

CREATING VALUE THROUGH COLLABORATION: A LONGITUDINAL CASE STUDY IN A DEEPLY FUNCTIONALIZED ORGANIZATION

C. Bruce Kavan, University of North Florida

Lakshmi C. Goel, University of North Florida

Dana L. Hart, University of North Florida

ABSTRACT

An important concern for many mature companies that are deeply structured or aligned by functional area is how to infuse or nurture a culture of trust and innovation that supports improved product quality, speed of service and cost. Such organizational structures are antithetical to promoting collaboration across functional boundaries, yet highly efficient within their respective structural domains. The purpose of this paper is to report on one company's efforts to break down functional area barriers in order to stimulate more effective cross functional organizational teaming or collaboration.

The individuals selected for this program were recognized by top management to be opinion leaders within individual functional areas that had the potential to make meaningful future contributions in moving the entire organization forward. The participants had the potential opportunity to be involved with the development, implementation and management of enterprise wide information-based solutions to solve significant company issues.

Analysis of qualitative and quantitative data during the pilot program with ten-year follow-up, yield three logical conclusions: 1) a top-down leadership program can serve as a nucleus for the creation and nurturing of a community of practice (CoP) that not only imbues the participants with appropriate management practices but can also reduce organizational barriers to the flow of information; 2) the knowledge created in the CoP concerning the interdependencies among the functional areas is a valuable business asset in itself; 3) knowledge ties created in the CoP extend beyond the duration of the formal program and persist over time.

Keywords: Community of Practice, knowledge networks, innovation, collaboration

INTRODUCTION

An important concern for many mature companies that are deeply structured or aligned by functional area is how to infuse or nurture a culture of trust and innovation that supports improved product quality, speed of service and cost (Scott & Davis, 2015). Functionally segregated organizational structures are antithetical to promoting collaboration across functional boundaries (Davenport, 2013), yet highly efficient within their respective structural domains. The motivation for this paper is to report on one company's efforts to break down the functional

area barriers in order to stimulate more effective cross functional organizational teaming or collaboration.

Our subject company (Company X) is a mature organization that traces its roots back to before the US Civil War (1860-64). Company X is publicly traded and operates in a highly capital intensive industry (over \$30 billion in assets) with approximately 35,000 employees. Due to pressure from industry changes and an ailing infrastructure, it was imperative for Company X to innovate and drastically improve its customer service. To remain competitive, Company X needed to significantly tighten and align functional area goals with overall corporate objectives. Consequently, Company X decided to launch a leadership and management training pilot program that targeted cross-functional collaboration. The pilot program provided an illustrated case of the application of the concepts associated with an intra-organizational community of practice (CoP) that spanned functional areas. The formal training program commenced in early summer of 2006 and lasted nine months with a recent opportunity for a ten-year follow-up. This paper provides detailed information concerning the management development process as well as periodic measurements of group metrics.

Employees were selected to participate in the pilot program from among various functional areas within the company. These individuals were recognized by top management to be opinion leaders within their respective functional areas. Management believed that the individuals chosen for the pilot project had the requisite potential to make meaningful contributions toward moving the entire organization forward. Participants would have the opportunity to be involved with the development, implementation and management of enterprise-wide information-based solutions to solve significant company issues.

In effect, the CoP provided a bridge to connect the individual knowledge networks that existed within discrete functional areas thus enabling improved information flows and broader understanding. As one participant reported - *“intra-organizational barriers within the CoP seemed to have evaporated, and now the exchange of information over the fence has had the effect of destroying the fence. In the end, instead of us identifying ourselves by our functional role, we identified ourselves as a member of a group (community).”*

Background: The need for a CoP

The quest to create value in organizations has its roots in the earliest records of civilization. In more recent decades, value has focused on efficiency (management science, vertical integration, etc.) and, most recently, on effectiveness (virtual organizations, vertical dis-integration or outsourcing, etc.). Vast opportunities have been made possible largely through advances in computing, particularly with respect to computer networks. As companies have progressed from utilizing individual effort to utilizing group effort (through the availability of networks) productive output has increased exponentially (Sytych & Tatarynowicz, 2014). For years we have heard the phrase “... it is not what you know but who you know.” Nowhere is this sentiment more evident than with the rise and abundance of social networks including LinkedIn, Facebook, and Snapchat. Thus, the creation of value is intricately tied to organizational structure (Christensen & Raynor, 2013). Indeed, well-established strategic models, such as Porter’s value

chain, acknowledge the direct impact of organizational structure on value (Porter & Millar, 1985).

The purpose of this paper is to report on one company's efforts to create value through the establishment of a cross-functional leadership training program to instill a better sense of community: a Community of Practice (CoP). Although the company is organized along deeply functional lines with extremely limited cross-functional interaction, some of the most senior executives themselves have been rotated between functional areas, presumably to develop a deeper understanding of potential functional integration and overall organizational optimization. As with many mature industries, the product of Company X has become commoditized, with differentiation based upon price and service. Therefore, there is a substantial need for innovation to improve linkages and processes both internally and externally.

During the period associated with this action research, Company X was engaged in a significant information systems expansion, particularly as it related to the establishment of closed-loop accountability systems. These closed-loop systems emphasized the development of corporate goals, as well as plan creation, execution and monitoring to meet those goals. During the information systems expansion, it was necessary for two of the largest systems to integrate disparate functional operating areas. As the project advanced, it was particularly evident that although team members were experts within their respective functional sphere, there was a significant lack of cross-functional knowledge. Thus, it was the working environment itself that created both the opportunity and the need for cross-functional knowledge sharing.

It was anticipated that this need for inter-departmental expertise would intensify as future projected developmental efforts continued the trend of spanning functional areas. Concurrently, individual functional area goals, objectives and accountabilities were ending. Accountabilities were becoming more integrative and common across the various functional divisions. Thus a higher level of understanding was required to improve awareness of how actions in one functional area affected another functional area as well as the total impact on attainment of company-wide goals. Accountability measurements became more holistic, spanning multiple functional areas. Thus, within the corporate environment, there was a very real opportunity to further develop leadership skills and leverage knowledge stemming from currently existing projects to those in the strategic pipeline. Furthermore, there was a need to more fully develop each CoP member individually, to sharpen their management skills and to provide them with tools and techniques that could be applied in their current job while simultaneously developing greater expertise which could be applied in future projects. These future projects would span functional areas and would require reducing or eliminating functional barriers to provide for the continuous flow and integration of information in support of the company's decision processes. Systems would be developed, managed, and implemented as enterprise-wide information-based solutions. The participants of the CoP involved in these future projects would be viewed as potential ambassadors, or change agents, to exchange ideas and practices across functional areas, bring down departmental boundaries and develop trust.

As such, the CoP management program was intentionally designed to build an environment where participants from among the varied functional departments could come together, build shared understandings, and serve as a nucleus for a knowledge network where participants could

access a repository of expertise to generate greater value for the overall organization (Garavan et al., 2007). This paper demonstrates how one such network was built to allow knowledge and relationships to be developed and leveraged to foster innovation and respond more rapidly to identify and resolve issues. The presence of this network also reduced intra-organizational barriers and frequent adversarial clashes by enabling the free flow of information and knowledge across the network to disparate functional units. We find evidence of how social and structural bonds can be used to refocus participants thought processes from a cost perspective (efficiency) to a company-wide value creation perspective (effectiveness). Through our ten-year follow up study, we demonstrate that these bonds persisted informally, even after the formal program had ended.

To summarize, in terms of the background discussed above, we can characterize the initial state of the company as having 1) well-entrenched functional areas, 2) top-down communication, 3) formal communication between silos, 4) lack of close relationships between IT and business disciplines, 5) IT failures with respect to strategic commitments and 6) political cliques and turf wars.

Initiation of the CoP

Early on in the process of forming the CoP it was evident that the IS function was viewed as a barrier to efficiency in the eyes of other business units. This was problematic since one of the strategic goals of the program was to lay a foundation for cross-functional enterprise systems. To facilitate a top-down approach to the cross-functional management strategy (Wenger & Snyder, 2000), an innovative Executive Sponsor (from a functional area other than IT) created the program and offered it to other functional areas including IT. The first task of the Executive Sponsor was the selection of participants which would be made by identifying “rising stars” across functional areas. Particular emphasis was given to the “pairing” of functional area participants with information systems leaders who could work together on the strategic enterprise systems infrastructure projects. The goal was to imbue the participants with appropriate management practices that would benefit the company by reducing organizational barriers in the development, management, and implementation of enterprise-wide information-based solutions. The initial set of candidates ranged in level from Manager to Assistant Vice President. Participation in the CoP was voluntary, however, participation in the program would fulfill each individual’s annual corporate development training requirement. Ultimately, the candidate selection process was not without issue. For example, a senior Director of Information Systems Development demanded to know how that the participants were selected. Perhaps concerned with “losing control” in his development silo, the demand was made to the program Facilitator rather than the Executive Sponsor. The response to the Director was that “... *the participants initially represented a cross section of individuals from various business units where these individuals were either working on very similar projects that had significant potential to move the business forward or would be working on such projects in the near term.*”

Likely participants were named by the Executive Sponsor. Potential “fast trackers” or “opinion thought leaders” who were viewed as the future leaders of the business were identified and offered the opportunity to participate in the development program. Unfortunately, the managers of some of those invited, even after helping to identify participants in support of the program,

discouraged their subordinates from participating. This behavior, at more senior levels, reflected the deep divide and the intense rivalry that existed between departments as well as managers' desire to contain informational flows within their own functional area. This resistance due to the extant organizational culture has been documented in prior research (David & Fahley, 2000). Additionally, the Talent Management (Human Resources) Department was not asked to participate in the development program. Rather, they were informed of the project after the fact. Consequently, performance measurement requirements were put in place after the program was initiated. The primary requirement of the Talent Management Department was to obtain both "before" and "after" Company360 performance reviews of the participants along with a measure of group cohesion to use as a benchmark (Armstrong & Taylor, 2014). This again reflected the extreme competitiveness between the functional areas but provided significant data in terms of attaining program objectives that would not otherwise have been available and will be reported upon in this paper.

CoP Kickoff

In order to manage expectations of participants and begin to develop the psychological contract for the program, an information meeting was held with the approximately 33 potential participants invited to attend. The program facilitator and the Executive Sponsor spoke to the assembled group. The Executive Sponsor emphasized the long-term value that the program would create for the company and for the individual participants involved. The Executive Sponsor also stressed the potential for leadership roles for those offered the opportunity to participate. He carried both an Executive Committee message as well as a personal one concerning the need to find ways to better span the organizational silos that existed, particularly with respect to future enterprise wide capabilities.

Participants were asked to consider the time commitment and impact on their current workloads, and balance that with the potential return from such a program. Not only would they receive leadership training, but they would form the foundation of a Community of Practice (CoP), adding value to the organization and to themselves from their contribution to such a knowledge network. The first CoP meeting was scheduled for about a month after the information presentation. During that time, Talent Management (Human Resources) got involved and offered a before and after 360-degree management review against core competencies. For many participants, this would be their first 360-degree review.

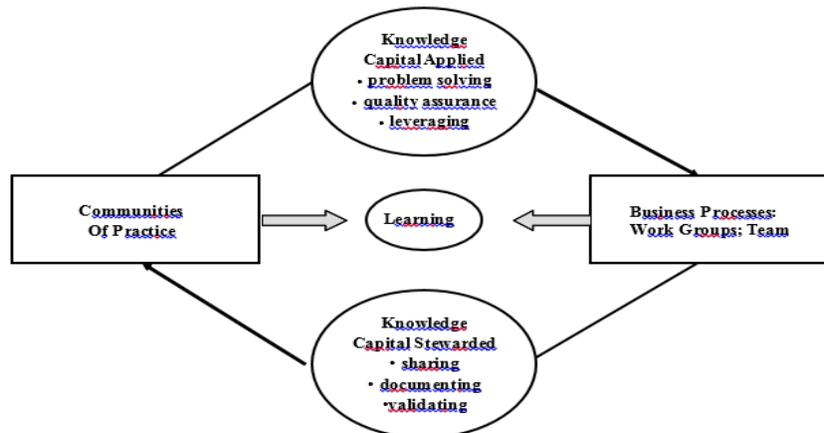
The program facilitator went through a short presentation (the agenda is attached as Table 1 – Agenda of Information Meeting) concerning the key components of the leadership program, the learning style to be utilized, potential outcomes, group governance, and time commitment (primarily every other Friday afternoon from 3 to 5pm for nine months plus advanced preparation in terms of readings). Information presented drew heavily on extant research on best practices of CoPs.

Table 1. Agenda of Information Meeting

Information Meeting Agenda Items
• What is a Community of Practice (CoP)
• The Nature of Knowledge: A Managerial Challenge
• Why CoP's
• Why participate
• Governance
• Building on team diversity

In defining a CoP, the facilitator relied heavily on Wenger et al. (2002). In this seminal work, Communities of Practice (CoP) were defined as groups of people who share a common concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in the area by interacting on an ongoing basis. These people do not necessarily work together on a day to day basis, but they meet because they find value in their interactions. As they spend more time together, they typically share information, insight, expectations and advice to solve each other's problems. (For a recent comprehensive review of Communities of Practice and Knowledge Management Literature, please see Brayton (2016).) As CoP members accumulate knowledge and become informally bound by the value they find in learning together, they tend to develop enduring ties and trust (King, 2010; Wenger et al. 2002). *“Over time, they develop a unique perspective on their topics as well as a body of common knowledge, practices and approaches. They also develop personal relationships and establish ways of interacting and develop a common sense of identity”* (Wenger et al. 2002, p 5).

Figure 1. CoP Organizational Learning



Wenger et al. (2002)

The relationship between the CoP and organizational learning is represented by (Wenger et al. 2002, p.19) in Figure 1 above. The model represented in Figure 1 was presented at the CoP information meeting where it generated considerable discussion, particularly as it related to tacit vs explicit knowledge located in procedure manuals and systems. What seemed to resonate was the ability to capture organizational memory as to why things were done in a particular manner.

The information session proceeded with a discussion of the managerial challenges represented by knowledge management. Both the executive sponsor and the facilitator viewed the discussion as a positive sign of group interest.

Setting CoP Goals

The information session continued with a discussion of the goals of a Community of Practice. Many authors, including Wenger et al. (2002), summarize the key definitional structural components generally as:

- Connection – discovering others with similar interests/issues although functionally diverse background
- Conversation – engaging in dialogs on inter-organizational basis particularly among individuals where such a dialog might not happen outside of CoP
- Community – building networks around shared themes
- Collaboration – finding new business procedures/practices

CoP Process

The CoP leadership program promoted the aforementioned goals through the sharing of ideas, information, and observations to solidify existing build-team relationships thereby preparing members for new cross-functional projects. CoP principles were accomplished through a study of contemporary management issues (these readings may be found in Appendix A – Contemporary Management Readings) with a facilitated discussion framing “lessons learned” in the context of the company environment; the learning objective was apply and integrate. This learning objective was observed both within the bi-weekly group meetings as well as in the participants’ private learning journal, maintained online. This process improved communication and behaviors among members of different functional areas within the company and generated interactions in a more constructive and channeled manner thereby improving members’ respective perceptions of each other’s functional area. CoP principles demonstrated the value of cross functional team based learning. The value added activity of studying contemporary management issues helped improve the integration of the company’s products and services across more business areas as participant-managers continued to move into newer, more integrated areas of responsibility. Developing a CoP was a way to more fully utilize existing intellectual capital by creating a mechanism for knowledge transfer through best demonstrated practices while maintaining commonality of focus on the core business.

Even though relationships within the company may start as collaborations between or within functional areas, these relationships must be stimulated and nurtured if they are to thrive. These relationships become the basis of a knowledge network of individuals with the right skills, motivation and expertise to foster the continued creation of intellectual capital and, therefore, innovation. Shifting focus to knowledge innovation allows managers to find better answers to new and tougher problems and apply new technologies and processes to “old” problems.

Wenger et al. (2002) indicates that to make the collaborative process work, it is important for participants to know why cooperative relationships might be beneficial to them as an individual.

This is the primary motivator for people to spare time and effort to engage in a rather uncertain and open-ended dialogue that is unlikely to have quick or easily identifiable returns. Equally important in the development of a collaborative relationship is the creation of a relaxed and safe environment in which to take risks, play with new ideas, and have a dialogue. Clearly the socialization process plays an important part here. It is crucial that the participants get to know one another at a personal as well as a business level. This is key to developing the trust required for people to share tentative ideas, speculative insights and intuitive understanding.

In this action research project, as participants applied more of the readings to their individual, unique situations, they learned that their comments were kept confidential by the group. Once the participants felt safe within the group, the dialogues concerning application and integration to the company environment became very open, unvarnished and frank. The result was great dialogue and the development of trust. As one participant said, "... the greatest proof so far that people feel they are receiving value for their time spent is that we have only lost one participant from the program after the initial month ... I think the group is balancing well and ... beginning to get caught up in the enthusiasm of the group."

Knowledge about how to relate to other parts of an organization is a valuable business asset in itself, which in this case, helped the company save money, be more flexible, improve innovative and increase responsiveness. Knowledge managers made a contribution to these improvements by taking action to help partnering relationships run more smoothly, avoiding the waste and damage that occurs as a result of frequent adversarial clashes, thereby enabling people engaged in these relationships to pool their ideas and learn about inter-organizational processes, and disseminate this knowledge more broadly.

Prior to the first bi-weekly meeting, participants were asked to take the Myers Briggs personality test. Each group member was then asked to read an article about personality styles and their impact on group dynamics (White, 1984) as the beginning of the team building process. Participants were also asked to bring a brief one page statement completing the phrase "My ideal team is" At the first gathering of the group, the team building process began as participants discussed the assigned article and its anticipated impact on the group. During this session, they also talked about their ideal teams, and they were given an initial assignment to write a group contract determining the governance for the group (i.e. their own team rules). This three-step process of getting to know yourself, describing your ideal team (your values) and concluding with a group outcome, started the team building process by allowing participants to develop trust through sharing and discussing such information (Ellinger & Bostrom, 1999). The governance process was very useful in that it provided a method for the group to communicate topics of special interest beyond the prescribed list of readings from the facilitator. Thus the grouped began to "own" the process.

The facilitator also asked each individual participant to identify and bring with them three to four "core competency areas" that the participant wanted to develop from among the competencies defined by the company for participant's current and next level position. Participants reported on learning in these specific areas in their learning journals, to the exclusion of other areas. The Talent Management Department administered a "pre" and "post" full 360 evaluation against the core competencies that was intended to evaluate improvement in specific core management

areas. The company coded participants’ core competencies in accordance with the FYI methodology as described in the *For Your Improvement Handbook*, by Michael M Lombardo and Robert W Eichinger (1996). Using the FYI methodology, along with a group cohesion measure, the company intended to demonstrate individual’s progress in acquiring leadership skills

Contemporary management readings were utilized for managerial developmental objectives while framing them against the company environment. Each reading served as a basis for discussion concerning how the author’s particular concepts or principles might be applied to practice within the company environment to address corporate and individual objectives. The readings also promoted informal discussions between members, describing specific organizational cultures, department challenges, realities, and possibilities for healthy intra-organizational behavioral change. A complete list of readings may be found in Appendix A – Contemporary Management Readings.

Outcomes

As indicated earlier, the motivation for this program was the creation of a forum to serve as a nucleus for a long-term knowledge network that promotes constructive change and provides perspective to members of the community. Although much of the value of creating a community of practice is behavior oriented or perception driven, how to measure the success of such a program was an important question. Just as beauty is defined in the eyes of the beholder, success was measured on multiple levels.

First, on a programmatic level, we measured the development of a social network utilizing a group cohesion method as defined in Bollen & Hoyle, 1990. For this purpose, we collected information at five points during the program. We represent the beginning and end points in Table 2 (Depth of CoP).

Table 2. Depth of CoP

Dimension	Beginning of Cop	End of CoP
Seek advice on personal issue (top 3)?*	2.40	3.00
Who else?***	0.00	2.71
Seek advice on business / systems issues (top 3)?*	2.60	3.00
Who else?***	0.80	1.71
Which are the 3 with whom you socialize most often?*	2.40	2.86
Who else?***	0.80	2.57
Number of CoP Team Responding	14	7

Scale: * is 0 to 3 while *** is scaled from zero to n, where n is the number of participants in the program

Second, on an individual level, proof of program success was measured as the individuals’ ability to take an abstract construct, adapt it to the company environment, and modify their individual or group behaviors for critical improvement. At the beginning of the program, the participants established personal objectives, as well as a common set of group objectives, used to track their progress within the program. At the midpoint and at the end of the leadership program, participants were asked to review their own journals and prepare a report to enter into the journal to describe the application of learning to their current and future potential job roles to be shared with their respective (and future) managers. Progress against these objectives was tracked with formal written feedback provided to participants and their management at the midpoint and at the end of the project. The individual formal feedback was reported against the Critical Success Factors contained in Table 3 (Dimensions of Individual Evaluations). This included the “before” and “after” Company360 reports against core competencies defined for each position. These core competencies, as defined, are aligned with those in Lombardo and Eichinger (2004).

Table 3. Dimensions of Individual Evaluations

Critical Success Factors	CoP Discussion Forum	Individual Learning Journal	Group Survey	Consultant in-person observations	Manager sit-down review with consultant
Progress against CoP objectives	X	X	X	X	X
Work process modified to take advantage of knowledge sharing	X	X			X
Taking action on lessons learned	X	X			X
Communication of lessons beyond CoP		X			X
Shift in focus to knowledge innovation	X	X		X	
Articulating value to company community	X	X	X		X
Activities that demonstrate learning	X	X		X	X
Active & involved leadership	X	X		X	X
Facilitation skills developed	X	X group		X	

The Corporate360 was administered in the second month of the CoP program with results not available until the fourth month of the program. The intent of administering the Corporate360 was twofold. First, the Corporate360 was to provide feedback to participants of certain areas requiring improvement. Each CoP team member had previously selected at least two areas of focus for improvement and granted permission for the results to be reported to their respective management as part of a score card of progress. For most participants, the results were truly shocking, as they had never participated in such a process before, and they were not ready to see the results. However, the results provided a beneficial “reality check” for the CoP as to the

importance of a focus on soft management skills. As one long-term employee indicated in their journal “I am, like others, surprised by some of the scores. Through this matrix report I see that I have been identified with three important skills with high skill level, two high skills of low importance, two middle skills of middle importance, and six important skills with low skill level. I try to give my all, provide support to my colleagues as much as I can, and encourage others to do their best. Through this CoP program I have had some time to momentarily pause and reflect upon my job issues, my weaknesses and those areas I need to focus upon to improve myself as a manager”. Another participant indicated that he had “been very distracted during the development process and a *bit skeptical*.” He tended to dismiss things that he didn’t immediately agree with and rationalize why they could not be right, particularly the Company360 evaluation. This individual worked in Information Technology and was “not very accepting of dissenting opinions particularly when coming from outside the IT arena”. The Company360 evaluation was very useful in establishing the reality, or need, for soft skills and team building.

Table 4. Changes in Corporate360 Core Competencies
Focus Areas by Participant That Completed CoP

Corporate360 Competency (skill number in Lombardo and Eichinger)	Individual Participants						
	D	I	J	K	N	O	H
Managing Vision & Purpose (65)	-0.11				0.13	0.24	
Managing (4)	-0.19						
Communication (33 & 67)		+1.0					
Leadership		+0.95					
Managerial Courage (34)			0.04	0.31			
Drive for Results (53)			0.17				
Priority Setting (50)				0.19			
Building effective teams (60)					0.27		
Strategic agility (58)				-0.33	0.08		
Customer focus (15)						-0.04	0.5
Integrity & trust (29)						-0.06	0.11

Notes: (1) Changes on 5 point scale; (2) Statistically significant 97.5% level using Wilcoxon Matched Pairs Signed Rank Test

The second purpose for administering the Corporate360 was to serve as a “pre” and “post” CoP program evaluation tool. Results of this evaluation are found in Table 4 above, (Changes in Corporate360 Core Competencies by Focus Areas by Participant That Completed the CoP). The Corporate360 was administered by the Talent Management (Human Resources) Department of the company. In most cases, there was positive movement at the particular competency level. In a few cases, there was negative movement. It must be pointed out that all individuals with negative differences had changes in management (and perhaps, therefore, perceptions). Statistically, we chose to use a non-parametric test due to the small sample size and uncertainty about the distribution of means. The non-parametric Wilcoxon Matched-Pairs Signed-Ranks test yielded a significant difference between the “pre” and “post” scores at the 97.5% level.

Previously, the objectives of a Community of Practice were defined in terms of the 4 C’s: Connection, Conversation, Community, and Collaboration. According to Hoadley (2012), a CoP

is made up of a relational property of individuals in context and in interaction with one another rather than a property of individuals and the cognitive representations in their heads. Within this framework, the results of the pilot were very positive. (For a novel approach using the 4 C's in social media, see Ang (2011).)

In regard to connection, (i.e. discovering others with similar interests / issues), team members of the CoP quickly found many common bonds from bonus systems, including similarity of bonus objectives, similar frustrations concerning bureaucratic response to innovation, ownership issues, communication issues, fuzzy strategies, etc. The group used their functional diversity to forge common solutions or responses to these shared views. Additionally, many of the CoP team members used each other and the group as a sounding board for handling their own multifaceted business problems. Often the outcomes were modified by suggestions from the group to improve clarity and offer alternative methods of accomplishment.

Within the 4 C's framework, conversation may be described as engaging in conversational dialog on an intra-organizational basis, particularly among individuals where such a dialog might not otherwise happen outside the CoP. This type of interaction was frequent between the CoP team participants. They often had group lunches in the cafeteria to discuss issues from the readings as they applied to business opportunities. Many of the team members started exercising and doing activities outside the office as the bond and dialogues continued to strengthen. The participants also began to offer each other suggestions on how to use the principles they had discussed to address work and personal issues. Sharing this knowledge had the effect of minimizing real or perceived barriers based on their functional role within the organization. The members found commonality in their desire to be more effective in both their personal and professional lives.

Conversation within the group provided the opportunity to develop a sense of community (building networks around shared themes). One participant was particularly reflective in his journal comments indicating *“Another concept is the choice between reactive and proactive evaluations of situations. I am high-strung, which is a good quality in my mind, but slowing down a little and really absorbing what other people are saying has helped me, and it is really appreciated by people in my teams.”* Another participant indicated that *“I have found few ways to use the information.”*

A social network is so central to the theme of Communities of Practice that we formally measured its development. The results of those measurements are summarized previously in Table 2 (Depth of CoP).

Table 5. CoP Feedback Survey

Dimension	at 6 weeks	at 15 weeks	at 36 weeks
The purpose of the CoP program is to create a forum to serve as a nucleus of a long-term knowledge network that promotes constructive change and provides perspective to members of the community. Extent to which the program is accomplishing its primary goal	4.17	4.67	4.86
Improve communication & behaviors among members of different functional areas & to interact in a more constructive and changed			

manner thereby improving their respective perception of each other’s area as well as the value of cross functional team-based learning. Extent to which the program has facilitated this goal?	4.00	4.67	4.71
One of the goals of creating a knowledge network is to take advantage of knowledge sharing and collaborative capabilities thereby shifting focus to knowledge innovation – finding better answers to new and tougher problems and applying new technologies and processes to revisit “old” problems. To what extent has this program helped provide frameworks for evaluating current problems and suggesting ways to solve old problems?	3.83	4.42	4.57
To what extent have you been able to take action on lessons learned to integrate key concepts from the CoP into your current professional thinking/environment?	4.00	4.67	4.43
To what extent have you been able to share CoP knowledge or concepts to members of the larger corporate community?	3.50	4.25	4.17
To what extent has the CoP been successful in “Connection” - Discovering others with similar interests/issues	3.83	3.87	4.57
To what extent has the CoP been successful in “Conversation” - Engaging in dialogs on an inter-organizational basis particularly among individuals where such a dialog might not happen outside CoP	4.33	4.67	4.14
To what extent has the CoP been successful in “Community” - Building networks around shared themes	3.83	4.00	4.14
To what extent has the CoP been successful in Collaboration - Finding new business procedures / practices	3.50	3.83	3.86
Overall, how satisfied are you with the results of the CoP?	4.00	4.67	4.83

Note: Measured on a five point scale (5 highest)

In order to gauge the level of perceived satisfaction of the participants against the multiple criteria of the program, an anonymous survey was administered at three intervals during the course of the program. The results are presented in Table 5 above (CoP Feedback Survey).

In addition to the above CoP facilitator administered survey, the corporate Talent Management Group developed and administered an independent survey for the participants. The instrument was developed after two of the more senior participants were interviewed to gain a more in-depth understanding of the objectives and issues within the program. The results of the survey (with small sample respondent size) are represented as Table 6 (Company Administered Survey):

Table 6. Company Administered Survey

Survey Question	Score
JOINING THE TEAM	
The objectives of the program were made clear to me before I agreed to participate	3.75
I had clear expectations before I joined the program team	3.25
I was prepared for my participation in the program	3.25
My expectations of the program were met	3.75
My manager supported my participation in the program	3.25
TEAM PRACTICES	
The CoP team represented a wide range of functional responsibility at the company	2.75
The CoP team members were able to communicate effectively during the program	3.50

I felt like I was part of the team	3.75
As a participant, I contributed something to the team	3.50
ABOUT THE FACILITATOR	
Was prepared (room, printed materials, slide show) for program sessions	4.0
Encouraged questions during sessions	4.0
Was knowledgeable of the program material (e.g., value-adding behavior concepts)	4.0
Was enthusiastic about the material	4.0
PROGRAM CONTENT	
Met my expectations	3.75
Were easy to understand	3.50
Were relevant to my daily job	3.50
Had to do with “value-adding behavior”	3.75
Had to do with aligning different functional units to meet company goals	3.25
Were interesting	3.75
Were useful	3.75
MY LEARNING	
I believe I have learned something as a result of my participation in this program	4.0
I did not learn much	1.0
Participating in the program enhanced my ability to work with other functional areas in the company system	3.75
I would recommend others to participate in this program	4.0
I learned something about myself	4.0
I am better equipped to perform my job	4.0
I know how to add value to company	3.75
COURSE DELIVERY	
I was able to complete the text readings on time	3.0
The text readings helped me learn the topics	3.75
I did not benefit from the readings	1.25
The building-block approach to teaching the topics worked for me	3.25
Active discussions with team members helped me learn about value added behavior	3.75
It helped that the material was tailored to the company	2.5
The goal of the program is clear to me	4.0
The next team should meet more frequently	3.5
I enjoyed using the “chat room” for communicating with team members	1.75
I wish there was more hands-on learning during the program	2.5
I had everything I needed to be effective in the program	3.5
The personality tool was helpful	4.0

Note: Measured on a 4 point scale (4 as strongly agree)

In addition to the program objective to facilitate the development of cross functional teams, sharpening managerial skills was also a primary objective. To this end, many contemporary management readings were utilized - most were books but several were journal articles. As a group, the readings were exceptionally well received. As one Information Technology participant indicated in his journal, I now “begin all meetings and conversations with asking how the task or vision at hand "adds value". [I] Start there with trying to determine whether we should take on the work or not, and if so, how to best go about it.” In addition, the same individual reported that “The CoPs training class has completely changed my perspective on how to analyze

and conduct business. It has shown me that working on the right things are far more important than working on everything.”

The CoP participants that gained the most were those individuals already in higher-level positions. They had a broader experience base to absorb and relate to the materials, but they also were in a better position to apply the tools and knowledge set. In a few instances they were working on complex, multi-year, cross-functional projects, and that created a personal and professional need for the material. The company surveys indicated that the participants had a good understanding of the expectations of the program. But the survey was limited in size, and it did not include the individuals that discontinued participation along the way. Ultimately, this study teases out the need for greater deliberation in the selection process, choosing individuals from among potential managerial candidates and those recommended by their management rather than using a “semi-strong arm” approach. As noted by Bandow, Gerweck, and Self (2015), organization leaders must commit wholeheartedly to this concept [of a CoP] and demonstrate this commitment daily in order for the implementation of CoP's to be successful. There were clear indications in the current study that some of the participants’ managers discouraged participation, although in the end, the CoP was successful.

In terms of pace, the CoP met twice a month for about nine months. The facilitator was initially concerned with the pace of the readings at about a book a month plus a journal article or two. Although the Corporate360 survey indicated that not everyone finished every reading on time (which was also evident in the discussion), there was also a free form comment indicating a desire for more readings. The facilitator’s recommendation was to essentially stay with the one book a month format but step into the second month with journal articles to supplement the readings and manage the number of journal articles assigned. The facilitator recommended that the sessions be conducted bi-weekly rather than semi-monthly, giving potentially two more sessions during program duration. The CoP lost some momentum when a new participant joined the group (and had to be socialized into the team) and during scheduled holidays.

Although the CoP started with a thorough intended list of readings, it did not complete all of them. When issues surfaced within the group, readings were substituted as appropriate to respond to the issues at hand. About half way through the CoP, the book entitled FYI (For Your Improvement) was identified. This book has chapters which correspond to each of the dimensions measured in the Corporate360. It was interesting to note how many of the readings discussed within the CoP were also included in the FYI suggested readings list. One recommendation from this research is that prior to implementation of a CoP, companies review the FYI resources and modify their reading list accordingly.

The team members were asked to keep a “Learning Journal,” first in LotusNotes and then in SharePoint, as well as to participate in electronic reading rooms. This task resulted in the most surprising and disappointing finding in the program; the participants would not regularly utilize the electronic environment. First, in LotusNotes, the participants objected to the non-windows like interface of LotusNotes. So, the IT people on the team implemented and converted materials to SharePoint (almost overnight). Ironically, the IT people still did not want to use the technology. Close to the end of the program one of them explained why: they were not comfortable that their comments, in electronic form, could be kept confidential because of the

security overrides by their own management team. On the other hand, these same participants were very open and candid during group discussions. It should be noted that the group offset the lack of online discussion with lunch discussions (without the facilitator) on the readings and management problems. It is the facilitator's recommendation that for future CoP development, an outside provider be utilized so that participants can be assured of a greater level of confidentiality regarding their comments. This would promote the use journaling activity as a means of measuring the level of participation with regard to performance management scores.

All the CoP participants have agreed to serve as “ambassadors” for the program and to provide active participation with others, particularly as it relates to expectation and outcomes.

IMPLICATIONS FOR RESEARCH AND MANAGEMENT

In summary, analysis of qualitative and quantitative data during the pilot program, and from the ten-year follow-up, yield three logical conclusions: 1) a top-down leadership program can serve as a nucleus for the creation and nurturing of a community of practice (CoP) that not only imbues the participants with appropriate management practices but also reduces organizational barriers to the flow of information; 2) the knowledge created in the CoP concerning the interdependencies among the functional areas is a valuable business asset in itself; 3) knowledge ties created in the CoP extend beyond the duration of the formal program and persisted over time.

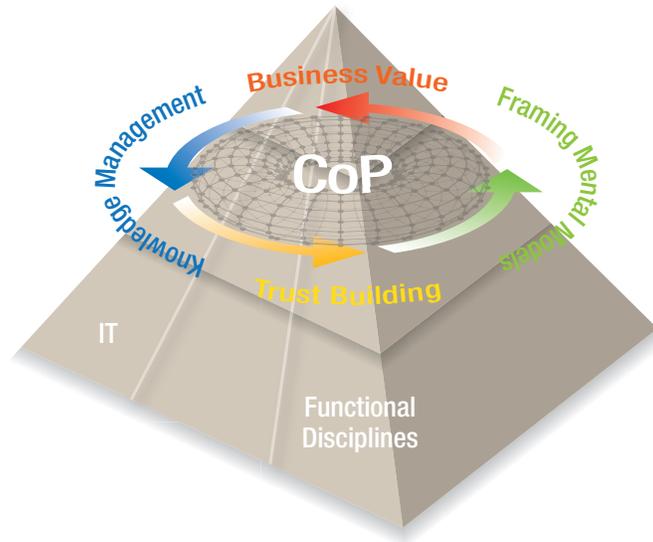
There was high attrition in the project. Of the approximately 33 potential participants invited to attend the information program, less than 14 moved forward into the program. The attrition may not be surprising given the research on challenges of sharing knowledge (Ardichvili et al., 2003). While participation was voluntary, changes in job responsibility, leaving the company, and the shock of a 360 evaluation program may have served as further cause to leave the program. Over the course of the program, the CoP team dwindled to 9 core members. The selection process clearly needed to change, as did management attitudes.

There was one key unanticipated benefit which was highly desirable: closer alignment of projects within the corporate strategy. Often, strategies are fuzzy, undeveloped visions on slides. The CoP was the perfect group to develop those visions and create detailed, substantive plans which could be implemented with multiple functional areas represented.

This pilot program demonstrated two additional significant outcomes. First, knowledge concerning how the functional areas interrelate within the organization is a valuable business asset in itself. This familiarity can facilitate cost savings and flexibility within an organization, as well as innovation and responsiveness to customers (both internal and external). Second, knowledge managers make a contribution by taking action to help partnering organizational relationships run more smoothly, avoiding the waste and damage that occurs as a result of frequent adversarial clashes, thus, enabling people involved with intra-organizational relationships to pool their collective ideas and knowledge about these relationships to disseminate knowledge more effectively. Thus there should be a fifth C – Creating knowledge.

- Connection – discovering others with similar interests/issues
- Conversation – engaging in dialogs on an intra-organizational basis particularly among individuals where such a dialog might not happen outside of CoP
- Community – building networks around shared themes
- Collaboration – finding new business procedures/practices
- Creating knowledge -- combining information in new ways

Figure 2. Creating Value Through Collaboration



This action research project was initiated in the early summer of 2006 and lasted a little less than a year with the results recently longitudinally verified. The paper is summarized above in Figure 2 - Creating Value Through Collaboration. The outcomes of the project documented in this paper are summarized in the following quote by a CoP member: *“Interorganizational barriers within the CoP seemed to have evaporated, and now the exchange of information over the fence has had the effect of destroying the fence. In the end, instead of each of us identifying ourselves by our functional role, we identified ourselves as a member of a community”*. Since no single case study can provide a high degree of reliability from a research perspective, the success of CoPs requires further exploration toward the development of a verifiable process to accomplish optimal interdepartmental collaboration. From a practitioner point of view, a detailed “how to” manual on the implementation of a CoP, as well as a greater emphasis on the linkage between strategy and fit, would have been very useful.

REFERENCES

- Ang, A. (2011). Community relationship management and social media. *Journal of Database Marketing & Customer Strategy Management*, 18(1), 31-38.
- Ardichvili, A., Page, V., & Wentling, T. (2003). Motivation and barriers to participation in virtual knowledge-sharing communities of practice. *Journal of Knowledge Management*, 7(1), 64-77.
- Armstrong, M., & Taylor, S. (2014). *Armstrong's handbook of human resource management practice*. Kogan Page Publishers.
- Bandow, D., Gerweck, J., & Self, T. B. (2015). Supporting and Empowering Knowledge Workers and Communities of Practice. *Quarterly Review of Business Disciplines*, 2(1), 1-17.
- Bollen, Kenneth A. & Hoyle, Rick H. (1990, December). Perceived Cohesion: A Conceptual and Empirical Examination. *Social Forces*, 69(2), 479-504.
- Brayton, S. W. (2016). *Participant Perceptions of Knowledge Sharing in a Higher Education Community of Practice*. (Unpublished doctoral dissertation.) University of North Florida, Jacksonville, Florida. Retrieved from <http://digitalcommons.unf.edu/etd/636>
- Christensen, C., & Raynor, M. (2013). *The innovator's solution: Creating and sustaining successful growth*. Boston, MA: Harvard Business Review Press.
- Davenport, T. H. (2013). *Process innovation: reengineering work through information technology*. Boston, MA: Harvard Business Press.
- David, W., & Fahey, L. (2000). Diagnosing cultural barriers to knowledge management. *The Academy of Management Executive*, 14(4), 113-127.
- Ellinger, A. D., & Bostrom, R. P. (1999). Managerial coaching behaviors in learning organizations. *Journal of Management Development*, 18(9), 752-771.
- Garavan, T. N., Carbery, R., & Murphy, E. (2007). Managing intentionally created communities of practice for knowledge sourcing across organisational boundaries: Insights on the role of the CoP manager. *The Learning Organization: An International Journal*, 14(1), 34-49.
- Hoadley, C. (2012). What is a community of practice and how can we support it? In S. Land and D. Jonassen (Eds.). *Theoretical foundations of learning environments* (pp 287-300). New York, NY: Routledge.
- King, W. R. (2010). *Knowledge Management and Organizational Learning: Annals of Information Systems*. New York, NY: Springer Media.

- Lombardo, M. M. and Eichinger, R. W. (2004). *FYI - For Your Improvement, A Guide for Development and Coaching, 4th Edition*. Minneapolis, MN: Lominger Ltd Inc.,
- Porter, M. E., & Millar, V. E. (1985). How information gives you competitive advantage. *Harvard Business Review*, 63(4), 149-160.
- Scott, W. R., & Davis, G. F. (2015). *Organizations and organizing: Rational, natural and open systems perspectives*. New York, NY: Routledge.
- Sytch, M., & Tatarynowicz, A. (2014). Exploring the locus of invention: The dynamics of network communities and firms' invention productivity. *Academy of Management Journal*, 57(1), 249-279.
- White, K. B. (1984, June). MIS Project Teams: An investigation of Cognitive Style Implications, *Management Information Systems Quarterly*, 95-101.
- Wenger, E. C., & Snyder, W. M. (2000). Communities of practice: The organizational frontier. *Harvard Business Review*, 78(1), 139-146.
- Wenger, E., McDermott, R., & Snyder, W. (2002), *Cultivating Communities of Practice: A Guide to Managing Knowledge*. Boston, MA: Harvard Business School Press.

Appendix A – Contemporary Management Readings
(Publication Descriptions from Amazon)

Overcoming the Five Dysfunctions of a Team: A Field Guide for Leaders, Managers, and Facilitators (Patrick Lencioni) -- excellent “think book” concerning aligning organizations around common goals and reduce the conflict that often is inherent in cross functional teams.

Silos, Politics, and Turf Wars: A Leadership Fable About Destroying the Barriers That Turn Colleagues Into Competitors (Patrick Lencioni) – excellent “think book” concerning aligning organizations around common goals so reduce dismantle silos and the dysfunctions associated in organizations as a result. It provides an insightful look at how companies can recognize and remedy infighting.

Now, Discover Your Strengths (Marcus Buckingham & Donald O. Clifton) – book discusses how to identify and develop your talents and those of the people you manage.

Blue Ocean Strategy (W. Chan Kim & Renee Mauborgne) – book’s hypothesis is that you have a choice: continue in a bloody battle of diminishing returns against your competitors or innovate and find a “blue ocean” where the market is yours to dominate.

Good to Great: Why Some Companies Make the Leap... and Others Don't (Jim Collins) – how can a good company become a great company? The author examines commonalities in companies that have made the transition and discovers that making the transition from good to great doesn't require a high-profile CEO, the latest technology, innovative change management, or even a fine-tuned business strategy. At the heart of those rare and truly great companies was a corporate culture that rigorously found and promoted disciplined people to think and act in a disciplined manner. Peppered with dozens of stories and examples from the great and not so great, the book offers a well-reasoned road map to excellence.

The Innovator's Dilemma (Clayton M. Christensen) – Discussion centers on when new technologies become available, how do established companies take advantage of these innovations without disrupting existing relationships with customers and stockholders? It provides an insightful analysis of technology on industries and organizations, and a convincing argument for why thinking outside the box is so critical.

The Goal (Eliyahu M. Goldratt & Jeff Cox) – an alternate method of examining problems to determine constraining factor (Theory of Constraints) and application to continuous process improvement.

The Power of Strategy Innovation: A New Way of Linking Creativity and Strategic Planning to Discover Great Business Opportunities (Robert E. Johnston, J. Douglas Bate, & E. Russell, Jr. Johnston) -- This book is a phase-by-phase approach to the process of strategy innovation, not step-by-step. They provide the blueprint and encourage the reader to customize it for the specific needs of their company and industry. "Strategy Innovation is best achieved by leaping ahead and working backward."

The 7 Habits of Highly Effective People (Stephen R. Covey) – Program of self-improvement involving creating habits for effective living including: 1) Be Proactive, 2) Begin with the End in Mind, 3) Put First Things First, 4) Think Win-Win, 5) Seek First to Understand – Then to be Understood, 6) Synergize, and 7) Sharpen the Saw.

Managing the Equity Factor: Or “After all I’ve Done for You (Richard Huseman & John Hatfield) – the book provides techniques towards setting positive expectations and goal setting, providing positive feedback and learning how to communicate in terms of the value structure of the “other person.”

Bullies, Tyrants, & Impossible People: How to beat them without joining them (Ronald Shapiro & Mark Jankowski) – provides techniques for identifying and neutralizing negative behaviors.

The Balanced Scorecard (Robert Kaplan & David Norton) – develops the concept of management by scorecard and providing actionable metrics linked to strategic objectives.

The Dilbert Principle (Scott Adams) – tongue in cheek look at serious management issues.

Sample Contemporary Management Readings (Articles)

“**The Outcome Frame: Key To Managing for Excellence**” by Rita Cashman, *Mobius*, 1986

“**Research-Driven Facilitation Training for Computer-Support Environments,**” by Victoria Clawson and Robert Bostrom, *Group Decision & Negotiation*, 1996.

“**Having Trouble with Your Strategy? Then Map It,**” by Robert Kaplan and David Norton, *Harvard Business Review*,

“**IT Doesn’t Matter,**” by Nicholas G. Carr, *Harvard Business Review*, 2003.

“**Management Time: Who’s Got the Monkey?**” by William Oncken and Donald Wass, *Harvard Business Review*, 1999.

“**Managing Your Boss**” by John Gabarro and John Kotter, *Harvard Business Review*, 1993

“**Pygmalion in Management**” by Sterling Livingston, *Harvard Business Review*, 2002

“**Software is not the Solution**” by Paul Sharman and C. Bruce Kavan, *Journal of Strategic Performance Measurement*, 1999

“**The Rise of the Business Web,**” by Don Tapscott, David Ticoll, and Alex Lowy, *Business 2.0*, 1999

“**MIS Project Teams: An Investigation of Cognitive Style Implications,**” by Kathy Brittain White, *MIS Quarterly*, 1984.

“**The Entitlement Generation: Are young workers spoiled or simply demanding a new kind of work life,**” by Martha Irvine, 2005

QRBD

QUARTERLY REVIEW OF BUSINESS DISCIPLINES

August 2017

Volume 4
Number 2



A JOURNAL OF INTERNATIONAL ACADEMY OF BUSINESS DISCIPLINES
SPONSORED BY UNIVERSITY OF NORTH FLORIDA
ISSN 2334-0169 (print)
ISSN 2329-5163 (online)