction (Hanna, *et al.*, 2011). Nie (2001) adds that internet use causes individuals to have less face-to-face time. Other researchers, however, found that computer mediated interactions have positive effects on individuals' interaction, involvement and social capital (Hampton and Wellman, 2003; Kavanaugh *et al.*, 2005). Burke, Marlow and Lento (2010) noted that active users of social networking sites (in contrast with passive consumers of information) may gain greater social capital. In addition, the use of social media tools allows development of new knowledge aggregation methods such as data visualisation (Chen and Hsiang, 2007). Innovative strategies (i.e., gamification, competition, collaborative work) promote engagement and subsequently bring change in behaviour (Burke *et al.*, 2010).

When technology is employed as a platform for communication in a CoP, it is reasonable to assume that successful VCoP activity requires the acceptance and use

of technology. The unified theory of acceptance and use of technology (UTAUT) and related models, such as the technology acceptance model (TAM) can be effective methods for explaining and predicting to what extent the leaders in the VCoPs adopt and use technology (Venkatesh, Morris, Davis and Davis, 2003). The UTAUT premise surmises that one must first use a technology before one can achieve desired outcomes, such as improvement in employee productivity, performance or in the case of this study, leadership practice. Within a VCoP, there can be wide discrepancies in the members' technological proficiency, i.e., in their ability to use the technology efficiently. A lack of experience with ICT may make it difficult for some members to participate to their full potential because of the barriers created by technology (Jarvanpaa and Staples, 2001). They may even be looked down upon by members who master the technology. Thus, while a variety of ICT may be available, members' ability to use them appropriately and efficiently will facilitate or hinder participation and information sharing.

The UTAUT has been found to successfully help understand users' attitudes and behavioural intentions towards technology (Anderson, Schwager and Kerns, 2006; Chiu & Wang, 2008; Venkatesh *et al.*, 2003). The UTAUT framework identifies four key factors: performance expectancy, effort expectancy, social influence, and facilitating conditions (Venkatesh *et al.*, 2003). Performance expectancy is defined as the belief that using a particular innovation will lead to positive outcomes, or perceived usefulness according to TAM (Nov and Ye, 2004; Van Raaij and Schepers, 2008). Effort expectancy relates to a user's evaluations of ease of engaging with a technology system (Nov and Ye, 2004; Venkatesh *et al.*, 2003). Social influence is the extent to which others are perceived to support the user's intention to adopt a technological innovation (Venkatesh *et al.*, 2003). Inspired by the construct of social norm within the theory of planned behaviour (TPB Ajzen, 1991), social influence was conceptualised as an individual's perception of social benefit from using the technology (Venkatesh *et al.*, 2003). Facilitating conditions are defined as the level of accessibility to technological and organisational resources that facilitate use of the ICT system (Venkatesh *et al.*, 2003).

However, criticisms of the UTAUT include being overly complex and unlikely to measure individual variables (Van Raaij and Schepers, 2008). Nistor and Fischer (2012) found weak or non-significant effects of participants' technology use

intention on their actual use behaviour. Nonetheless, there is some validity in attempting to capture a deeper understanding of technology acceptance in various contexts. Nistor and Fischer (2012) suggest that users from different countries and professional backgrounds may show different attitudes towards technology. This is supported by Jasperson, Carter and Zmud (2005) who posited that the social context of technology acceptance and use not only includes formal organisation forms, such as functional unit, business division, and the entire organisation but also informal social entities, such as user communities and other informal social networks. Bettoni and Eggs (2010) argue that technology is given too much importance in the success of knowledge management initiatives. They propose that you can implement a very good tool, but if you fail to train and develop a new culture of collaboration and cooperation, the initiative will not be successful.

Rogers (2002) innovation diffusion theory takes this a step further. Innovativeness is defined as the openness of particular groups within a social system to new product experiences (Rogers, 2002). According to Rogers (2002), individuals may be classified into groupings that indicate their relative likelihood of adopting a novel product or service, or in the case of this study, the VCoP. The model suggests that innovations may be accepted quickly by members of an organisation or may take years to reach widespread adoption. If an innovation is not perceived as being advantageous, it is unlikely the innovation will be adopted. In addition to being advantageous, the innovation must be compatible with the existing values of the user and relatively easy for the adopter to use and understand (Rogers, 2002). Many innovations are adopted but fail to fit the needs of the organisation and lack clarity as to what the change means in practice. Rogers classifies adopters into five categories on the basis of when they began to use the innovation. The categories include innovators, early adopters, early majority, late majority, and laggards. Although VCoPs allow members to leverage each other's knowledge in a timely fashion, without the constraints of time and space (Krogh, 2002; McDermott, 2000), they may be using different technology and to different degrees. Deprived of rich face-to-face contacts, especially at the beginning, a VCoP may have problems and/or take longer to establish a sense of identity and a common purpose, and to develop the shared knowledge that increases the likelihood of mutual understanding (Cramton, 2001). Most VCoPs need some face-to-face time

to be the most effective and the resulting stronger personal relationships seem to be essential to carry the group through extended periods of virtual communication (Hildreth *et al.*, 2000). In this study, the leaders sampled met initially once or twice face-to-face before using online platforms of the participants choosing.

For this study therefore, it will be useful to understand the leaders' attitudes and behavioural intentions towards the specific technology being used for the VCoP, their innovativeness towards the technology, and whether their use and perceptions of the technology have any impact on their perceived value of participating in the community. This could have implications for organisations who may need to consider how learners will perceive an innovation and not solely on the benefit of using the technology.

Culture

Cultural influence of VCoPs can be considered at the national, organisational, and professional levels (Wenger *et al.*, 2002). Cultural diversity in a VCoP may be created by mixing different national cultures. Hofstede (1993) shows how different cultures have different conceptualisations of management, leadership, autonomy, priority and focus, decision-making, and relationships between people. A VCoP may bring together different organisational cultures, with different learning and adaptation processes (Hesselbein and Johnston, 2002) as well as diverse knowledge sharing behaviours and preferences. Members of a specific professional culture develop their own knowledge bases, language, technical routines and workplace values and norms. Homogeneous describes a community in which members come either from the same organisation or from organisations with similar cultures, are located in culturally close countries, and have similar professional backgrounds (Pan and Leidner, 2003).

While cultural heterogeneity is an asset that brings a rich variety of perspectives and experiences and provides a mechanism against groupthink, it can also make participating and sharing difficult (Pan and Leidner, 2003). In addition to shaping how one relates to others and to the group (Wenger *et al.*, 2002), culture defines what knowledge is, what is worth managing, who should possess it, and who should hoard it (De Long and Fahey, 2000). CoPs generally develop supportive cultures (Schwen, 2003), whereby members develop trust. However, it may be more

challenging for the VCoP's members to identify and develop common interests and share a common understanding, to establish open communication and trust, delaying the time a VCoP requires to be effective. Therefore, trust may be a threat to the culture, value and success of VCoPs and merits further exploration.

Trust

As already identified, VCoPs rely on the trust of its members to be successful. A community will only work if a certain level of trust exists among its members (Hara and Schwen, 2006; Ridings *et al.*, 2002). Hoy and Tschannen-Moran (1999) define trust as a multifaceted concept that encompasses one party's willingness to risk vulnerability based on the confidence that the latter party is benevolent, reliable, competent, honest, and open. Trust has been recognised as an important factor affecting knowledge sharing (Ridings *et al.*, 2002). Although trust is positively related to knowledge sharing in both face-to-face and online communities, without the facial expressions, verbal cues, and nonverbal cues afforded in face-to-face communities, online communities meet unique challenges in cultivating trust (Ridings *et al.*, 2002). Building mutual knowledge, trust, and the sense of belonging, which all increase the likelihood of comprehension, open exchange and sharing may be more difficult (Cramton, 2001; Handy, 1995; Hildreth, Kimble, and Wright, 2000; McEvily *et al.*, 2003; Pan and Leidner, 2003). The willingness of individuals to share with others the knowledge they have acquired or created are major concerns (Bock *et al.*, 2005). Trust therefore, is a crucial factor in the sustainability of VCoPs (Ridings *et al.*, 2002). Hence, developing a comprehensive framework of trust for knowledge sharing in VCoPs becomes an important issue to be addressed.

Studies suggest that trust is developed through repeated interactions with time or through the social network that people established (Ring and Ven, 1992; Zaheer, McEvily and Perrone, 1998). Trust levels can be established on a personal, technical and organisational level. On a personal trust level, this relates to personal characteristics and competencies. Secondly, the technical aspect of the community focuses on activities which foster trust building. The hardware and software, its usability, access and the data security may impact the way people interact on the platform. Researchers have previously integrated trust with models of technology acceptance (Lippert and Davis, 2006; Pavlou, 2003; Wu and Chen, 2005) and

technology usage (Kim and Moon, 1998). These studies have shown that trust is important during ICT implementation: trust between the organisation and the employee, and trust in the implemented technology (Lippert and Davis, 2006). These relationships are thought to lead to greater efficiencies in employee technology adoption by promoting an environment that is conducive to ICT acceptance. Fang, Shao and Lan (2009) utilised an extended TPB model to explain web survey participation, and demonstrated that trust influenced users' intentions to participate in an online survey. These findings lend support to the inclusion of trust as behavioral intention within the context of technology acceptance and use.

Finally, the organisational culture level examines the extent to which the culture supports trust building in an organisation. Trust first is built between community members such as in confidence and personal trust. Once, this is established the second level of structural trust means a good technical system is addressed. Different experiences have shown that a lot of VCoPs failed due to technical problems. The solutions are too complicated or the members didn't have enough media competences for the use of such platforms. Zaheer *et al.*, (1998) concur that trust in communities is built upon obtainable economic benefit, mature community infrastructure, and sound managerial mechanism, which will attract members to participate and trust the community.

Jarvenpaa and Leidner (1999) posit that individuals in VCoPs will go through two stages of trust in the potential interactions with other members—initial stage and mature stage. Paul and McDaniel (2004) argue that different types of trust may evolve into another deeper type of trusts. At the beginning of the formation of the VCoP, the network ties between the leaders may be weak. As interactions increase over time, the leaders may perceive the trustworthiness of other members which may enhance the social network density for the VCoP (McEvily *et al.*, 2003). Once, these key factors are in place, a new culture must be established which may take time. This experience shows that trust building needs a long period of time, especially in a virtual learning space. The biggest challenge is often the establishment of a new culture of collaboration. Feelings of disconnectedness, isolation and aloneness for users are reduced and members do not feel that being in one place cuts them off from other places (Paul and McDaniel, 2004).The relationship and human dimensions are much more important than the

technology. The relationship level is even more crucial because individuals only build trust and work together, if they communicate openly together, if they get constructive feedback and see the results and success of their communities. This would support Rogers (2002) innovation diffusion theory and the degree of openness of groups within a social system to new experiences. It can be surmised that trust may be a key threat to VCoPs in terms of openness, access, interactions, ownership and sustainability, so will be an important element in understanding whether the leaders find value in their leadership VCoPs.

2.5 The Practice of Leadership Development

While virtual communities may come in all shapes or sizes, this study focuses on VCoPs where members are assembled around an organisational practice – leadership development. The main practices pursued in communities include conversations to share experiences, knowledge and materials, as well as provide emotional support and develop collective projects. The opportunity to share practices and experiences can help leaders think about what they do in their daily work (Macia and Garcia, 2016). This is discussed below.

The importance of leadership development for organisations has increased exponentially over the years, and today it is a strategic imperative for organisations given the current complex and uncertain business environment (Leskiw and Singh, 2007). For this reason, the development of leaders who think strategically and can confront these challenges is increasingly a source of sustainable competitive advantage (Fulmer, Gibbs and Goldsmith, 2000). Human resource professionals have shifted their thinking about leadership development towards a more complex approach (Van Velsor *et al.*, 2004). It is useful to highlight some of these shifts here, as they are relevant to this study and to blended learning within leadership development programmes. The first shift has to do with a move "from practicing development as an event to supporting it as a process over time" (Van Velsor *et al.*, 2004, p. 205). There is a recognition that leadership development "is a lifelong, ongoing process" and that "no single event, no matter how powerful, is enough to create lasting change in an individual's approach to the tasks of leadership" (p. 205). McCauley and Van Velsor (2010) echo this view, postulating that leadership development consists of developmental experiences in combination with the ability to learn and the organisational context supporting development. These views

support the idea of learning being situated in the context of social practice (Boud and Garrick, 1999; Eraut, 2004; Le Clus, 2011; Marsick and Watkins, 1991). This concept of leadership development is in line with the thinking of theorists that have studied adult learning, which were reviewed earlier in this literature review. A blended learning model can strengthen the links between multiple development experiences and allow participants to better tackle real-life challenges (Matzat, 2010, 2013).

Traditional leadership research has focused on human capital attributes of leaders and situational attributes of leadership contexts (Balkundi *et al.*, 2005). Human capital attributes of leaders include traits, characteristics, behaviours and styles whereas social capital refers to "relationships with other actors, and access to information, resources, opportunities and control" (Brass and Krackhardt, 1999, p.180). Palus and Drath (1994) cited leadership as meaning-making in a community of practice: People engaged in a shared activity make sense of their experience together so that they can communicate, cooperate, and agree about what is happening, and so that they can interpret, anticipate, plan, and act. If leadership is understood as a social activity, though, then leadership development must involve some change in the collective activity, in addition to some change in individuals (Heifetz, 1994). Hoppe and Reinelt (2010) suggest that leadership is the capacity of people who share similar identities, circumstances, or contexts to provide each other with trusted and relevant information, advice and support when it is needed.

CoPs want to encourage information flow, knowledge reuse and learning, however VCoPs can be constrained by structure, homophily and the personality or interests of those involved (Chiu *et al.*, 2006; McPherson and Smith-Lovin, 1987). Homophily theory refers to the tendency for individuals to interact more with their own kind, either by preference or opportunity constraints (Borgatti and Foster, 2003; McPherson and Smith-Lovin, 1987) such as through race, gender, education and work unit. This can undermine learning and the value of communities. Physical proximity, similarity of beliefs and attitudes, amount of interaction can also affect relations and ties between leaders. Organisational research on homophilous networks has focused on its effects on group and individual performance outcomes (Krackhardt and Stern, 1988; Reagans and Zuckerman,

2001). On the one hand, interacting with others who are similar is thought to be efficient in that similarity builds stronger cohesion, facilitates transmission of tacit knowledge (Cross *et al.*, 2001), simplifies coordination and avoids potential conflicts. On the other hand, it can prevent individuals from the benefits of diversity, information sharing and can promote us-versus-them thinking (Borgatti and Foster, 2003; Krackhardt and Stern, 1988). Exploring the proximity of participants and the reasons why the leaders reach out to or interact with others in the communities in this study will tell us to what extent the network is homophilous.

Exploring the value of the VCoP can help leaders create connections and improve community effectiveness (Cross *et al.*, 2001). Organisational behaviour studies show that influential leaders tend to be highly connected with many members of the community frequently occupy brokering positions (Burt, 1992; Huffaker, 2010; Mehra, Dixon, Brass and Robertson, 2006). Bonding and bridging denote different types of connectivity in communities (Hoppe and Reinelt, 2010). Bonding relates to connections in a tightly knit group or strong ties, and bridging relates to connections to diverse others, known as weak ties. A cluster is a tightly knit, highly bonded, subgroup. Identifying clusters can reveal important previously unrecognised subgroups within VCoPs. In this research, examining bonding and links will help identify trusted communities where interactions are familiar and bridging where new opportunities and interactions may exist (Hoppe and Reinelt, 2010).

In virtual environments, leadership is an especially interesting phenomenon because of the distributed nature of the context in which leadership must be exercised (Avolio, Kahai, and Dodge, 2001). Traditional forms of exercising leadership are changed in virtual environments, where the usual face-to-face influence is not possible. Contribution in the community can impact a leader's reputation and trustworthiness (Muller, 2006). Reputation forms a necessary condition for building up leadership status: leaders are characterised by higher levels of reputation. Motivation is a necessary prerequisite for sharing knowledge and learning in a CoP (Ardichvili, 2008). Because knowledge resides within individuals, knowledge cannot be shared effectively if individuals are not motivated to do so. Therefore, it is important to gain a better understanding of the

factors that motivate knowledge sharing. Individuals share knowledge because they expect knowledge sharing to be advantageous to them. Ardichvili *et al.*, (2003) found that some leaders shared information because of a need to establish themselves as experts. Contributing knowledge enabled these individuals to gain informal recognition or formal expert status within their CoP. Another benefit is a better professional reputation (McLure-Wasko and Faraj, 2005). Similarly, Butler, Sproull, Kiesler, and Kraut (2002) suggested that the main reason why individuals share knowledge is because they expect to be seen as skilled, knowledgeable, or respected. Additionally, they expect to gain some emotional and intellectual benefit from it (McLure-Wasko and Faraj, 2005). Sharing knowledge was found to broaden one's expertise, and provide new challenges (Chiu, Hsu and Wang, 2006; McLure-Wasko and Faraj, 2005; van Winkelen and Ramsell, 2003).

However, high levels of reputation only form one characteristic for leaders, they also have to be perceived as legitimate by other members. Indeed, a key feature of VCoPs lies in the autonomy of the members (Dubé *et al.*, 2005). As identified earlier in this review, trust forms a prerequisite for cooperation and the capacity of individuals to influence individual behaviours, this being at the root of collective learning and interpersonal coordination (Klos and Nooteboom, 2001). Contrary to reputation, trust entails the existence of direct, interpersonal interactions among leaders. An important feature of trust lies in the existence of interdependences among the leaders and in their capacity to accept vulnerability. A VCoP can be a safe environment that allows leaders to speak openly and honestly with each other, outside the structures of power and authority within which they work (Dubé *et al.*, 2005). This study will explore the levels of trust and the impact of trust development for the leaders within the VCoPs.

2.6 Value Creation in Communities of Practice

Value creation is the "value of learning enabled by community involvement and networking" (Wenger, Trayner and de Laat, 2011: p. 7). Building on Wenger's (1998) prior work, Wenger *et al.,* (2011) developed a framework for assessing value creation in online CoPs that links specific activities to desired outcomes based around five cycles of value creation, explored further in the Conceptual Framework chapter of this study. The value of the communities has both short-term and long-

term aspects. Learning, and value from the community may be applied later in other contexts or environments, such as in a future job.

However, as identified throughout this chapter, there are also many threats to the success of VCoPs. While literature focusing on the analysis of value creation in online communities is limited, prior research demonstrates that participation in online communities can be a satisfying experience and indeed lead to the acquisition of various forms of knowledge capital such as social, tangible and learning capital (Chiu *et al.*, 2006; Dubé *et al.*, 2005; Leask and Younie, 2001; Wenger et al., 2011). Storytelling and the development of a shared repertoire of stories and cases can function as a dynamic knowledge source for members of a community (Gray, 2004).

2.7 Chapter Summary

Based on the literature review, there is a gap in exploring the value leaders attribute to using a VCoP to develop their leadership practices. For VCoPs to be successful, in terms of being a venue for information sharing and maintaining its existence, certain characteristics and variables need to be present. Some are inherent in virtual communities, whereas other will develop as the community grows and the needs of the members evolve. Many factors are associated with the success of VCoPs, such as its age, shared purpose, structure, membership, trust and technological expertise (Dubé *et al.*, 2005; McDermott, 2000). Success is often measured in terms of knowledge sharing as it is a key factor in contributing to the growth and development of the VCoP (Hara and Schwen, 2006). Moreover, the literature review identifies that VCoPs rely on the trust of its members to be successful and trust therefore, is an important factor affecting knowledge sharing and the sustainability of VCoPs (Hara and Schwen, 2006; Hoy and Tschannen-Moran, 1999; Ridings *et al.*, 2002). Testing these assumptions, therefore, is part of the next stage in this research process, which is described in the methodology chapter.

Chapter 3. Methodology

This chapter introduces the epistemological belief, interpretive framework and conceptual model included in this study. It details the theoretical basis behind the mixed-methods methodology and the choice to employ it. The discussions that follow describe the study design for both phases of the research, the combination of quantitative and qualitative methods and their sequence and priorities within various points of the study. Finally, this chapter explains the actions taken to collect and analyse data during the preliminary phase and main study of the research.

The principal research question is as follows:
What value do leaders attribute to participating in virtual leadership communities of practice?

The supplementary questions are:

- How do leaders engage in virtual communities of practice to develop their leadership practice?
- What influences the value that leaders find in their virtual leadership community?
- How is learning from engaging in a virtual leadership community applied to a leader's leadership practice?

3.1 Epistemological Belief and Interpretive Framework

Epistemology concerns the question of how knowledge is known and therefore, subjective evidence is assembled based on individual views – through the subjective experiences of people (Cresswell and Poth, 2018). Each individual views the world differently according to their own paradigm and the different world views they reflect imply grounds for knowledge about the social world.

To understand the experiences in this research, I used social constructivism to develop the meaning behind the experiences of the leaders in their community. The constructivist view manifests in the phenomenological approach, whereby participants describe their experiences (Crotty, 1998; Moustakas, 1994). Constructivism, often described as interpretivism, draws on the socially and culturally situated nature of the learner; their active involvement in the learning

process; and learning by doing (Schweisfurth, 2013; p.22). A constructionist asserts that the creation of knowledge is not a solitary process and therefore does not take place in isolation. Meaning is a result of interaction with others and is collectively created within relationships over time. This indicates that an increase in relationships means exposure to different knowledge which results in an increase not only in knowing, but also in what is known (Gergen and Gergan, 2003).

Thus, social constructivism focuses on the collective generation of meaning as shaped by social processes. From their viewpoint, the social phenomena exist in the minds of people and their interpretations where each of the different socially constructed perspectives of the world requires a related action (Schwandt, 2007). From an ontological stance, this means that different individuals may construct meaning in different ways, even in relation to the same phenomenon (Crotty, 1998). Furthermore, an individual's participation in a VCoP can be viewed as a process of continuous emergence rather than a static state. This rejects the positivist paradigm wherein the nature of reality is assumed to be a single unchanging reality, which is divisible and fragmentable (Hirschman, 1986). This study assumed that leaders are social beings with their own perceptions and views as they interact with the world. Within the social constructivism approach, the researcher needed to be involved to draw out the individual's perceptions and views (Hirschman, 1986).

This study aimed to explore the insights of the values of virtual communities that leaders use for their leadership development as perceived by the individuals. Through the VCoPs, participants negotiate a shared understanding of knowledge within the community and from these interactions, collective ideas and views are exchanged thereby constructing value or meaning to the participants for their leadership development (Palus and Drath, 1994). Individuals will have different experiences and different relationships within the community over different time periods (Crotty, 1998). It is through these interactions that the participants reflect on their experiences and construct their perceptions of the values and impact of participating in the community which affect their future practices. This approach is very much grounded in the social constructivism approach summarised by Burr

(2015), Crotty (1998) and Schwandt (2007). These lived experiences also align with the constructivist approach built on the concept of learners using experiences to frame and shape their own learning environment (Moore, 2020).

Therefore, this research aligned with the social constructivism viewpoint and is the approach adopted and is the root of epistemological considerations that formed the core research of this study. This allowed insights into the leader's socially constructed meaning as they participated in the community. It recognises that everyone creates their own perception, and this is an active process that exists in the interaction between members in the community (Stoll *et al.*, 2006). The focus was on the interpretation individuals ascribed to the value of the community they participated in. This approach helped shape the research questions around exploring the leader's perception of the value of the community, how they applied learning to their leadership practice, and the influences shaping their perceptions. It was also hoped that through the interview process, the leaders could reflect and become aware of the potential benefits of communities of practice and also on their own leadership development practices.

3.2 Conceptual Model

To illustrate how Wenger *et al*'s (2011) value creation framework connects with leadership learning in VCoPs, I developed a conceptual framework to demonstrate the learning process. Figure 3.1 shows a conceptual framework for assessing the value of the learning in the VCoP, based on Wenger *et al*'s (2011) model. The combination of the domain, practice and community constitute a VCoP (Wenger, 1998). The domain is defined by what the community members care about - a shared interest and membership implies commitment to the domain – in this study this pertains to a shared interest in leadership development having followed a leadership programme. In pursuing their interest, members engage in joint activities and discussions, help each other and share knowledge. They build relationships that enable them to share and learn from each other and it is this interaction and joint learning that defines a community (Wenger, 2008). In this study, the community are leaders within the HMG who have undertaken various types of leadership programmes and are committed to a process of collective learning oriented towards achieving outcomes and improving their leadership

practices. The practice is what and how the community do things together virtually. Developing shared resources or shared practices enable members to become part of a CoP, rather than just a community of interest. It is by developing these elements that the value creation of the CoP, or value of the learning enabled by the community can be assessed (Wenger *et al.*, 2011).

The value creation element of the conceptual framework is from Wenger *et al.*, (2011) and will be applied to the quantitative and qualitative design and identifies examples of indicators or themes that can be assessed within each value element. Wenger *et al.*, (2011) suggest that in order to appreciate the richness of the value created by communities, it is helpful to think about value creation in terms of cycles. The value created can be briefly defined within five areas, or cycles:

Cycle 1. Immediate value – This considers community activities and interactions as having value in and of themselves. These can include activities such as a useful conversation online, asking a question, solving a problem, providing advice and guidance, or connecting with each other.
Cycle 2. Potential value – Activities and interactions can produce knowledge capital whose value lies in its potential to be realised later. This potential can be useful even if it is never realised. For example, learning from the story of a participant's experience what to do or not to do in a certain situation. Even if a similar incident never happens, it is useful and reassuring to have that knowledge.

This knowledge capital can take different forms:

- *Personal assets (human capital).* This can take the form of a useful skill, information, new ideas or a new perspective. The personal value of participating in a community can also demonstrate inspiration, caring, confidence, and status.
- *Resources (tangible capital).* Participating in a community provides access to specific pieces of information, documents, tools and procedures, but also networked information sources, links and references, search capabilities, and other socio-informational structures that facilitate access to information.
- *Relationships and connections (social capital).* Social relations and connections are a form of knowledge capital. The ability to ask questions

because one knows who to ask or to trust can be as valuable as personal information or commitment. Reputation is another social achievement that can become a knowledge resource. Communities can build shared understanding and develop a common language; social resources can facilitate further learning and communication. All this can lead to potential opportunities for collaboration and the ability to promote a cause.

- *Collective intangible assets (reputational capital)*. Such assets include the reputation of the community, the status of a profession or type of position, or the recognition of the strategic relevance of the domain. Many people value their community of practice for the collective voice or recognition that it provides them which can increase the potential for collective action.
- *Transformed ability to learn (learning capital)*. The act of participating in a facilitated community is a valuable way of learning especially for people for whom formal teaching or training methods have always been regarded the only way to learn. When members have experienced significant learning in communities, they can transfer this experience to other contexts.

Cycle 3. Applied value – Adapting and applying knowledge capital in different contexts that leads changes in practice or innovation. This can include reusing a piece of information or resources, exploiting synergy between business units, changing a procedure, implementing an idea, trying a suggestion, enlisting others for a cause, or leveraging a collective voice to make a case for an organisational decision. Adapting and applying knowledge capital in different contexts can lead to changes or innovations in actions, practice, tools, approaches, or organisational systems.

Cycle 4. Realised value – Improvements in performance which includes reflection on the effects of the application of knowledge capital. New practices or tools may result in improvements in performance, but this is not guaranteed. It is therefore important not to simply assume that improved performance is the case when people change their practice, but to reflect on what effects the application of knowledge capital is having on the achievement of what matters to stakeholders, including members who apply a new practice.

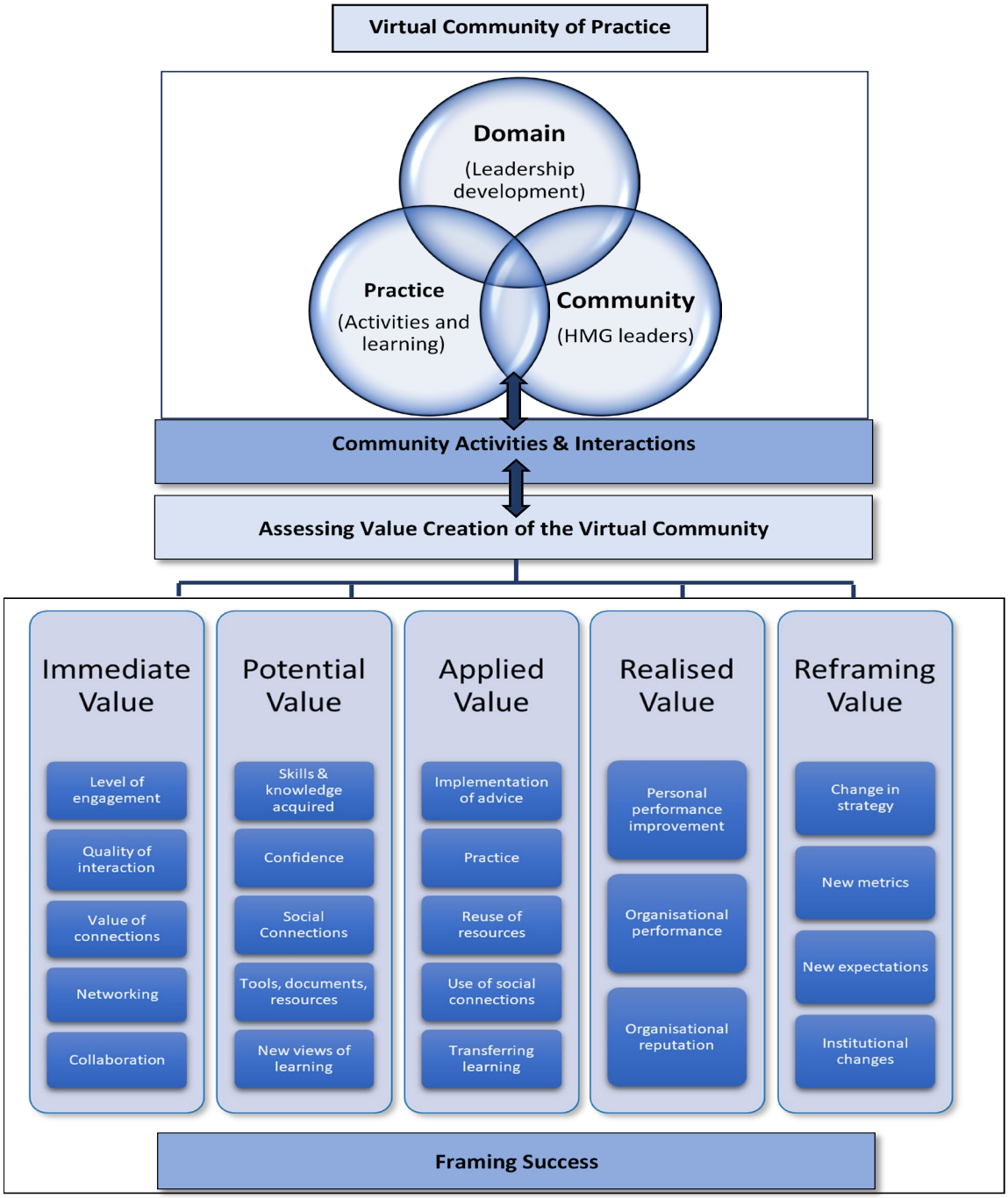


Figure 3.1: A conceptual framework for assessing the value creation of a virtual leadership community
Source: Wenger, Trayner and de Laat, 2011

Cycle 5. Reframing value – Redefining success at the individual, collective and organisational levels. This includes reframing strategies, goals, as well as values. It can also include proposing new metrics for performance that reflect the new definition of success. Moving from individual redefinitions of success to collective and institutional ones would require renegotiation with senior stakeholders who have the legitimacy to define success at these levels.

While there are causal relationships between the five cycles, it is important not to assume a hierarchy of levels or a simple causal chain. As described earlier in this review, learning is not a linear process (Boud and Garrick, 1999; Eraut, 2004; Le Clus, 2011; Marsick and Watkins, 1999) and applied to this framework, it is not the case that activities in one cycle necessarily leads on to the other, or that a community is only successful if it reaches the final cycle. However, these five cycles taken together provide a dynamic framework of aspects of value creation to consider.

Wenger *et al*'s (2011) framework was chosen as it is a tested research tool in teacher professional development (Wenger *et al.*, 2011). His qualitative approach, intended to help him describe social phenomena and shared learning allowed him to collect first-person accounts of experience, anecdotes, observation of interactions, and artifacts. Its focus is on the value communities and networks create when they are used for learning and how community activities can improve professional practice was particularly relevant to this study and specifically, to the leadership practice of leaders. It is grounded in theory to ensure relevance and data-oriented to provide scientific validity and reliability. Therefore, it is rigorous for researchers, useful for practitioners such as myself and can be informative for stakeholders. Overall, the study's purpose is to explore whether the framework is useful in helping us to understand the value leaders may find in a VCoP.

The reflective nature for the leaders when they told their stories of using the community may help them recognise the value of their activities in the virtual community (Kolb, 1984; Mezirow, 1991; Schön, 1987). Structural equivalence in leadership networks is based on shared activities, goals, or interests. Unlike finding clusters, however, structural equivalence can work without any information about who knows whom and focuses on groups of egos who are 'equivalent' in one sense

or another (Burt, 1992). Asking the leaders to report what relationships they had with all other community members could raise difficult challenges. By comparison, it was easier to collect data about common attitudes and practices, which members associated themselves with (Borgatti and Foster, 2003; DiMaggio and Powell 1983).

Organisational stakeholders can use the findings in this study to make decisions about how to support the development of communities, manage resources and maximise value from them, for leadership development and also for other organisational disciplines. These stakeholders need to make decisions based on reliable and informative data (Wenger *et al.*, 2011). This study also helped demonstrate if and how this tool could be applied to other contexts and programmes of learning within my professional practice.

In summary, the discussions above have clarified and justified the social constructivism paradigm that underlies this research as it is about interpreting a social community that individuals have constructed though their interactions in the community site. By unpacking the underlying assumptions, it has shaped the research question and guided the research design to collect relevant data. The methodology will be discussed in detail in the next section.

3.3 Research Methodology

The study was based on a mixed methods research design, identifying the value created for learning in any CoP, first using a quantitative approach before interviewing a sample of participants that used a community for leadership development through a qualitative approach. Both quantitative and qualitative approaches can be adopted in social constructivism. Quantitative research provides objective measures for the treatment of data, large sample and statistical validation for study. However, it only scratches the surface of people's attitudes and feelings. Since this research was interested primarily in the subjective experiences of individuals of a certain group, an additional research approach was needed that sought to explore and interpret individuals' social world (Bryman, 2004). This methodological triangulation (Robson, 2011) helped enhance the rigour and validity of the research for analysing the value creation of the learning and examining the commonalities and variations of the participant's experiences in the

online community. This design was particularly beneficial in this study due to the complex nature of the phenomena and the range of perspectives that needed to be understood (Creswell and Poth, 2018; Sokolowski, 2008). This chapter details the theoretical basis behind the mixed-methods methodology and the choice to employ it. It discusses the study design, the combination of quantitative and qualitative methods and their sequence and priorities, followed by the actions taken to collect and analyse the data.

3.4 Mixed Methods Research

Mixed-methods research is not simply a combination of qualitative and quantitative methodologies and is defined as "collecting, analysing, and interpreting quantitative and qualitative data in a single study" (Leech and Onwuegbuzie, 2009, p. 265). It is its own method, with a different theoretical basis, that can be seen as an alternative to quantitative and qualitative research (Denscombe, 2008). When exploring cultural-historical phenomena, the objective is to use the data collected from a particular instance or event to construct a reality that could possibly exist elsewhere. This kind of research requires data that are both “particular and universal, concrete and abstract, or specific and general" (Ercikan and Roth, 2006, p. 15). The constructivist paradigm allows researchers to understand the point of view of participants and build learning from that (Howe, 1988). Both qualitative and quantitative methodologies involve identifying a central research question to answer, collect and analyse data, testing hypotheses and writing up interpretations and conclusions. The design of a quantitative study might be more specific in detailing the types of variables the researchers plan to measure and the analyses they intend to complete. In terms of the research questions themselves, the questions in a quantitative study are often thought to be less judgmental and more statistical than those in a qualitative study, with the intention of obtaining scientific and unbiased results. However, there are critics who state that traditional quantitative methods alone could not provide as complete a description of a phenomenon as a mix of quantitative and qualitative methods could (Denzin, 2008). Qualitative research draws on both a realist, objective and value-neutral perspective as well as a constructivist and subjective perspective that is grounded in values (Greene and Caracelli, 2003).

Mixed-methods research is thought to have the following defining characteristics:

- Quantitative and qualitative methodologies
- The research design details the sequence and priority given to the methods in terms of data collection and analysis.

The research specifies how quantitative and qualitative methods relate to each other in the study and the function of each. In other words, they can be used for triangulation, exploration or explanation (Bryman, 2006; Creswell, 2009; Denscombe, 2008). The placement of each method within this study was intentional in order to answer specific research questions, provide a more complete picture of the phenomenon or build on initial findings (Bryman, 2006; Denscombe, 2008).

Integrating two different approaches can be powerful in terms of using triangulation to find errors that might exist in the use of a single approach. Mixed-methods research also allowed the viewing of a problem in different ways and the strengthening of the inferences that can be made from the data (Cohen, Manion and Morrison, 2011). There are other challenges associated with mixed-methods research. Researchers may themselves be conflicted about the methods they are using, having more confidence in the results they have gained from one method over another. The findings from one method might be more interesting than the findings from the other and thus the other method remains largely ignored. There could be practical difficulties to integrating data from both methods, and thus data are not integrated in the study at all. This lack of integration may not be problematic, but it could also mean that the full potential of the data is not being explored (Bryman, 2007). The research questions explored in this study do not have simple answers. A variety of question types were used to explore how a virtual leadership CoP becomes part of a leader's ongoing practice. The central research question, as stated previously, is: 'Exploring leaders' value of participating in a virtual leadership community of practice'.

The study employed multiple further research questions to define the elements that were necessary to gain understanding of the relationship between community membership and the value leaders placed on their participation for supporting their leadership development practice:

- How do leaders engage in virtual communities of practice to develop their leadership practice?
- How is learning from engaging in a VCoP applied to their leadership practice?
- What influences the value that the leaders find in their community?

As a methodology, mixed methods allowed application of both quantitative and qualitative strategies to answer the different research questions. To answer the central research question, the research needed to discover what value leaders attributed to participating in a virtual leadership CoP. Answering the question required an understanding of whether leaders engaged in the communities to support their leadership practice, both internal to the organisation and externally. If yes, to understand the value of their communities, it was first necessary to understand where they did this, what virtual communities might they use, their frequency of use and type of platform. The research needed to explore what activities and practices they engaged in, whether they used or developed any community resources and tools and the value they attributed to these practices and resources. It was also important to analyse what influenced their perception of value within the community. Additionally, the research explored the self-reported differences in the value of their community activities and interactions to discover to what extent those activities influenced or changed their leadership practices, aligned with the value creation cycles.

As evidenced in the literature review, this study was also firmly based in sociocultural theories of learning, specifically examining whether and how leaders could learn through participation in a leadership community of their peers, or communities of practice. CoPs "come into existence through the need to collaborate with those who face similar problems or issues for which new knowledge is required" (Denscombe, 2008, p. 277).

3.5 Research Design

This study necessitated two phases of research. The first, a preliminary phase, required data to be collected and analysed to help determine the universal

experiences of leaders in virtual communities and understand whether leaders used community sites, internally or externally, and for what purpose. The main study, the second phase, focused on the value of one specific virtual leadership community that the leaders used as part of their leadership development programme. A multi-phase sampling plan was designed to select the appropriate sample of leaders to correspond to the differing purposes of each strand of the study (Cohen *et al.*, 2011). The design of the preliminary research phase and main study, and justifications for design decisions, are discussed in the sections that follow.

The study used the conceptual framework of Wenger, Trayner and de Laat (2011) to explore the value of virtual leadership communities of practice. This study did not just seek to replicate the work but obtain data of the types similar to that with which Wenger *et al* (2011) worked with in order to enable comparison of this research data to their framework. Their approach was predominantly qualitative with some quantitative indicators. Therefore, this study likewise took a similar approach, but employed a quantitative survey instead of quantitative indicators. The research aimed to understand a phenomenon (leaders' use of virtual leadership communities) and sought to discover what influenced how the leaders valued the communities in which they participated and the value creation this participation had on their leadership practice (Creswell *et al.*, 2003; Morse, 2003). Normally, qualitative methods would be the traditional approach used to explain phenomena, the context and circumstances surrounding them and their impact. Adding quantitative data permits different research questions to be asked, provides a general understanding of the research problem and allows the researcher to account for more voices in the research through a larger sample (Newman, Ridenour, Newman and DeMarco, 2003).

Integration between the quantitative and qualitative data

Many mixed-methods approaches require the researcher to place an emphasis on either the qualitative or quantitative strands of the research. Thus, I had to consider which approach (or both), had more emphasis in the study design; establish the sequence of the quantitative and qualitative data collection and analysis; and decide where mixing or integration of the approaches actually occurred. I decided

to give priority to the qualitative data collection and analysis despite its being the second phase of the research process. In this study using quantitative methods (in this instance, a survey), data was collected from HMG leaders who had completed a leadership programme in order to get a general idea of the types of virtual communities they frequented for work and for developing their leadership practices, both internally and externally. The goal of the second, qualitative phase was to explore and interpret the statistical results obtained in the first, quantitative, phase. A subset of these first participants were studied in more detail to provide answers to different research questions. This subset sample included leaders who had regularly participated in a virtual leadership community. The analytic components of Wenger's framework are complex and multidimensional. The type of data sought by this is not easily quantifiable and required that participants engage in some self-reflection of their participation in the VCoP and extending to their perceptions of their leadership practice. It was therefore important to obtain in-depth, personal accounts from the leaders. Qualitative inquiry methods such as interviews and observation of the group engaged in its meeting activities supported identification and examination of the issues presented within Wenger's (1998) framework. Therefore, semi-structured interviews were used for the qualitative strand of the main study. This qualitative data helped inform the quantitative data by exploring the leaders' views in more depth (Ivankova, Creswell and Stick, 2006) and also offered insights into the validity of the survey data.

For this reason, a sequential mixed research design was selected for the main study phase of the research. Integration refers to the stage or stages in the research process where the mixing or integration of the quantitative and qualitative methods occurs (Creswell, 2013). I decided to connect the two phases during the intermediate stage in the research process while selecting the participants for the qualitative case studies from those who responded to the survey in the first, quantitative, phase and volunteered to be interviewed. Form these volunteers, I chose a sample of leaders that represented different gender, leadership level, department and location. The placement of each method within the study is intentional in order to answer specific research questions, provide a more complete picture of the phenomenon or build on initial findings (Bryman, 2006; Denscombe, 2008). In this typology, conclusions based on the results of the first strand of research informed the design of the second strand (Creswell and Clark,

2007). In this study, the quantitative strand provided the sample of HMG leaders as well as informed the questions to be asked in the subsequent qualitative strand of the research. I integrated the results of the quantitative and qualitative phases during the discussion of the fieldwork to more fully answer the research questions and develop a more robust and meaningful picture of the research problem. Figure 3.2 provides a visual representation of the sequential, explanatory, mixed-methods design adopted in this study.

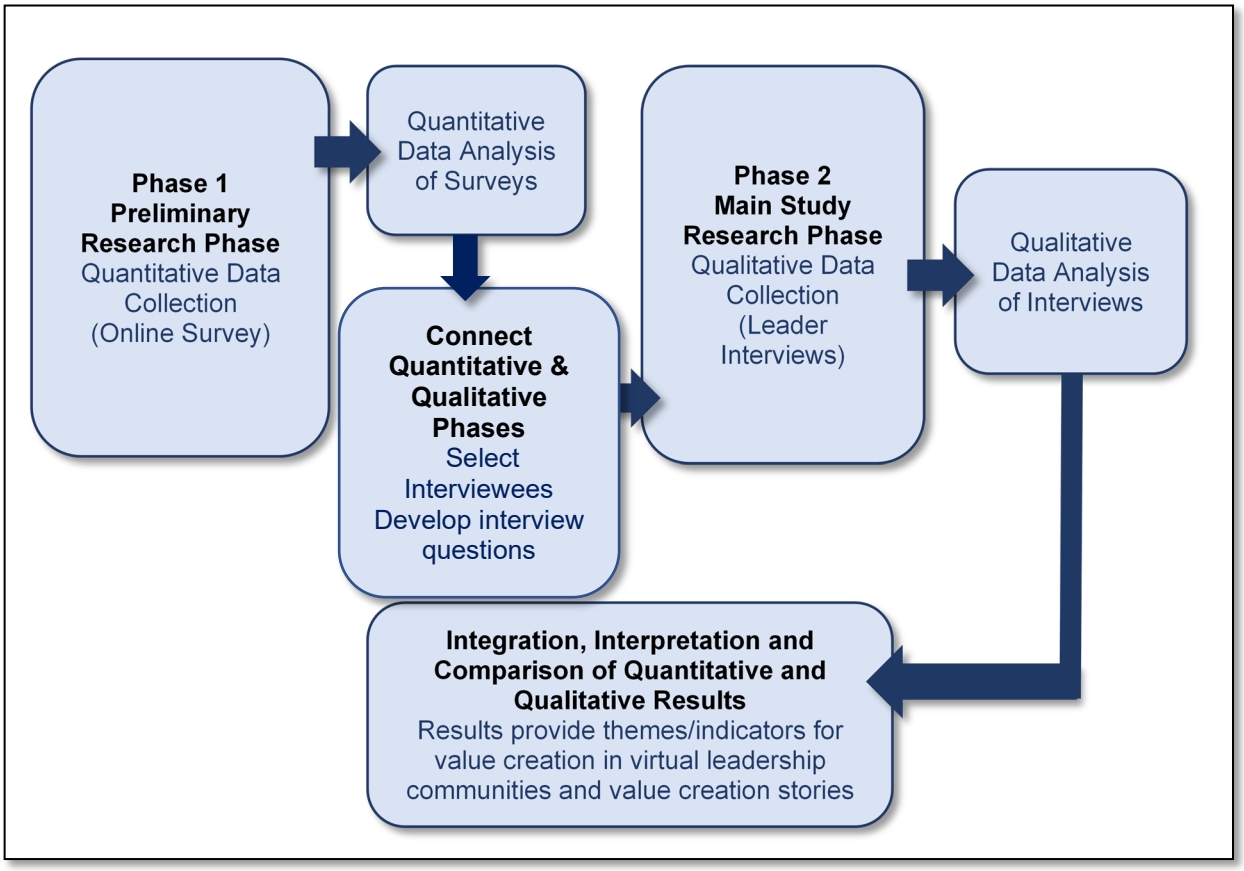


Figure 3.2: Visual representation of the sequential, explanatory, mixed-methods design adopted in this study

3.6 Preliminary Research Phase Design - Quantitative Approach

The quantitative research method was used to help determine the universal experiences of leaders in virtual communities. It was decided that a survey would be developed with the objective of reaching as many HMG leaders as possible who had undertaken a leadership development programme to begin to address elements of the research questions. The survey was intended to gather information from a wide sample of leaders about their leadership learning preferences and

views on virtual communities. The concept of multi-membership, in which scholars can be active participants in multiple communities of practice and can share knowledge and practices between them (Wenger, 1998; Wenger *et al.*, 2002) applies naturally to the mixed-methods community in which practices from both quantitative and qualitative communities might be shared. The findings from the survey were augmented and expanded by questions asked in the interview and for the data analysis indicators.

The questions designed aimed to find out whether the leaders had participated in a virtual community of any description, either internally to HMG or externally. If recipients had not participated in a virtual community, then questions were designed to explain why not. The questions firstly explored which communities they used for work purposes (not necessarily just for leadership development), either internally or externally, frequency of using the community and the perceived benefits of participating in that specific community. Then the same questions explored virtual communities specifically related to their leadership development, frequency of using one specific community and the perceived benefits of participating in that specific community. The statements around the benefits were linked to the indicators from Wenger *et al*'s (2011) framework. Asking questions around communities for work purposes and communities for leadership development allowed for comparative data to explore whether the leaders frequented different communities for different purposes and the benefits and value they perceived from such interactions. Questions were developed asking if they perceived their leadership practice to have changed as a result of participating in the specific community.

The survey for this study began with an introduction to the research being conducted and instructions for completion. This was in line with guidance to provide respondents with clear instructions as to how to respond to the survey (Bryman, 2004). Once the survey design was completed, it was uploaded into the online survey platform, Survey Monkey (www.surveymonkey.com). The survey was designed with mainly closed questions to help simplify the process of analysis. However, there were instances in which open questions were needed so as not to limit participants' responses. To ask leaders why they had not participated in any virtual community respondents needed to be able to write without restriction.

A mix of response types for closed questions was also used. The survey consisted of multiple-choice questions and dichotomous questions, in which respondents could select one response from possible responses found in a drop-down list. The survey also contained Likert scale questions. It was designed as a Likert scale with four response options, to avoid respondents choosing the "undecided" or middle response that a five response Likert scale would allow (Matell and Jacoby, 1972). Likert scales also made the survey easier to respond to from the participants perspective and could yield a higher response rate. Question types were selected based on the information required from each question. The final question also asked if respondents were willing to participate in an interview to discuss their experiences further. The complete survey can be found in Appendix A.

Platform and Pilot

SurveyMonkey was selected as the online platform for this study due to its global popularity and pervasiveness as an online survey provider, as well as the functionality it provided. It is a known tool that generates results as descriptive statistics and graphed information and allows up to 100 respondents per survey (Creswell and Poth, 2018). Each of the question types required by the designed survey items was supported by the SurveyMonkey platform, so the questions themselves did not have to be edited to fit the platform. The instructions for responses that were provided to leaders with each question were edited, based on the specifics of SurveyMonkey.

Five colleagues known to the researcher piloted the survey. Three worked within learning and development, one was a leader who had already completed a leadership programme and one was another leader working for another government department. As a mechanism for validating the clarity and efficacy of the survey, I used the pilot process as a form of member checking by inviting the respondents to comment upon the clarity and credibility of the questions (Merriam, 1988; Miles and Huberman, 1994). I contacted each respondent separately and discussed their experience of completing the survey online, including concerns regarding the extent to which the questions might be perceived as being overly leading (Creswell, 2013).

Once the pilot process was completed, the survey was revised according to the feedback. Although all questions were designed to be as clear as possible, using

familiar language and an absence of jargon, some questions were perceived to be confusing. Consequently, I redeveloped each confusing question so that a response would be easier for the user (Johnson and Turner, 2003) and explored other possible options with the respondents. The feedback also helped make the introduction and the instructions shorter and clearer.

The survey was launched through a link in an email from myself and other colleagues along with two documents – information for participants and a consent form. The first document explained who I was, the aims of my research, what to expect in the study, benefits and risks of taking part in the study, confidentiality, data protection information and contact details for myself and the University. The consent form was composed of boxes to check to show understanding of participating in the study along with name, date and signature. Both documents can be found in Appendix B. The survey window was three weeks. A reminder email was sent to selected participants who had not responded after ten days.

Sample for the preliminary research phase

The scope of this study focused on any leaders within HMG who had completed a leadership development programme within the FCDO over the past two years. For the quantitative sample, this included leaders who had completed the 12-month Emerging Leader's Programme (ELP), the 12-month Global Leadership Programme (GLP) or the two-week Overseas Leadership Programme (OLP). The sample was approximately over 170 leaders. Participant names were attained with permission from the organisation of leaders who had attended all the programmes from April 2017 to April 2020, as staff were still likely to be with the organisation and contactable. The sample number was approximate as some of my colleagues forwarded my initial email to leaders they knew who did not appear on my lists.

Participants were based in different global regions: Americas, Asia Pacific, Africa, Europe, Middle East North Africa and the United Kingdom. The sample included a mix of male and female U.K. based diplomats and civil servants, and male and female country-based staff in each region. All respondents who had attended the OLP were U.K. based diplomats on pre-posting training prior to taking up a position as Head of Mission or Deputy Head of Mission overseas, and were senior level leaders. Respondents who attended ELP and GLP were a mix of U.K. based

and country-based staff, from different HMG departments, typically, the FCDO, Department for International Trade, Ministry of Defence, Devolved Agencies, National Crime Agency and Visit Britain. Staff were also drawn from different roles, such as Policy, Trade and Investment, Economics, Politics, Consular, Corporate Services, Defence, Visits and Protocol. The preliminary research phase did not collect data on departments, roles or gender. ELP participants are emerging leaders who may just be starting to lead small teams or projects; GLP participants are mid-level leaders who will be leading teams, heads of section or directors.

A lot of data can be collected on CoPs such as participation, engagement, influence, however, this study focused on the value leaders attributed to their experience of learning within the community. It is important to note when reviewing the analyses of the survey data that any findings cannot be representative of all leaders within the HMG. The respondents were those who, for whatever reason, chose to participate. The study assumed that many of the leaders were using virtual communities and they would agree to participate in the research and discuss their personal lived experiences. An additional assumption was that the participating leaders would focus more on the best attributes of learning in communities. The respondents might have focused on the methods and actions perceived as ideal responses, causing the data to reflect a single aspect of the lived experience (Polkinghorne, 1995). All the programmes attended by the research participants were relatively new programmes, having been around for four years or less. This may have implications for the age and maturity of the communities discussed.

Data collection and analysis for the preliminary research phase

The quantitative results identified leaders more universal experiences of communities and their perceived benefits and value in participating in communities for work purposes and for their leadership development. Questions around the benefit and value of participating in these communities were analysed using a score of:

No Benefit at All = 0, Somewhat Beneficial = 1, Mostly Beneficial = 2, Completely Beneficial = 3

The total sum of all questions provided the total value creation of participating in communities for work purposes and for leadership development training. Subscales were used to identify the immediate, potential, applied, realised and reframing value of responses. Other questions asked were analysed using percentages and tables and grouped into themes supporting the five cycles of Wenger *et al*'s framework (2011). The analysis helped inform the questions for the interviews and provided a benchmark for leader's learning experiences in a community of their choice compared to leader's experiences in the specific virtual leadership CoPs. Data from these themes was integrated into the findings from the interviews.

3.7 Main Study Research Design - Qualitative Approach

This approach allowed probing beneath the preliminary research and views of the leaders in their specific virtual leadership community. Since the main research focus was explorative, it allowed the research to evolve and allowed data in individuals' perceived values to emerge from interactions between the researcher and the participant. This allowed for a great deal of descriptive detail of individuals' experiences (Strauss and Corbin, 1990), the meanings they placed on their interactions in the community and provided the contextual environment and conditions to interactions and activities. In this study it provided an insight of the inner workings of the VCoP through the lived experiences of HMG leaders. The type of data sought for this study was not easily quantifiable and required participants to engage in self-reflection of their interactions and practice and the perceived value they placed on those activities (Kolb, 1984; Schön, 1987). It was therefore important to obtain in-depth, personal accounts from participants, which led to me choosing narrative research to analyse these accounts.

Narrative Research

Narrative research has many forms. In this study, 'narrative' was the phenomenon being studied and was the method used to analyse the stories being told by the leaders (Clandinin and Connolly, 2000; Clandinin, 2007). In this particular research, it was relevant as I needed to understand the context in which the narrative was embedded, i.e., the virtual leadership community that the leaders are experiencing. I engaged in semi-structured conversations with the leaders who told stories of their experiences of the VCoPs.

There are different ways to collect stories and they may emerge from a story told to the researcher or co-constructed between the researched and the participant. (Connelly and Clandinin, 2000). In this study there was a strong collaboration feature as stories emerged through the interaction in the interviews between the leaders and myself. In the case of this study, the narrative stories occurred within a specific place – the virtual leadership community the leader wished to describe. Contextual details were important and helped describe the typology of the community site as well as the value of the community to the individuals.

Narrative inquiry is a fluid process. This approach supported the research questions in capturing and exploring the experiences of the leaders in the VCoPs. Narrative researchers situate individual stories within participants' personal experiences, culture and time and place (Riessman, 2008). Being context-sensitive is considered essential to narrative inquiry (Czarniawska, 2004) and lent itself well to this study as participants were located in different countries, from different cultures and perform differing types of roles. It was therefore important to understand their context and embed that information into the data collection and analysis.

Stories from the communities can include personal and collective narratives. Personal narratives refer to the experiences of participants whereas the collective narratives relate to the community site itself (Connelly and Clandinin, 2000). The communities can develop a collective identity that becomes part of the identities of the participants, the personal stories become part of the collective narrative. Wenger *et al.,* (2011) argue that the two are not necessarily congruent. Individuals can belong to multiple communities which is one of the reasons why I also employed quantitative research to explore some of the sites the leaders frequented. The stories were analysed using the conceptual model based off Wenger *et al*'s (2011) framework and is further discussed in the Data Analysis section.

Transitioning to Interviews - Sample for the main research phase

The proposed sample for the second phase focused on a sample of leaders that had been identified from the preliminary research phase who had been or were participating in a virtual leadership community of practice. From the preliminary sample of approximately 50 leaders, I expected to interview 10-15 participants as

recommended by Polkinghorne (1989). The sampling strategy for the interviews was 'stratified purposeful' as I wanted to identify a specific subgroup. Drawing a random sample of leaders, or even choosing leaders whose experiences with virtual communities were unknown to the researcher, would not work for this research. A non-probability sample was required, in which some participants are actively included and some excluded from the study (Cohen *et al.*, 2011). Specifically, a purposive sample was used, in which leaders were hand selected based on the researcher's own judgement of whether they were the most appropriate. In narrative research, the researcher reflects more on whom to sample as all the individuals need to have stories to tell about their lived experiences (Riessman, 2008). Appropriateness in this instance meant that the leaders had completed or were in the process of completing one of the internal HMG leadership programmes. A sample from across the three different leadership programmes was needed. I also chose leaders who had participated in or were still active in a virtual community that supports their leadership development so that they could describe their experiences during the interviews. The sample drew from leaders based in different regions, had different roles, were a mix of UK-based and country-based staff and came from different HMG departments, to ensure a comparative analysis and context (Polkinghorne, 1989).

The first step in this process was to examine the results of the last question in the survey, which asked whether survey respondents would be willing to participate in an interview for this study. Of the 48 respondents to the survey, ten responded yes, that they would be willing to participate in an interview as part of this study and signed and returned the consent forms.

Normally, narrative research focuses on one or two individuals (Polkinghorne, 1989). In this study, I interviewed ten participants which was higher than normal for narrative research. The reason I still chose narrative research was because I wanted to use the Wenger framework (2011) to focus on the lived experiences of the leaders in a virtual community and tell individual stories of their experiences. I collected data from a specific place. Indeed, Gergen and Gergen (2003) suggests that narratives come into existence not as a product of an individual but as a facet of relationships, as a part of culture, as reflected in social roles such as gender and age. Daiute (2014) states that sensemaking of narratives begins with sampling

relevant time and space dimensions. In this study, the narratives did emerge as a facet of relationships in a community site, which is a particular space – the virtual leadership community.

This second research phase explored the experiences of ten HMG leaders: Amber, Betty, Bob, Chloe, James, Olivia, Paul, Sophia, Tim and Zoe. All names have been changed to protect the identities and confidentiality of the data. Further details on the sample are in Table 3.1.

Name	Regional Location (when interviewed)	Leadership Programme Attended	Role/Dept	UK Based/ Country-based staff
Amber	Americas	OLP	Head of Mission	UKB
Betty	United Kingdom	OLP	Deputy Head of Mission	UKB
Bob	Africa	ELP	Corporate Services	CBS
Chloe	Asia-Pacific	ELP	Defence	CBS
James	Middle East North Africa	ELP	Corporate Services	UKB
Olivia	Europe	ELP	Consular	CBS
Paul	Americas	GLP	Trade	CBS
Sophia	United Kingdom	GLP	Political	UKB
Tim	Americas	GLP	Consular	CBS
Zoe	Africa	GLP	Policy	UKB

Table 3.1: Sample of ten HMG leaders interviewed

Data collection for the main study

The primary method of data collection was semi-structured interviews. As discussed earlier, Wenger's framework (2011) forms the basis of this research, data collection and interpretation were deliberately left open-ended enough to allow for exploration of themes or emergent data not captured by Wenger's framework.

Interview design

As part of the sequential mixed design for this study, the qualitative strand of data collection followed and was reliant upon the quantitative strand. The semi-structured interview questions were designed to supplement the data gathered from the survey by delving deeper into certain issues and providing data to answer

the different research questions. Once the survey was complete and initial analyses had revealed some findings the work on the interview process began.

After selecting the leaders through the process discussed earlier in this chapter and obtaining their agreement to participate in the study, each leader acknowledged that they had read the description of the research and signed the consent form. In all data collection materials, the selected leaders were labelled per Table 3.1. The real names that correspond to these pseudonyms were maintained in a password-protected Microsoft Excel spreadsheet saved on the researcher's work encrypted laptop, which can only be accessed with the researcher's username and password.

The interview design was based on Wenger *et al*'s (2011) framework for assessing value creation in communities and networks and was adapted to capture the different cycles of value creation. Each cycle of value creation suggests a series of questions to investigate as a way to reflect on the value that communities produce. The following open-ended. guiding questions provided a simple frame to construct the stories, based on Brinkmann and Kvale (2015) interview protocol:

1. What are your reasons for participating in the community site?
2. What activities/outputs do you gain from the community site?
3. What is the value to you of participating in the community site?
4. How is participating in the community changing you as a leader?
5. How is participating in the community affecting your social connections?
6. How is participating in the community helping your professional and leadership practice
7. How is participating in the community changing your ability to influence your working environment as a leader?
8. How is participating in the community transforming your view of learning?

Following these initial questions, I then asked the leaders to describe in detail a meaningful activity they participated in as part of the community and their experience of it, including a specific resource this activity produced for them. They were asked to describe how they used this resource and what it enabled that would not have happened otherwise. By describing a specific example, the leaders were encouraged to tell a story around a particular activity (Wenger *et al*, 2011). Finally,

I asked the leaders about their aspirations for the community, as I wanted to understand what their expectations and hopes were for a successful community of practice. The interview question structure used can be found in Appendix C.

Conducting the interviews

Over a period of three months, in-depth interviews were conducted over Skype or Microsoft Teams with the ten leaders. Each interview lasted between forty and sixty minutes and were recorded onto my phone with the leader's permission. While the interviews were semi-structured, consistent use of the interview protocol was employed to minimise interviewer bias (Brinkmann and Kvale, 2015). Each interview started by ensuring participants understood the aims of the research and the content of the consent form.

Transcribing the interviews

l initially transcribed the interviews using MediaHuman Audio Convertor before transferring the scripts into a Word document. I then listened and edited the transcripts manually to ensure accuracy and to delete pauses and other non-verbal elements, such as 'um', coughing and 'mmm' type sounds.

3.8 Data analysis

To explore the value that the leaders attributed to their chosen virtual leadership community, Wenger *et al* (2011) defined a series of indicators for each of the five cycles to collect the relevant data. Appendix D provides examples of indicators for each cycle that were used and adapted from Wenger *et al*'s (2011) indicators for the context of this research, along with the types of data that can be collected to monitor each indicator. For cycle 1, these included indicators of activity and interactions. Indicators for cycle 2 reflected the various types of knowledge capital produced by social learning: human, social, structural, reputational, and learning, and understanding what changed as a result of them. Indicators for cycle 3 referenced changes in practice and use of knowledge, tools and social relationships. This level required more probing because it was information that was not readily available to understand what difference participation had made to the leaders' practice. Cycle 4 indicators included metrics of performance that were related to

the potential contributions of communities and to understand what difference participating in the community made to the leaders' ability to achieve what mattered to them or their stakeholders. Indicators for cycle 5 reflected changes in what counts as success both for the leaders and for their environment. Did participating in the community change the leaders' or other stakeholders' understanding and definition of what matters?

The transcripts were firstly coded by highlighting words, phrases and short text that related to the indicators (Huberman and Miles, 1994). Using prefigured indicators or codes from a theoretical model, such as Wenger *et al*'s (2011) indicators, is popular (Crabtree and Miller, 1992). However, this can also limit the analysis, rather than adding in emerging codes to reflect the views of the interviewees. Therefore, for this research, additional themes with indicators were added in the coding to include the platforms that were used as the VCoP and references to VCoP typologies referenced in the literature review. In addition, the coding scheme was refined and expanded as interaction with the data progressed until a final list of indicators was achieved against each value cycle and the additional themes. Previously coded stories were recoded against using the new scheme. The coded stories were then analysed, illuminating patterns, or cycles, of value creation through the lens of the leader's experiences (Reissman, 2008). A spreadsheet was created with all the coded data for each interviewee and categorised into the five value cycles and the additional themes. This data was then copied to each of the value creation cycles and themes in the spreadsheet for further analysis and use.

Value Creation Stories

Wenger *et al.* (2011) state that data can be collected for each cycle which provides useful information; however, most indicators taken by themselves only act as proxies for value creation to the extent that observations in one cycle can warrant safe assumptions about another. For instance, frequent community participation can be such a proxy. Without knowing more about it, it can be assumed that members find value in it and that it has relevance to what they are trying to achieve. Similarly, a high level of activity could be a sign that something valuable is happening. For example, if a document is downloaded or used very frequently, it

can be assumed that it has value for lots of people. Assumptions can also go the other way.

Wenger *et al.* (2011) asserted that it is necessary to follow value creation across cycles. For example, it would be useful to ascertain if a community interaction had generated a discussion of a problem recurring in the leaders' practice, and what specific ideas came out of the discussion. So, it was useful to find out who had tried to apply these ideas in their own context and with what effects on their leadership practice. Wenger *et al.* (2011) defined these cross-cutting accounts as "value-creation stories."

A value-creation story is woven through each of the cycles of value creation. It can start with an interaction such a project, an inquiry or request (cycle 1). The story then highlights a resource, such as a response to an inquiry, an idea, a piece of advice, a document, a procedure, a model, or a relationship which came out of the activity (cycle 2). It then explains how this resource was applied in the practice of the leader and with what effects (cycle 3). The effect on practice can then be linked to an outcome, such as a measure of personal or organisational performance (cycle 4). Finally, the story might evoke reflection on the definition of success and new considerations to frame the expectations of value creation (cycle 5).

A value-creation story does not necessarily have to cover all cycles (Wenger *et al.*, 2011). It can use proxies at either end. For instance, a story could start with a document without a full account of how it was produced; or it could end with an application to practice without exploring further outcomes. It can be too difficult to know the full story; or know that the story is not finished. For instance, someone may have made some significant contacts through a community, but the potential of these contacts has not been leveraged yet.

Leveraging indicators and stories

In this research, I decided to share specific stories from three of the leaders, one from each leadership programme, using a value-creation story. These stories were based on the specific examples the leaders described in the latter part of their interviews and show how the leaders accounts of their experiences in the leadership community traversed the different cycles. While the stories followed a specific format, they may or may not have covered all five cycles but the community

participation enabled learning through shared, collaborative learning, which could be leveraged to improve practice and help redefine successful practices. Figure 3.2 illustrates Wenger *et al*'s (2011) approach to a value-creation story leveraging example indicators for each cycle. The different coloured arrows represent different stories, some which traverse all cycles, some which do not.

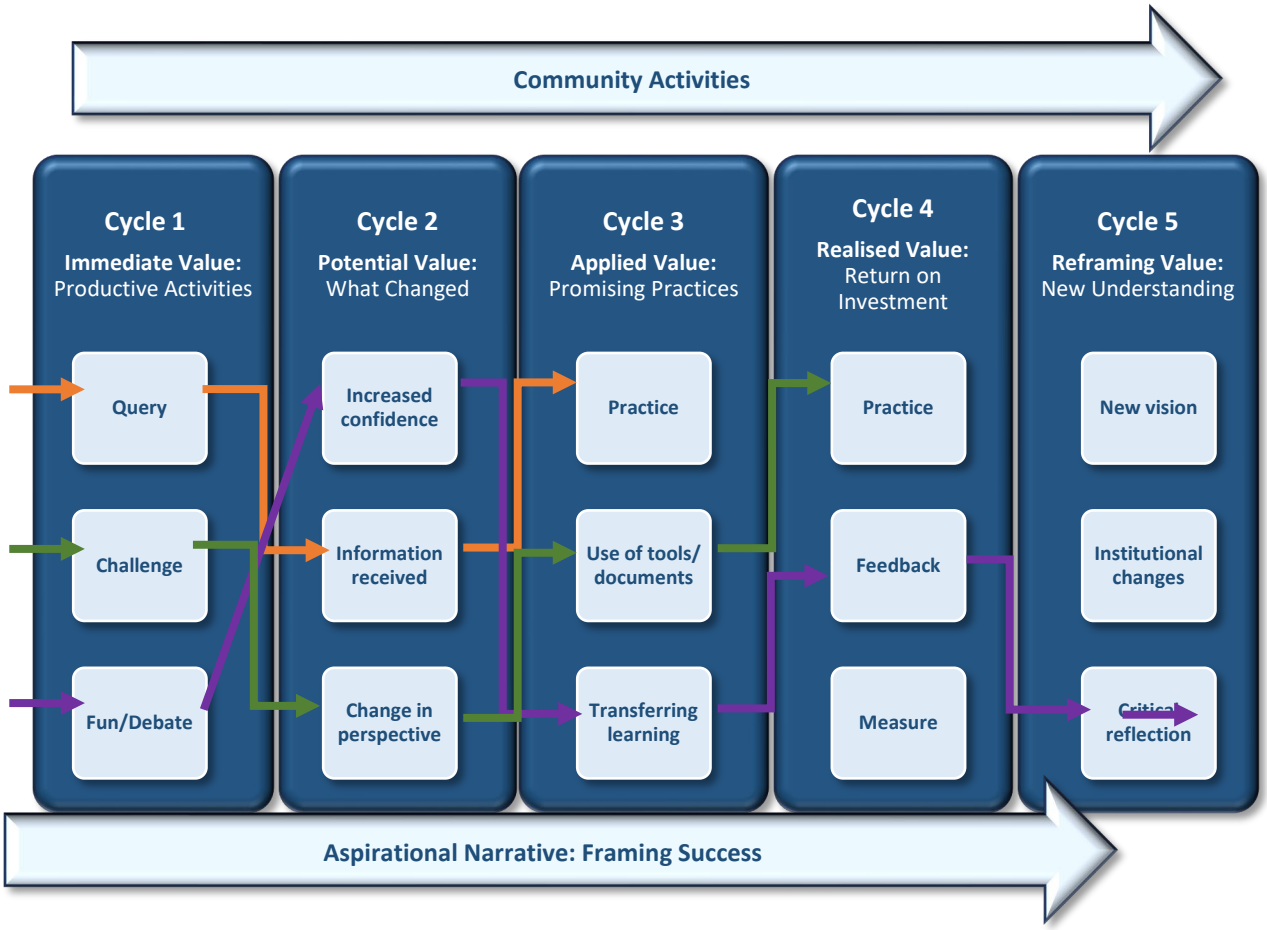


Figure 3.2: Example Value-Creation Story, Wenger, Trayner and de Laat, 2011

3.9 Data Validity and Reliability

Shenton (2004) defined reliability in qualitative studies as trustworthiness. Reliability is about the consistency of a measure, and validity is about the accuracy of a measure. Reliability and objectivity are inherently difficult to attain in qualitative studies. Shenton wrote that true objectivity is impossible to implement, as researcher bias is inevitable. This study used a mixed methods approach for ensuring data validity and reliability, circumventing the weaknesses that can result from reliance on only one method, and achieving triangulation of data, a strategy to establish credibility (Creswell, 2013; Shenton, 2004; Yin, 1994). The rationale

for triangulation of data is that it will confirm findings or "strengthen the study" (Patton, 2002, p. 247) by merging different points of data into one coherent picture that may be viewed as "reality." However, mixed methods studies are complex to plan and conduct. They require careful planning to describe all aspects of research, including the study sample and timing. Integrating qualitative and quantitative data during analysis is often a challenging phase for many researchers. Adding quantitative data permitted different research questions to be asked and allowed the researcher to account for more voices in the research through a larger sample (Huberman and Miles, 1994). Employing the Wenger *et al.* (2011) framework allowed the researcher to relate the study findings to an existing body of knowledge, a key criterion for evaluating works of qualitative inquiry (Shenton, 2004). The framework is rigorous and flexible and grounded in theory to ensure relevance and data-oriented to provide scientific validity and reliability (Wenger *et al.*, 2011).

Sampling

Gaining access to leaders who were willing to talk about their leadership experiences, be they positive or negative, proved to be a challenge. In my experience, leaders who are invested in their leadership development and who are willing to talk about the benefits they experience, tend to be people who are positive and enthusiastic about learning in general. There can be, however, a tendency for leaders to overstate the returns 'their' learning yields on their leadership practice. As evaluators of their own leadership practice, enthusiastic leaders may protect themselves by heavily filtering what they say, becoming uncritical of their practice and of learning generally (Creswell and Poth, 2018).

My reliance on the ten leaders who had been purposefully selected was no guarantee of the fact that their views were indicative of those of the majority of leaders participating in virtual communities (Pelto and Pelto, 1975). I only interviewed leaders with experience in participating in a VCoP and not those who had not participated in a community for their leadership development. As mentioned earlier, these programmes were relatively new and therefore, the communities would only be 'coalescing', 'maturing' or in 'stewardship' (McDermott, 2000; Wenger *et al.*, 2002). The lack of age and maturity of the CoPs could impact the leaders' experiences within the communities. This limitation was

intentional to focus the purpose of the study with the main goal of exploring the value of and influences on virtual leadership communities. For this purpose, I believe it was appropriate to purposefully interview these leaders who were experimenting with the use of virtual leadership communities. I could then leverage their opinions to generate a conceptualisation of the value of leadership communities that is meaningful as a platform for my organisation, other practitioners and future studies.

Data collection and coding

To limit bias in my data collection and analysis, and bolster the study's credibility, I asked the interviewed leaders to re-read the transcripts of their interview to ensure I had accurately recorded their interviews (Creswell and Poth, 2018; Shenton, 2004).

However, the coding process was challenging and subjective, and ensuring consistency across the application of codes was difficult. Due to timing constraints, I was the only coder of all the data for this study, and although the process of examining inconsistencies and recoding was observed (Reissman, 2008), there was not another person involved to help eliminate subjectivity in coding. During the coding process, it was important for me to draw out responses that related to the leaders participating in virtual leadership communities, as opposed to them describing their experience in the overall leadership programme or another type of community or learning site. However, to make the coding as accurate as possible, re-reviewing and recoding occurred as new codes were developed and the coding indicators were kept up-to-date. All coding was verified and corrected at the end of the coding process (Bazeley, 2013; Reissman, 2008). By using the Wenger (2011) framework to guide data collection, coding, and analysis I have tried to minimise my own bias. Using the indicators to aid data collection helped with this (Shenton, 2004). I also frequently revisited the Wenger *et al.*, (2011) text (for further clarification of an overlapping term, for instance) to ensure that the data was being matched to the framework, without reinterpreting the framework simply to match the available data. The findings and analysis can be found in Chapter Four.

Peer scrutiny

After I had drafted my thesis, a colleague who works in the International Academy and is an external university PhD examiner provided a (Shenton, 2004) peer scrutiny of the research (Shenton, 2004). She provided some fresh perspectives that challenged my assumptions and allowed the researcher to refine the findings and strengthen my analysis.

Ethical Considerations

This is linked to my subjectivity as a researcher (Maxwell, 2005) as I realise that my own position within the organisation, experience and presuppositions could affect gathering and interpretation of data and have tried to remain cognisant of this. I have spent much of my professional career developing and facilitating various types of leadership development programmes and interventions. A qualitative approach to inquiry does not require objectivity and distance from the data. However, there was a risk that my own values and expectations had influenced the collection and analysis of the data. This may have in turn affected the conclusions of this study in terms of limiting my ability to remain open to whatever was emerging from the data (Patton, 2002). Ultimately, the fact that I was familiar with the challenges faced by organisations with respect to supporting CoPs and developing leadership capabilities was actually helpful to me. Strauss and Corbin (1990) refer to this as the theoretical sensitivity of a researcher that includes the personal and professional experiences necessary to develop an awareness of subtleties in the meaning of data and the capacity to understand the context. From this perspective, my experience enhanced my ability to understand and interpret the experiences of the leaders who shared their stories and allowed me to understand ways in which virtual communities could be leveraged in other contexts.

The goal of qualitative study is not to eliminate influences but to understand methods to use influences productively (Maxwell, 2005; Patton, 2002). I drew upon my personal interview skills training and experience to minimise the introduction of personal bias during the interviews. During the interview and data analysis phase, I tried to proactively reflect on how my own biases were influencing

my work as Head of the International Academy (Americas). I was also conscious that my position within learning and development, the area of research, may result in some of the leaders not feeling they could open up to me, for fear of criticising the leadership programme, learning in the organisation or feeling uncomfortable about insider research. I dealt with this risk by disclosing the nature of my role and experience to participants orally and in writing. According to Patton (2002), the credibility of the researcher is especially important in qualitative research as it is the person who is the major instrument of data. I spent time with the interviewees ensuring they understood the aims of the research and reassuring them that disclosures and data collected would be used to improve the learning for others. I avoided asking leading questions and sharing any personal impressions or knowledge about their particular programme colleagues, roles and departments. It was hoped that this adherence to the Wenger (2011) framework made the study somewhat less prone to bias. Interviewees appeared to speak freely about these issues. During some interviews, there were instances of interviewees expressing criticism of the leadership programmes or of their experiences, particularly around engagement and motivation.

I received approval from the FCDO to conduct the research before proceeding with the study, as well as ethical approval from the UCL IOE Research Ethics Committee. Participants were provided the contact information for the Committee if they wished to make a complaint on the consent form which is at Appendix B. The interviewees appeared to be providing honest responses, and trusted me to respect their opinions and protect their confidentiality (Shenton, 2004). All personally identifying details were omitted from the transcriptions. Specific names of people exist in the recordings, but are replaced with 'X' in the transcript. Researching working practices within a government institution, I also discounted any references or working practices that could be deemed sensitive. The recorded files and transcripts in Microsoft Word documents were saved with the leaders' pseudonyms as file names on my encrypted laptop. All data was stored in accordance with GDPR and the Data Protection Act 2018. The researcher had also conducted GDPR training with UCL IOE and also with her own organisation.

Within the social constructivism approach, the researcher needed to be involved to draw out the individual's perceptions and views (Hirschman, 1986). Moreover, I was aware that in contrast to forms of research which pursue the narrowing of a single conclusive idea, I aimed to expand my learning by uncovering multiple and complex meanings as expressed by the participants (Creswell, 2013). Other researchers are likely to interpret the data differently, given that the theoretical lens through which they may view the field of inquiry is contrary to my own (Denzin and Lincoln, 2008). Furthermore, I recognised that when analysing data, the emphasis I placed on what I deemed to be significant and the assumptions I made about its meaning were likely to be different from the emphasis and assumptions of others, even if their general interest in the topic is similar to mine. I recognise that as a learning and development professional, the worldview I hold has an influence in the aspects of the participants narratives that catch my attention. However, since this study is an EdD in which I am expected to bring my professional experience to the process, I aimed to be as aware of my assumptions as possible. Although it is based on my professional experience and I have come to understand the value of learning in VCoPs as beneficial for leadership learning and growth, I recognise that not all leaders will have had similar experiences to mine.

Chapter 4. Findings and Analysis

This chapter presents the main findings of this study relating to the value leaders attributed to participating in virtual leadership communities of practice, how they engaged in the VCoPs to develop their leadership practice, the influences that shaped the value leaders found and how learning within the VCoP could be applied to their leadership practice. The process of analysing and coding the data was described in the chapter three. This chapter presents quantitative and qualitative findings. The first section describes the different types of VCoPs leaders reported using. The discussion continues with an in-depth examination of the themes identified through the five cycles of the value creation framework based on Wenger *et al.* (2011). The findings are presented, relative to each cycle, and show whether the application of Wenger *et al*'s (2011) framework proved useful or not to understanding how leaders valued participating in their leadership communities. This includes selected value creation stories to illustrate how the leaders valued their interactions in the community. Findings support the narratives of the leaders surveyed and interviewed.

4.1 Participating in Communities of Practice

Data from the quantitative analysis showed that 75% of participants in the survey had participated in an online learning community, whether an internal organisational work community or an external community. From this sample, 76% then reported having participated in an online community for their leadership development, whether an internal organisational work community or external one. This was an interesting statistic as everyone chosen in the sample would have participated in virtual learning sets with their specific leadership development programme. From the responses to both questions on learning community engagement for work purposes or leadership development, the leaders that had not engaged in a community for work purposes did not engage in one either for their leadership development. Responses provided surmised three main reasons:

1. A lack of knowledge or understanding as to what communities were available and what the benefits were of participating in them.
2. A lack of time to engage in a community.

3. Not their preferred learning experience.

One survey respondent stated "I spend too much time on the computer, I find learning more stimulating when you can exchange face to face with real people, especially when it comes to developing your skills and awareness around leadership". Another said they "prefer to use email". Olivia explained that "some people are just not interested in using new technology or working smarter depending on their personality, background or what part of the world they are from." This would support UTAUT theory (Anderson *et al.*, 2006; Jarvanpaa and Staples, 2001; Venkatesh *et al.*, 2003;) whereby the leaders' attitudes and behavioural intentions towards the technology can impact the desired outcomes and participation in the community. However, this also backs Nistor and Fischer's (2012) critique of UTAT in that users from different countries and professional backgrounds may show different attitudes towards technology. This is discussed further in the next chapter.

Community sites frequented

The quantitative data revealed some differences in the types of community site leaders frequented for work purposes and for their own leadership development. Figure 4.1 shows that most leaders surveyed used WhatsApp (88%) for work purposes, followed by Microsoft Teams (74%) and Facebook (38%). What's App was identified as the primary site for work purposes by 62% of respondents with 82% stating they had used the platform for more than two years for work purposes which they visit on a daily basis (88%), shown in figure 4.2. Leaders shared that they prefer to use a blend of platforms depending on the work purpose, such as James:

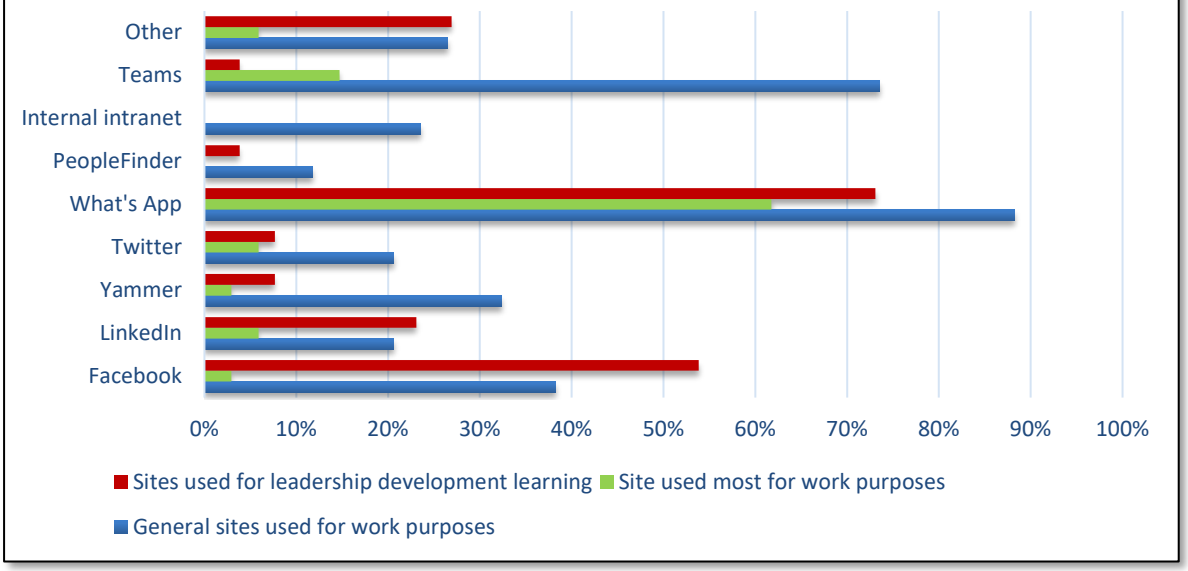
> We use WhatsApp all the time to manage ourselves in the region and Skype for Business and Teams in terms of actually doing work and communication and leading teams.

For leadership development purposes, 73% of survey respondents reported using WhatsApp as their primary site, with 54% frequenting Facebook or other sites such as Slack, discussion boards, different external sites, college or university sites or

wider Civil Service forums. Therefore, the leader's intentions towards the technology would change to suit their contextual needs (Jasperson *et al.*, 2005) or they are using different technology and to different degrees (Krogh, 2002; McDermott, 2000). Similarly, Chloe explained how her community used different platforms depending on the context and to distinguish between more formal learning and social interactions:

> We used WhatsApp for group meetings, get-togethers and chat groups. But when we had to debate things officially, we used the teleconference.

Figure 4.1: Community sites frequented for work purposes compared to those visited for leadership development learning



The leaders reported they belonged to several WhatsApp groups for work purposes as well as for their leadership development. WhatsApp is viewed as ideal for quick, semi-formal communications and questions and is used more than the phone and "on a par with email". Chloe affirmed this, saying WhatsApp "is more for catch up about work a little bit or when we share certain similar activities or some visit, for example, like Boris Johnson when he was foreign secretary." The leaders agreed that WhatsApp was versatile and easy to use, supporting the effort expectancy element of UTAUT theory (Nov and Ye, 2004; Venkatesh *et al.*, 2003) and innovation theory (Rogers, 2002). Yet, Zoe said, "there is not really a distinction

between how you use it with colleagues, with clients and within your own personal life. It's all there in the same platform. So, it is just sort of interchangeable". Paul viewed WhatsApp more as an ideal platform for culture building and motivating his team, seeing it as a safe space, not for him but for his team:

> Keeping a digital team across a large geography is hard to motivate, but I've found WhatsApp particularly useful for developing an open forum where people can express their frustrations knowing full well that it's not going to contaminate a broader environment.

He also thought that the structure around the community platform was important to his engagement for work purposes. This would support the performance expectancy element of the UTAUT framework whereby the community leads to positive outcomes, or perceived usefulness (Nov and Ye, 2004; Van Raajj and Schepers, 2008). The importance of being able to reach a globally dispersed audience to share information and knowledge broadly was also highlighted by many of the leaders. Paul realised value came from the perceived social benefit and influence of the technology (Venkatesh *et al.*, 2003):

> The Slack group that I set up went from zero to 50 users in the first month. But what was insightful about that is that half of my users were from the UK so I was getting my UK-based stakeholders on one page.

However, Betty shared that she was given clear direction from her programme facilitators on which platform to use and for what purpose:

> We were encouraged quite heavily to debate leadership ideas on a forum, which was set up and our cohort had access to via the online learning platform. There was quite a structured kind of view on what different communication platform you used for different types of conversation.

These facilitating conditions (Venkatesh *et al.*, 2003) impacted her ability to participate in those forums. She went on to describe how she used a smaller subset of her community to "really learn and share ideas". This would support Hoppe and Reinelt's (2010) theory on the different types of connectivity that exist in communities and how clusters can reveal unrecognised subgroups, which is discussed later.

There was more of a significant contrast between the frequency of the sites visited for work purposes compared to those for their own leadership development. A higher proportion of leaders (88%) used WhatsApp on a daily basis for work purposes (figure 4.2). For leadership development, the frequency was more varied (35%) or weekly (35%). Betty explained that this correlates to the value of time leaders, and the organisation, places on leadership development compared to work purposes and priorities, "you can get time off to learn Mandarin but we're expected to do all of this leadership learning in our own time at the weekends. There's a value judgment there." James elaborated further by stating that accessing sites regularly and in small amounts helped him balance workload and time. Initial experiences of using a site deterred people from returning if their experience was bad. This would support the effort expectancy, whether good or bad, within the UTAUT framework (Venkatesh *et al.*, 2003), as well as Roger's innovation theory (2002). If an innovation is not perceived as being advantageous, it is unlikely to be adopted.

Figure 4.2: Frequency of visiting communities for work purposes compared to visiting for leadership development learning

4.2 Value Creation Findings

Findings from the study suggest that the collection and analysis of value creation stories using the value creation framework provide a more detailed and nuanced understanding of the different types of value members found through their participation in the virtual leadership CoPs. Within this section, findings are subdivided by the five cycles of value creation (Wenger *et al.*, 2011).

Cycle 1: Immediate value – What happened during activities and interactions in the VCoP?

Cycle 1 identifies productive activities that have value in and of themselves. The leaders surveyed and interviewed found immediate value with the interactions within their VCoP, especially around the domain of conversations around leadership and activities that supported their work. However, there were differences in what people found value with. Activities described in the interviews ranged from helping others, receiving advice and information or taking part in engaging and challenging leadership conversations. It also meant the social connections and sharing experiences.

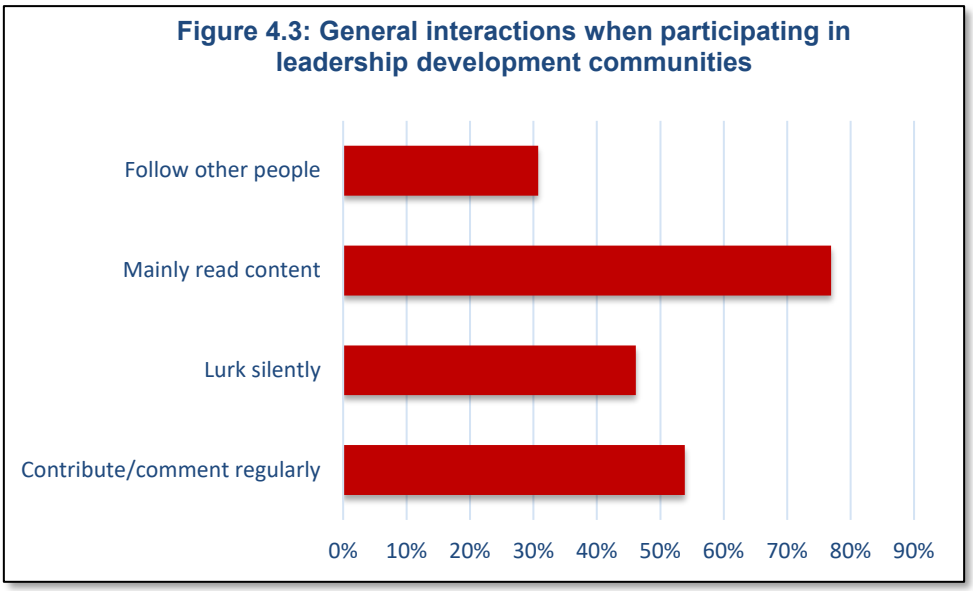
What were the activities and interactions?

It was clear that the leaders had very different reasons for visiting their communities. Some had very specific ideas of what they wanted to achieve from frequenting the site. Paul stated he didn't "go to them looking for inspiration. I've usually got an idea of what it is". Zoe also shared that she "picks bits from across different communities" rather than rely on one particular site.

Figure 4.3 describes the universal general interactions leaders exhibited when participating in leadership development communities. 77% of leaders reported to mainly read content with 54% contributing or commenting regularly. The leaders who contributed regularly tended to be the senior and mid-level leaders, rather than the emerging leaders. The idea of sharing where you feel more comfortable or confident (Hoy and Tschannen-Moran, 1999; Hara and Schwen, 2006) was reaffirmed by another respondent who shared that they contributed regularly when they felt confident within a group, otherwise they would "tend to lurk, read and

also contribute in a limited way". Olivia identified with this theme of comfort level when interacting in these communities:

> I think that Facebook or LinkedIn is more like your representation of yourself. If you post something or if you like something it kind of a reflects your interest to the public. I would say that I don't normally give long comments about certain things or comment, I will share those with personal interactions or with closed group interactions.



Betty shared that she felt she needed to be more considered and deliberate when engaging in the community:

> This is a number of people who are my peers. I mean this isn't just having a quick chat with the person next to you to see what they think. You need to craft this stuff if you're going to write it. I personally found the forums more about everybody putting something out there then it was about really having that kind of engaged discussion where you're bouncing ideas off each other.

Having confidence to engage in the VCoPs can be linked to various influences, such as level of engagement and trust, which are discussed later in this section.

The leaders shared articles or content that individuals themselves found useful or interesting from "snippets of interesting things I have found online" to "articles on women leaders I distributed to female members of the group". Paul's approach was to "generally share things if I can that are going to make people happier". The range of information or materials shared helped the leaders see different ways to support their leadership learning and raise self-awareness by finding out what worked for them as a leader and what they were comfortable and confident in. The content of the interactions and resources helped maintain the VCoPs (Chiu *et al.*, 2006). Chloe appreciated being able to share problems or "work difficulties", whereas Betty identified more with providing support to others in the community, rather than for herself. For Amber, reading and making connections with others who she thought would engage and stimulate her thinking were more of interest.

Engagement – working towards a common goal?

The data examined in this study was collected from leaders who had undertaken a leadership development programme. The idea that the leaders had undertaken a programme to develop themselves in leadership may lead to the assumption that all the leaders on the various programmes were working towards a shared purpose of developing their leadership practice, the domain within the VCoP (Wenger, 2002). This assumption is not without exception however, and this study did not sample every leader who had undertaken a leadership development programme to prove or disprove this theory. Interview respondents were not asked directly whether they believed that they shared a common goal with their counterparts, but many of them mentioned this as one of the points they found most useful and also frustrating.

Bob's purpose for joining the programme was to use the immediate value to help him with potential value to be realised in the future:

> To get a theoretical background to a bigger job opportunity that may come up, in terms of management and leadership.

Chloe expressed varying levels of engagement from her peers, stating that only about three or four really engaged in her VCoP. She surmised that the community structure and lack of maturity attributed to less engagement:

> Because it wasn't organic there were varying degrees of dedication to the programme…there is no real connection between the people.

The leadership communities described were fairly new, coalescing, or had been established for a couple of years, maturing. (Wenger *et al.*, 2002). They either grew organically by the community or were "created by the trainers from the beginning".

Olivia compared her leadership community to work ones she was engaged in and commented on the importance of time span in creating effective communities:

> We do have our own work community and this has been forged over many years where we have developed friendships and personal relations with peers.

Tim agreed that "when you try to create a community where one wasn't in the first place and put into the same room a bunch of different personalities with different experiences and backgrounds it doesn't work very well". Even if you are working towards the same goal, that may be not enough just to engage people (Cramton, 2001; Handy, 1995; Hara and Schwen, 2006; Hoppe and Reinelt, 2010). This sentiment was echoed by Betty, who commented on the difference between organic and forced interactions.

However, it was recognised by all interviewees that each member needed to make an extra effort to engage with others in the community (Ring and Ven, 1992; Zaheer *et al.*, 1998). Sophia commented that it was demotivating for people who did contribute to the community but did not receive any engagement. She started posting content but received very little engagement back. She felt that people were not used to interacting in that way but also were not prepared to experiment on a

new platform, "so it fell apart". This would support Roger's innovation theory (2002) and UTAUT theory (Venkatesh *et al.*, 2003). Participant's technological aptitude and confidence impacted engagement. Ease of access to the community while mobile was also important to some leaders. Paul described how "the more that's on my phone the more it gets looked at because of the mobile aspect of it". Tim confirmed that engagement for him focused on "the versatility (of the site), you can send photos, you can send audio and it's instant and it's just as quick communicating on the other side of the world". For him, effort expectancy and social influence were valued (Venkatesh *et al.*, 2003).

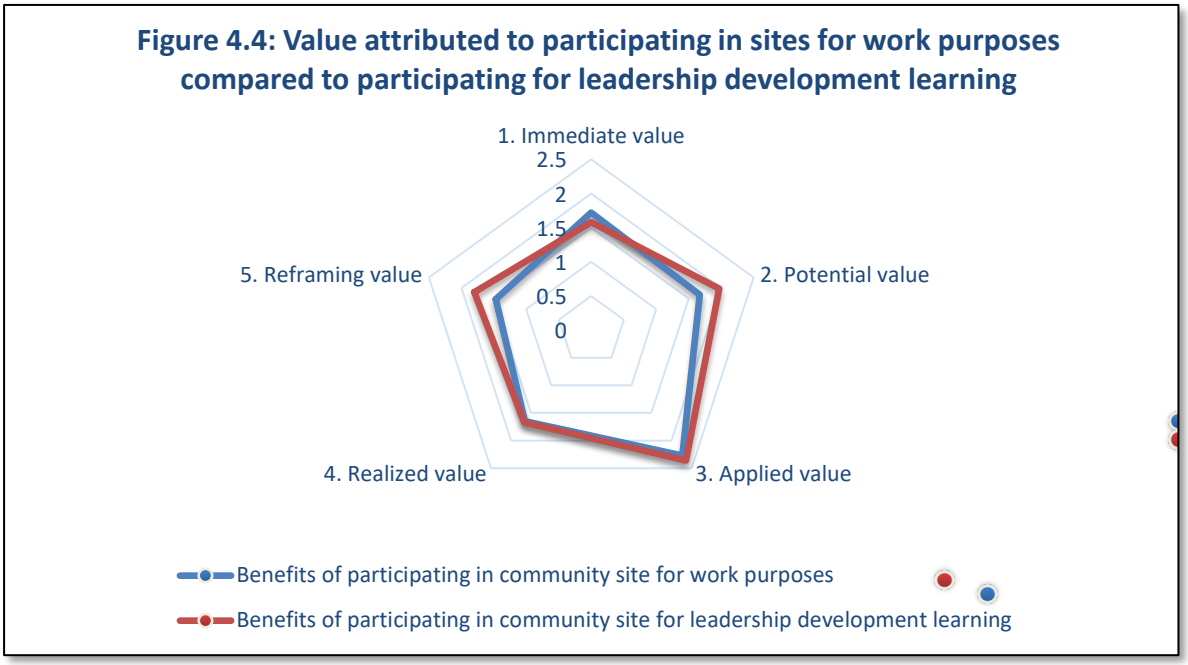
All the leaders interviewed talked about the immediate connections they made in their communities. However, they also referenced needing more than just activities, interactions, information, or making immediate connections with their peers. It was more about the future value of these activities and interactions which they were interested in, especially ones that were more influential to their own leadership development practice, or performance expectancy (Venkatesh *et al.*, 2003). The immediate value of an activity is perhaps most easily seen and understood at the time, but can be quickly forgotten. It is hard to count these short-lived or transient connections, yet it is this immediate value which lays the groundwork for a VCoP to develop (Wenger *et al.*, 2002).

Cycle 2: Potential value – What changed as a result?

Cycle 2 in the value creation framework emphasises the value in knowledge, resources acquired or created, what Wenger, Trayner, and de Laat (2011) call 'knowledge capital'. There are various types of knowledge capital—learning, human, social, reputational and tangible - that were clearly discernible in each of the leader's communities. As the leaders continued to share resources, participate in meaningful conversations over time, expand their professional learning networks, pick up tips and ideas, not only did they find immediate value through those interactions, but they were also amassing knowledge capital. Furthermore, Wenger *et al.* (2011) note that not all value is immediately realised, with the value of some activities and interactions lying in the potential to be realised later. For some leaders, it opened up new perspectives. The quantitative data in figure 4.4 supports these findings, as more leaders started to report benefitting from the

'potential value' of virtual leadership communities than from the 'immediate value'.

Figure 4.4: Value attributed to participating in sites for work purposes compared to participating for leadership development learning



Resources (tangible capital)

Participating in a community provides access to information, documents, tools and procedures, but also networked information sources, links and references that facilitate access to information that the leaders may not have had access to otherwise. Stories from the leaders frequently highlighted the value they found through resources and tools which helped build their skills and knowledge. In particular, the leaders commented on the value of the different reading material, podcasts or leadership thought leaders that either the leadership programme and the VCoP exposed them to. Bob used "the reading lists that were recommended and started from there on my own little path". Olivia found some of "the neuroscientists or cognitive psychologists work interesting as that fits with a lot of the work that I'm doing", as she could directly see the value to her role. Zoe shared that the resources would help her make a plan which would then "affect how I behave". This supports the theories whereby learning experiences have greater impact when linked to day-to-day work (Hernez-Broome and Hughes, 2004; Knowles, 1970; McCauley and Van Velsor, 2010). Betty summarised this sentiment:

> I use the different publications for reflection, for professional growth and learning and for challenge. To challenge what I consider leadership to be, because reading a wide variety of different leadership publications allows me to be more critical in what kind of leadership, what is leadership and what types of leadership are effective in different situations.

Relationships and connections (social capital)

Social relations and connections are a form of knowledge capital. The ability to engage in the VCoP because one knows who to approach or to trust can be as valuable as personal information (Hara and Schwen, 2006). In all the interviews, there were indications of the leaders forming relationships with others from the programme, or gaining performance expectancy or social benefit (Venkatesh *et al.*, 2003). The data collected showed evidence of relationships developing through the community interactions, from arranging to have 'virtual coffees' to calls for an informal, social chat. For Tim, the social connections were more about "maintaining contact and gathering a little bit of low-grade intelligence" which would come in useful for his work, supporting the theory of acquiring knowledge to be realised later (Wenger *et al.*, 2011). Paul stated that his community used their connections to collaborate and solve problems together. The leaders also mentioned that the social connections helped them see that everybody had qualities that they could bring to the table and bring to the fore as a good leader. It reinforced the value of respect and the need to be able to communicate with diverse groups and be inclusive (Hesselbein and Johnston, 2002).

Betty's experience showed that the relationships were more than just about connections for oneself, but knowing how you could contribute to others learning or challenges and offering emotional or practical support, congratulations and encouragement. Similarly, Zoe shared how she supported her community through challenging others own assumptions and limiting beliefs. This supports Mezirow's (1991) theory of transformative learning as the leaders are challenging each other's assumptions and encouraging others to consider different perspectives.

The value of trust

However, the leaders did value social connections by the level of trust and knowing others well enough to see how they could contribute to their learning (Ridings *et al.*, 2002). This resulted in the leaders expressing some frustration in being able to find quality connections and engagement. Olivia summed it up by stating:

> There were a few of us who felt relieved that there were a few of us we could talk to about different things. It is very much connected to a, the personality and b, the fact that there was no real connection in the community and the community is not organic. Trying to find others to play with is difficult.

Aligned with Mezirow's (1991) transformative learning theory, Amber described that surrounding yourself with good people doesn't need to be people who think the same as you, they need to be people who will challenge you and "they need to be people who you can be comfortable speaking with and having challenging conversations with." She explained that being a leader does not automatically mean you will connect with other leaders. James also shared that trust comes from a blend of connecting with someone and being challenged by their diversity enough without judgement. He agreed that there needed to be a connection between people so they are able to have different ideas, but also trust. Sophia described trust as:

> An idea of benevolence that we are in this together and I've got your back. You've got my back and we are both growing in our understanding of what we're doing and why we're doing it, be it a leadership practice or a work improvement practice or an idea that you've got you think could have an impact on outcomes either on a local level or a larger level.

For Zoe, trust came from sharing ideas with some form of recognition as well as a personal level of comfort with what you share in a virtual community. Therefore, the value in the social capital is not just about making a connection, it needs to be a 'quality connection', provide comfort and assurances to promote engagement, yet

be challenging, relevant, have a clear purpose and be of value to the individual (Bogenrieder and Nooteboom, 2004; McLure-Wasko and Faraj, 2005).

Paul also stressed the importance of the human and personal side of the connections:

> Everybody's contributing positively to the group things from actual lives, it might be their dogs or their Halloween costumes or things that give us an actual sense of who we are working with and that sort of humanises us in this overly digital world.

Betty agreed, stating how a smaller group helped build trust for her as they were able to share more personal information beyond the learning. She shared that the people she really trusted were people she had been posted overseas with, in a challenging environment. It was in these situated, or shared experiences, when she saw people at their best and their worst, really helped her build trust to a deeper level that what she experienced in her community. These sub groups that are tightly knit, highly bonded clusters support the identified, trusted communities explained by Hoppe and Reinelt (2010). This has implications for creating shared experiences within communities and how to really develop deeper levels of trust, which will be discussed further in the next chapter.

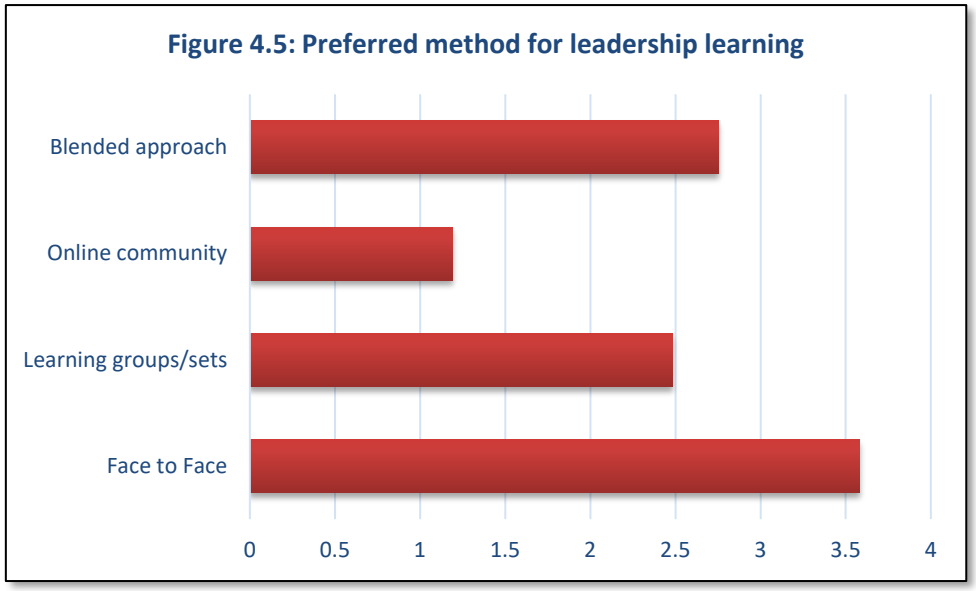
Chloe felt that cultural background and location limited her social connections. Although she met peers from nearby ASEAN (the Association of Southeast Asian Nations) countries, she found that other colleagues tended to form smaller sub-groups or clusters with leaders from their own sub-regions, such as Japan or Australia. Even though Chloe's cohort were all located in the Asia-Pacific region, smaller sub-groups or clusters formed based on an individual leader's location (Pan and Leidner, 2003). Chloe's experience would support homophily theory, where physical proximity, similarity of beliefs and attitudes, amount of interaction can also affect relations and ties between leaders (Borgatti and Foster, 2003; McPherson and Smith-Lovin, 1987). However, this did not appear to be the case for all the leaders interviewed. Chloe went on to explain that due to her participation in the community, she saw herself as a 'bridge' because of being a

country-based staff member and using her local knowledge and experience to help be the bridge to what her "international counterparts should want in the working environment".

Face-to-Face learning and social connections

All of the interviewees found the collaborative and social aspects of the programme to be highly valuable, increasing their knowledge and strengthening their social connections, stating that their participation also deepened their trust in each other (Boud and Garrick, 1999; Eraut, 2003; Le Clus, 2011; Marsick and Watkins, 1991; Palus and Drath, 1994). All the leaders commented that the face-to-face interactions were important to build ties between members, develop trust and help build relationships with others whom they might call on for assistance in the future – the potential to be realised later (Wenger *et al.*, 2011). Bob shared that "it is the face-to-face interactions that establishes a deeper connection. Members of that community can then can use their skills to create more personal relations."

Figure 4.5 corroborates the leader's preference for face-to-face learning. The quantitative data shows that most of the leaders placed face to face learning as their preferred method for leadership learning, followed by a blended approach (face-to-face and virtual), then learning groups with online communities being the least preferred option. Tim explained that with virtual methods "you haven't quite got the communication, the body language, the understanding of what the other person's thinking, it is not as good as it is sitting talking to someone". Other leaders felt the face-to-face meetings were really important to developing stronger connections and building trust, especially at the beginning of a programme, supporting Matzat's theory (2010; 2013). They shared that undertaking virtual learning once you already know other learners works better as they have already met each other in person and felt that it built up trust better. Olivia agreed that she could not imagine the programme having worked in the same way if her community had not met in person. Amber also felt that face-to-face discussions had more value, as it would be easier to challenge her thinking and make her reflect more. This has implications for virtual learning, especially due to the nature of the global COVID-19 outbreak on in-person learning programmes, and is discussed later in this chapter.



Sustaining relationships

Further to the development of relationships is the challenge of sustaining them over time – whether they are positive or negative (Wenger, 1998). All of the leaders interviewed mentioned having contact with or at least one sustaining relationship from the community. Leaders, such as Olivia and Bob, shared that their community kept in contact despite the programmes finishing, although not as regularly as before. Supporting UTAUT theory (Krogh, 2002; McDermott, 2000; Venkatesh *et al.*, 2003), communities changed platform to sustain relationships and value. Zoe explained,

> I think what was a big step for really establishing these communities were face-to-face connections, personal connections initially and then the channels just change over time. It could be Teams, it can be Skype, it can be email, phone, voice, IM, whatever it was.

This was echoed by both Tim and Chloe, who stated that her leadership programme finished almost two years ago and her community still shared quick interactions on WhatsApp, but they had switched their main communication channel to Facebook. James reflected that sustaining relationships in a VCoP required a common interest between people and for the community to have met in person. He

added that leadership development is “not a quick fix overnight and it takes time to change and build up trust, ideally over a number of years”.

Human capital

All the leaders reported valuing some form of a useful skill, information, idea or a new perspective. The increased self-confidence and sense of professionalism that leaders experienced through their participation in the respective communities frequently emerged in the value creation stories that they told. For example, Bob shared “it has given me confidence to think that I can influence my working environment more and that I can contribute more”. Supporting the theories of Knowles (1970), Kolb (1984), Mezirow (1991), Schön (1987) and Wenger (1998), leaders commented that the discussions caused them to reflect on and engage more deeply in their practice, while providing some reassurance, as “it gave me that deeper insight into my actions and the reasoning behind my actions”.

Change in perspective

All the leaders commented on some form of change in their perspective, whether their understanding of their leadership practice (domain) or a better understanding of others perspectives, which helped change the leaders’ perceptions, assumptions and biases (Gray, 2004; Mezirow, 1991; Palus and Drath, 1994; Vavasseur and MacGregor, 2008). For the emerging leaders, it was particularly important to realise that other embassies and consulates had similar work difficulties to those they experienced and they were not alone. This sharing of experiences also helped country-based staff leaders understand other cultural perspectives such “the British approach” or “Western philosophies to leadership and communications”.

For others, participating in the VCoP helped changed their perspective on their own leadership style and practice. However, many remarked that their own leadership style looked different to what they thought the ‘organisational leadership style’ was. James reflected that “it helped me to define what my leadership style looks like in an environment where leadership styles were very clearly top down”. Sophia also had a better appreciation of her leadership style, “it

just looks differently to your atypical authoritative style". Tim commented that the community had helped him to reflect and identify areas to develop or consider ones that he really considered before. Betty shared how her outlook had broadened and she was thinking more about the organisation and future challenges and needs, and what type of leaders the organisation would need in the future. Her perspective was future focused and how to adapt her approach to keep motivating a workforce that was increasingly values led and less long-term.

Learning capital

Leaders indicated that the knowledge they gained through participation in their community gave them confidence to share and apply learning back in the workplace. Olivia stated:

> It gave me confidence that what I can offer has got value. It motivates me to want to develop me, to continue to develop myself and continue to explore that avenue of supporting people in their own journey of learning.

Paul shared that he viewed his own learning as "proof of walking the talk" to his team. While the learning was valuable to him, his ability to share that learning with his team was important too. Amber's view on learning needed to be grounded in evidence or theory, as she wanted to understand why she should know certain information, otherwise it was not perceived as being as valuable to her.

Leaders also placed a high value on reflection as a means of significant learning, which they suggested resulted in increased knowledge capital. Betty stated that it was valuable to reflect back on what you were doing for improving your own leadership practice. She would ask herself questions around her assumptions for acting in a certain way, as "often when things can get quite stressful you revert to the behaviours that are most comfortable with you and that can neglect other behaviours that a leader should demonstrate." This process of experience, reflection and practice supports Schön's (1987) assertion that adults can continually improve their work and become reflective practitioners.

Cycle 3: Applied value – What difference has participation made to my practice?

The next stage in the cycle of value creation is adapting and applying knowledge capital in different contexts that leads to changes in practice, innovation, tools, approaches, or organisational systems (Wenger *et al.*, 2011). The leaders recounted the ways in which interactions within their community led them to change their leadership practice.

The leaders adapted and applied knowledge capital gained into their practice, especially advice, solutions and insights. This was supported by the quantitative data (figure 4.4), where leaders reported benefitting from the 'applied value' of virtual leadership communities, more than any other cycle. Olivia shared how she was able to provide a different perspective to a colleague on a team management issue, where she explained the difference that this individual brought to the team. This was based on her applying theory she had learned within the leadership community into practice (Hoppe and Reinelt, 2010). Amber found that the knowledge capital, a particular paper, reassured her and provided confidence that an action she had taken was right, and "what I had done was what other successful leaders do". Paul also applied learning from other leaders to his own leadership practice and was trying to proactively incorporate some new learning into his daily work, not every day but more into his working routine (Hernez-Broome and Hughes, 2004; McCauley and Van Velsor, 2010). Chloe stated she had implemented learning how to communicate with diverse people and be inclusive by learning how to be aware of those differences and how to manage certain situations within her role (Leskiw and Singh, 2007). This was valuable to her because of her role working with the public in challenging circumstances.

Amber shared how she would print out articles or take books, such as Nancy Kline's 'Time to Think' to discuss at senior leadership team meetings, to try to get everyone to think differently. Similarly, Sophia used articles that she valued to approach challenges back in the workplace and indirectly use knowledge capital to implement an idea and change behaviour. She used this knowledge capital to challenge others from a neutral position, as she viewed herself as an introverted,

reflective leader, the opposite to her colleagues. This knowledge helped build her confidence and open up a meaningful discussion with her colleagues. Betty, also cited implementing a model for "giving feedback from speaking to people where they could potentially feel that their authority is being undermined or I'm placing a judgement or threatening them". James shared that he used Jim Collins 'Good to Great' Hedgehog Concept without mentioning the actual framework, but drawing on the concept to explain his department's vision and mission. Paul felt that access to resources helped enhance his credibility with others (Butler *et al.*, 2002; McLure-Wasko and Faraj, 2005) and enabled him to transfer learning practices by sharing learning with others. He explained that referencing a study or an author or a framework gave you credibility because you were providing examples that you had learned something. He also felt that this became modellable behaviour because you were also doing what you wanted others to do.

One of the three tenets of a community of practice, the practice itself (Wenger *et al.*, 2002), is the act of developing leadership. All the leaders reported that participating in the leadership community helped define and refine what their leadership style was and broadened their outlook as leaders. For some of the emerging leaders such as Bob, the difference emerged in feeling more assertive to take on more of a role of a leadership role. Yet, being an effective leader was not about trying to emulate another leader, but take a wide view and choose what suited your leadership style, your team and context. Zoe's analogy summed this up:

> It reminds me of parenthood. There is so much material out there, what constitutes a good parent and what you should and shouldn't do. There is so much stuff out there that you have to read wide. But then you decide what works for you and your family because you can't take all advice and do all things. And on leadership, I found it very, very similar.

The leaders commented how their participation in their communities had helped influence how they interacted with others. Zoe described improved relationships with her team and felt that her approach to team members had changed and she was able to empower staff, so that "people feel they know what they need to do and

you've got a combined understanding of that rather than them feeling that you're telling them what to do". Olivia shared a similar reflection on the way she approached people now, as it helped her understand and consider other people's priorities and what they wanted.

However, Sophia shared that it was often difficult to sustain the practice or ideas she wanted to implement, as people often felt too busy to discuss the resources she was sharing. Tim agreed adding that the organisational environment affected the potential impact or change you were trying to influence or implement. He thought that time was needed to consolidate new ideas and change. This supports situated learning theory (Lave and Wenger, 2001; Wenger, 1998) where effective learning is shaped by workplace culture (Billet, 2002; Lave and Wenger, 1991; Marsick and Watkins, 1999). However, it also confirms Roger's innovation theory (2002) where innovations may take years to reach adoption.

Cycle 4: Realised value – What difference has participation made to my ability to achieve what matters to me or other stakeholders?

Realised value is where formal outcomes are achieved, including performance improvements, skills development, and stakeholder satisfaction (Wenger *et al.*, 2011). New practices or tools may result in improvements in performance, but is not guaranteed. The quantitative data (figure 4.4) showed that fewer leaders reported 'realised value' in their leadership development learning. It is therefore important not to simply assume that improved performance is the case when people change their practice, but to reflect on what effects the application of knowledge capital had on the achievement of what matters to the leaders and their stakeholders. These reflections were therefore, easier to probe and explore in the qualitative research.

Personal performance improvement

The leaders interviewed reported improvements in their own personal performance which validated their time in the leadership programme (McLure-Wasko and Faraj, 2005). They commented on how their outlooks had broadened, the value of their own sense of self-worth and improved confidence and reflected on the effects of the application of knowledge capital. Amber shared that reading a

wide variety of different leadership publications allowed her to be more critical about what leadership was and to experiment with different types of leadership styles and see which were more effective in different situations. Sophia reflected that being a good leader was about being authentic and being yourself, and learning the behaviours that would help you be a good leader:

> I think that's actually given me confidence in myself as well that I don't have to become this particular type of person to become a good leader.

Bob shared a similar reflection on his understanding of his leadership style which had encouraged him to apply for different roles:

> What I've come to appreciate is actually I am it. It just looks different and that's been the thing I will take away and I think that's what's giving me the confidence now to change my position.

Paul agreed, confirming that improved confidence not only affected him, but others too:

> It gave me confidence that what I can offer has got value. It motivates me to want to develop me, to continue to develop myself and continue to explore that avenue of supporting people in their own journey of learning.

For Betty, it was important to understand areas where she needed to develop and improve, such as learning more about data science and artificial intelligence for future leadership roles.

Improved relationships with teams and stakeholders

Leaders commented how participating in the community gave them the confidence to influence others and their working environments. They stated they were able to contribute more in their roles and feel valued for those contributions, which would benefit organisational performance in the longer-term (McLure-Wasko and Faraj, 2005). Paul described how this increased confidence had broadened his outlook

and influencing skills and helped him "think like the boardroom or see into the boardrooms that may help my leadership in terms of being comfortable when I'm in them". This performance improvement enabled him to have more mature conversations with stakeholders and engage at the boardroom level and feel comfortable in this practice.

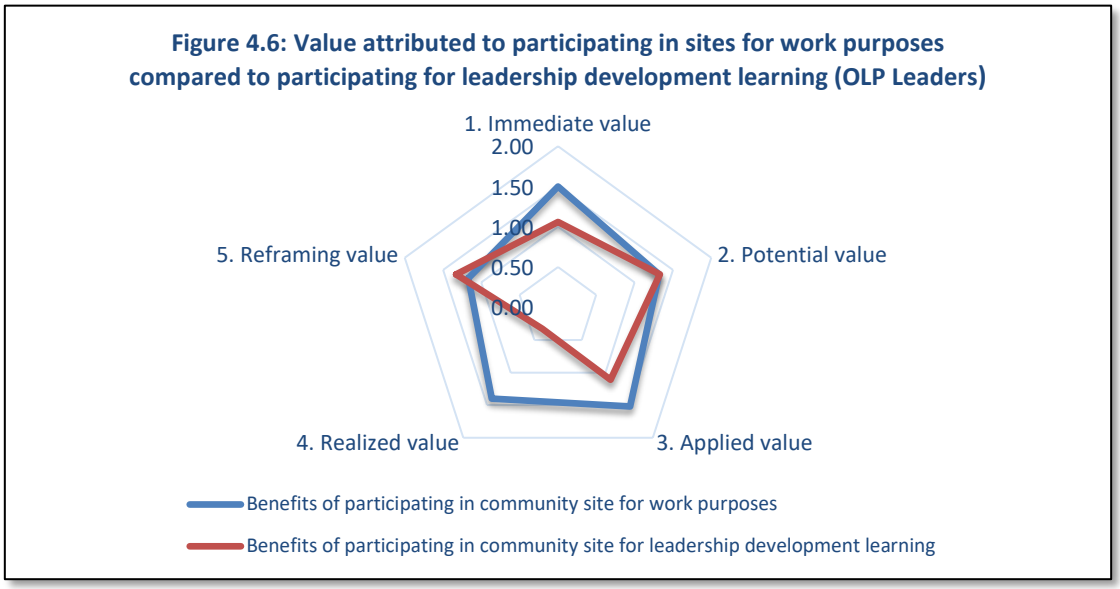
The leaders described how improved personal performance had affected their wider relationships. Paul, described, how he had transferred his learning to support external work stakeholders: "I set up an online learning community that turned into real relationships with engineers". He also felt more confident to inspire his team to be more innovative in their working practices (Rogers, 2002). Chloe shared that she had used her learning to influence between different cultures and avoid potential problems escalating but also to protect her reputation and relationships with external stakeholders:

> I learned to compromise between all stakeholders so we could get the job done. For me, I saw that as an influence because if I just let it happen it could lead to bigger conflict and also it could affect my work relationship with the stakeholder.

Cycle 5: Reframing value – Has participation changed my or other stakeholders' understanding and definition of what matters?

The fifth value cycle defined by Wenger *et al.* (2011) is aspirational value – the value in reframing what success meant for the leaders, at individual, collective and organisational levels. The quantitative data (Figure 4.6) showed the leaders reported increased 'reframing value' for their leadership learning, compared to 'realised value'. Further analysis highlighted that compared to emerging and mid-level leaders, more senior leaders responded to these value indicators than in any other cycle. However, when exploring this cycle with the interviewees, by probing further and encouraging them to reflect more, it was evident that many of the emerging and mid-level leaders had changed their understanding and definition of what matters to them in leadership practice (Gray, 2004; Mezirow, 1991; Vavasseur and MacGregor, 2008; Wenger, 1998).

Figure 4.6: Value attributed to participating in sites for work purposes compared to participating for leadership development learning (OLP Leaders)



In this cycle, the qualitative data showed that the leader's reflections were built off the foundations from earlier cycles (Knowles, 1970; Kolb, 1984; Mezirow, 1991; Schön, 1987). For example, they reported that team dynamics and relationships with stakeholders had not just improved, but were strengthened further the more they tried different approaches and practices. Zoe attributed this to her learning becoming more embedded in her leadership practice, or situated learning (Lave and Wenger, 2001). New understandings around having a broader outlook emerged through the leaders' stories. Growing as a leader meant reframing how they viewed themselves as leaders and realising that leadership is not just about self-growth, but also about how they lead and interact with others. James echoed that he was more accepting of how others could contribute to the bigger picture and being able to help colleagues in his wider network understand how to do the same. Sophia had helped broaden the outlook of others by sharing some feedback from her boss:

> She said you really changed my perspective on things because of the things that you brought to the table.

Sophia explained that she had implemented coaching practices into her work environment and had proved the value of these practices so that her boss had

embraced the new practices. Olivia shared that she now puts her practice within a more regional framework and has been involved in more inter-regional projects. Participation in the community helped her redefine her approach to be more outward looking and "focused on capability sharing and bringing the team along, the wider team, not just my immediate team."

4.3 Value Creation Stories

Wenger-Trayner *et al.* (2017) highlight that 'the emphasis in social learning is the flow of value across cycles and looping the learning back'. It is therefore valuable to identify where participants indicated insights they developed in the community, how this learning was applied, followed by articulating what they did as a result of the learning and what they learnt from that process. Figures 4.7, 4.8 and 4.9 below illustrate how the stories of three leaders' evidence multiple cycles of value creation including reframing value. These three stories were selected to illustrate an example from an emerging leader, a mid-level leader and a senior leader.

Olivia's Story (an emerging leader's story, figure 4.7)

In Olivia's story, Figure 4.7 portrays two narratives, represented by the orange and green arrows. Her story started through the social connections in her VCoP, with the quality of them being important to her perceived value of the leadership community (cycle 1). She became part of a smaller sub-cluster of leaders within her VCoP, because she found it difficult to find others who were engaged and with whom she felt a connection. It was the quality of these interactions that enabled her to value her involvement and engage in the VCoP (cycle 2), seen by the spread of orange arrows across the cycles.

The green arrows show a particular example where she described how the programme and community enabled her to read more leadership books and articles (cycle 2) which helped change her perspective (cycle 2) and her leadership practice (cycle 3). She had started to incorporate new ideas into her daily routine and had drawn on her increased confidence and new perspective to help a colleague with a management issue (cycle 3).

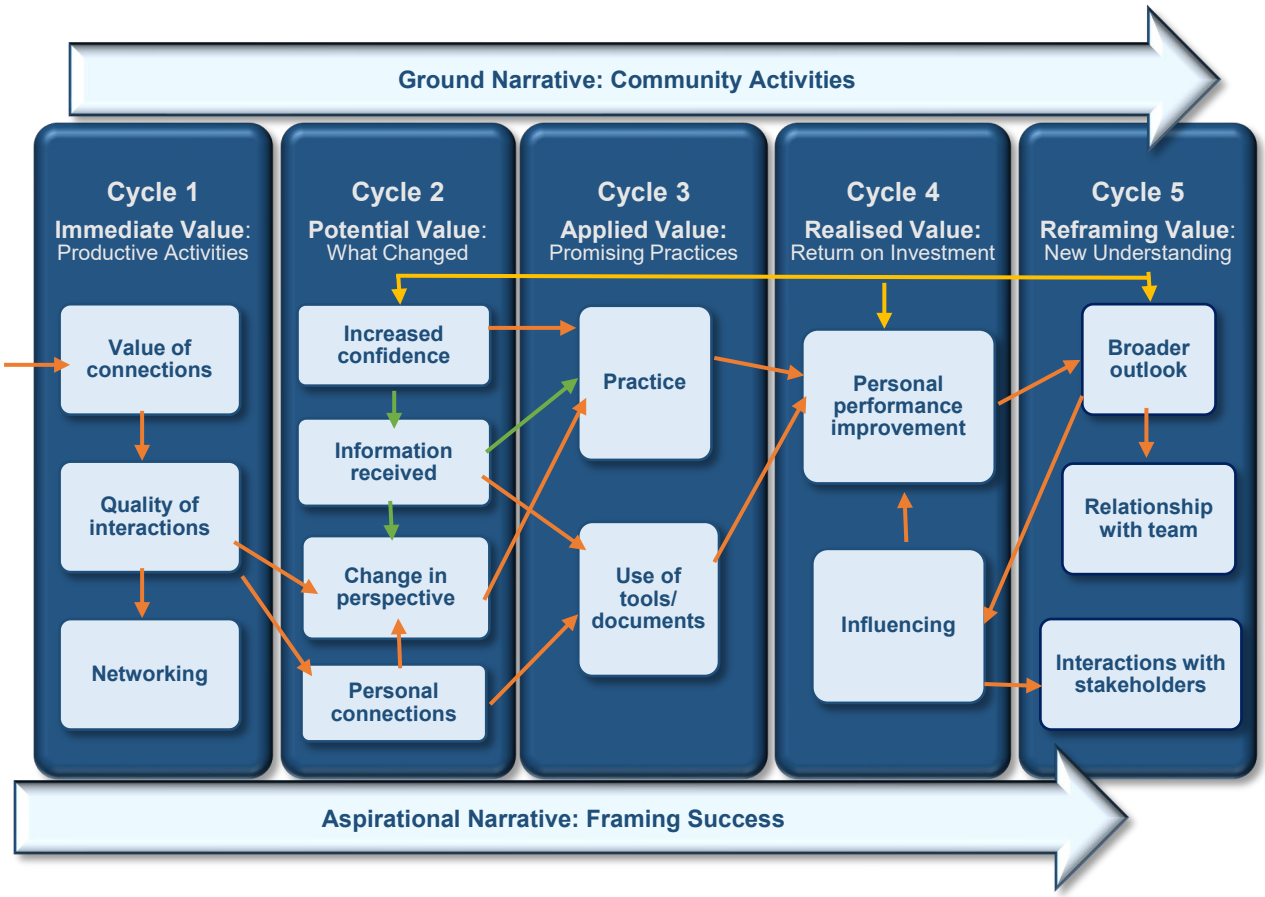


Figure 4.7: Olivia's story

As an emerging leader, Olivia described her leadership practice as having a much broader outlook and awareness of the bigger picture. The yellow arrows represent the reflection and reconsiderations of some of the outcome indicators in the previous cycles, and the connection between confidence, personal improvement and having a broader outlook. The broadened outlook made her look at her role within that framework, not just within her geographical region, but inter-regionally (cycle 5). She said that she felt more confident to contribute and influence others now (cycle 4), which helped with her interactions with other stakeholders and her own team. This increased confidence as an emerging leader had also been felt in her own personal improvement (cycle 4), she was more involved in initiatives and focused more on developing others, which she described as "moving from being dependent to independent to interdependence", which now influenced how she interacted with others.

Paul's Story (a mid-level leader's story, figure 4.8)

In Paul's case, he had very set ideas of what he wanted to get from his community and jumped to different communities to meet his knowledge gaps, once identified.

For him, information, tools and resources were valued as they led to his realised value and supported his leadership practice. This can be seen by the number of arrows that lead from the 'use of tools and resources' indicator in cycle 3. He viewed it as investment for "content you're going to need in a few months". These were acquired through social connections, networking and collaboration (cycle 1). The VCoP provided him with the resources, tools and behaviours to try out new ideas and "define what leadership" was and be "different and authentic" (cycle 3).

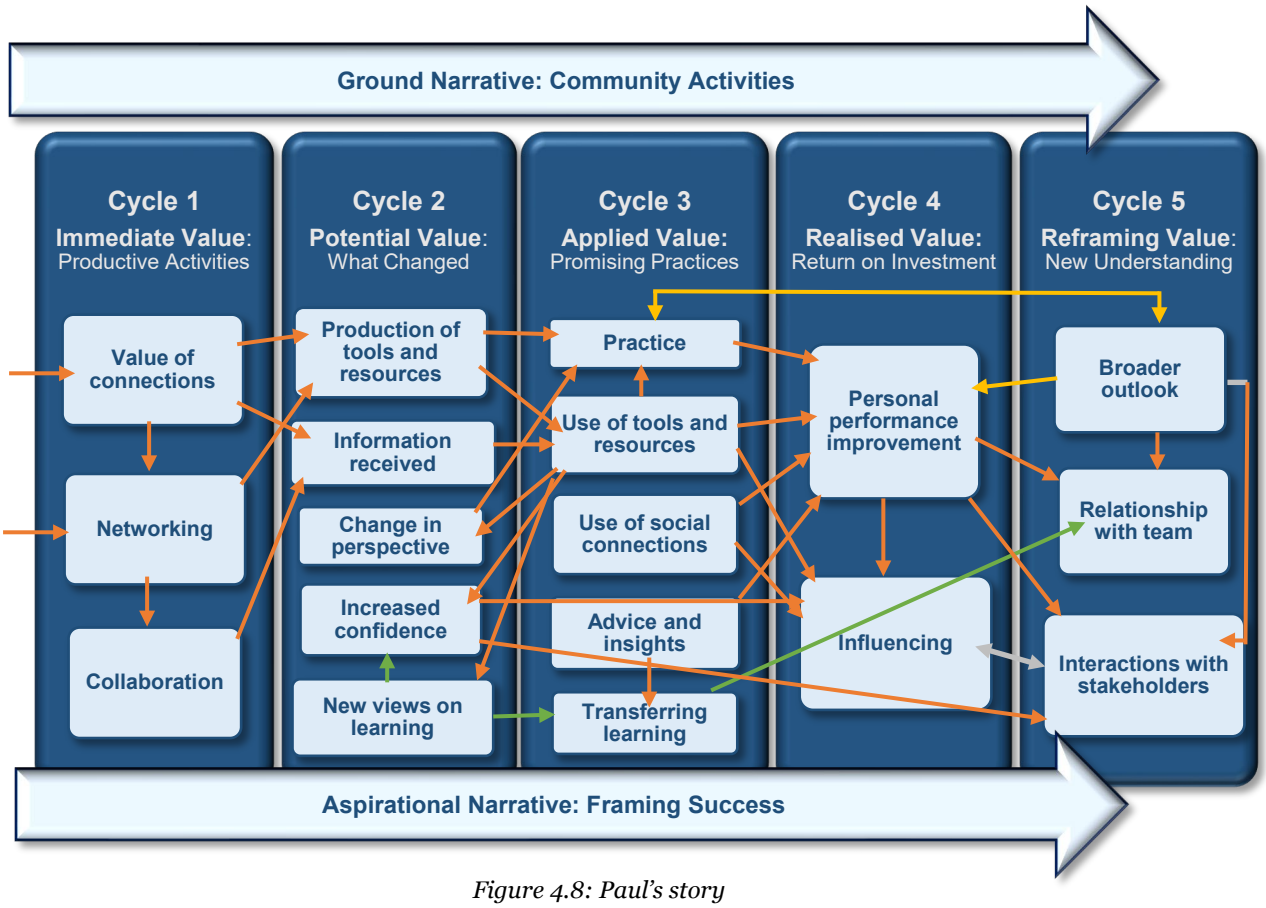


Figure 4.8: Paul's story

Paul also transferred his learning to his wider team, as shown with the green arrows, which he said "gives you more confidence and sets everybody else up for success". Although a separate narrative, he drew on his learning to invest in developing others, which was a big part of Paul's leadership style and correlated to team motivation and retention. This included helping team members understand where their work fitted into the bigger picture. Using these tools and resources, as well as bringing in new practices and procedures, helped him "sell the vision of a two-year work stream to retain people and defend the bigger vision". This had a good impact on his relationship with his immediate team and others who wanted

to work for him. In this way, Paul could be drawing on cognitivist theory (Dewey, 1938) through creating learning experiences for his team by grounding concepts and ideas into their work routines and environment (Hernez-Broome and Hughes, 2004; Lave and Wenger, 1991; Moore, 2020).

Paul often started up new communities of practice and then handed them over to others (cycle 3) to keep going, transferring learning both internally and with external stakeholders, so he was not always involved in some of the groups realised value. He did this to deepen his relationships with others and to bring a group of people together with one collective voice and shared interest (Klos and Nooteboom, 2001). He viewed himself as a bridge which was reflected in his moving between communities and handing them over. The yellow arrows represent the reflection and reconsiderations of some of the outcome indicators in the previous cycles, and the connection between having a broader outlook and practice. Paul acted as a broker between different communities and connected to diverse others (Hoppe and Reinelt, 2010). As Paul increased his leadership practice and influencing skills through his engagement in the community, he also reported gaining credibility in the eyes of his stakeholders.

For him, referencing the tools and resources provided "credibility" and "modellable behaviour" which then influenced his leadership practice and working environment (Butler *et al.*, 2002; McLure-Wasko and Faraj, 2005). He cited an example where he used resources "to improve my counsel to British companies who are building digital products". This impacted his reputation "because the leads that I give are solid…better qualified". It broadened his outlook and enabled him to "think like the boardroom that may help my leadership terms of being comfortable when I'm in them" (his personal performance cycle 4 – reputation). He said the leadership community had given him more confidence to have more mature conversations with key stakeholders and show them proof of work.

Betty's Story (a senior leader's story, figure 4.9)

For Betty, her story focused around the integrity and deep connections with colleagues. Any value was centred around the need to build up the trust first (cycle 2) before any further value could be realised (Bogenrieder and Noteboom, 2004;

Dubé *et al.*, 2005; Hara and Schwen, 2006; Ridings *et al.*, 2002). This enabled her to value her involvement and engage in the VCoP (cycle 2), seen by the spread of orange arrows across the cycles. For Betty, this also meant having met face-to-face first, rather than starting in a virtual environment (Ridings *et al.*, 2002). She also reported that the programme and community made her outlook broader (cycle 5). It made her think a lot more about the organisational culture, the environment in which she operated in and the future of the organisation and what that meant for her and her current and future leadership practice. For example, artificial intelligence, millennia workforce: "the type of leader you can possibly be in the future and the type of leaders we are going to need in the future" (cycle 5). She described how she was very interested in these types of issues particularly around what millennials were going to expect from a cultural and leadership perspective. This new perspective encouraged her to critical reflect on these issues as she viewed them as real challenges for senior leaders to figure out in the future (Kolb, 1984; Mezirow, 1991; Schön, 1987). The development and reflection through insights from the community enabled Betty to re-frame the way she had initially thought about her leadership and the impact on the organisation in the future (cycle 5). This reflection is represented by the yellow arrows.

In the applied value, Betty received but provided more emotional and practical support to others in the group, such as providing constructive feedback to people, and being a sounding board and "positive supportive". She felt her VCoP provided a supportive, safe space to support each other and ask questions and where "judgement is suspended". In this way, the VCoP served as a zone of proximal development as outlined by Vygotsky's (1978) social development theory and provided scaffolding to enable more senior leaders such as Betty to provide guidance to others. Betty also explained that the people she really trusted and valued input from, were those whom she had deeper relationships with (cycle 1), built up through intense experiences and challenging environments. She felt more comfortable in a smaller sub-cluster of leaders where it was easier to build trust. This reflects what some leaders suggested about the evolution and age span of communities (Dubé *et al.*, 2005), where organically grown communities, or ones that had been around longer, had participants who valued the relationships made in the community.

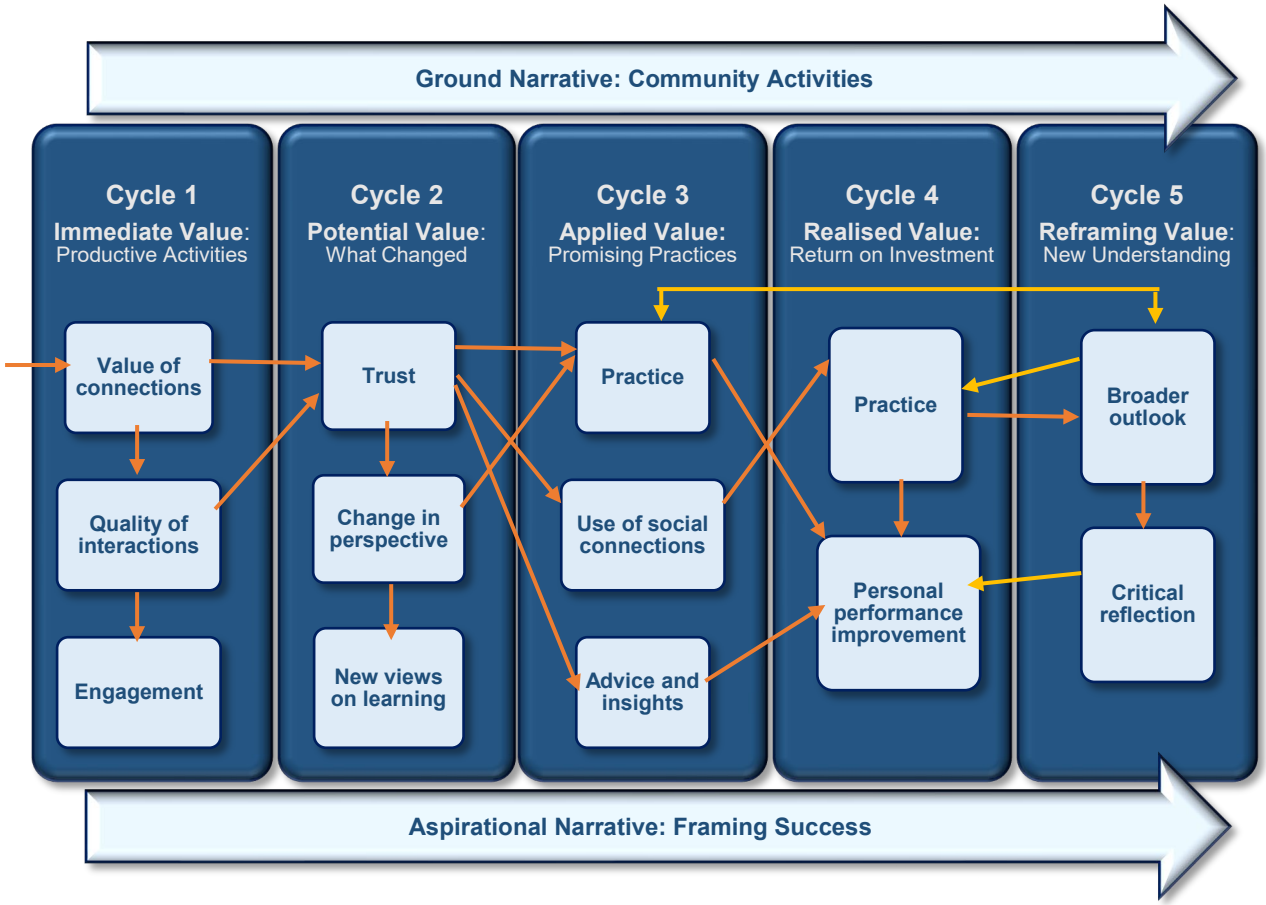


Figure 4.9: Betty's story

The three stories describe what each leader valued from their VCoP. As an emerging leader, Olivia's experiences focused on the potential value (cycle 2) of her learning. What changed for her was gaining confidence in her leadership practice and access to resources to inform her practice. At the mid-leader level, Paul's story focused on applied value and promising practices (cycle 3). The realised value arose from the collaborative relationships between stakeholders and using the resources to share and co-construct knowledge to improve their working practices, which gave Paul credibility and confidence. It can be argued that Paul is an influential leader as they are often highly connected in the community and frequently occupy brokering positions (Burt, 1992; Huffaker, 2010; Mehra *et al.*, 2006). Betty's story, similar to Olivia's account, showed how learning and developing through trust and quality engagement and conversations was more important than the process. Her experience supported her individual and the organisation's performance. The value for her occurred when she could relate her learning to the organisational issues and in particular, the future of the organisation (Hernez-Broome and Hughes, 2004).

All the leaders described the importance and impact of a broader outlook, or reframing value. For Olivia, as an emerging leader, this was reflected back on her own immediate practice and confidence. For Paul, as a mid-level leader, the broader outlook gave him the confidence to have more mature conversations with senior stakeholders, and therefore, think and act at a different level. For Betty, she focused on the wider organisation and how her practice could influence the future context.

4.4 Chapter Summary

This chapter presented the main findings of this study relating to the value leaders attributed to participating in virtual leadership communities of practice, how they engaged in the VCoPs to develop their leadership practice, the influences that shaped the value leaders found and how learning within the VCoP could be applied to their leadership practice. The leaders reported using different types of VCoPs and changing them to suit the growth of the community. The majority of the leaders found immediate value with the interactions and immediate connections within their VCoP, especially around the domain of conversations around leadership and activities that supported their work. However, there were differences in what the leaders found value with. Some needed quality interactions and trust in their peers before engaging, for others they were more interested in the future value of the activities and interactions, especially ones that were more influential to their own leadership development practice. More leaders started to report benefitting from the 'potential value' of virtual leadership communities than from the 'immediate value'.

The findings highlighted that compared to emerging and mid-level leaders, more senior leaders recognised the need for reframing their value. However, it was evident that many of the emerging and mid-level leaders had also changed their understanding and definition of what matters to them in leadership practice. These themes are discussed further in chapter five, along with the research questions.

Chapter 5. Discussion

Applying narrative inquiry by examining value creation stories through the lens of Wenger *et al*'s (2011) value creation framework demonstrates how emerging, mid-level and senior leaders, with varying perspectives and levels of expertise, can co-construct new forms of learning and understanding in ways that are valuable to their leadership practice. This section discusses the findings and analysis in relation to the research questions: exploring a leader's value in participating in a virtual leadership community of practice, understanding what influences the value the leaders find in the community and how learning is applied to their leadership practice.

5.1 How do leaders engage and learn in virtual leadership communities?

Given that the emphasis in social learning theory is on the flow of value across cycles and Wenger-Traynor *et al.* (2017) argue that 'it is these loops between learning interactions, insights, practice, results and back that we call social learning' (Wenger-Trayner *et al.* 2017, 3), then it can be surmised that informal learning took place surrounding the leaders through conversations, social interactions and practices (Boud and Garrick, 1999; Eraut, 2004; Le Clus, 2011; Marsick and Watkins, 1999). However, learning mainly occurred if the right conditions, or facilitating conditions (Venkatesh *et al.*, 2003), enabled the appropriate VCoP environment that each leader valued. These are discussed further.

It was evident from the data that the leaders needed meaningful interaction to occur in order for them to find value in their leadership community and build trust. Social constructivist theories, as proposed by Vygotsky (1978), imply the need for meaningful interaction between people for real development to occur. This was very clear with leaders wanting to engage deeply and build trust with other community members before opening up. Some of the leaders held more of the pure cognitivist view that knowledge is an absolute value and that value derived from just their interactions and resources (Harasim, 2017). However, others displayed more of a constructivist view and the value of the knowledge was constructed from the leader's various experiences, such as the community, the overall leadership

programme they had engaged in and drawing on other leadership and learning experiences (Dewey, 1929; Swan, 2005; Vygotsky, 1978). All the leaders interviewed shared the same andragogical learning characteristics of wanting to apply knowledge gained in order to improve their personal performance and used learning experiences to inform their leadership practice (Knowles, 1970; Mezirow, 1991). They shared stories that demonstrated changes in their individual mental models and also talked about their transformation through the interactions in the communities. This included sharing how they had used their learning to apply to challenges, their teams, stakeholders and skills needed for their working and leadership practices (Billet, 2002; Hernez-Broome and Hughes, 2004; Lave and Wenger, 1991; Marsick and Watkins, 1999; McCauley and Van Velsor, 2010). This implies that the leaders created meaning from their experiences at the individual and social level (Lave and Wenger, 1991; Le Clus, 2011).

Both quantitative and qualitative data highlighted that the leaders mainly preferred face-to- face learning over other forms of learning, which raises questions around the value of VCoPs if the leaders preferred the more traditional mode. Indeed, studies reveal that participation in virtual environments is reinforced by face-to-face contact (Hildreth *et al.*, 2000; Matzat, 2010, 2013) and encourages more reliable support among professionals. The data also supports Hildreth *et al*'s (2000) assertion that face-to-face time results in stronger personal relationships which are essential to carry the group through extended periods of virtual communication (Hildreth *et al.*, 2000). This supports the experiences of the leaders interviewed who all said that their learning and social connections with other participants was enhanced due to the initial face-to-face contact. It also helped change their perspectives and assumptions as Zoe shared:

> The space to interact with other people face-to-face was really important. Just realising afterwards actually how diverse these people were and how they all had different personalities.

However, the leaders interviewed did all demonstrate more self-determined, or informal learning principles (Eraut, 2004; Knowles, 1968; Marsick and Watkins, 1999; Piaget, 1970) with them taking responsibility for their own learning and

drawing upon their experiences to improve their leadership practices (Bonk *et al.*, 2006; Moore, 2020). This would support Vygotsky's ZPD theory (1978), whereby the leaders had achieved so much with guidance in their leadership development programmes. But the data shows that the leaders self-reported interactions with their peers was an effective way to further develop their leadership practice and they were embedding their learning in the flow of work (Towards Maturity, 2018). It is also clear that online learning allowed the leaders spread out across different countries to engage in meaningful learning and therefore allowed learning across the organisation (Graham, 2006; Singh, 2003; Wenger and Snyder, 2000). The leaders did not report that their community resisted the move from face-to-face meetings to a virtual online format, despite most preferring the face-to-face learning. The communities already had purpose, legitimacy and some defined norms that would help them in the virtual environment (Cramton, 2001). This could lead to the conclusion that VCOPs do have an important place in blended leadership programmes.

This research was conducted prior to the COVID-19 pandemic in 2019 when all learning then either stopped or became virtual. It would be an interesting study to re-interview the leaders now and see how in the pandemic and post-pandemic environment whether as strong connections and relationships are made between participants purely interacting in online, virtual environments and whether the relationships endure. This is discussed further in the section on Implications.

However, this study did not just examine the leader's cognitive meaning-making reflection process, but also the context in which the learning took place. Situated cognition argues that learning is rooted in the situation in which the learner participates which is why the research looked at the virtual platforms the leaders used during the learning process (Merriam, *et al.*, 2012) along with identifying what influences the value that the leaders experienced and the effect on their leadership practices.

5.2 What influences the value leaders find in virtual leadership communities?

Wenger *et al.* (2002) acknowledged that CoPs can take several forms whose combinations produce different types of CoPs. It was evident from the leaders that their VCoPs were very different from each other. Although all these VCoPs were created in facilitating environments and were initially started with carefully chosen topics that were relevant to the leaders' leadership practices, their other structuring characteristics and influences differed, which raised various challenges for comparing them. The virtual communities shared some common features but the various influences and characteristics that made them unique are discussed below.

Life Span and Age

The leadership communities the leaders discussed were established as part of the organisational strategy for the leadership development programmes to encourage information sharing and networking, so can be called 'practice-based networks' (Pan and Leidner, 2003). These were relatively young communities, of one to two years in duration. Olivia and Paul experienced spontaneously emerging CoPs and others were still members of 'maturing' or 'stewardship' CoPs (McDermott, 2000; Wenger *et al.*, 2002). Although the leadership programme had finished, some leaders joined a smaller sub-set of their original VCoP to sustain their learning. Referring to the life stages of the CoP, it could be argued that these latter VCoPs had transformed or renewed into newer VCoPs and supports Lesser and Everest's (2001) assertion that an existing network of individuals may be the instigator of a new CoP. Based on Roger's (2002) innovation diffusion theory, these specific leaders could also be called 'innovators' as they are more open to new experiences by creating a smaller VCoP. The leaders already knew each other and the VCoP was perceived as still being advantageous to that subcluster of leaders.

Technology and Technological Expertise

CoPs differ from VCoPs because of the technological component and the leaders experienced different environments because of the media through which they interacted (Jasper *et al.*, 2005; Nistor and Fischer, 2012; Van Raaij and Schepers, 2008). Wenger and Snyder (2000) stated that the success of CoPs was primarily

based on social, cultural and organisational issues and secondly, with technological features. The leaders used different platforms as their virtual collaborative space, which made it more challenging to compare the different influences and characteristics, which would support criticisms of UTAUT theory and the importance of technology on behaviour (Bettoni and Eggs, 2010; Nistor and Fischer, 2012; Van Raaij and Schepers, 2008). On the other hand, the leader's intentions towards the technology would change to suit their contextual needs and to meet performance expectancy, effort expectancy, social influence or facilitating conditions (Venkatesh *et al.*, 2003). Most of the platforms used for the leadership communities, such as What's App and Facebook, were outside of the official organisational platforms, although Microsoft Teams was popular for internal work purposes. These types of platforms allowed the leaders to leverage each other's knowledge without the constraints of time and space (McDermott, 2001; Krogh, 2002). The different platforms also allowed for more contextualised, situated learning to take place (Jackson *et al.*, 2003; Marsick and Watkins, 1991; Merriam *et al.*, 2012) and to distinguish between more formal learning and social interactions.

All the leaders were in geographically dispersed VCoPs so had to communicate mostly through technology. The effort expectancy and facilitating conditions (Nov and Ye, 2004; Van Raaij and Schepers, 2008) of mobile devices increased access to learning while travelling which was important for some leaders Yueh-Min *et al.*, 2014). Even Betty, whose community was based in the same location noted that her colleagues still participated through a virtual environment. Therefore, the leaders had to use technology to achieve any of their desired outcomes, the main premise of UTAUT theory (Venkatesh *et al.*, 2003).

However, there is a difference between having to use technology and how the leaders may use and engage with the technology in their VCoPs. An individuals' acceptance and adoption of information technology is a complex and dynamic process. The data shows that although all the leaders exploited the technology to join and participate in their VCoPs, not many explored the technology to do new or innovative things with the technology (Rogers, 2002; Venkatesh *et al.*, 2003). Two of the interviewees shared that they were 'dinosaurs' when it came to technological

aptitude which hindered their engagement. In the quantitative data, leaders also reported not being interested in using technology which prevented them from participating in a VCoP. This implies that for these leaders, their perception of using the technology had an impact on their perceived value of participating in the community, which would support Jarvanpaa and Staples' (2001) research on the barriers created by technology.

This also raises questions around at what point does technology become a barrier rather than a support? One leader from Africa stated that internet band-width impacted their participation in their community at times, which would indicate that the technology was a barrier for them, albeit out of their control and not related to intent. However, the lack of technology can also limit opportunities to build and improve leadership capabilities and progress with an organisation (Towards Maturity, 2018). Therefore, technology is a necessity to supporting an individual's performance and opportunities in global organisations (Graham, 2006; Hernez-Broome and Hughes, 2004; Singh, 2003). Furthermore, technology also allowed the leaders to have more control over their own learning and how they engaged with it, as was demonstrated in the way that the leaders used, or changed platforms (Moore, 2020), or developed their own sub-clusters (Lesser and Everest, 2001). To ensure success with technology, it may need further training for individuals or development of the right facilitating conditions (Bettoni and Eggs, 2010; Venkatesh *et al.*, 2003). This would also support Roger's (2002) and UTAUT theories by helping the leaders understand the advantages of the technology, especially around the four factors of performance expectancy, effort expectancy, social influence and facilitating conditions (Venkatesh *et al.*, 2003). It would be worth exploring further the usage patterns of how leaders use technology in VCoPs, their outcomes, and whether other contextual factors may impact the way technology is perceived and adopted in VCoPs, especially in the post-COVID virtual environment. Contrary to Wenger and Snyder's (2000) statement that technology is a secondary feature, the data implies that technology does play more of a role in the success and development of a VCoP.

Trust

Trust was an important theme throughout this research and was found to be the strongest predictor of knowledge-sharing behaviour. The data strongly suggested that the leadership communities relied on the trust of its members to be successful. This supports Hara and Schwen's (2006) and Ridings *et al*'s, (2002) assertions that a community will only work if a certain level of trust exists between its members. The leaders valued their interactions and outputs more if they trusted each other and therefore, were more likely to share knowledge and information with others. Building trust within an organisation can be difficult, especially virtually, but a few practices that helped to cultivate a trusting environment could be identified. For all the leaders, trust was developed more at the personal level, through meeting face-to-face, repeated interactions and through developing social interactions (Ring and Ven, 1992; Zaheer *et al*., 1998). This would support prior research suggesting that providing members of a VCoP with opportunities to meet and work together in face-to-face settings can help to cultivate trust (Ardichvili, 2008; Wasko and Faraj, 2005). While opportunities for members to engage in face-to-face settings are not a necessary condition for success, in this case, the leaders' stories suggest that these opportunities to meet face-to-face enabled them to form bonds and build trusting relationships that in turn facilitated learning together virtually. The leaders would not accept vulnerability until they trusted their peers (Klos and Nooteboom, 2001). Then the VCoP became a safe environment where they felt they could speak openly and honestly (Dubé *et al*., 2005). This experience shows that trust building can take a long time, especially in VCoPs (McEvily *et al*., 2003).

The willingness to risk vulnerability based on the confidence that their peers are benevolent and competent was important (Hoy and Tschannen-Moran, 1999). The leaders noted that the closed community of like-minded, leaders increased their confidence that what was said in the community would stay there. Trust in the integrity of other leaders and the value they provided, increased their willingness to take calculated risks for the benefit of sharing and learning. This would support Rogers (2002) innovation diffusion theory and the degree of openness of the leaders. The depth and density of a network in developing trust was highlighted clearly in Olivia and Betty's stories. It is through an intense connectedness and shared experiences where people have seen each other at their most vulnerable and

at their best, which builds a deeper sense of trust (Paul and McDaniel, 2004). This implies that smaller, dense networks with increased interactions can contribute significantly to the development of trust (Hoppe and Reinelt, 2010; Jarvenpaa and Leidner, 1999). The smaller, cluster communities, described by other leaders, that emerged and organically developed from the original VCoPs would also support this perspective. Further research into smaller networks using social network analysis would help understand how these clusters build trust. Wenger *et al.* (2002) stated that very large VCoPs are usually structured into subgroups to encourage active participation, but the data in this study showed that smaller clusters formed even within smaller communities.

Cultural heterogeneity made participating and sharing difficult which impacted the development of relations and trust (Pan and Leidner, 2003). Chloe's experience of sub-group clusters created by geographical proximity made it difficult for her to develop common interests and share a common understanding, although she did state she learned more about Western practices generally. For Chloe, homophily theory (Borgatti and Foster, 2003) was a comfort but also prevented wider diversity and information sharing and for other leaders to learn about her culture. This affected her relations and ties to others, but she realised she could do something about it and become a 'bridge' (Burt, 1992: Hoppe and Reinelt, 2010). Other leaders interviewed commented that they found it difficult to bond and develop trust with other leaders without some strong cohesive factor, such as physical proximity, similarity of beliefs, attitudes or shared experiences. Therefore, these leaders' communities could be described as homophilous with the leaders seeking and preferring shared activities, goals or interests (Borgatti and Foster, 2003; McPherson and Smith-Lovin, 1987).

Whereas, leaders such as Amber found value in wanting to be challenged and have a robust debate with others of a different mindset (Mezirow, 1991). As she said, being a leader yourself, doesn't mean you will connect with other leaders. On the one hand, for other leaders, it was not enough just to be challenged or be able to challenge others, they needed trust as well (Mezirow, 1991). Cultural heterogeneity allows for a safe space with peers where you can build trust but alternatively, combining leaders from different countries, cultures and departments allows for

greater diversity, understanding and learning that can help overcome barriers to developing trust (Pan and Leidner, 2003). There was a high dispersion for all the interviewees, except for one who was based in the United Kingdom. All the CoPs had members in different time zones, from different cultures and a mix of UK-based and country-based staff. Wenger *et al.*, (2002), stated that physical distance encourages psychological distance and therefore takes more effort to keep the community alive, which was one of the frustrations shared. The leaders interviewed belonged to a CoP group of peers of a similar grade to themselves. One suggestion could be to combine a community of senior and more junior leaders. The relations between 'newcomers' and 'old timers' is important for sharing and evolving practices: where 'masters' and 'apprentices' are redefined as co-learners, the skills changing as they are passed on (Lave and Wenger 1991). Given the limited research conducted in this area, the relationship between trust and technology usage intentions in the context of VCoPs is unclear and may be worthy of further exploration.

Engagement and Motivation

The leaders all chose to join their respective leadership programmes but engaged in their communities to varying levels, impacting the sense of purpose, engagement and participation within the VCoPs. The leaders applied to join their programmes and were eager to join a group of like-minded people (Chiu *et al.*, 2006; McPherson and Smith-Lovin, 1987). However, participation on its own does not account for how new learning comes about or is produced (Edwards, 2005). All the leaders agreed that they found valuable information within their VCoP (Wasko and Faraj, 2000) and indicated that they valued the closed aspect of the community and the ability to speak openly "behind closed doors." These were not large leadership communities, varying between twelve to twenty-two members, but it was evident from the data that it was still challenging to meet the needs of all members (Mitchell, 2002). However, from the stories, it was clear that small communities can also include people with contingent, diverse, and distributed interests, as much as larger communities.

The VCoPs were also different in terms of boundary crossing and member diversity which can impact the level of cohesiveness within a community (Borgatti and

Foster, 2003). All the leaders worked for the same organisation, the UK Government, but were from different government departments, therefore the VCoPs crossed boundaries across work groups, organisational units and different government departments (Jasperson *et al.*, 2005). Boundary crossings were low in some respects as these were closed communities for leaders of the same leadership programme and the leaders had similar working practices and conditions which facilitated communication and exchanges. This would assume greater control over managing and identifying common interests and therefore, enable greater trust development and sharing of knowledge. However, building trust was identified as a challenge by most of the leaders. By Wenger *et al*'s (2002) definition, it could be argued that the boundary crossings were high, as participants were from different government departments, countries and cultures which may have made it more difficult to develop trust and share knowledge. This would also support criticism of UTAUT theory whereby it is important to understand the formal organisational forms and the informal social entities (Jasperson *et al.*, 2005; Nistor and Fischer, 2012). The real-life experience of each leader in the communities was also diverse, making it more difficult to achieve a common vision and to build a high level of cohesiveness and engagement within the communities. However, despite this diversity, the leaders were able to develop some close relationships and build strong ties.

However, the leaders found that fostering and sustaining other participants' interest was challenging and frustrating, as commented on by Schwen and Hara (2003). Management of these 'peripheral members' (McDermott and O'Dell, 2001) was limited and the leaders did not report trying to draw them in either. These communities were also not facilitated to motivate engagement and the leaders did not have clearly assigned roles in their VCoPs although they did comment that some peers were more active than others. There may, then, be an indication that that the leaders who are less engaged in the VCoP are also less mindful and intentional about their leadership practice. The question of whether engagement encourages mindful, thoughtful practice might be one worth future exploration, as is the matter of whether this may be tied to motivation to engage within the VCoP. Wenger (1998) often blurs the distinction between participation and engagement, and his text proves challenging in this regard. This lack of clarity is partly due to

Wenger's (1998) tendency to use the words in overlapping ways, pointing to a suggestion for refining the framework.

The data does agree with Burke *et al.*'s (2010) assertion that active users of social networking sites gain greater social capital. The leaders interviewed found greater value as more active members of their communities where they were actually participating in the construction of knowledge and offering value to the community. This study did not examine whether identified peripheral members found value in their lurking activity or not. From a theoretical perspective, structured activities or conversations in virtual communities can enable sustained mutual engagement around a practice, allowing members to explore good practice, articulate perspectives, accumulate knowledge and create a shared context for ongoing exchanges (Wenger *et al.*, 2009). Not all of the leaders participated in communities with structured activities although all the leaders participated in learning sets which provided a structured context for learning. Betty's experience was of a more-structured community that reflected 'legitimacy problems' (Schwen and Hara, 2003) that made her feel that she was responding for the sake of it, and restricted her engagement as people felt vulnerable sharing freely and felt they had to put out 'rehearsed responses'. Her experience contradicts the aforementioned assertion by Wenger *et al.* (2011), and made it less valuable for her. It is evident that in communities, where processes, engagement and practices are constantly negotiated, it is more difficult for a VCoP to reach an effective level of trust and cohesiveness and fully mature. In an effort to build motivation to participate, the motivation building effort must continue to show for example, how leaders may individually benefit from their participation in the community.

5.3 Applying learning to the practice of leadership development

In virtual environments, leadership is an especially interesting phenomenon because of the distributed nature of the context in which leadership must be exercised (Avolio *et al.*, 2000), even more so in today's post-pandemic environment. The value creation stories from the leaders suggest that opportunities for leadership within the community were highly valued by members, such as leading learning sets, sharing experiences and advising and supporting colleagues. The acquired social capital did lead to new opportunities for

leaders in their personal leadership practices with new social connections, improved team and stakeholder relationships and broader perspectives and outlooks. The leaders did provide members in their communities with trusted and relevant information, advice and support when needed (Hoppe and Reinelt, 2010). Paul commented that a cluster of his VCoP, who were located in a similar region, took the opportunity to meet face-to-face and sustain their leadership learning past the programme structure, to continue their own self-determined learning (Knowles, 1970; Mezirow, 1991). Taking on leadership roles in sustaining their learning encouraged this group of leaders to assume ownership of this particular community.

The data supports research that leadership development is a lifelong, ongoing process (McCauley and Van Velsor, 2010; Van Velsor *et al.*, 2004;). Virtual communities often struggle with engaging in authentic practice due to the disconnect between the community and the members' individual practice. However, it was in the narratives that the leaders were able reflect or revise the value of their virtual leadership communities. Reflection is important to help learners make the connections between their learning and workplace performance, so that the learning is not valued as a standalone, discreet element (Kolb, 1984; Mezirow, 1991; Wenger, 1998). All the leaders experienced learning that could be applied to their leadership practice or to other current or future contexts and environments. Thoughtfully articulating their position, while reflecting on their learning, increased their knowledge and confidence, broadened their perspectives and deepened their leadership practices. Amber clearly demonstrated how she progressively enriched her understanding of leadership by reflecting deeply on previously acquired knowledge. Drawing on Piaget's developmental model of learning (1970), Dewey's (1938) work on building on a learners' existing knowledge and experiential or reflective learning (Kolb, 1984; Schön, 1987), she viewed learning as not just an accumulation of information but as an ongoing and personal construction on the value of the learning to her leadership practice. Furthermore, the learning needed to be relevant and applicable to her work context to have any personal value. Her thinking about "what am I doing while I am doing it" is a clear example of reflection-in-action, which allowed her to practice her leadership and create new ways of thinking (Schön, 1987). Through this process of experience,

reflection and immediate practice, Amber was continually improving her work as a reflective practitioner. Such changes in practice illustrate the value creation process through applying insights and ideas to develop their leadership practices. This also embodies the nature of experiential and reflective learning (Knowles, 1970; Schön, 1987). Through the interview process itself, all the leaders engaged in reflective practice as they were describing the value of their experiences.

The data showed clearly that the leaders valued their communities for their leadership practice if they were able to transfer learning to workplace practices and practice insights (Hernez-Broome and Hughes, 2004; Lave and Wenger, 1991). Their experiences support McCauley and Hezlett's (2002) theory that the learning improves specific behaviours and mindsets. Most of the leaders discussed how their participation and sharing knowledge had changed their perspective, practice and broadened their outlooks and expertise (Chiu *et al.*, 2006; McLure-Wasko and Faraj, 2000). It was the combination of formal interventions (for example, the leadership programme and learning sets) and natural interventions in the virtual communities and the social capital (relationships, access to information, resources and opportunities) that enabled the leaders to see changes in their leadership practice. Allowing time for reflection and the opportunity to experiment with new ideas, resources and insights in their work contexts allowed the leaders to extend their learning experiences beyond the classroom walls where value creation takes place through social learning (Jackson *et al.*, 2003; Rogers, 2002). This would support the blended leadership programme approach and value of VCoPs. Thus, best practice in leadership development does not equate to a theory-based, finite course, but rather it involves implementing an entire learning system that guides the learner on their own personal learning journey made up of different experiences (Leskiw and Singh, 2007; Van Velsor *et al.*, 2004). These experiences, planned over time, are all targeted at improving a specific behaviour, practice or a changing a mindset.

Growing as a leader meant reframing how they viewed themselves as leaders and realising that leadership is not just about self-growth, but also about how they lead and interact with others. Although, it may be difficult to attribute performance improvement back to the interactions and activities specifically, all the leaders reported increased confidence in their personal performance, whether an

emerging, mid-level or senior leader. However, senior leaders reframed their success at the organisational level, compared to emerging leaders, who focused more on success at the individual level, and mid- leaders who valued success at the collective level, for their teams and stakeholders. Yet, it was evident that many of the emerging and mid-level leaders had changed their understanding and definition of what matters to them in leadership practice (Chiu *et al.*, 2006; McLure-Wasko and Faraj, 2005; van Winkeln and Ramesll, 2003). It could be assumed that these emerging and mid-level leaders had not really valued their leadership capabilities and worth, which could be linked to them finding increased confidence in their leadership practice. The leaders felt that the sharing of knowledge gave them more confidence to perform better, try different ideas or approaches, which then afforded them credibility, recognition, respect or impacted their reputation (Ardichvili *et al.*, 2003; Butler *et al.*, 2002; McLure-Wasko and Faraj, 2005). Most of the leaders reported gaining some emotional and intellectual benefit as well (McLure-Wasko and Faraj, 2005).

Were the leaders participating in VCoPs or virtual networks?

There was evidence of the leaders sharing a common goal, or domain (Wenger *et al.*, 2002), in wanting to improve their leadership practice and promotional prospects. However, the leaders did express frustration that not all members of their communities shared their same interests or goals. Some described their community as more of a network of acquaintances.

The idea of mutual engagement amongst members of a community of practice involves the development of relationships between members of the community (Wenger, 1998). Thus, it is important to examine whether the leaders shared any evidence of relationships developing amongst members, which might indicate that a community of practice has formed. The leaders did discuss their interpersonal relationships, or the 'community' (Wenger *et al.*, 2002), that developed. They described their interactions as frequent, trying to help each other, exchanging advice and sharing resources, which implies a community existed. For others, the interactions were rich, stable and long-lasting, although these tended to occur either between smaller groups, or sub-clusters. The richness and density of the interactions were a feature most of the leaders valued, allowing them to develop

strong and trusting relationships. The degree to which a community's members are connected differentiates a community of practice from other learning communities (Haythornthwaite and Wellman, 1998; Wenger, 2008). These smaller clusters that formed, based on dense interactions and trust, demonstrate the characteristics of a small community of practice. These relationships that developed in the smaller clusters continued over a sustained period of time and past the end of the initial leadership programme.

Although their communities built a shared understanding, the leaders did not comment on the value of the collective voice of their leadership community, or describe collective intangible assets, or reputational capital. This could be because many of the communities were relatively new, or there was a lack of trust or engagement (McEvily *et al.*, 2003). The leaders described examples of change at the individual level. For example, Paul demonstrated co-construction through collaborative learning and all the leaders interviewed shared examples of learning through reflection and analysis. It was not as evident from the data that the leaders used their communities to address challenges collectively, although they did share knowledge. These communities may not have been tangible communities in themselves, but the community and value came through a sense or feeling as perceived by the leaders. A successful outcome for the leaders needed to be linked to the perceived value of the development of their leadership practice and personal performance improvement (McLure-Wasko and Faraj, 2005). Collaboration with trusted colleagues in their group was a means to support this, therefore, the value came from the smaller communities, or subsets, of collective learning.

Overall, it can be argued that the leaders interviewed acted more as a network of leaders in their original VCoP format. There was no difference in the data, quantitative or qualitative, or between the reported actions of the different levels of leaders (emerging, mid-level or senior). They had connections with others in their community that they used as a resource to share knowledge, resources, challenges and make connections. These interactions helped improve their confidence and individual leadership practices. The VCoPs could, therefore, be deemed successful as information and knowledge was shared and all the leaders commented on learning and striving to become better practitioners in the domain

of leadership. The VCoPs created value for their members and ultimately their teams, departments and organisations, through developing and sharing new knowledge and capabilities. However, there was a lack of motivation and engagement to develop and mature as a collective community. Nobody really used their VCoP to improve the community itself or to determine the value of the larger VCoP they originally joined. The research further demonstrated that it was the sub-clusters that formed within the VCoPs where there was evidence of communities of practice. These need to evolve over time to mature further and create more of a trusting environment.

5.4 The value of the value creation conceptual framework

Value creation was explored in the context of narratives from the perspective of the leaders and was defined as personal learning enabled through community involvement, knowledge sharing and networking (Wenger *et al.*, 2011). The narratives shared helped provide accounts of what was happening, activities, interactions, connections made and experiences. The value creation framework recognises that value-creation is not linear but less predictably moves backwards and forwards between 'ground' and 'aspirational' narratives. The ground narrative, expressed by the leaders, tells of a community of leaders coming together to learn. The aspirational narrative is the leaders' aim to improve their leadership practice. (McCauley and Hezlett, 2002), which was the reported case for the leader's individual practice, rather than improving the collective community. Learning was not necessarily a linear process for all the leaders, evidenced by the value creation stories or that one cycle led to another or that a leader only felt successful if reaching reframed value (cycle 5). However, it was clear that trust was a linear indicator, as without a strong level of trust, the leaders did not attribute as much value in their community.

The leaders interviewed valued different aspects of the communities and it is therefore, useful to examine the main indicators that served to facilitate the value creation in more detail.

Cycle 1: Immediate value from learning in the VCoP

The experiences and face-to-face activities all had immediate value in themselves, especially sharing leadership resources and experiences. The level of engagement was an important indicator that the leaders valued which was tied to the quality of the interactions. Without engagement, the community would not develop or mature. Wenger *et al.*, (2011) refer to 'level of engagement' as an indicator in cycle 1 with 'intensity of discussions' and 'challenges of assumptions' as potential sources of data. Based on the data, I would argue that the indicators for intensity of the discussions and the challenge of assumptions should move to cycle 4 as the stories told indicate that it takes courage and vulnerability to be self-aware enough to engage in deeper discussions and challenge each other (Mezirow, 1991). The leaders shared that they needed trust to have a greater level of engagement, which takes time to build.

Cycle 2: Potential value of the learning for their leadership practice

The data discussed how ideas, insights, resources and best practices were shared, there was additional reading around leadership and defining it and developing more personal connections in the community. Value was taken from these elements or was added to them as a result of the activities, although, as is the nature of knowledge capital, much was short-lived or transient (Wenger *et al.*, 2011). Therefore, having access to tangible resources is not the end goal, the resources need to provide further value and have substance that can be leveraged immediately or later.

However, level of trust, change in perspective and confidence were the emerging indicators and themes in cycle 2. It underlines the need for ensuring the community is sustainable or valued relationships are sustained. Confidence is a level 2 indicator and is created here but it could also be moved to cycle 4 as 'realised value', or even cycle 5, where it is confidence that enables the leaders to reframe purpose at a higher level. However, if trust is not developed by this stage, it seems more of a challenge to develop deeper and sustaining relationships which could impact the leader's ability to achieve 'realised or reframed value' from their

community. The leaders are starting to transfer experiences to other contexts or understand the relevance, or potential value, of the learning. The quantitative data in figure 4.4 supports this finding, as more leaders reported benefitting from the 'potential value' of virtual leadership communities than from the 'immediate value'.

Cycle 3: Applying the learning

The leaders reported many practices developing through trying new insights, ideas and learning. The leaders' skills develop, and knowledge capital grows as the leaders apply the practices, leverage connections made and see the effect, and reflect on their interactions (Knowles, 1970; Lave and Wenger, 1991; Mezirow, 1991). The leaders shared stories of starting to see a change in practice and the quantitative and qualitative data posits this cycle is where the leaders saw most value. The leaders reported applying theory as practical application and having a better understanding of the theories or insights and felt more confidence to experiment with their leadership practice. They implemented ideas into their daily routines by referencing articles, authors and resources and shared learning wider with others or encouraged others to develop by modelling the required behaviours. They questioned, reviewed their own actions and engaged in deeper reflection (Knowles, 1970; Kolb, 1984; Schön, 1987).

Cycle 4: Impact of learning on personal performance and others

The leaders were applying their skills and perspectives. They reported their confidence growing based on their reflections and personal performance improvement, which delivered value to the leader's teams and stakeholders (Chiu *et al.*, 2006; McLure-Wasko and Faraj, 2005). The leaders reported having a broader outlook and were more involved in other initiatives. They described deeper connections and discussions with teams and stakeholders who felt understood and empowered. Developing and providing transformative learning experiences to others supported this, which also helped increase their influencing skills and credibility. The leaders did not report any institutional changes or new frameworks, which may be due to the newness of the communities and time duration (Dubé *et al.*, 2005).

Cycle 5: Reframing my leadership practice

The value shared by the leaders reaffirms the purpose of the virtual leadership communities and leadership programmes. The quantitative data highlighted the largest discrepancy between the different levels of leaders (emerging, mid-level and senior) in this cycle. It could be assumed that these emerging and mid-level leaders had not really valued their leadership capabilities and worth, which could be linked to them finding increased confidence in their leadership practice. With further probing, the leaders described having deeper insight into their actions and reasoning from a leadership perspective. This insight reinforced, or reminded them of the leadership behaviours they felt they should be modelling and encouraged them to think more about the 'why' and 'how' of what they are doing as leaders (Heifetz, 1994). The change in perspective allowed them to reframe what leadership meant to them and to their teams and stakeholders (Wenger *et al.*, 2011). Increased confidence permitted them to feel more comfortable when engaging with senior stakeholders and thus they felt they developed more mature relationships with internal and external stakeholders. These new insights, values and learning became embedded in their everyday leadership practices (Gray, 2004; Vavasseur and MacGregor, 2008).

Figure 4.10 shows the value-creation framework from Wenger *et al.* (2011) which has been adapted to show the indicator outcomes that were valued most by the leaders in their virtual leadership communities and described in the above section. The leaders invested their time in their leadership programmes to enhance certain aspects of their practice or professional development. Given that the aim of the value creation framework is to understand social learning and the interrelationship between learning interactions, insights and actions by focusing on cycles of value, there will inevitably be a cyclical nature to the findings when investigating social learning in communities (Wenger *et al.*, 2011). The data demonstrated that the value creation stories were a promising method for capturing the processes as they provided more detailed accounts of the learning and value creation, compared to the quantitative data (Clandinin and Connelly (2000). They gave an indication of how the leaders co-constructed new forms of meaning and understanding in ways that were individually valuable, and applied that knowledge in their professional practice.

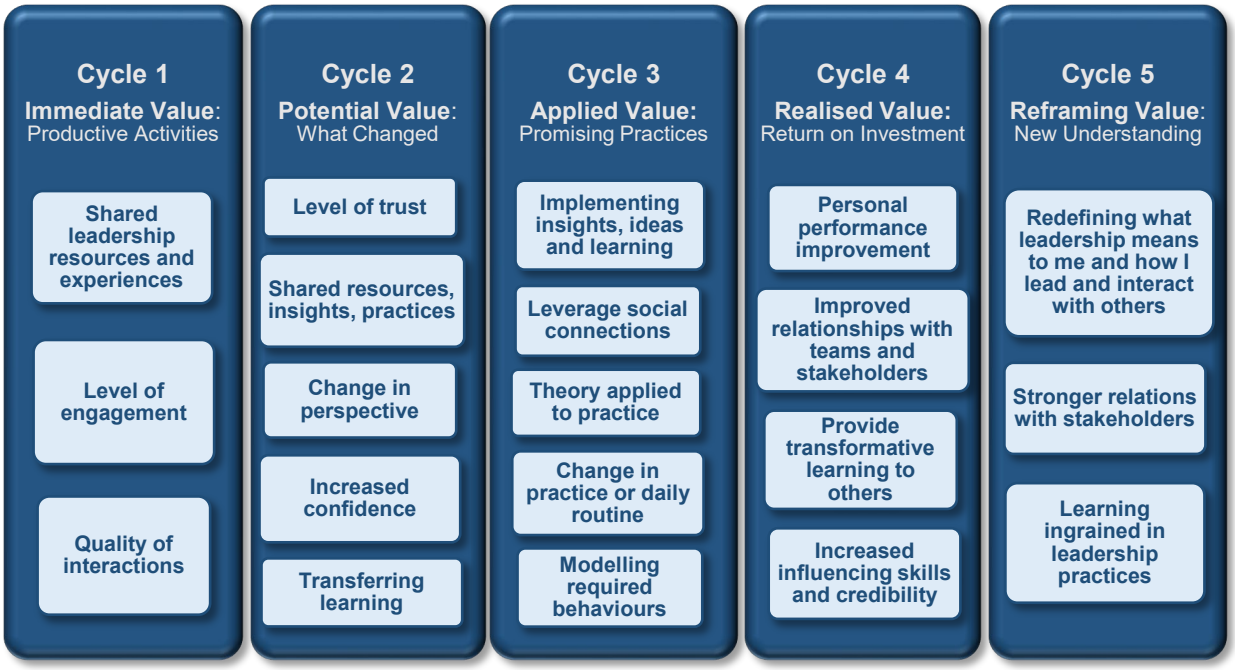


Figure 4.10: Value-creation framework showing indicators that were valued the most by the leaders

The stories also provided insights into the leaders understanding and perceptions around leadership learning, increased knowledge of leadership practices, changing of individual perceptions, broadening their outlook and increased self-confidence and also when dealing with their teams and stakeholders, especially senior stakeholders. However, to make this framework even more robust, it would be useful to combine it with social network analysis to look at the interactions in more detail and bring in the elements of UTAUT theory to ensure that the technological element is integrated into the social learning aspect.

5.5 *What constitutes necessary and sufficient conditions for leadership VCoPs*

Findings demonstrated that is difficult for one VCoP to meet everyone's individual needs and expectations within that community, even for smaller groups. Identified below are some proposed conditions for successful VCoPs.

Clarifying the purpose. Having a clear focus on shared practice would help with gaining consensus and engagement. While it is important for VCoPs to evolve, having a clear purpose with objectives in the beginning can help ensure all members understand the future direction of the community (Lesser and Everest, 2001). As members will guide the direction of the VCoP over time, it is important not to over-strategise or limit the potential growth, or organic nature of the community.

Establishing a community leader. Wenger (1998) identifies a key feature of successful CoPs is a skillful and reputable coordinator. The data showed that ownership is important to engagement and sustainability of the VCoP, both at the collective and the leadership level. It may be beneficial to divide the responsibility among members to reduce the workload of any one individual. It is also an opportunity to exercise one's own leadership practice and hold the community accountable to its purpose and engagement. A leader could also help build and nurture trust within the group.

Technology management. As technology is a necessity to supporting an individual's performance and opportunities in global organisations (Graham, 2006; Hernez-Broome and Hughes, 2004; Singh, 2003), the following conditions were identified from the data collected to help limit technology becoming a barrier rather than a support to VCoPs:

a. An easy-to-use, accessible platform for all members, regardless of location.
b. The right platform for the outcome desired, rather than constrained by internal organisational technology. This could be decided collectively by the members. Having someone responsible for ensuring members have access, and confirming that the tools work as expected.

c. Help members understand the advantages of the VCoP and technology, especially around the four factors of performance expectancy, effort expectancy, social influence and facilitating conditions (Venkatesh *et al.*, 2003).

Social capital management. It is not just the structure and enabling conditions of the VCoP that matter, but also the active relationships and commitment of the members within it (Burke *et al.*, 2010). Trust, commitment and willingness to risk vulnerability are foundational in creating strong social capital in VCoPs. Organising face-to-face meetings as part of the blended approach to the VCoP may help build cohesion and trust among members. The motivation building effort could also demonstrate to members how they may individually benefit from their participation in the community, as well as at the organisational level. Benefits include increased interaction between different groups of leaders, the knowledge creation and sharing process, peer and social support, increased confidence, performance improvement, broader outlook and potential to influence organisational policy.

Smaller dense networks could be introduced to increase meaningful interaction, innovation and help build trust. It was the sub-clusters that formed within the VCoPs where there was evidence of CoPs and collective learning. These need to evolve over time to mature further and create more of a trusting environment. These could emerge organically or be encouraged, making it possible to design and implement custom actions for each of these subnetworks. A leader could help encourage 'bridges' between subclusters to enhance diversity and cohesiveness of the community (Borgatti and Foster, 2003; Burt, 1992: Hoppe and Reinelt, 2010). One example could be between a community of senior and more junior leaders where 'masters' and 'apprentices' could be co-learners.

Contextualised workplace learning. The leaders valued their communities for their leadership practice if they were able to transfer learning to workplace practices and practice insights (Hernez-Broome and Hughes, 2004; Lave and Wenger, 1991). Allowing blended opportunities in leadership programmes for leaders to experiment with new ideas, resources and insights in their work contexts that guides the learner on their own personal learning journey made up of different

experiences (Jackson *et al.*, 2003; Leskiw and Singh, 2007; Rogers, 2002; Van Velsor *et al.*, 2004).

Reflective practice. Reflection helps learners make the connections between their learning and workplace performance (Kolb, 1984; Mezirow, 1991; Wenger, 1998). The data showed that reflecting on their learning, increased their knowledge and confidence, broadened their perspectives and deepened their leadership practices.

5.6 Limitations of the study

While this study demonstrates the potential of the value creation framework to better understand the impact of participation in virtual leadership communities, it also revealed some challenges and limitations. The indicators used were taken from Wenger *et al*'s (2011) framework, and in terms of analysis, the researcher found it challenging to attribute certain accounts to the relevant indicators in the cycles and sometimes to determine which cycle a particular indicator may fall under. While the distinctions can easily be understood conceptually, teasing out these distinctions within stories occasionally proved challenging. However, the methodology enabled the identification of indicators and subsequently, themes that were important to the leaders and how dimensions of value emerged in their specific communities and leadership practice, as well as capture reflections on what was important to them (Bazeley, 2013; Reissman, 2008). The coding process could have been strengthened with the engagement of an inter-rater to ensure greater reliabililty.

There are significant challenges in understanding social learning as it is by its nature dynamic, making it difficult to systematically create, capture and share knowledge in a way that includes the voice of actors (Boud and Garrick, 1999; Eraut, 2004; Le Clus, 2011; Marsick and Watkins, 1999). Critical examination of different learning approaches in a workplace context would help us recognise whether learning within a VCoP is different to other learning approaches. Further research around the social dimension of reflection in VCoPs would help us understand Mälkki's (2011) critique that reflection is more than a rational process.

This data could then help us to formalise the reflective process when exploring VCoPs and narrative inquiry.

Narrative inquiry and value creation stories require experience, expertise, and continued practice to do well (Connelly and Clandinin, 2006). Many participants found it difficult to clearly identify and share examples without prompting to show the value creation process. The most powerful stories gave specific examples of their leadership learning and were often detailed with a clear narrative, showing causal connections between the different value creation cycles. Other stories were brief with little detail and would reflect on learning in a general way, without necessarily outlining whether specific learning interactions led to potential, applied or realised value, for example. Understanding of communities of practice, learning and practice were often interpreted in very different ways, despite the researcher's attempts to define the terms with the interviewees. The stories represented reconstructions of experiences, remembered and told at a particular point, mainly when people were looking back at their learning. Context and timing are likely to have bearing on how they were told, what was told and how they were interpreted (Riessman, 2007).

In the search for authenticity and trustworthiness, the absence of verification procedures could be noted. I recognise that the study would have been stronger if I had given it back to participants at the end to check that my interpretation of the data was agreed with the participants (Huberman and Miles 1994; Shenton, 2004).

5.7 Implications for Future Practice

The data examined provides a better understanding of virtual leadership communities as social learning spaces. It is difficult to capture informal learning and show definitive links on learning to changes in practice and perspectives (Edwards, 2005; Moore, 2020). The findings do not result in a definitive framework for creating and sustaining successful virtual leadership communities due to many contextual factors, however, they do have implications for practitioners. This research offers insight in terms of exploring a leader's value in participating in a virtual leadership community of practice and provides a pathway

forward for a framework for understanding what influences the value the leaders find in the community and how learning is applied to their leadership practice.

For learning professionals, this study demonstrates the use of narrative inquiry to explore, capture and present the value of participation in virtual leadership communities. It offers a form of developmental evaluation for organisational learning (Patton, 2002) that learning professionals can use to improve communities of practice and programmes of learning to determine aspects of the community that may need development and support. Learning professionals may want to consider sharing value creation stories within the learning programme or community of practice as a way of promoting the value creation and sharing the benefits, or value of communities in learning and developing leadership practices, as well as providing a framework to build on (Venkatesh *et al.*, 2003). Further conversation around what a community of practice actually is, examples of how to engage, including stories from alumni participants, along with potential benefits may help the development and engagement in future communities and learning programmes. This would require organisations to create learning spaces where staff can learn collaboratively, which could lead to high impact learning cultures (Daly and Ahmetaj, 2020).

The value creation framework (Wenger *et al.*, 2011) and stories can help learning professionals and organisations to better understand the value these communities create for leaders and practitioners. The value creation cycle attempts to trace the path leaders take from the immediate value they receive from the community all the way to the impact participation has on their leadership practice, organisation and beliefs. It also shows the value embedded in the steps or journey towards an outcome. Whereas, it is important to understand whether leadership programmes achieve their learning outcomes, organisations often overlook the value made during the realisation of those outcomes (Brown, Duguid and Seely, 2001). The value of a community may be dismissed because it is not visible or tangible and can therefore, lead to uniformed decisions. The VCoPs formed part of leadership programmes and this analysis helps illuminate the potential, and intangible, value of communities of practice to leaders and the wider organisation as well as understanding some of the influences that make virtual communities successful.

However, these findings are not exhaustive and value creation stories require time-intensive processes that may limit the potential for busy practitioners. Some of the limitations highlighted here and with the value creation framework suggest a need for exploring additional methods for assessing value creation in VCoPs. Wenger *et al.* (2011) have suggested that value creation stories should be complemented with additional quantitative indicators, such as site analytics showing number of posts or social network analysis demonstrating the patterns of member interaction. This was outside of the scope of this particular research. The quantitative data helped provide a base for the researcher to build a broader picture of leaders and communities of practice and provides additional evidence to support self-report data such as the value creation stories.

The VCoPs described by the leaders, despite their similarities, clearly vary (Dubé *et al.*, 2005). Typology and exploring influences can help in identifying the influences and characteristics that differ among the various communities. As the data demonstrated, combinations of these influences make each leadership community unique, but also impacted on the maturity, engagement and trust within them. The findings imply that trust is a complex concept in VCoPs and provide insight into the trust building processes. These challenges will need to be specifically addressed by learning professionals, CoP members and organisations. Analysing the social network of the most active members of the community may help in this endeavour.

Technology enables situated learning processes. The use of technology now has a major implication for organisational learning and development, as technology now plays a significant role in learning (Hernez-Broome and Huges, 2004). Building trust can take time and without the face-to-face interactions currently, this has implications for the virtual learning space where it will take much longer to build trust. Relationships and human dimensions are just as important as the technological factors (Jasperson *et al.*, 2005). Virtual learning can be a cost-effective solution. However, for virtual learning to represent a valuable alternative to face-to-face learning, it needs to provide high-quality opportunities that can translate into value for individuals and organisations more broadly (Venkatesh *et*

al., 2003). This would also mean considering how learners will perceive an innovation and not solely on using the technology. Issues of inclusiveness would also need to be tackled to ensure that all individuals can benefit, including those with lower digital skills and limited access to computer and internet facilities, or engaging those with less self-motivation. The COVID pandemic response demonstrated just how impactful virtual learning can be. Participants now engage more remotely and over extended periods of time. However, there are still implications for countries where access to technology, the internet or sustained electricity is limited. This presents challenges for VCoPs in these countries (Nistor and Fischer, 2012). As mentioned earlier, combining Wenger *et al*'s (2011) framework with social network analysis and elements of UTAUT theory would ensure that the technological element is integrated into the social learning aspect.

Further research into lessons learned during the COVID-19 crisis can help address the existing limitations to realise the full potential of virtual learning. The data examined supports Hildreth *et al*'s (2000) assertion that face-to-face time results in stronger personal relationships which are essential to carry the group through extended periods of virtual communication (Hildreth *et al*., 2000). However, for those new to an organisation or starting new programmes of learning, it will be important to understand how, or whether, these individuals develop strong personal relationships and build trust without the opportunity to meet face-to-face. Trust is a major enabling factor for learning in virtual communities (Hoy and Tschannen-Moran, 1999; Hara and Schwen, 2006). Trust has implications for creating shared experiences, quality connections, comfort and assurances to promote engagement, yet be challenging and relevant with a clear purpose and be of value to the individual.

It would be interesting now to revisit this study and explore how the leaders would value their virtual learning programmes and communities after having worked and learned virtually during the COVID pandemic. Would their experiences and mindsets have changed at all and would the realised or reframed value be harder to achieve or look different? With most of the world working virtually currently, further research would be needed into Hampton and Wellman's (2003) claim that

computer mediated interactions have positive effects on individuals' interaction, involvement and social capital is true over sustained periods of time.

Chapter 6. Conclusion and Recommendations

This study explored specific ways that leaders found value through their participation in virtual leadership communities of practice. Applying narrative inquiry by examining value creation stories through the lens of Wenger *et al*'s (2011) value creation framework demonstrated how emerging, mid-level and senior leaders, with varying perspectives and levels of expertise, could co-construct new forms of learning and understanding in ways that were valuable to their leadership practice. It further illustrates how their participation in leadership communities could traverse multiple cycles of value creation and similar experiences could be experienced and valued by leaders at all levels. Analysis of these stories provided both a foundation for future research that examined the influences of successful VCoPs to increase and support value creation among leadership VCoPs.

Combinations of influences and characteristics produced different types of CoPs and those examined in this study were not exhaustive. The data analysis illustrated that even similarly-intended communities may vary depending on environmental and contextual characteristics and influences. Not all VCoPs were similar and these differing influences led to different strengths and challenges, which could be addressed by learning professionals and organisations. A group of leaders learning together did not immediately make them a community of leadership practice, rather more of a network of leaders learning together. This study, through the value creation framework, helped determine some of the characteristics and influences that can help a network become more of a community. These included using a blend of face-to-face and virtual meetings, the maturity of the CoP, the use, ease and access to technology, the ability to develop trust, engagement and motivation, as well as delivering value applicable to their work and leadership practice. What wasn't observable were characteristics such as collective learning and collective production of tools and resources. Trust was a significant prerequisite for cooperation and the capacity of leaders to engage in and develop the community. This needs to be built from shared experiences, quality connections, comfort and assurances to promote engagement, yet be challenging and relevant with a clear purpose and be of value to the individual.

Smaller CoPs can spring from a network and were just as valuable to their members as a larger community. Communities of practice, whether large or small, are important to organisational learning, and developing high impact learning cultures, because through them, people can grow the necessary capabilities and structures that enable new ideas, processes, systems and change to emerge and become more influential to make transformative changes. Developing a comprehensive framework of trust in VCoPs is an important issue that needs to be addressed for communities to develop and become sustaining.

There is value that exists when people come together to learn and significant value in leaders coming together to share their knowledge and practices. Learning is embedded in practice. Although there was strong alignment about what constituted value in the stories that were generated by the leaders, this does not mean that we can assume that what is considered value will be the same for all leaders in similar communities. It is important for practitioners to help learners connect learning to workplace performance so they understand the added value.

The value creation framework, despite some limitations, was a useful framework for enabling understanding about how leaders in communities interact, collaborate and learn. It can also enrich understanding of how narrative research can lead to social learning and in turn impact on practice. The use of the value creation framework showed that it has the potential to capture the interrelationship between leadership programmes, communities of practice and understanding the value leaders have of participating in these communities for their leadership practice. The framework is a different way to consider value and generating tangible evidence of the intangible learning, and can be extended to diverse situations, better informing decisions and policies. The value reaches beyond the immediate value of the leaders participating in a programme or community of practice. As the smaller subclusters of leaders showed, the value of learning and connections made can remain long after the community has stopped. To increase its external validity, future studies based on a larger number of leadership communities would be beneficial to refining the framework and indicators for learning professionals.

Virtual learning communities have great potential to provide a form of ongoing professional development and support for leaders. Situated in the context of leaders' everyday work, they facilitate informal learning, the transfer of expertise and experiences, and the exchange of ideas in ways that contribute to leaders' continual professional learning. As the world becomes increasingly digital and virtual, it is essential to find ways of leveraging the power of social networks to support, encourage, and sustain professional learning. Although there is much research into best practices to manage VCoPs this study clearly showed that, in order to ensure success, decisions and actions have to be fine-tuned towards the unique personalities of their VCoPs. This study contributes to the base of knowledge for understanding VCoPs by identifying the value of participating in the leadership communities and understanding the specific practices that cultivate and sustain learning and trust in virtual communities.

The following recommendations were identified in this research:

Organisations should incorporate VCoPs as part of their blended leadership programmes and create learning spaces where staff can learn collaboratively, which could lead to high impact learning cultures. It is important for leaders to be able to link their learning to their work and leadership practices. However, the learning needs to be contextualised for the VCoP and the organisation taking into account the identified influences that make virtual communities successful. Formalising the reflection process around this helps learners make the connections between their learning and workplace performance.

Using value creation stories can help learners and the organisation understand the value these communities create for the individual and their practice as well as the wider outcomes. These stories can also demonstrate the value embedded in the steps or journey towards an outcome.

Technology is a necessity to supporting an individual's performance and opportunities in global organisations. Incorporating conditions to help limit technology becoming a barrier to VCoPs including:

a. An easy-to-use, accessible platform for all members, regardless of location.
b. The right platform for the outcome desired, rather than constrained by internal organisational technology. This could be decided collectively by the members. Having someone responsible for ensuring members have access, and confirming that the tools work as expected.
c. Helping members understand the advantages of the VCoP and technology, especially around the four factors of performance expectancy, effort expectancy, social influence and facilitating conditions (Venkatesh *et al.*, 2003).

Incorporating social network analysis with elements of UTAUT theory into Wenger *et al*'s (2011) value creation framework would enable further exploration into the interactions within the VCoP and ensure that the technological element is integrated into the social learning aspect.

Finally, ensuring appropriate social capital management, especially around engagement, commitment and building trust, will help underpin the structure and cohesion of the VCoP. A successful VCoP is only as good as the relations, active and supportive members within it.

45,997 words

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APPENDICES

Appendix A: Quantitative Survey Questions

Leadership Learning and Communities

Thank you for participating in this survey. Your feedback will help inform my doctoral research around online communities of practice and leadership development. The study seeks to understand if and how leaders use online communities of practice for their leadership development.

I am particularly interested in exploring if leaders do or do not use online communities of practice, why they use them and what value they gain from using them. Data collected will also help inform existing learning practices.

This survey is based around your experiences of online communities of practice. A 'community of practice' is a learning partnership among people who find it useful to learn from and with each other about a particular subject area. They use each other's experience of practice as a learning resource and join forces in making sense of and addressing challenges. Communities in this survey is based around this definition.

All responses are confidential, anonymous and data stored in accordance with GDPR and the Data Protection Act 2018. This study has been reviewed by, and received ethics clearance through, the University College, London Research Ethics Committee. It should take approximately 10 minutes to complete this survey.

Thank you for completing this survey. If you are interested in participating in a further interview in support of this study, please leave your contact information at the end of the survey or contact Samantha Mathis (email address)

1. Which leadership programme did you participate in?
Overseas Leadership Programme as Head of Mission
Overseas Leadership Programme as Deputy Head of Mission
Global Leadership Programme
Emerging Leadership Programme

2. Which region are you based in?
Africa
Americas
APAC
EECAD
Europe
MENAD
SAAD
UK
Other (please specify)

3. **Thinking about your leadership learning, please rank in order the method you personally prefer for learning (1 being your preferred method, 4 your least preferred method)**
Face to face
Learning groups/sets
Online community
Blended approach

4. **The leadership programme I attended (OLP, GLP, ELP) made a significant difference to my leadership performance.**
Strongly agree
Agree
Somewhat agree
Disagree
Strongly disagree

5. **Have you participated in an online community of any description, whether an internal organisational work community site or external one? A 'community of practice' is a learning partnership among people who find it useful to learn from and with each other about a particular subject area.**
Yes (go to question 6)
No (go to question 17)

6. **Which online community site(s) do you mainly use for work purposes (internal or external)? Please check any that apply and name any other sites as there are many out there.**
Facebook
Linkedin
PeopleFinder
Teams
Twitter
WhatsApp
Yammer
Internal community sites (please specify below)

7. **Which online community site do you use the most for work purposes (internal or external)? Please choose one.**
Facebook
Linkedin
PeopleFinder
Teams
Twitter
WhatsApp
Yammer
Internal community sites (please specify below)

8. **How long have you been using this particular site?**
One month

2-6 months
6-12 months
1-2 years,
Over 2 years

9. How frequently do you use/visit this site?
Daily
Weekly
Monthly
Other (please specify)

10. How would you rate the benefits to you of participating in this community site? Rate using 'No Benefit At All', 'Somewhat Beneficial', 'Mostly Beneficial', 'Completely Beneficial'
Having useful conversations
Relevant interactions to support my work
Having fun
Enabling reflection
Collaborating with others
Acquiring skills and knowledge
Problem-solving
Finding inspiration
Improving confidence
Being able to trust others in the community
Producing tools, documents, resources
Trying new ways of learning
Implementing advice, insights and ideas
Using tools, documents and resources to inform my work
Leveraging social connections made
Ability to influence
Help improve organisational performance
Other (please specify)

11. Have you used any community sites specifically for your leadership development?
Yes (go to question 12)
No (go to question 18)

12. Which online community site(s) do you mainly use for your leadership development (internal or external)? Please check any that apply and name other sites you may use as there are many out there.
Facebook
Linkedin
PeopleFinder
Teams
Twitter
WhatsApp
Yammer
Internal community sites (please specify below)

13. How frequently do you use/visit these sites?
Daily
Weekly

Monthly
Varies
Other (please specify)

14. How do you generally use the community site(s) for your leadership development?
Contribute/comment regularly
Lurk silently
Mainly read content
Follow other people
Other (please specify)

15. Thinking of the sites you use for leadership development, what are the main benefits to you of participating in the community site(s)? Rate using 'No Benefit At All', 'Somewhat Beneficial', 'Mostly Beneficial', 'Completely Beneficial'
Having useful conversations
Relevant interactions to support my work
Having fun
Enabling reflection
Collaborating with others
Acquiring skills and knowledge
Problem-solving
Finding inspiration
Improving confidence
Being able to trust others in the community
Producing tools, documents, resources
Trying new ways of learning
Implementing advice, insights and ideas
Using tools, documents and resources to inform my work
Leveraging social connections made
Ability to influence
Help improve organisational performance
Other (please specify)

16. Thank you for completing this survey. Please indicate below if you are interested in participating further in an interview to discuss your experiences of online communities and leadership development.
Yes, I am interested – my name and contact information are below
No, I am not interested

17. If you have not participated in an online community site, please explain why.
Open text

18. If you have not participated in an online community site, please explain why.
Open text

Thank you for your time completing this survey. If you have any further comments or questions, please contact Samantha Mathis (email address).

Appendix B: Information for Participants and Consent Form

Exploring the value of online community of practices for leadership development - Participant Information Sheet

My name is Samantha Mathis and I am currently completing a Doctorate in Education (EdD) through the Institute of Education, University College London (UCL), researching learning in online communities as an element of leadership development and practice. As part of this research, I am undertaking a project investigating the experiences of leaders who have completed a leadership programme in using internal or external online communities of practice to embed their leadership learning. Your feedback will help inform my doctoral research around online communities of practice and leadership development.

1. Who is carrying out the research?

Samantha Mathis is Head of Learning & Development, Diplomatic Academy Regional Team (Americas) and is a part-time doctoral student at the UCL studying in the Department of Learning and Leadership within the Institute of Education (IOE). UCL IOE is a world-leading centre for research and teaching in education and social science. The IOE is ranked first in the world for education in the *QS World University Rankings* and is the largest education research body in the United Kingdom. You can contact her at (email address).

2. Background and aims of the study

This study aims seeks to understand if and how leaders use online communities of practice for their leadership development. A 'community of practice' is a learning partnership among people who find it useful to learn from and with each other about a particular subject area. They use each other's experience of practice as a learning resource and join forces in making sense of and addressing challenges. Communities in this research is based around this definition.

I am particularly interested in exploring if leaders do or do not use online communities of practice, why they use them and what value they gain from using them. I would greatly value your own insights and would like to invite you to participate in this research by completing an online survey in the first instance which take approximately 10 minutes. I would also like to interview a small number of participants following the online survey. I would be very grateful for your participation and hope that you will find it interesting and useful too, particularly as an opportunity to shape our leadership development programmes and online communities of practices to embed a culture of learning.

3. Why am I being invited to take part?

You have been invited to take part in this study because you have been identified as having completed some form of leadership development programme. I would like to understand more about your use of online communities for work and specifically for supporting your leadership development practices.

4. What will happen in the study?

If you are happy to take part in the study, you will be asked to sign the accompanying consent form and be interviewed by the researcher at a date convenient to you. This interview may take place virtually or by telephone, it will last for up to one hour.

You do not have to take part in this study. It is entirely up to you to decide whether you would like to participate. If you decide you are happy to participate, you can change your mind at any time during the study. Simply tell the researcher that you want to withdraw yourself and your data from the study.

5. What are the potential benefits and risks of taking part in the study?

Taking part in the interviews will require you to sacrifice an hour of your time. If time pressure becomes an issue for you, the researcher may reschedule the interview. No further risks to participation have been identified. Benefits include a chance to reflect on your learning and your learning practices. Data collected will also help inform existing learning practices.

6. What happens to the research data provided?

The interviews will be recorded and transcribed. The transcripts will be entered into a database, so that themes can be drawn out from across participants. These will be reviewed by the researcher, her supervisors and other individuals involved with the research, such as proof-readers. Data will not be made available to any other person. Your data will be anonomysed will be stored in password-protected files on a secure laptop and all data including recordings and transcriptions will be destroyed six months after doctoral approval.

7. Will the research be published?

UCL is committed to the dissemination of its research for the benefit of society and the economy and, in support of this commitment, has established an online archive of research materials. This archive includes digital copies of student theses successfully submitted as part of a UCL postgraduate degree programme. If you agree to participate in this project, the research will be written up as a thesis. On successful submission of the thesis, it will be deposited both in print and online in the University archives, to facilitate its use in future research. Elements of the thesis may also be submitted for publication in academic journals.

8. Who has reviewed this project?

This project has been reviewed by, and received ethics clearance through, the UCL IOE Research Ethics Committee; it has also been reviewed by the appropriate supervisors in the Department of Leadership and Learning, UCL IOE, Dr Tracey Allen and Dr Ruth McGinty. Once the project is complete, the results will be

published in the form of a doctoral thesis and may also form the basis of articles submitted to academic journals.

9. Who do I contact if I have a concern about the study or I wish to complain?

If you have a concern about any aspect of this project, please speak to the researcher, Samantha Mathis, in the first instance or her UCL IOE supervisor, Dr Tracey Allen. The researcher should acknowledge your concern within 10 working days and give you an indication of how she intends to deal with it. If you remain unhappy or wish to make a formal complaint, please contact the chair of the UCL IOE Research Ethics Committee who will seek to resolve the matter in a reasonably expeditious manner: Chair, UCL IOE Research Ethics Committee; Email: ioe.researchethics@ucl.ac.uk; Address: UCL Institute of Education, 20 Bedford Way, London WC1H 0AL).

10. Data Protection Privacy Notice

The data controller for this project will be UCL. The UCL Data Protection Office provides oversight of UCL activities involving the processing of personal data and can be contacted at **data-protection@ucl.ac.uk.** UCL's Data Protection Officer can also be contacted at **data-protection@ucl.ac.uk.** Further information on how UCL uses participant information can be found **here.** Your personal data will be processed so long as it is required for the research project. All responses are confidential, anonymous and data stored in accordance with GDPR and the Data Protection Act 2018. If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at **data-protection@ucl.ac.uk.**

11. Contact for further information

If you would like to be involved, please complete the following consent form and return to: (email address)

If you have any further questions before you decide whether to take part, please do not hesitate to contact me.

Thank you very much for taking the time to read this information sheet.

Exploring the value of online community of practices for leadership development

Consent Form

If you are happy to participate in this study, please complete this consent form and return to (Samantha Mathis email address). This form can be completed electronically.

Yes	No	
☐	☐	I have read and understood the information about the research.
☐	☐	I agree that if I participate in an interview, it may be recorded purely for the purpose of conducting the thesis.
☐	☐	I understand that if any of my words are used in reports or presentations, they will not be attributed to me.
☐	☐	I understand that I can withdraw from the project at any time, and that if I choose to do this, any data I have contributed will not be used.
☐	☐	I understand that I can contact Samantha Mathis at any time and request for my data to be removed from the project database.
☐	☐	I understand that the results may be shared in research publications and/or presentations.
☐	☐	I agree for the data I provide to be archived in accordance with GDPR and the Data Protection Act 2018. I understand that other authenticated researchers will have access to this data only if they agree to preserve the confidentiality of the information as requested in this form.
☐	☐	I understand that other genuine researchers may use my words in publications, reports and other research outputs, only if they agree to preserve the confidentiality of the information as requested in this form.

Name: _____ Signed: _____

Date: _____

Please return to Samantha Mathis:

Appendix C: Interview Questions

1. What are your reasons for participating in the community site? (e.g., challenges, aspirations, professional development goals, networking, etc).

2. How long have you been using this site?

3. How often do you frequent the site?

4. What activities/outputs do you gain from the community site? (e.g., resources, documents, visits, events, networking, etc).

5. What is the value to you of participating in the community site? (e.g., professional development, handling difficult situations, improving organisational performance, etc).

6. How is participating in the community changing you as a leader? (e.g., skills, attitude, identity, self-confidence, feelings, etc)

7. How is participating in the community affecting your social connections? (e.g., number, frequency, emotions, who, etc).

8. How is participating in the community helping your professional and leadership practice (e.g., ideas, insights, processes, etc).

9. How is participating in the community changing your ability to influence your working environment as a leader? (e.g., voice, contribution, status, recognition, success of organisation, etc).

10. How is participating in the community transforming your view of learning?

11. Describe a meaningful activity you participated in and your experience of it, including a specific resource this activity produced for you. Describe how you used this resource in your practice and what it enabled that would not have happened otherwise. Explain how it affected your success.

12. What are your aspirations for the community? (For example, what experience should people have in the community? What useful things would you want to see in the site?).

Appendix D: Value Creation Indicators

Cycle 1. Immediate value: indicators of activity/interactions

Indicators for this cycle refer to community activities in and of themselves and what happened during those activities and interactions.

Cycle 1. Activities/interactions indicators	
Typical Indicators	**Potential Sources of Data**
Activity and interactions	• Conversations • Sharing ideas, resources, tools
Level of engagement	• Intensity of discussions • Challenges assumptions • Shared purpose
Quality of interactions	• Bringing experience of practice into the learning space (e.g., "I have a problem with this," or "we did this in such a case") • Debates on important issues • Feedback on personal value of the interactions
Value of participation	• Shared experiences • Support work • Personal value of leadership learning • Supportive environment • Have fun
Networking	• New connections made • Connections that helped practice
Value of connections	• Follow up to new connections made • Feeling comfortable with peers
Collaboration	• Joint projects • Working together to lead learning sets
Reflection	• Impact of participation

Cycle 2. Potential value: indicators of knowledge capital

Indicators for this cycle reflect the various types of knowledge capital produced by social learning: human, social, structural, reputational, and learning, and understanding what changed as a result of them.

Cycle 2. Knowledge Capital indicators	
Typical Indicators	**Potential Sources of Data**
Skills and knowledge acquired	• Resources and tools to help build skills and knowledge • Self-reports
Problem-solving	• Sharing problems • Contributing ideas to other people's problems
Change in perspective	• Self-reports • Reflections on leadership practice
Inspiration	• Self-reports
Confidence	• Self-reports • Reflection

Level of trust	• Positive contributions • Challenging conversations • Sharing personal information
Production of tools and documents to inform practice	• Types of output • Coverage of relevant topics
Social connections	• Forming relationships from social connections • Support to others
Reputation of the community	• Feedback from stakeholders
New views of learning	• Experience with communities of practice • Interest in learning and leadership activities • Barriers to learning

Cycle 3. Applied value: indicators of changes in practice

These indicators include the use of knowledge, tools, and social relationships. This is the level that requires the most probing because it is information that is not readily available to understand what difference participation has made to the leaders' practice.

Cycle 3. Change indicators	
Typical Indicators	**Potential Sources of Data**
Implementation of advice/solutions/insights	• Self-reports • Feedback from others
Innovation in practice	• New ways of doing things • New perspectives • New concepts and language
Use of tools and documents to inform practice	• Self-report such as feedback on documents and tools from people who have used them • Indicators of value in application
Reuse of products	• Self-report of reuse
Use of social connections	• Collaborative arrangements • Leveraging connections in practice
Transferring learning practices	• Using communities, networks or other peer-to-peer processes and tools for learning in other contexts • Barriers • Enablers

Cycle 4. Realised value: indicators of performance improvement

Aspects of performance that can be affected by social learning are often the objects of established metrics, which are already monitored. The aim is to find metrics of performance that are related to the potential contributions of communities and to understand what difference participating the community made to the leaders' ability to achieve what matters to them or their stakeholders.

Cycle 4. Performance Improvement indicators	
Typical Indicators	**Potential Sources of Data**
Personal performance improvement	• Increased effectiveness, quality or outputs in leadership practices • New achievements • Self-reports • Feedback from stakeholders
Organisational performance	• Reported stakeholder satisfaction
Organisational reputation	• Client feedback

Cycle 5. Reframing value: indicators for assessing the redefinition of success

Indicators for this cycle reflect changes in what counts as success both for the leaders and for their environment. Did participating in the community change the leaders' or other stakeholders' understanding and definition of what matters?

Cycle 5. Reframing indicators	
Typical Indicators	**Potential Sources of Data**
Community aspirations	• New learning agenda • New discourse about value • New vision
Relationships with stakeholders	• Different conversations with stakeholders • Involvement of new stakeholders • New sets of expectations
Institutional changes	• New strategic directions that reflect the new understanding
New frameworks	• New social, institutional, legal or political systems (emerging or created)

For this research, additional themes with indicators were added in the coding which are referenced in the table below:

Additional indicators	
Typical Indicators	**Potential Sources of Data**
CoP typologies	• Life span • Age • Purpose, context and structure • Technology and technological aptitude
Views on learning	• References to face-to-face learning, blended learning and leaders own learning
Platforms or apps	• References to What's App, Facebook, Slack, Yammer, Twitter and other platforms and apps