

THE CASE OF COMMUNITY-OF-PRACTICE DEMISE: WHY GOOD WILL AND REAL NEED ARE NECESSARY FOR PEER-LEARNING BUT ARE NOT ENOUGH

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Abstract: in communities-of-practice (COP) much effort is dedicated to prevent "knowledge hoarding", as if knowledge contribution is the chief success factor. Little attention is paid to knowledge consumers' motivation. Two case studies are presented in which a COP had been much appropriate but, despite organizational support, has dissolved. The prime impediment was reluctant demand for knowledge as community members preferred independency and self-reliance. Two causes are hypothesized: (1) a sense of over-responsibility, and (2) implicitness aversion, or "soft" knowledge mistrust; both require further research. Practically, the study demonstrates the negative effect of over-motivation in a COP context.

Keywords: Community-of-practice, Organizational culture, Peer learning

1 INTRODUCTION

Community-of-practice (COP) in Orr's (1996) tradition is an informal assembly of co-workers, whose common denominator is their actual practice (Brown & Duguid, 2002). COPs became the new frontier of organizational learning and are often acclaimed for benefiting the organization in which they operate through sharing knowledge, promoting innovation or increasing effectiveness (Wegner & Snyder, 2000; Plessis, 2008). No wonder that the topic at large has been witnessing an increasing interest for the last two decades. Yet, characteristic of fledgling domains, a sound theory has not developed and much of our knowledge of the topic is episodic. This study maintains this limitation yet enlightens a point hardly addressed thus far: the motivation – or better to say the counter-motivation – of knowledge *consumers*.

There seems to be a hidden assumption in the literature as if demand for knowledge is insatiate. In terms of economics, under endless demand supply is the only determinant of consumption. When examining references to COP-enablers one may reach this very conclusion. Literatures surveys² (e.g. Dube, Bourhis & Jacob, 2006; Johnson, 2001) ignore the factor of consumers' motivation. COP studies, either from individual or organizational point of view, concentrated on the knowledge contributor; several examples follow.

Concerning the individual level, Dixon (2000) denies the likelihood of knowledge sharing unless the knowledge *contributor* is eager to do so. Ye, Chen & Jin (2006/a, 2006/b) and Tedjamulia, Olsen, Dean & Albrecht (2005) examine the knowledge *contributor's* motivation. Mooradian, Renzl & Matzler (2006) emphasize trust as *contributor's* motive, again from a unidirectional perspective. Ardichvili, Page &

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² Concerning virtual COPs.

Wentling's (2003) study of barriers to participation in COP is another example of how knowledge consumers remain in the shadows.

On the organizational level, Hooff & Ridder (2004) find commitment (in the context of organizational culture) as a prerequisite toward knowledge *contribution*. McLure-Wasko & Faraj (2000) call organizations to instill the notion of knowledge as a public good in order to encourage knowledge *contributors*. McDermott & O'Dell (2001) praise organizations in which peers and supervisors pressure knowledge *contribution*. Once again, what underlies these accounts is taking knowledge's consumers for granted.

Is it really the case? Occasions in which potential knowledge consumers refuse or fail to accept knowledge are documented, although not necessarily in COP context. NIH (not-invented-here) is a widely spread acronym, used by scholars and practitioners alike. Limitation of absorptive capacity is another established notion, treated theoretically (Cohen & Levinthal, 1990) as well as empirically (e.g. Menon & Pfeffer, 2003). Missing trust is as applicable to knowledge consumers as to contributors (Dixon, 2000). Nevertheless, these and other demand-side impediments are not very often discussed when COP is concerned.

The following study sheds light on this issue. The research question is what dissuades organizational members from utilizing the benefits of COP. It comes out that inhibited knowledge acceptance is a key factor. In the remainder of this paper two such cases are described and analyzed, conclusions are drawn and propositions for further research are suggested.

2 BACKGROUND

In the two occasions described hereinafter the evolvement of COP was nothing but expectable; nevertheless, it did not happen. This section provides chronological background to rationalize the alleged COP likelihood. The cases in point share the COP-appropriateness but differ in almost any other aspect. The arena in one is an academic college where the protagonists are teachers; the other takes place in a high-tech manufacturer wherein project managers (PMs) are centered on.

2.1 The College

The college provides first-degree engineering education and is located in the north of Israel. The college offers degrees in five engineering domains (each corresponds to a department): industrial, mechanical, software, electronics and bio-technology. Colleges in general are relatively new in Israel's academic system, and the ideology behind their establishment was to make higher education more accessible in the periphery. A sheer consequence of this increasing capacity was lower selectivity that opened the door for students with moderate learning skills. On the other hand, the academic requirements remained as high as before. The challenge to bridge this gap was left to the colleges.

About five years ago, in the course of strategic thinking, the college we talk about decided to meet the challenge by adding learning skills to the curriculum. A dedicated center was established towards this end and a renowned method for advancing learning skills was adopted. According to this center's policy the regular engineering teachers, not newly hired specialists, would instruct the learning skills courses.

About fifteen teachers, representing most of the departments, studied the matter in a two-year training that was taught by an outsider expert. They met regularly for a couple of hours every other week, enough time to permit familiarity among the members. The next two years about two thirds of them engaged in practical instruction. In principle every teacher taught the course in her or his department with minor adaptation, but basically all the courses were identical.

Recall: here is a group of teachers, all (but one) face a new challenge under the same condition. That is, all of them share the stress of entering unknown territory, out of their cozy habitat. They are geographically, professionally, mentally and personally close. They are peers, and in the academic climate around them knowledge co-creation is the way of life. COP seems to fit the circumstances like a glove. Did it?

Seeds of cooperation have already been planted towards the end of the training. Each teacher was voluntarily assigned a topic and prepared a detailed outline for the entire group; the materials were stored in an exclusive website accessible to every member. All the teachers announced their commitment to on-going collaboration.

In addition, four meetings with the expert were organized (by the center) during the first year after the training, to which all the teachers were invited and most showed up. In these meetings the practicing teachers shared their experience and the expert gave her feedback and advice. The need for practical knowledge was clear. However, a side observer could notice that the communication was bilateral rather than multilateral: participants addressed mainly the expert and not each other. Later the official gatherings diminished to once a year, with very few contacts in between.

In sum, a COP did not emerge, the website withered, and every teacher paved her or his own way.

2.2 The High-Tech Manufacturer

The organization in point designs, develops and manufactures cutting-edge systems. Its structure follows a weak matrix: domain-specific sections along one axis and project managers (PMs) on the other. The PMs coordinate the resources which remain subordinated to the section heads. At any point in time about ten projects run in parallel, each lasts between one and two years.

Traditionally PMs are mid-career engineers, who grew in a professional section to which they will return after the project's completion; few will exercise another project. In this sense project management is perceived as a rite of passage, surely not a vocation. The consequence is that almost all the PMs are to some extent novices (not equally, since projects do not start simultaneously). This pathology is acknowledged throughout the organization, but not accepted to excuse management failures.

The organization took some measures to mitigate the entrance to the job; among them a written PM guide, nomination of a personal mentor and tight supervision. Though, recurring mistakes are inevitable when the learning curve starts from zero in every project. At this point the executive director asked for the author's advice. A thorough diagnosis, based on individual and group interviews (see Faran, Hauptman & Raban [2006] for the diagnosis method), yielded problems typical of personalized knowledge (Hansen, Nohria & Tierney, 1999). More important, PMs found comfort in unveiling

common problems of which they were unaware. Structural changes³ were rejected by the management, but a recommendation to introduce a COP was welcomed.

As a starter I suggested to convene several organized meeting, in hope that the generated bonds would encourage further relationships. The organization subscribed seriously: a senior manager undertook the sponsorship and time was guaranteed despite the tight schedules of the projects.

In the next five months two meetings were held, a daylong each. About ten PMs participated in every meeting, half of them in both. PMs presented problems they had faced and intense discussions followed. Long breaks enabled spontaneous, informal connections. The feedback was unanimously positive; participants praised the experience and announced their will to continue. The utterance “From now on I will consult my peers more often” gained 3.6 on 1-5 scale; “I wish this community would continue” – 4.1. Characteristic of COP was the score they gave to the question: “to what extent did you teach others and to what extent did you learn from others?” The average answer was: the same.

Alas, optimism was too early. Informal ties remained rare, and the initiative faded. After a long recess the new executive resumed the organized meeting, more or less bimonthly. But unless PMs are enforced to learn from each other they insist on the hard way of self-experience.

2.3 Summary

In both cases the soil was fertile to breed a COP: realizable need for practical knowledge, amiable conditions and favorable top-management. In both early experiences demonstrated the potential benefits a COP can yield. Still a voluntary involvement failed to flourish and the organized initiative had no continuation.

3 METHOD

The research method employed here is case study, which is appropriate for inquiring phenomenon within its real-life context (Yin, 2002). Within this, since the COP theory is way underdeveloped, the study applies essentials of Eisenhardt’s (1989) “Building theories from case study research” method. This multi-case method calls for within-case analysis (actually data categorization), followed by a cross-case comparison, whereby overlapping phenomena solidify theoretical conclusions.

The main criterion behind the cases' selection was accessibility to data. In both the author was actively involved in the entire process and enjoyed intimate access to internal interactions. Data included pre- and post-process interviews and real-time records of COP's plenary assemblies. 7-10 deep interviews were held per each case, about half an hour each. The process and data collection have lasted three years.

The interviews, mostly individual plus one in a group, took a face-to-face form and were unstructured. Besides an opening question and few clarifications interviewees directed the talk wherever they found appropriate. This method minimized the risk of premature closure. Unit of analysis is the individual member whilst unit of observation is the community as a whole.

³ Such as a PM career or project management office.

Just one question led the study, namely: what impeded the thriving of the COPs in point *despite* the need and the organizational encouragement? Key constructs upon inception were: assistance, contact and learning; more emerged during data collection.

4 RESULTS

4.1 The College

Patterns of informal collaboration: the most prevalent form of collaboration was exchange of materials – documents or presentations. One teacher described⁴: “the only interaction involved [materials] give-and-take”. Most of the teachers experienced verbal communication as well but to a minimal degree; the word “sporadic” was the most common in this sense – usually an occasional meeting, in the corridor or at the coffee corner, which evoked a conversation. When asked about the content in these face-to-face meetings, teachers used mainly uncommitted words like “impressions”, “grumbles”, “comparisons [of classes]” or “experiences” (the last two unspecified); few particularized “ideas” or “small tactics”. To a moderate extent teachers attended one another’s classes. Only one teacher acknowledged regular consulting with colleagues.

After a few months (but within the first year) intensity of collaboration diminished. One teacher concluded bluntly: “the more experience we gathered, the less we shared it”.

Patterns of formal collaboration: under this concept I combine formal meetings, assistance from the outside expert, and the teachers’ website. The first two are merged since most of the contact with the expert and these meetings co-occurred. As mentioned earlier, four meetings have been held during the first year of practice. Interestingly, recall of the meetings in retrospect was quite belittling (“it was a waste of time”, “I can’t remember any benefits”), whilst my real-time records definitely indicate otherwise. It is, maybe, a sort of suppression. The website use was limited to exchanging materials, and accordingly was considered insignificant.

Drivers of collaboration: the strongest driver was clearly negative, i.e. difficulties. Examples: “I contacted others only upon dilemmas”; “without a difficulty I wouldn’t look for advice”; “we talked because she [another teacher] was desperate”. One expressed it the other way around: “I contacted nobody since everything was fine”.

Positive drivers, infrequently though, were personal similarities (“X and I share the same way of thinking, so it was easier for us to converse”), or prior acquaintance. Anyway, collaboration from any reason was sparse.

Intrinsic cultural barriers: the most salient explanation for the common self-reliance was a mix of responsibility and ownership, synonymous for the teachers with individual decision-making; in one’s words: “responsibility means self-decisions”. One teacher phrased it utterly clear: “it’s a matter of responsibility – after all it is *my* course!” Akin to this was the belief that professionalism equals independence. A teacher said, proud of her resourcefulness: “I was terribly anxious because [the course] is not my usual turf, so I selected those topics with which I felt more comfortable. I was surprised by my success and didn’t feel like [getting help]”.

⁴ Interviews and other communication were conducted in Hebrew and translated by the author.

Teachers readily paid for their sense of responsibility with time currency and committed themselves to hard work: “I made it all by myself”; “it was a pure self-experience”. It was explicitly stated that working in isolation was the rule, not the exception.

Extrinsic cultural barriers: the most popular reason in this category was the NIH (not invented here) syndrome. Some put it directly (e.g. “my needs are different”) while others implied: they justified departmentalization for the sake of common language. Alas, by that they lost out both ways, as one teacher noticed: “since each department maintains a single course at a time, inter-departmental contact is simultaneously the only and the unacceptable alternative”. The consequence was departmental silos.

Some teachers ascribed individualism to local organizational culture or even to academia in general. One speculated a vicious cycle, in which her colleagues suspected other's willingness to cooperate and thus hoarded their knowledge; but her voice was not echoed.

Situational barriers: another source of discouragement presents duality; for one, the newness of the subject made many teachers stick to the letter and follow the instructions – a counter-collaboration motive, in their opinion. Over time teachers gained confidence and developed their own variations; now the diversity became the very obstacle to collaboration.

Time pressure was also cited, justified by the marginality of the course for most of the teachers – that is, collaboration was ranked low priority.

4.2 The High-Tech Manufacturer

Patterns of informal collaboration: informal interactions are verbal only and slightly exercised. The interviewed PMs asked for other's advice, mainly upon their nomination; today, as experienced ones, they consult the younger. However, frequency in both cases is regarded low. The PMs sharply criticized the rarity in which their educated advice is requested; in hindsight they regret how little they have done it themselves as novices, or even beyond. One PM confessed: “I asked for assistance as a young PM, but not later; the need lessened”.

Collaborating parties are neither equal nor peers: one provides knowledge, the other only receives. The receiver is exclusively responsible for the contact initiation, preferably with those whose projects have ended. Personal acquaintance plays a minor role; anyway, due to the organization's size, many do not know each other. The search criterion is task similarity. Once a contact is established the communication is vastly face-to-face, always verbal and timely-bounded, usually without continuation.

Patterns of formal collaboration: two patterns are in use, one personal and the other collective. Personally, each new PM is assigned a mentor, ex-PM, who leads his early steps. Intensity of mentoring varies widely, from zero to weekly meetings, depending on both sides. Collectively, the executive conducts a bimonthly workshop with all the active PMs, i.e. peers. The aim is to share experience, and the spirit is distinctively apedagogical; in one's words, “we tell what we did, not what should have been done”.

Drivers of collaboration: one consistent driver (as already mentioned) is the project's outset, when the PM is usually a new-comer. Later in the project collaboration is mainly problem-driven, wherein the vast majority is *after* the fact. An ex-PM testified: “most of the communication succeeds failures... people ask my

assistance after they encountered a problem”. Remarkably many problems are not new, as one PM – probably the most experienced one – recognizes: “I often witness PMs who have fallen in a known trap and I ask myself: ‘damn, where have they been?’”.

Intrinsic cultural barriers: PMs seem to have assimilated an amazingly strong admiration of self-decision as an organizational value. One’s words are telling: “I was led to believe that deciding alone is a sign of dignity. I felt like I had a mental block against being consulted”. Others represented the idea not the less decisively: “I must prove to myself that I can manage alone”; “aren’t we picked up just because of our individualism? That’s how we get experienced”; “*naturally* the PM learns the job all by himself”; the “naturalness” turned fatalistic when another one added: “if you [the new PM] can’t cope, the organization is truly mean... you enter the job free of skills and experience, and if you fail you fail; no second chance”. Despite this stress they were attracted by the power in authority: “there is a beauty in the leeway, in shaping your own way”; another PM bundled the honey with the sting: “the heavy error cost of my decisions made me to feel powerful”.

In short, the courage to decide is perceived a maturity test, a privilege, a ticket to join upper echelons. But – a remarkable “*but*” – not any decision; only managerial ones. The PMs widely agree upon the difference between managerial and technical issues, where in the latter consulting is not only legitimate but almost mandatory. The rationale is interesting: “technical consulting is much more natural than managerial one. In technicality it is black and white, mathematic-like: either it works or not. The tech-expert you consult with has a proven record. Quite contrarily, management is rife with subjectivity, so you wonder what assures the ‘expert’ rightfulness. Why not to trust myself?” Or consider this: “asking for a technical advice is self-evident; but management skills? They are not teachable”. Another PM looked from a different angle: “technical consultancy is desired [by the organization]; managerial assistance is allowed – on the assisted account”.

By the way, undifferentiated *cooperation* is one of the four organizational espoused values.

Between the lines there is a conviction that if such a highly professional organization (technologically professional, to be sure) promotes inexperienced PMs it cannot be but intentional. The purpose behind the intention is left to imagination.

Extrinsic cultural barriers: impediments to collaboration relate to or stem from time pressure, a constant condition in projects. One expressed his priorities by saying: “we are here to work, not to play behavioral science [by which he meant mutual assistance]”. Another one explained: “they [the managers] emphasize long-range planning and strict schedule, to which peer-assist is definitely an interruption”. Further, perceiving the organization as results-oriented led the assumption that investing in collaboration will not compensate for a missed target.

The NIH syndrome has a tiny effect; a single PM mentioned it. Quite the opposite – many highlighted the recurrence of problems (as aforementioned).

5 DISCUSSION

Prima facia, both the cases exhibit COP appropriateness: common practice, shared difficulties, and time and space proximity. In both the seeds of a community have

been planted and favorable wind was assured by the organization. Still both resulted in isolated individuals who strive for independency.

At the same time the cases differ from each other remarkably. The college's case displays a mutual newness, namely all the members are more or less equally qualified; at the manufacturer experience is stratified at any point in time. Departmentalization and NIH are conspicuously greater in the college, whereas the manufacturer glorifies the unity of goals. The parent organizations are fundamentally different as one is a community of scholars and the other is a functional hierarchy; so are their cultures.

Despite the differences, the most crucial inhibitor for collaboration is surprisingly similar: self-reliance. The teachers emphasized their ownership-driven responsibility; the PMs worshiped autogenic decisions. Both associated self-reliance with maturity – *noblesse oblige* for the teachers, the light at the end of the tunnel for the PMs. Clearly the consumption side failed to meet the expectations.

Given the far-flung variation between the two organizations, what can explain the same maverick mentality? The common ground may be the skipped apprenticeship. A COP participant, according to Lave and Wegner (1991), proceeds from apprentice to journeyman to expert, and the interrelationships along this line form the community. The technicians described by Orr (1996) also progress along three levels of expertise. The teachers and the PMs, on the other hand, entered a single-stop route. This instant development probably catalyzed the perceived over-responsibility. Interestingly, Thomas-Hunt, Ogden & Neale (2003) found that *experts* are more appreciative toward other's knowledge; alas, the subjects in this study perceived themselves as not-yet experts.

Another striking finding is the PMs' perception of technical advice being legitimate whilst a managerial is not, due to the deterministic character of the former. This stance should not surprise Christensen (1997) who observed analogous discrimination between technology and marketing when a failure is concerned. It may sound counterintuitive, since management is much less teachable than technology, but it holds coherence with Nonaka and Takeuchi's (1995) assertion about the Western preference for the explicit. Though, the softness of project management provides another explanation for knowledge disuse.

Third and last, in both cases collaboration is trouble-driven; in other words it is oriented toward extraction, not generation, of knowledge (Faran, Hauptman & Raban, 2005). This finding contradicts several advocacies of COP as a tool for innovation (e.g. Brown & Duguid, 1991). What may explain the contradiction is the inter-project relationships associated with the cases. In contrast, positive evidence refers to intra-project mechanisms (Ayas & Zeniuk, 2001; Keegan & Turner, 2001).

6 CONCLUSIONS

The institutionalization of COPs under organizational auspices gains popularity (e.g. Gongla & Rizzuto, 2001) and top management's sponsorship is assumed a success key factor. The study shows that it is not enough as far as members' image of their job is in conflict with the aspired community spirit.

Two propositions are derivable: causes for self-reliance and inhibited knowledge consumption in COP context are (1) skipped apprenticeship (or instant seniority), and (2) ambiguousness of the subject matter (project management in this case). Further

research is required with these hypotheses. The significance of intra- or inter-project relationships is another topic for inquiry.

The study conveys a practical aspect, that managers who wish to vitalize COPs in their organizations should be aware of over-motivated employees. In such a case, where members perceive self-reliance as an imperative, short knowledge demand may neutralize the community in spite of benevolent supply.

The limitation of this study is its uncultural setting on a national level. Indeed, the cases are extremely different in almost any aspect but still both have roots in the same society. Further studies across national boundaries can eliminate this weakness.

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