Co-creating Business Value through University-Business Collaborative Projects: a case study approach

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Abstract

This paper explores the co-creational collaboration between academics, graduates/post-graduates and small business owner-managers when working together on knowledge-sharing projects (KTPs and K4Bs). The study uses six previous business school and small business collaboration projects to explore the life cycle of these temporal Communities of Practice (CoP) as effective means to share knowledge and expertise. Knowledge and skills are the new currency of increasingly informal knowledge management structures (networks, open innovation communities). The stakeholders in co-creating value through capturing, analysing and disseminating new knowledge and experience are the business managers, academics and new employed graduates. These special Community of Practices (sCoP) have their own life cycle of creation, growth and maturity/destruction, this is the focus of this particular study.

The research takes a case study approach, using project meetings, interviews and other documentary data to capture the events, actions and changes of attitudes/behaviours allied to the new community's project goals and objectives (KTPs and K4Bs). The preliminary findings indicate a significant change in the level of trust and identity with the new community's shared vision and values. Some of the projects quickly move into a value creation phase by which both 'quick wins' and medium term actions generate financial & non-financial business value. Benefits for the associates to enhance their professional skills and for the academics to apply to their teaching practice are evident.

Previous research highlights the importance of reflective learning in Communities of Practice (CoP) to strengthen the level of identity and trust, and to move more quickly onto co-creating value for all the community partners. The study also highlights the importance of getting commitment of the small business owner manager to all phases of the CoP life-cycle, most often commitment drops off in the latter phases. With the increasing importance of the SME sector in contributing to the overall UK economy, it is important to understand how business school's can be more effect in their support. This study, and ongoing research into the effectiveness of collaborative Communities of Practice, is paramount.

1 Introduction

Business School (BS) and SME community collaborative projects are a valuable way by which BS's support economic development. This study explores the value of these projects through the nascent communities of practice they co-create.

Reports by Sir Wilson and Lord Young have highlighted the importance of growing the SME sector to help rebalance the economy away from its previous over-dependence on the City (Leitch 2006; Wilson 2012; Young 2013). SMEs account for more than 99.9% of UK businesses, generating over £1.23 trillion in turnover and employing more than 13 million workers, as reported by the Department of Environment, Food and Rural Affairs (DEFRA 2006). The UK government is looking towards SMEs to help grow the economy and provide future employment. Yet these smaller to medium-sized enterprises have particular challenges in their ability to react quickly to the threats and opportunities in the marketplace. Many of the difficulties revolve around the very attributes that have previously made them successful and adaptable in the past, as reported by BERR, now called the Business, Innovation and Skills (BIS) department (BERR 2010):

- Resource capacity and limitations on access to knowledge and expertise;
- Business culture is most often dominated by the owner-manager;
- Management practices are both informal and tacit;
- Finally, lack the ability in most cases to influence and shape their business environment.

This paper discusses the learning associated with collaborative projects, involving the setting up of special Community of Practice (sCoP) between SME managers, recent graduates and business school academics. The authors particularly focus on the different member perspectives and behaviours associated with development of this knowledge-sharing community. The analysis focuses on six case studies, two highly successful, two that met the original brief, and two that did not complete. The next section highlights the background research associated with the initial conceptual framework used to explore the collaborative projects.

2   Literature Review

Knowledge management (KM) is a critical skill that all businesses need to manage in today's knowledge economy (Dalkir 2005). All businesses throughout their life cycle will face tipping points, pivotal points of time when important decisions will determine the growth/survival of the business (Phelps, Adams et al. 2007). It is imperative at these tipping points for businesses to create/capture new knowledge to develop solutions to their challenges.

Since people are the most important conduits of information, knowledge and experience then allowing them sufficient time to look for this and helping their colleagues do likewise is essential. These knowledge workers are five times more likely to turn to another person, either inside or outside the organization, than any formal database or KM system (Cross and Parker 2004). These learning activities whereby people engage in tacit-tacit, and explicit-explicit, knowledge-sharing are an essential part of building social capital (Cohen and Prusak 2001). Increasingly, such one-to-one social knowledge exchanges are hard to maintain in their traditional form, e.g. informal hall talks,

etc., because people may not be in close proximity to one another, or that we find ourselves working in small businesses. Yet communities are created, whereby members exchange knowledge & expertise both within the organization and outside it. Yet there is little research that studies the dynamics of these community partners when they are from very diverse backgrounds – for-profit vs. public sector.

2.1 Knowledge Exchange Programmes at Universities

In the UK the Technology Strategy Board (TSB) support Knowledge Transfer Partnerships (KTPs), a well-known and established scheme, which place recent graduates (associates) into companies (Wilson 2012). The primary goal is to improve the competitiveness of the company, the associate is under joint academic and company supervision. This scheme has been running for over 30 years, its success is down to the intensive highly structured partnership between the academics, company managers and associates. The university of Hertfordshire has additional set up a Knowledge For Business (K4B) scheme that is just as intensive and structured but has more informality around the reporting and management activities. This programme has been particularly attractive to Small to Medium-sized Enterprises (SMEs) that are considering broader business systems and process re-engineering.

2.2 Knowledge Sharing in the Business Community

Communities of Practice (CoP) are often formed and maintained by "a group of people having a common identity, professional interests and that undertake to share, participate and establish a fellowship" (Dalkir 2005) pp. 112. These communities differ from other types of networks, like "project teams", "cross-functional teams" and other inter-organisational teams (Probst and Borzillo 2008). CoPs differ from purely project teams in that the roles of members are not formally assigned or specific to one task. Secondly, the community value is measured by the quantity and quality of the exchanges of knowledge, expertise and skills. Thirdly, CoP's are expected to persist and grow long after the initial rationale for the community has been reached. These CoPs can be long-standing or transitory, being created for a specific purpose, maybe to make use of shared knowledge and thus enhance all parties' learning, and through such knowledge exchange co-create a share value for this community (Seufert, Krogh et al. 1999; Adams and Freeman 2000). The shared value is based on both the knowledge in action(see the next section for a formal definition) and the formal propositional knowledge presented by the individuals to this community, at the beginning and during the life cycle of the community.

These Communities of Practice have often been explicitly and tacitly formed within organisations to help create and maintain a knowledge sharing community (Lave and Wenger 1991). The learning in these unique communities of practice is very different

as it deals with the challenges of organisaional boundaries (Juriado and Gustafsson 2007). However, we are looking specifically at CoP's that demonstrate this knowledge sharing activity across organizations and industries. In particular we are looking at those CoP's between Business Schools and Small Businesses. Wenger (1997) described these communities of practice as exhibiting some basic characteristics or traits: a common goal (or joint enterprise), mutual engagement (overall commitment) and a shared repertoire (a means to interact with one another and share knowledge and experience), see figure 1 below:
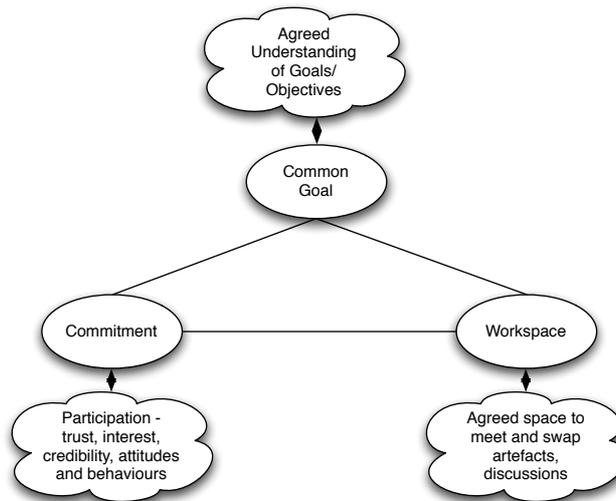

Fig. 1. Communities of Practice

A community only reaches it full potential when it has matured and stewardship of the different knowledge levels creates value for the majority of its members (Dalkir 2005). This suggests a life cycle for communities, one that entertains the premise of creation/birth, growth and eventual maturity/ending, very similar to an businesses life-cycle (Lippitt and Schmidt 1967). The life cycle model of these CoP's must be aligned with the different Knowledge Management (KM) roles and responsibilities of its community partners:

- Knowledge journalist – helps build, identify and extract valuable content from community members;
- Knowledge taxonomist – helps organize content once its produced;
- Knowledge archivist (sponsor) – helps store knowledge and experience, gaining support for changing business processes, systems and strategy.

In the case of this specific study, the journalist equates to the academic, the taxonomist is the associate and the archivist is the company supervisor.

Equally as important in the development of the community from its creation through to full delivery, is the understanding of the value created and the subsequent maturity and productivity. Maturity model's have been used in knowledge management cycles for a number of years, reflecting the learning, competencies and business strategy they en-

compass (Dalkir 2005). The knowledge management maturity model can also be applied to the Community of Practice life cycle, where the life cycle represents a road map of the different phases these specific knowledge-sharing communities take from creation through to transition (Dalkir 2005). Applying the roles of the different community members to the maturity life cycle of a CoP suggests the following:

- The knowledge journalist helps to establish the parameters of the community's common goal and define the requirements for coalescing knowledge needs. Key to the success of the knowledge journalist is their ability to develop a successful relationship with the other members, where commitment and trust are central factors (Morgan and Hunt 1994). Commitment is the members desire to maintain an on-going relationship with the other members. Yet commitment is based on trust, defined here as the reliability and integrity of the other members to deliver on the project goals;
- The second phase is driven largely by the knowledge taxonomist who then provides stewardship in organizing and establishing new processes/systems for retaining the knowledge;
- Lastly, the knowledge archivist undertakes the important role of transforming the knowledge into value delivering decision-making actions, and then links this with future business strategy.

The development of the sCoP during these three phases is an iterative process (see figure 2).
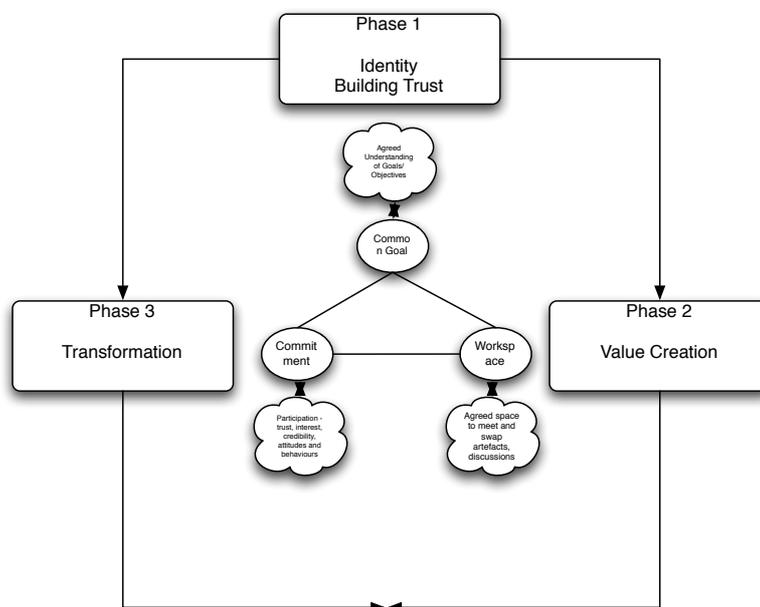

Fig. 2 – Special Communities of Practice Life Cycle

The three phases typify the process of creation, growth and transformation in any community, but in the case of the Community of Knowledge-sharing represents a temporary structure, one that has a limited timeframe. The temporal nature of the sCoP's relates to the original common goal, see figure 1., upon which the premise of the Community was

founded. The sCoP's life cycle resembles the organizational knowing framework, where knowledge is created, shared and stored by an integration of three primary processes:

- Sense-making – the understanding and interpretation that is undertaken as a shared community, agreeing to shared meanings of the action and outcomes undertaken by the community – this is aligned with Phase 1;
- Knowledge creation – new knowledge is acquired and shared across all community partners – Phase 2;
- Decision-making – shared decisions are made based on the shared knowledge and sense-making – Phase 3.

The sCoP life cycle is built upon the continuous process of learning and reflection of its members.

3 Research Methodology

When studying collaborative projects involving multiple partners it is important to understand the unit of analysis and then justify the appropriateness of the research methods chosen. Our subjects are the owner-managers of the small businesses, the academics mentoring and coaching the owner-managers and associates, and finally the associates themselves. In the case of the businesses/projects reviewed in this study they are the graduate project managers in either the KTPs or K4Bs. Since the study is exploring the perceptions of these partners and in a situated environment surrounding the project we are looking at qualitative research. Qualitative research is well situated to studying these types of interactions and environments (Denzin and Lincoln 2011). Denzin and Lincoln provides us with a perspective of what qualitative researchers attempt to understand:

"qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them" (Denzin & Lincoln, 2011:3).

In this study the authors used qualitative research to explore the assumptions and frameworks (Creswell, Creswell et al. 2013) identified in the literature review above to unwrap the research problem – thus attempting to understand and interpret the meaning these community partners ascribe to the benefits and costs associated with the project.

3.3 Research Strategy

The study into these special Communities of Practice (sCoP's) raise interesting questions regarding the assumptions that the different community partners have on the value being created and delivered. This necessitates the creation of a qualitative inquiry embedding an interpretative perspective, which the researchers use to understand the observed actions and outcomes during the collaborative project. Equally, the community partners have their own interpretation of the stages of development of the community.

There is too little research that explores these transient communities of innovation, both in their development and also too often their termination.

To study these issues above, the authors use six case studies, where data has been collected from the informal discussions with the individual partners – notes. The authors have also collected data from the many project meetings and discussions held between two or more partners. The process of data analysis is one of collating and organizing the many different sources, and then reducing this down into various themes by the systematic application of coding tools (Creswell, Creswell et al. 2013). Two principle tools of abstraction were used: a Qualitative Research Software (QRS) tool and cognitive mapping to help both make sense of the data and to begin core and axial coding to organize the themes around some of the broad categories identified in our conceptual framework above. Simply, as the authors review the texts, they identify text segments that relate to the different topics/themes under study, this will often create between 25 – 35 codes. A further pass is made through these core codes to create axial codes or 4 – 8 central themes that help combine and reduce the original core codes (Crabtree and Miller 1992). It is these 4 – 8 themes that then help enable the writing of the final narrative in the discussion and conclusion sections of the study.

3.4 Case Studies

Six enterprise case studies were chosen out of a total of thirty reviewed. Table 1 provides some contextual details on the enterprises and the primary reasons behind the initial collaborative project.

Table 1: Case Studies - For profit enterprises (on KTP or K4B schemes)

Type of Business	No. of Employees	Reasons for the Project
Enterprise A Metals Recycling	40 – 50 workers	New Competencies in Channel Expansion and Management
Enterprise B Printing	30 – 40 workers	Market evaluation and development of a new business model
Enterprise C Renovation materials	10- 15 workers	New business systems
Enterprise D Retail Systems Integrator	100 – 120 workers	New marketing and CRM systems
Enterprise E Moulded Plastics	20 – 25 workers	New Markets and Supplier Chains
Enterprise F Air Product Manufacturer	40 – 45 workers	Product Portfolio Analysis

4   Findings

The research findings are presented in a longitudinal fashion, using the three main themes from the sCoP's life cycle framework, see figure 3. above. The authors have collected, analysed and presented findings from six case studies all involving enterprises seeking additional knowledge and experience in taking on a new challenge or initiative, the challenge could be bringing in a new Information System (IS) or Information Technology (IT) processes, or evaluating and determining a strategy to enter a new domestic/international market.

<u>Phase 1: Before Knowledge Exchange</u>

The process starts with the recognition that they have a challenge that their current resources cannot solve. Of all the initial inquiries received nearly 99% are initiated through one of four reasons:

- A recommendation from another business colleague;
- They have tried everywhere else;
- They already have a relationship with the university;
- They have been attracted to talk to the university through the website or a cold call.

Almost all 'first contact' enquiries result in an initial scoping meeting where a business-facing representative brings together the business representative with one or more academics. At this first and follow-on meetings, the discussion very quickly turns to the value deliverables – what can be delivered to the business, the academics and what knowledge is needed.

Business Value *– driven by the enterprise's business model*

Enterprises A and C both came to the university because of the opportunity to work with academics and students on a new venture. Equally four out of the six businesses identified the university as a valuable intermediary and delivery institution by which they would be offered basic information and advice, but at the same time potentially providing specific support/services to help achieve their particular goals. Key factors identified in the selection of the university and school focused on perceived knowledge, credibility and anticipation of delivery.

The most focused businesses highlighted the importance of their current knowledge, and its effectiveness in delivering business value (revenue and profitability), yet equally they were aware of the need for new knowledge:

> *"We are very reactionary – we use our current knowledge to serve the customer, but it does not help create future business or even generate sustainable competitiveness … [Business Manager, Enterprise A]*

Most of the enterprises on these knowledge exchange projects put their success down to their market, and particularly their customer relationship management and market knowledge. Nearly all anticipated growing by 5% per annum over the next three years, after starting the project.

Associate/Recent Graduate Value

Enterprise F had already had a successful project with the University, and so we had already built up an element of trust and loyalty. All the graduate interns exhibited high levels of motivation and commitment to making themselves invaluable to the enterprise:

> *"after my interview, I knew my insights and approach would work well alongside my company supervisor. I felt really confident in being able to make a real contribution" [Grad Intern, Ent. F]*

Academic Value

In the six collaborative projects discussed in this article over 15 academics were engaged in various levels of knowledge sharing over the collaborations lifetime. In over 66% of cases the academics' primary goals was the opportunity to link theory with practice. Many of them cited the value of bringing these experiences back into the classroom to demonstrate the value and contribution of Problem-Based Learning (PBL). These same academics are also research active, previously focusing on academic publishing where the readership is other like-minded academics. These same academics saw the opportunity to focus on publishing future output to practitioners, thus widening their audience and the implications of their research.

> *"this is the first such collaborative project I've engaged in. I can now see that one of the key outcomes for me will be the development of new skills in communicating my knowledge in a very practitioner friendly way."* [Academic, Ent. A]

Phase 2: Knowledge Exchange to Create Value

Most of the enterprises that come to the university, either directly or indirectly, have characteristics that are supportive of them being effective networkers:

1. They are often embedded in their local economy and business community
2. They rely on reputation and trust in their business transactions
3. They often have a strong commitment to their employees
4. They are also not solely focused on profit maximisation.

This networking capability is enhanced in the special Communities of Practice (sCoP's). Through the sCoP's activities, searching for new knowledge and experience that will create value, they develop a shared meaning – they coalesce.

Business Value – *Using knowledge exchange to find new markets*

Four out of six projects were directly or indirectly seeking new markets. They all understood the transitions their respective industries were going through. Because of this they were reaching out for new ways to create value that both increases their competitiveness and delivers new revenue streams.

Within the first six months of working with their respective academic partners they acknowledged how they have changed their opinions of academics, knowing that they don't all live in 'ivory towers':

> *"We need new markets to help us grow and develop our full capacity, and through these we will become stronger and more competitive ...[Business Manager, Enterprise A]*

Most of the enterprises put their success down to their market, and particularly customer knowledge, all businesses are in markets that are growing by at least 5% per annum.

Associate/Recent Graduate Value

Over 55% of the associates (graduates) recruited to these projects had only one previous job following graduation. These graduates along with the other more experienced graduates had ambitious aims around the opportunity to link previously taught theories and models with real practice. Many of these associates had not previously sought employment in the SME sector, because of perceptions around promotion, salary and diversity of job experience.

> *"three months into the collaborative project .... I've already had many of my previous perceptions of what working in a small business would be like, blown away. What gets me rushing to work in the morning is the thought that another opportunity will come up where I can make a direct impact on the fortunes of the business. " Associate, Ent. A]*

Academic Value

Enterprise D are like most of the other enterprises who approach the university, they already have an idea at what they want, they are looking for a partner who can help deliver it.

> *"working with this innovative enterprise has directly contributed to my core competencies and skills, I know that together with the other project partners we can really deliver value to the business ...." [Academic Mentor, Ent. C]*

Phase 3: Sustaining Community – Transformation of the Enterprise

Expectations are very high at the beginning of the collaborative project about the attainment of this phase of the community's life cycle. Three primary goals are common

across all businesses that engage in the knowledge-sharing activities: opportunity to engage and benefit from open innovation, creation of a new resource capacity and enhanced skills and competencies.

Business Value *– good results and favourable actions*

After the first set of deliverables, and the positive feedback from the rest of the organization (suppliers, buyers) and most importantly the customers, then other courses of actions were received more favourably. The result of this was a general change in attitude, they:

- Raised their overall aspirations of the expected project deliverables;
- Had more confidence in both the associate and academic;
- Were more confident in using the new knowledge and experience to make difficult decisions

60% of the enterprises involved in these collaborative projects attested to the beneficial changes in their business model as a direct consequence of the actions of the community. Most had accommodated changes in their business processes to bring in the new learning.

> *"We have all learnt a lot during this project, and we now have a very useable formal structure to base our future foreign market developments on ……[Director, Enterprise F]*

The anticipation of new revenue and profit streams is a key value for the businesses. Ultimately this was a key component of the business case for the initial investment.

Associate/Recent Graduate Value

Those enterprises that engaged and stretched out for new knowledge and experience, then the associates and the company gained significant value. Enterprises E & F both increased their supplier network bringing new revenue streams for company, and extending the associate's knowledge & experience:

> *"my satisfaction levels are extremely high with regards to the outcomes of the project …. We did this during the recession when British manufacturing was on a downturn. This has given me massive amounts of experience that I could not get anywhere else. " [Associate, Ent. E]*

Academic Value

Quite often the academics notice a transformational process in the business managers. In 66% of the case studies, the academics facilitation role of bringing new knowledge or pointers as to where this knowledge can be obtained, eventually resulted in attitude and behaviour changes in the business managers. The first signs of an attitudinal change was for these managers to spend more time working with the associates on the type and

detail knowledge required. Behaviourally, they started using this knowledge to inform their decision-making on at first short-term strategy, and later long-term strategy.

> *"My first task was to understand the nature of the business manager I was working with. Once I understood their concerns and character, then I felt confident that the solutions that the associate and myself were developing would work."* [Academic, Ent. A]

5 Conclusions and recommendations

In discussing the findings above, particularly the level of value co-creation generated as a consequence of the different collaborative projects, the authors have focused on the perceptions of the three community partners: business manager(s), associate and academic(s). This study highlights the differences between the traditional CoP being organizational-orientated, where the emphasis of the creation of the special Communities of Practice (CoPs) is focussed on knowledge and expertise sharing, learning by the different community partners is informal and spread over the life-time of the community.

5.5 Business managers

In four out of six enterprises in these collaborative projects the academics were working directly with the owner-managers.

- Phase 1 – all business managers came into the project in response to a project they themselves defined. In 66% of the cases this was the first collaborative project the businesses had undertaken with a university. Over 50% of the business managers had only infrequently sort help from outside support agencies. These same business managers accepted the role of the academic as the initial instigator of the community goals and objectives, and equally did have some reservations as to the long-terms objectives being fully met.
- Phase 2 – 66% of the business managers were satisfied with the operational outcomes of this stage of the project, many had handed complete control over to the associate to manage any transformations in the business systems and processes. Those businesses (33%) that had an explicit and aggressive growth strategy realized quicker business value, more capable of benefitting from quick-wins – early sales.
- Phase 3 – at the conclusion of the collaborative projects, some businesses (33%) retained the associates to work full-time at the enterprise, of those that did not some (33%) transferred the knowledge gained successfully within the enterprise, and reaped the medium-term benefits. The remainder of enterprises (33%) took the knowledge and directly applied it to their business and achieved their original objectives – short-term business growth.

This last attribute has been alluded to by other researchers (Deakins and Freel 1998) into small business growth "the learning process in small and medium-sized firms is a crucial part of the evolution and growth of firms and that the entrepreneur, through experience, acquires the ability to learn" (Marcketti and Kozar 2007: 142). Equally, Probst and Borzillo (2008) identified in intra-organizational CoPs that lack of active engagement by core members often lead to failure of these communities.

5.6 Associate/Graduates Perspective

Our research across the six case studies highlighted the gap between the associates' initial perception of the small business, and small businesses in general, and their later experiences around the attractiveness of said employment. Further inquiry into the associates' rational for their perspectives of small businesses, suggests that graduates have too fewer opportunities to connect or work on small business problems.

The focus of the learning for the associate is around organizing the captured knowledge and expertise from the other partners over the life-time of the project, and hopefully beyond.

- Phase 1 – the associates were key to the establishment of the special Communities of Practice (sCoPs), helping alongside the academic to build trust with the small business owner-manager and other employees. Associates were made responsible for project management and disseminating new knowledge and competences to the appropriate new members of the community.
- Phase 2 – the associates are often the key partners in turning newly captured knowledge and competencies into business value. By effectively working with the small business owner-manager and their nominated company champions, they were instrumental in organizing the new knowledge and liaising with the business systems to help suggest changes and enact these. But not every associate could effectively achieve this, taking on the role of both organizer and negotiator with the key gate-keepers in the enterprise to change processes/systems.
- Phase 3 – a number of the projects never reached this level, both because of a failure to establish trust in the capabilities and competencies of the associates, but also the stability of the community itself – often affected by the commitment of resources by the small business owner-manager.

This is supported by previous research by other bodies interested in studying the attractiveness of student employment in the SME sector (Thorpe 2013).

5.7 Academic Perspective

Many of the academics entering into a collaborative project for the first time frequently identified three principal concerns they had: that of the expectations of the small business manager of the likely deliverables; and secondly the perceived shortage of time

managers were able to give to the project; thirdly, the perception that working on these projects would receive insufficient recognition from their colleagues and school.

Those academics working on these six collaborative projects generally acknowledged the importance of the creation of the temporal community of practice to help generate new knowledge, formalize and coordinate its dissemination and storage.

- Phase 1 – the critical stage for the academic in help to establish the rationale for the nascent community, focusing as it does on the management of new knowledge and its eventual usage. Four out of the six academics had Organisational Behavioural (OB) schooling, and therefore appreciated the important connection between enterprise learning, the structure and goals of the nascent community, and the ability to deliver knowledge.
- Phase 2 – hopefully with trust established between the academic and the small business owner-managers/associate the project moves into value creation. But without effective trust being established between the academic and business supervisors in the projects, then difficulties arise over the ability of the academic to encourage a business mindset change. Academics wield significant power in the relationship around the introduction and dissemination of new knowledge and management tools to understand current challenges and derive new creative and innovative solutions. Without trust from the business supervisor, the directed activities of the associate can be undermined, leading to partial implementation of the project deliverables.
- Phase 3 – In all projects the associate's primary objective was to leave behind detailed procedures regarding the original project goals. For example, if the project goals were to evaluate channels to market for a new territory/sector/country then the associate under the supervision of the academic detailed the processes used to gather and collate this data, so that anyone within the business could replicate this in another territory/sector/country. The academics responsibility was to ensure a minimum delivery of new management tools and an implementation plan for its embedding in the business, in the majority of cases this was full-filled.

Again, a finding that is supported by previous studies on small business and business school collaborations (Thorpe 2013). In 100% of the small business collaboration mutual trust between small business managers and the academics increased. In 66% of the businesses this led to follow-on projects, some consultancy-based and therefore fee-based, other projects involving students projects required only resource commitments from the businesses involved. Previous research on university-business cooperation suggests a reduce future transaction cost when mutual trust is established (Kitson, Howells et al. 2009).

5.8 Development of a Taxonomy on the Special Community of Practice (SCoP) Life Cycle

A contribution of this study is the evaluation of the life cycle of special Communities of Practice (sCoP) – those specifically formed with a focus on knowledge-sharing between Business Schools (BS) and small businesses. The authors have highlighted the different learning outcomes from the three important community partners, and the impact this has on the stability and ultimate success of the temporary community in meeting the expected deliverables.

Additional outcome of this study is a new taxonomy of community learning for university-business collaborative projects. This taxonomy highlights the importance of the learning journey and of being flexible and innovative over the achievement of outcomes and linking these to medium- to long-term impacts for both business and university alike, see table 2 below.

Table 2: Taxonomy of the Business School/Small Business special Communities of Practice (sCoP)

Phase & Key Activities	Key Community Members & Roles	Key Benefits (Value)
One Common Goal, Identity, Trust	**Enterprise Managers** Expected to be fully engaged, commit resources, and have the ability to lead the longer term CoP goals and objectives. **Associate** Leader skills and competencies in using relevant tools, and taking on project management and leading change tasks. **Academics** Understanding of organisational issues relating to new CoP's – those cultural factors likely to implied its creation and growth.	**Enterprise** Initially linked to the Enterprises' overall strategic needs – from the original project aims. Including quick wins – linked to additional revenue and profit. **Associate** Opportunity of developing professional skills and competencies around managing disruptive innovation. **Academic** Gain experience as a mentor and coach to the enterprise manager to become both active sponsor and liaison to outside resources that will be needed later.
Two Creating Value	**Enterprise Managers** Interpretative skills and further resource recruitment, understanding what components of the business model are being challenged; **Associate** Creative enterprise case presenter, active co-participant with the owner-managers in creating a enterprise case for growth and important attitudinal and behavioural change;	**Enterprise** Accessing the wider university resource capacity, creating further value from additional knowledge and expertise. **Associate** Positivist attitude towards working in small businesses. The opportunity represented by this type of collaborative project in providing strategic change opportunities.

	Academics	Academic
	Facilitator and arbitrator of knowledge-sharing conflicts – most often revolving around understanding the enterprise mindset, and then cajoling a change.	Follow-on projects achieved once mutual trust and valued deliverables are demonstrated. Often further output for research output, thus helping to demonstrate research impact.
Three Stability, Extending the Community, New Community Partners	**Enterprise Managers** Visionary and strategic leadership, co-leading change in the business model and the business systems; **Associate** Disseminator and trainer of new community members to take over key functions/roles; **Academics** Further support and advice on opportunities for enterprise growth.	**Enterprise** Importance of knowledge exploitation and gaining wide-spread employee acceptance of value. **Associate** Knowledge, expertise and confidence in undertaking a enterprise-wide strategic project – involving leading change. **Academic** Managing an exit strategy, ensuring that the transitory CoP has the opportunity to survive and grow. Equally, assuring that if the associate leaves any processes/systems associated with knowledge capture, analysis and dissemination are documented and embedded in the enterprise.

The sCoP's outcomes and deliverables during the initial phase 1 – 3 of the lifecycle are heavily influenced by the business manager, acting as primary sponsor in phase 1. Initially business managers were highly sceptical about the value of the graduates skills to helping deliver the project goals, instead depending on the supporting academics. In Phase 2 and 3, this situation flipped where nearly all business managers depended more and more on the associates to deliver the final business value. Other research into graduate skills value to micro- and small businesses has suggested that graduates are unlikely to want to work in these businesses, and question their usefulness (Pittaway and Thedham 2005). The academics in these sCoPs play an equally valuable role in supporting the sponsor's in initially gaining and building the value of the sCoP's outcomes, the new knowledge and expertise that results. The academic can additional support the sponsor by helping them understand the wider value of the new knowledge and expertise, often around new management tools, and approaches to presenting this knowledge in ways to gain overall acceptance and appreciation of the business value from their follow managers and employees. Existing literature on CoPs discusses the importance of sponsors, but does little to explore or quantify the skill shortages they have in re-presenting this new knowledge internally (Probst and Borzillo 2008).

Communities have long been touted as important areas of knowledge exchange, access to resources, important agents of change, yet little research has been focused on their ability to change behaviour. If the future success and role of small businesses in the

UK's economic development is to be assured then more intra-organisational research, university-industry (small business), is needed on how these temporary communities can be used to drive creativity and innovation around areas of innovation for (small) business growth.

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