LAUNCHING AN ORGANIZING VISION: COMMUNITY ENTREPRENEURSHIP IN PROFESSIONAL SERVICES AUTOMATION*

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ABSTRACT

Launching the vision for an emergent class of enterprise software, professional services automation (PSA), many organizational actors recently came together as a community. At the community's core, multiple entrepreneurs from various industries mobilized resources and assumed risks to pursue diverse but interdependent opportunities. Their *community entrepreneurship*, described here, sheds new light on theorizing the early diffusion of innovations, the origin of institutions, the launching process of management fashions, and entrepreneurship itself.

Keywords: Information Technology, Innovation Diffusion, Organizing Vision, Organizational Field, Community Entrepreneurship, Professional Services Automation

"This is not a show for you to miss out on!" – Alex Popov[1]

With these words, one of us was two years ago introduced to a new class of enterprise software, professional services automation (PSA), and invited to give a talk at a "first conference" on this exciting new information technology (IT). Never mind that we had until then never heard of this new IT! The conference promised to be a gala event with key players in attendance. So began the exploratory research reported here.

Especially for practitioners, confronting promising new IT can take on a carnival-like atmosphere. Will PSA be the Next Big Thing? At any one time, there are many pretenders, and numerous conferences that might be attended. For academic researchers, the situation is typically different. Most often, researchers come to IT that has already been widely adopted among firms. Their IT research focuses on the adoption, implementation, and use of *popular* innovations such as ERP (enterprise resource planning) and CRM (customer relationship management). But how do such IT innovations arise in the first place? How do they diffuse *before* they become popular?

Previous research proposes that a diverse interorganizational community creates and employs an *organizing vision* for a new IT that is central to its early diffusion (Swanson & Ramiller, 1997). Here we explore how a community emerges to launch the vision for PSA. Broadly, PSA is an emergent class of enterprise software primarily targeted to service-oriented organizations for managing their projects and personnel. It is not yet widely known. Over recent months, we were able to *contemporarily* observe and partake in a community of diverse organizations and people interested in PSA.

Aiming to better understand the early diffusion of IT innovations, an under-explored process

[1] Staff member at First Conferences, writing to one of the authors in an email on July 24, 2001.

thus far, we found that real people and their organizations came together as a community. At the community's core were actors, whom we call *community entrepreneurs*, who mobilized various resources and assumed significant risks to pursue diverse but interdependent opportunities. Their collective success in launching the organizing vision for PSA, a process still underway, will likely have a profound impact on PSA's diffusion (Swanson & Ramiller, 1997) and destiny (Fichman, 2003). From our research, we gain insights into the role of human agency and how it is both enabled and constrained by multiple purposeful interests in the launching process, leading us to propose that *community entrepreneurship* underpins the phenomenon.

In what follows, we first lay the theoretical foundations for our study. We then describe our research methods. Next, we tell the story of how a community came together to launch the vision for PSA. Further, we take a closer look at multiple community entrepreneurs and their motivations and interactions. We then discuss the concept of community entrepreneurship. We conclude by noting how the concept contributes to theory and guides practice.

THEORY

How does new information technology come to be applied and diffused among firms? For over a decade, most attempts to answer this question have been made by researchers who study IT as organizational innovations.[2] Broadly, the field of innovation in organizations was invigorated in the 1980s by the study of new IT (Van de Ven & Rogers, 1988). Researchers now make distinctions among adopters of IT innovations, among innovation types, and among phases in the process by which an innovation diffuses across and within organizations (Rogers, 1995; Swanson, 1994). A number of process models have been proposed to depict a sequence of

[2] For reviews, see Swanson (1994) and Fichman (2000). Innovation can be studied at different levels of analysis, such as individual, group, organization, or nation-state. Here, following Rogers (1995), we define an IT innovation as an IT new to the *organization* adopting it.

stages/phases/subprocesses ranging from becoming aware of and understanding the innovation, to adopting, implementing, and routinizing it.[3]

Almost every such process model has a cognitive stage, in which the organization becomes aware of the innovation, makes sense of it, and develops an attitude toward it. Although such a stage is recognized, researchers have primarily focused on the adoption, implementation, and use of new IT (Swanson, 2003). In fact, understanding a new IT is no less problematic than adopting or implementing it. Part of the problem is that, with the uncertainty shrouding new IT, each organization has its own cognitive limits, making it difficult for its managers to understand the relationship between the new IT and their often ambiguous goals. In such "organized anarchies" (Cohen & March, 1986), managers struggle to grasp what the IT innovation is, how it works, what benefits it brings, what costs it entails, and how it should be implemented.

Fortunately, each organization is not alone in comprehending innovations. Institutional theory stresses that organizations are embedded in a broader environment. Organizations, their key suppliers, resource and product consumers, competitors, regulatory agencies, and other organizations involved in "the common enterprise" constitute an *organizational field* (DiMaggio & Powell, 1983). In making sense of an innovation, organizations often talk to each other in the field. Gradually, their interpretations of the innovation may converge to a consensus, a web of values, norms, rules, beliefs, and taken-for-granted assumptions in the field (Tolbert & Zucker, 1996). Finally, the innovation may become "institutionalized" as *legitimate* practice that can not only be "rationally" adopted, but also copied, or even mandated across and within organizations. In essence, institutions are socially constructed templates for action (Berger & Luckmann, 1967). Thus, institutional theory is insightful and powerful, especially in explaining the late history of

[3] See Wolfe (1994) for a review of stage models for organizational innovations. Examples of stage models for IT innovations are found in Kwon & Zmud (1987), Cooper & Zmud (1990), and Swanson (2003).

innovations' diffusion, once innovations have become institutionalized.[4]

But how does an innovation come to be applied in firms *before* it is institutionalized? To answer this question, research on the institutionalization *process*, i.e., how institutions emerge and change, is needed. In this vein, two research streams are notable. One stream has primarily addressed the institutionalization process with theories. For example, Strang & Meyer (1994) stress the *theorization* process in institutionalization.[5] Tolbert & Zucker (1996) offer a stage model for institutionalization that involves habitualization, objectification, and sedimentation. Barley & Tolbert (1997) propose a model of institutionalization as a *structuration* process.

The other stream for studying institutionalization has largely pursued an empirical agenda with case studies on institution creation (See, for example, DiMaggio, 1982a, 1982b, 1991; Galaskiewicz, 1991; Garud, Jain, & Kumaraswamy, 2002). Calling attention to the role of interest and human agency, DiMaggio (1988) suggests that institution creation is a profoundly political process, with innovations reflecting powerful interests becoming the ones institutionalized. Fligstein (2001) draws on DiMaggio's notion of "institutional entrepreneur" to emphasize the social skills that political actors apply to induce cooperation in the reproduction of social life. Until now, the two streams have not effectively informed each other. Theoretical propositions and frameworks in the former stream have lacked empirical substantiation. The empirical case studies in the latter stream have lacked theorizing. For example, researchers have yet to theorize how institutional entrepreneurs apply their social skills to induce cooperation.

Better theorization of the institutionalization process is needed to explain how an innovation diffuses before it is, or fails to be, institutionalized. Such theorization should account for

[4] See Armour & Teece (1978), Tolbert & Zucker (1983), and Fligstein (1985) for examples of empirical studies.
[5] Theorization is a process that involves "both the development and specification of abstract categories, and the formulation of patterned relationships such as chains of cause and effect" (Strang & Meyer, 1994:104).

innovations that are weakly institutionalized or not institutionalized at all. In fact, few innovations are widely adopted by organizations or highly institutionalized (Zucker, 1988). Too, some innovations become momentarily popular or fashionable regardless of their eventual degrees of institutionalization.[6] Researchers interested in management fashions claim that organizations adopt certain innovations because managers believe that the innovations are at the forefront of progress (Abrahamson, 1996, Abrahamson & Fairchild, 1999).[7] How does an innovation diffuse before it becomes fashionable? Abrahamson & Fairchild (2001) argue that, in a process they call "idea entrepreneurship," knowledge entrepreneurs select innovative ideas and generate and disseminate discourse about the ideas. However, the process by which entrepreneurs *launch* management fashions remains theoretically ambiguous and empirically unexplored.

The Organizing Vision for Information Technology Innovation

Swanson and Ramiller (1997) introduce a *revised* institutional view of new IT diffusion – organizing vision theory. They address the very *beginning* of an IT innovation's diffusion, when the innovation arrives on the marketplace in an immature state with substantial uncertainty about its nature, and when organizations seek information to interpret it. They draw attention to the existence of an interorganizational community composed of diverse organizational members such as prospective adopters, consulting firms, and technology vendors, all having a common interest in the innovation.[8] Members interact, largely by engaging in discourse (i.e., talking,

[6] For monitoring the visibility/popularity of technologies over time, IT market analysis firm Gartner has devised the "Hype Cycle" model (Linden & Fenn, 2003).

[7] Various definitions for management fashions exist. We adopt Abrahamson and Fairchild (1999)'s definition that management fashions are "relatively transitory collective beliefs, disseminated by the discourse of management-knowledge entrepreneurs, that a management technique is at the forefront of rational management progress" (p. 709). Popular IT, in our opinion, often evidences a special case of management fashion.

[8] The community for organizing vision is very similar to the organizational field in institutional theory except that the former is largely a conversational or discourse community and the latter is a socioeconomic network of

listening, writing, and reading), to create and employ a collective vision for applying the new IT, giving it *organizational* meaning. Formally defined, an *organizing vision* is a focal community idea for the application of IT in organizations (Swanson & Ramiller, 1997: 460).

An organizing vision thus characterizes a type of IT innovation. Data warehouse, CRM, and Web services provide current examples. The organizing vision arises to facilitate three aspects of an IT innovation's diffusion (Swanson & Ramiller, 1997). First, the vision provides an *interpretation* of the innovation's existence and purpose while reducing the uncertainties associated with the new IT. Second, the vision *legitimates* the innovation by developing the underlying rationale for the innovation, aided by the reputation and authority of those promulgating it. Third, the vision helps *mobilize* entrepreneurial and market forces that emerge to support the material realization of the innovation.

Primary development of the vision may take place during the community's earliest interpretations of the innovation. Swanson and Ramiller (1997) conjecture that early adopters might in fact be less heroic in picking the right IT for realizing their goals than previous empirical institutional research suggests, partly because they may be situated to advantage in the community. "Their 'local' organizational choices may be timely and effective largely to the extent they are not made in relative isolation, but rather because they effectively link internal cycles of interpretation to those at the institutional level" (Swanson & Ramiller, 1997: 470).

Indeed, organizing vision theory draws attention to the cognition of *organizational* innovations at the *institutional* level. At this level, several institutional forces shape and are shaped by the organizing vision. Foremost, an organizing vision exists because a community of

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organizations connected by commercial transactions or material relationships. Because most community members engage in the discourse as they are attracted by opportunities it suggests, "the discourse community is largely congruent with the organizational field" (Swanson & Ramiller, 1997: 465).

organizations shares a common interest in the IT innovation and agrees that the vision exists. In effect, community members jointly decide what innovations get selected for diffusion and for becoming fashions or institutions later on. Essentially, it is such *social cognition* that drives the diffusion of innovations. While organizing visions provide important *cognitive* structures, discourse communities offer *social* or *behavioral* structures, shaping and shaped by interest and human agency (Giddens, 1984). Although the theory proffers rich description of the vision, no empirical study has been conducted to advance organizing vision theory's relatively sketchy portrayal of the community thus far.

Research Questions: *How does a discourse community emerge to launch an organizing vision for an IT innovation before it becomes fashionable or institutionalized? Specifically, who belongs to such a community? Why do members join the community? What do they do to keep the community together?*

With these questions in mind, we undertook the present study to examine the *process* by which a community emerged to launch the PSA vision. As will be seen below, our study not only advances organizing vision theory, but also sheds new light on theorizing the early diffusion of innovations, the origin of institutions, and the launching process of management fashions.

METHODS

In July 2001, one of us received an email invitation to speak at a "first conference" on PSA, as already mentioned. Although he is well versed in enterprise application software in general, he had never heard of PSA and thus declined the invitation. Still, the organizer invited us to attend the conference. Out of professional curiosity and interest in emergent organizing visions for IT, we decided to undertake a case study on the launching process of PSA. We had been given the unique opportunity to *contemporarily* trace this process within its "real-life" context.

More typically, academics come to an IT innovation (e.g., ERP or CRM), whose organizing vision has already been launched and seems self-sustaining. PSA, an emergent class of enterprise software whose organizing vision is just now being launched, is studied here as a single revelatory case (Yin, 1994). We closely examined a significant portion of the PSA launching process for 15 months (July 2001 – September 2002). We also traced retrospective and archival data about the process since 1996. Together, historical data and contemporary examination formed the basis for our analysis. [9]

Given our objective, we adopted the grounded theory approach that uses a systematic set of procedures to inductively derive theory from a study's data (Glaser & Strauss, 1967; Strauss & Corbin, 1998). Notably, the launching process cannot be studied by directly observing the community as a whole, but is examined by watching and listening to various members in the community "living through" the same process. It is in such situations, where richly described experiences can be compared, that the grounded theory approach appears at its most powerful to exploit the *density* in the data (Langley, 1999).

Following systematic procedures formulated originally by Glaser & Strauss (1967), throughout the 15-month study period, we collected and analyzed data in an iterative fashion. Immediately after collecting data, we evaluated its theoretical relevance, upon which further data collection was based. Initially, we made a dozen contacts representing vendors, consultancies, and research firms through casual conversations at a PSA conference. From telephone interviews with these "seed" informants, we identified and then interviewed others important in

[9] Admittedly, launching the organizing vision for a new IT can takes years and in PSA's case the process is still incomplete. However, a whole-course longitudinal study goes beyond our study objectives and available resources.

the launching process: e.g., journalists, public relations managers, users,[10] and organizations that had not yet adopted PSA. By such "theoretical sampling," we found that several industries of organizations and their people belonged to the PSA community: IT research firms and analysts, IT professional services organizations (PSOs) and consultants, PSA vendors, conference-organizing firms and conference organizers, trade publications and journalists, business schools and academics, as well as numerous prospective adopters. Such grouping made it possible to select members from each industry to interview and observe their activities and interactions in the community. As community members carried out certain activities and played certain roles, we will refer to them as *actors* or *players*. Further analysis suggested the distinction between *active* and relatively passive players in the community. Active players were much more engaged in the conversation about PSA than were passive players.[11] For example, as we will show below, some analysts were much more vocal in talking about PSA than were others. In general, prospective adopters, though probably the majority of the community in number, were usually passive players in that they primarily read and heard about PSA on an *ac hoc* basis. As we were interested in how players actively build and maintain the PSA community, we gave our attention to the more active players in each industry.

In total we conducted 22 semi-structured phone interviews, each ranging from 20 minutes to an hour. Our interview protocol includes general questions (e.g., How did you become aware of PSA? What is PSA, as you understand it? Where are we now with PSA and where do we expect to be in the next a few years?), and specific questions tailored for specific informants and organizations (e.g., When did your company adopt and implement PSA? What benefits has your

[10] In IT practitioners' language in this context, users refer to the organizations that adopt new IT, as opposed to individuals who operate the technology. We use adopters and users interchangeably in this paper.
[11] Lower level of engagement might not be due to passivity entirely. Some members may have failed to gain prominence in the competition for attention in the community.

company realized from deploying PSA?). These interviews generated considerable amounts of *narrative* data about informants and their organizations' experiences with PSA. Additionally, PSA's contemporary nature allowed us to take advantage of several other data sources. Over the 15 months, we attended two major conferences and two vendor/analyst webcasts on PSA to learn about the PSA market. Also we participated in a product workshop to see how PSA software works. There were about 250 email exchanges between our informants and us. Some informants also sent us the documents they wrote or used. In addition, we regularly access vendors and adopters' web sites and several online archival databases or portals such as Factiva, ABI/Inform, and PSASoftware.com. Triangulation of these multiple sources enhanced the likely validity of our interpretation of the launching process.

To ensure the reliability of the study, we developed a case study protocol (including the interview protocol) and discussed it with several colleagues for feedback. Further, we built a case database composed of the following discourse items classified by organizations: (1) notes from all interviews and events such as conference, webcast, and product workshop, (2) news releases and articles in the trade press, (3) analyst research reports and summaries, (4) product brochures and advertisements, (5) event attendee lists, programs, and presentation slides, and (6) email messages. Finally, we asked our informants to review the draft of our paper and we undertook additional investigation and revisions according to their comments. With few exceptions, with which we have lost contact, all had the opportunity to comment on our paper.

Over the study period, we met regularly to discuss new items appearing in our case database. We sorted the data by industries. Within each industry, we perused and coded the data in several categories specific to the industry. For example, "aiming to serve an underserved market" (for PSA vendors), "inviting people to conferences" (for conference organizers), "writing white

papers" (for research analysts). Across industries, several common categories of concepts emerged: "opportunities represented by PSA," "community engagement," and "resources." After repeatedly comparing and contrasting the theoretical concepts with the data, we conceptualized the launching process as "community entrepreneurship", *the* core concept deeply grounded in our data. Linking pieces of data from various sources, we constructed a chronology (Table 1) of the process by which a community emerged to launch the organizing vision for PSA. We present the chronology in narrative form next.

Insert Table 1 about here.

LAUNCHING PROFESSIONAL SERVICES AUTOMATION

In the summer of 1996, seeking a school for his 5-year-old son, Farzad Dibachi became so unhappy with schools in his Silicon Valley neighborhood that he decided to open his own private school – a co-op school where parents would be aware of goings-on at the school via technology; teachers would be given stock options and have study plans and homework online with constant communication with students and parents. But a year of research revealed that the venture was too expensive and a political hot-button with more bureaucracy than he was willing to deal with. In the process, while trying to document his findings, Dibachi discovered that he was unable to locate software to organize his information for future reference. He began to wonder how organizations keep track of project information while employees are trying to do their jobs. In fact, Farzad Dibachi was more than an education visionary. Having become a senior vice president of Oracle before he was 30, Dibachi co-founded a well-known information appliance company later acquired by Sun Microsystems. His forsaken school venture enabled him to see an emerging opportunity to develop software to help companies manage schedules, projects, and

personnel. To this end, Dibachi founded Niku Corporation in November 1997.[12]

In early 1998, even without a business plan, Dibachi successfully secured the first round of financing for Niku, relying on his reputation as a veteran entrepreneur (*Forbes*, 2000). In December, Niku released the first version of its software labeled "Professional Services Automation," which aimed to help IT professional services organizations (PSOs) manage their projects and workforce. To publicize Niku's product, Dibachi approached several IT research firms, asking analysts to write white papers about Niku's PSA. R. David Hofferberth, then a research analyst covering IT professional services organizations at Aberdeen Group, was asked by his boss to write the white paper for Niku. Out of curiosity, still unpaid and working on his own time for this white-paper project, "all of a sudden," Hofferberth said to himself, "maybe there is something to this!" He found that a few other software companies (e.g., Novient, Changepoint, and Evolve) were producing similar software. During the next a few months, Hofferberth studied these software vendors and even visited some of them.

As Hofferberth found out, these vendors had very different origins. For example, founded in 1989 as a service company in Canada, Changepoint decided to become a project management software company and shipped the first version of its software in 1995. By 1997, Changepoint judged that project management software was a commodity. Learning from its own customer base, Changepoint identified an underserved market for mission critical solutions (such as invoicing for services companies). It thus added modules such as invoicing and resource management to its product, originally on the Lotus platform. Later Changepoint switched to a relational database (Microsoft SQL) platform using the product label "software for managing the business of technology services."

[12] This story of founding Niku has been adapted from *San Francisco Business Times*, 1999.

Around the time that Changepoint embarked on its software business, the Internet and the Web became a dominant force. Mark Kopcha and R. Russell Caldwell, two experienced software developers at Dun & Bradstreet, saw the opportunity to take advantage of Internet technology for automating resource management for professional services companies. They presented their idea to Dun & Bradstreet, but its management declined to explore the idea. Undeterred, Kopcha and Caldwell founded InfoWave in 1995. In the basement of Caldwell's home, they developed InfoWave's first version of software and launched it in early 1997 (*Business Week*, 1999). Later that year, they signed up several customers including SAP and secured a first round of venture capital. Subsequently InfoWave changed its name to Novient.

Despite their very different backgrounds, companies such as Niku, Changepoint, and Novient all came to target IT professional service organizations by no coincidence. As an analyst responsible for covering IT PSOs, Hofferberth recognized that IT PSOs had been experiencing increasing pressures to be more efficient due to limited resource pools, an expanding range of services, and an increasing dispersed and mobile workforce. After studying some vendors and their products, he became convinced that the solution to PSOs' problems had arrived and it was time to formally define the market. In November 1999, Hofferberth used PSA to name the market as well as his 136-page research report.[13] His report marked the birth of a new "category" of enterprise application software, as Hofferberth defined it:

> "Professional Services Automation" is the term used to describe a new family of applications designed for professional services organizations that enable service professionals to become more productive and profitable by increasing their efficiency on the job through increased employee utilization and integrated knowledge management. PSA solutions also have the capability to increase client satisfaction by maintaining an updated flow of information to the client (Hofferberth, 1999: 4).

[13] The original report is unavailable. The following synopsis of the report was based on the table of contents, executive summary (chapter 1), and summary of findings (chapter 2) downloaded from www.aberdeen.com.

In the report, Hofferberth began with the challenges and problems that PSOs faced and then described how PSA solutions would "revolutionize" PSOs by automating their "planning and scheduling, expense capture and billing, and knowledge capture and dissemination" (Hofferberth, 1999: 8). Most PSA solutions have a modular architecture.[14] Modules typically include planning and scheduling, project management, performance management, and billing. Hofferberth "geared" his report towards the early adopters of PSA, mostly IT-related service organizations, including IT PSOs, IT services departments of large enterprises, and services organizations within hardware and software firms. However, he stated that other professional service providers in management consulting, engineering, legal, advertising, and R&D would also benefit from PSA. Two types of PSA vendors were identified: (1) ERP vendors such as PeopleSoft and SAP that intended to "branch out" to services as a target vertical market, and (2) "pure-play" PSA vendors such as Changepoint, Evolve, Niku, and Novient that counted PSA sales to be their major revenue source and long-term growth potential. Looking ahead, Hofferberth forecasted that the market size for PSA would grow to about $1.3 billion in 2003. He concluded, "PSA is here to stay – and service firms and their clients will benefit from the efficiency gains and cost control."

While Hofferberth was researching the market, the PSA concept came to the attention of a section editor at *Information Week*, a weekly IT trade magazine with a half-million circulation. The editor raised the topic at a periodic editorial meeting and decided to run a feature story on PSA. The article was assigned to a freelance writer – Norbert Turek. Upon receiving the assignment, Turek started his interviews with Niku. He then asked Niku for some customers to talk to. He also found out that David Hofferberth was a key analyst for PSA and interviewed

[14] See Appendix for the basics of PSA as offered by selected members of the community.

him. Hofferberth not only helped Turek describe the PSA market, but also provided a list of PSA vendors. When asked to measure the relative strengths of product offerings in the emerging market, Hofferberth told Turek, "everyone [of the vendors] pretty much tells the same story. The segmentation is just beginning." From the vendor list, Turek spoke to several, including Opus360, Novient, Changepoint, and Evolve, and further with some of their customers. In the end, Turek summarized findings from his three-week research in a five-page feature story published by *Information Week* in December 1999 (Turek, 1999), just weeks after the first research report on PSA was released by Aberdeen's Hofferberth.

During most of 1999 and 2000, the pure-play PSA vendors continued "beefing up" their products, building management teams by hiring senior executives from large software companies such as PeopleSoft and Oracle, and signing up new customers. In February 2000, PeopleSoft debuted PeopleSoft PSA, becoming the first ERP vendor to offer a PSA solution. Although PeopleSoft PSA's functionality was rudimentary at the time, the announcement itself was hailed by pure-play vendors as endorsement and validation of the PSA market.

Within a few weeks or months of the first research report by Hofferberth and the *Information Week* article by Turek, PSA began to be recognized by journalists, IT research analysts, and conference organizers. Among the analysts, Ted Kempf, then a senior analyst at a leading IT market research firm – Gartner, emerged to be a dominant analyst in the PSA market. Unlike Aberdeen's Hofferberth, who chose to devote his entire time to PSA research and consulting, Kempf has never been a full-time PSA analyst. In his opinion, it is his job to "advise IT professional services organizations how to become more efficient." He added, "I found PSA applications amazing in what they can do" for IT PSOs. Kempf quickly developed a relationship with every PSA vendor and started to advise vendors in product development and marketing

strategies. For example, in mid 2000, as the "featured speaker," Kempf joined Novient's executives, customers, and partners for Novient's PSA seminar series in 11 US and European cities. In October, he gave a keynote speech at Changepoint's inaugural user conference. Additionally, recognizing system integrators'[15] importance in implementing PSA solutions, Kempf brought together over 80 systems integrator and major PSA vendor representatives to a Gartner-sponsored conference called PSA Summit in July 2000.

With the facilitation of analysts such as Hofferberth and Kempf, both the number and size of PSA adoptions increased. In June, Andersen Consulting (AC),[16] one of the largest IT PSOs, agreed to license Novient's PSA solution, almost doubling Novient's entire installed user base. AC and Novient later also announced an alliance, in which AC named Novient as its preferred PSA provider; in return, Novient selected AC as its implementation partner. Meanwhile a major division of EDS, another giant IT PSO, spent most of the year 2000 evaluating various PSA solutions and finally selected Evolve's PSA.

However, a closer look at EDS's adoption revealed that the division implemented only two PSA modules (out of the seven now offered by Evolve): opportunity management and resource management.[17] For the EDS division, the primary rationale for adopting the two modules was to acquire the planning and forecasting capability of managing project opportunities and resources. Existing applications such as time and expense management worked fine for the division and thus there was no need to replace them. According to David Stevens, vice president of that EDS

[15] IT practitioners often call IT consultants *system integrators*, who help implement new systems and applications.
[16] Andersen Consulting changed its name to Accenture in January 2001.
[17] In general, there are two adoption approaches: integrated "end-to-end" solution and point solution. In the first case, companies adopting PSA usually buy all or most modules from one vendor. Even with integration (between modules) built-in, it is still necessary to integrate PSA with other applications such as back-office ERP or front-office CRM. In the second case, as with EDS, companies adopting PSA purchase the one or two PSA modules that best meet their keenest need. Consequently they may end up with many applications from many vendors. Different applications may not communicate with each other; integrating various applications may become difficult.

division, EDS took the point solution approach because "large firms such as EDS simply can't walk away from a lot of embedded applications already developed for various functions."

This reason may also explain, in part, why many other large IT PSOs have so far not adopted PSA. According to Kent Piper, an executive at Arthur Andersen,[18] the firm had over the years developed many solutions in-house to meet its diverse needs. Although the different pieces of in-house solutions lacked integration, Piper did not believe that, in this nascent market, an integrated PSA solution could be customized to Andersen's diverse processes and still be scalable and robust. The nascent stage of the market might also explain non-adoption. For example, Cadence Design Systems, an electronic design firm in the Silicon Valley, had been talking with about a dozen PSA vendors since 1999. At one point, after evaluating various solutions, Cadence decided to adopt Evolve's PSA for its professional service department. However, Cadence's IT department "killed" the project because it could not support the integration with other applications, and doubted that Evolve would stay in business to help.

Although such skepticism had some chilling effect on the PSA market, additional software vendors were entering the market with new applications or new versions of old applications. Following PeopleSoft's lead, large software vendors such as Siebel, Lawson, Oracle, SAP, and Microsoft Great Plains[19] announced PSA products or at least initiatives. In June 2001, Lawson Software, an ERP vendor, after a more than two-year joint sale partnership with Novient, acquired a pure-play PSA vendor (Account4) to expand Lawson's "solution for professional service organizations." With over 20 vendors and slowing penetration in IT PSOs, the PSA market quickly became very crowded. Almost every vendor began to seek customers outside the IT PSO segment. Despite the fact that PSA was originally defined to benefit many kinds of

[18] The interview with Kent Piper was conducted before the Enron/Andersen fiasco.
[19] Microsoft Great Plains later became part of Microsoft Business Solutions.

service organizations (Hofferberth, 1999), PSA had been frequently interpreted as a solution for IT PSOs. Now, to correct this misconception, vendors attempted to re-brand their offerings. For example, Niku, dropping PSA as originally coined by itself, began to use "Services Relationship Management" (SRM). At a user conference in August 2001, PeopleSoft CEO Craig Conway formally abandoned the PSA term and announced "Enterprise Service Automation (ESA) is the next big thing." He added, "ESA I believe is at the same stage that CRM was five years ago."

Working closely with Novient, Gartner's Kempf also created a new term – "Service Process Optimization" (SPO), and Novient immediately adopted SPO to name its entire product offerings. In a research report first bearing the SPO term in the title, Kempf (2001a: 14) explained why SPO was appropriate for expanding the reach of PSA:

- The word *service* immediately connotes the fact that these applications are targeted toward firms involved in the service economy. Using a word such as business or enterprise is far too general.
- The second word, *process*, drives at the point that these applications address the various processes or workflows associated with delivering various services. While using workforce in place of process would be equally justified, unfortunately most firms believe that workforce connotes a human resources application, which is an inaccurate categorization.
- Lastly, *optimization* strikes at the heart of these applications in that, if they do not optimize operational efficiencies within service organizations, they are of no use.

Kempf emphasized, "SPO is not a new application but rather a new branding campaign" (Kempf, 2001a: 14). In his view, PSA, restrictive to IT PSOs, would become part of SPO. The new term would help vendors market their products to all kinds of service organizations. In August, a year after Gartner's PSA Summit, Kempf once again gathered major vendors, system integrators, and prospective users in a conference named, as might be expected, SPO Summit.

In fact, Gartner's SPO Summit series was just one of several conferences featuring PSA. Alex Popov, then working at a London-based conference firm First Conferences (FC), saw signs that PSA could become "very big" and would bring a "grand success" for FC to organize a series

of shows[20] on PSA. After talking to several PSA vendors, customers, and trade publishers, Popov convinced FC's management to run a PSA show. Approximately 60 paying delegates from prospective adopters, system integrators, and prospective vendors, 25 speakers representing PSA vendors, adopters, and analysts, a few reporters, and one of us attended the two-day conference in November 2001. In the opening speech, Gartner's Kempf said, "SPO is a cost of doing business and thus a competitive necessity in the service economy." The conference went on with user presentations often joined by vendors and consultants. Topics included adoption rationales for service organizations, methods to select modules, vendors, and system integrators, effective implementation and maintenance approaches. Outside the conference room, at each vendor's booth, attendees watched product demos, talked about opportunities and challenges for their own organizations, and exchanged business cards. Immediately after PSA 2001, Popov started to prepare "a fantastic follow-up show" – a PSA 2002 conference in New York scheduled in May. He also graciously offered us an opportunity to publish our research on PSA at the conference web site. A few months later, however, Gartner's Kempf told us that the PSA 2002 conference had been canceled and Popov was no longer working at FC.

Not every PSA conference series ended this way. Gartner's Kempf managed to organize the third annual conference – SPO Summit in July 2002. Over years, Gartner has developed a substantial mailing list of IT executives based on past interactions. From the list, Kempf invited executives who had expressed concerns with their service functions or processes. About 60 invited executives from prospective adopters (mostly internal IT departments) attended the Summit. Ten vendors present at the Summit contributed funds to cover the conference expenses and the traveling and accommodation expenses for all executive attendees. Between vendor

[20] Conferences are often referred to as *shows* in the conference industry.

presentations, product demos, user case studies, Gartner analysts' presentations covered a range of topics: SPO definition and benefits, solution selection, business intelligence in SPO, and market potential and trend. Analysts also had one-on-one meetings with prospective adopters and introduced them to vendors. Presented with basic information about PSA/SPO and many vendors' brochures and gifts, executive attendees were also struck to learn that PSA/SPO, among all categories of enterprise software applications tracked by Gartner, was the only growing category in 2001, a period when the US economy was in deep recession.

In fact, PSA's prospect of growth in the future was far from clear. On the negative side, responding to the "terrible economic time", most enterprises had to cut or take closer scrutiny of their IT spending. As a result, both the number and size of PSA software sales were decreasing. After another disappointing quarter, at a conference call to Niku's investors in August 2002, Farzad Dibachi commented, "We are all selling shoes and people are not buying shoes." In September 2002, Dibachi received a letter from NASDAQ, informing him that Niku's stock price dropped below the minimum bid price requirement and thus was subject to delisting.

On the positive side, forecasts for the PSA market remained promising. Both Hofferberth and Kempf agreed that the size of the market would exceed $2 billion in 2006. Market demand for PSA solutions was also signaled by new vendors entering the PSA market. In a webcast jointly hosted by Aberdeen and Changepoint, Hofferberth said, "Every month I find a new vendor that's ready to announce PSA products." In September 2002, Microsoft Business Solutions announced that the next quarter it would deliver its PSA solution, a combination of Microsoft Project 2002 and one of its project accounting lines. Building on its historical strengths in the small and mid-market, Microsoft targeted its PSA product at these segments. Meanwhile, vendor consolidation seemed to be accelerating. Two major pure-play PSA vendors

(Novient and Portera) were acquired in June. After the acquisition, Novient quickly dropped the SPO term, and relabeled its product Professional Services Automation.

PSA as an innovation, organizing vision, and community continues…[21]

ACTIVE PLAYERS IN THE PSA COMMUNITY

In the process of launching the organizing vision for PSA, a *community* of organizations and people thus emerged. In this section, we examine the relatively *active* players in two aspects: why they joined the community and how they have thus far built and maintained the community.

IT Research Firms and Analysts

IT research firms may be positioned broadly relative to the market research industry (Firth & Swanson, 2002). Analysts at these firms provide their clients with a range of services, including (1) market research reports for subscription or purchase, (2) research and consulting services, and (3) conferences. Industry leader Gartner achieved revenues of $952 million in 2001. In the case of PSA, Aberdeen's David Hofferberth initiated research on PSA in 1998 and many IT research firms now have analysts to cover PSA. To IT research firms and their analysts, PSA is an *organizational* opportunity to initiate a new line of market research for retaining existing clients and acquiring new clients. In fact, Hofferberth currently heads the PSA research and consulting practice at Aberdeen. Moreover, PSA is also a *personal* opportunity for top analysts to become thought leaders or *gurus* for an IT innovation. Fairly speaking, Aberdeen's Hofferberth and Gartner's Kempf have become widely recognized PSA authorities. However, PSA may not be considered an opportunity by all. An analyst who used to cover PSA told us:

The PSA market has been an example of how an innovation has *failed* to diffuse in a

[21] As we write, for instance, a two-page advertisement by PeopleSoft of its Enterprise Service Automation (ESA) product appears in *Business Week*'s November 4, 2002, issue.

> large scale into a user community. My business model is very opportunistic in that I only track existing and dynamic industries. PSA's promise has not been realized and PSA is not a market that is actually taking off. Therefore, I don't track PSA any more.

IT analysts have fostered the PSA community in three important ways. First, analysts are in the position to broker diverse players in the community, especially vendors and prospective adopters. Although vendors' direct sales pitches are commonplace, a manager at Cadence remarked, "vendors, especially the start-up pure-plays, are really small and don't know how to sell them." More importantly, the IT executives of prospective adopters read research reports and consult with analysts regarding their use of and need for IT. David Jarrat, a marketing director at the PSA vendor Portera, noted, "analysts are very important and we want to be on their short-lists that they give to prospective customers." Additionally, analysts write white papers about vendors' products, speak to adopters and prospective adopters, and introduce prospective adopters to vendors at various events such as SPO Summit, user conferences, and webcasts. Hofferberth described his role in mediating between vendors and adopters this way:

> It's just part of what I do. I have to talk to people who are deploying [PSA] and present the information back to the vendors and saying that "OK, it's time for your guys to tell me what you are going to do and prove it to me by letting me talk to your customers."

Occupying a unique position between vendors and users, analysts are expected to report unbiased and truthful information to both parties. However, analysts may not always meet this expectation. One informant who would like to remain anonymous said in an interview,

> IT analysts bring a great many insights and wisdom to the community but they are biased. Who would like to see the market that they cover decline? Some analysts are actually trading vendors' stocks. In Analyst X's new report, several paragraphs that are supposed to be user comments had been literally copied from somewhere else, not from users.

Recognizing this problem, a prospective adopter attending SPO Summit 2002 told us:

> We know [analysts] are biased but we still read their reports and listen to what they say. You just need to take it with a grain of salt. Because without analysts, we would be at the mercy of vendors, who are more biased.

At a webcast, when asked how to stay objective in the PSA market, Hofferberth replied,

> There is a lot happening behind the scene, where the vendors may say something, and quite honestly, I tell them I don't see it and I don't believe it. Not every moment is great, and I don't have a perfect relationship with every vendor. I wouldn't be in this business if people weren't deploying these solutions and telling me what's good and what's not. The day I don't get to talk to the end users is the day I get out of the market because there is no way to be unbiased if you are not talking to people who have deployed PSA.

Maneuvering between vendors and users, socially skillful analysts know how to act without appearing narrowly self-interested.

Second, talking to many organizations, analysts sensed, aggregated, and voiced opinions about PSA, sometimes adding their own judgment and insights. In their research reports, speeches, and casual conversations, analysts *framed* these opinions into ideas that were shared, understood, and discussed about throughout the community. In the PSA community, analysts helped frame market demand. At the very beginning, demand for PSA was framed in the context of IT PSOs' efficiency and profitability. Here is an example:

> IT PSOs are experiencing pressures regarding consultant profitability due to several primary factors … Each of these issues affecting the productivity and profitability of service organizations is a problem in search of a solution. (Hofferberth, 1999: 10-12)

Over time, market demand as framed by analysts may change. For example,

- Emphasis is changing from making more money with PSA by increasing utilization rate of consultants to managing current economic downturn by, for example, downsizing the consultant teams. (David Hofferberth, interview, December 2001)
- Recent scandals have created the need for organizations to more accurately track and report financial. With PSA, executives can now assess the performance of their enterprises in real time. (David Hofferberth, webcast, September 2002)

Third, analysts helped name and define the PSA innovation itself. Hofferberth endorsed the PSA term and offered a definition for PSA in his first report. The PSA term, as Changepoint's vice president Chuck Tatham said, "brought huge benefit because the term served as a thing that you can hang your hat on." Analysts also forecasted the size of the PSA market periodically. Typical sections of any PSA research report included a list of vendors and a forecast of the

market over the next few years. Sometimes, analysts point out market trends. For example,

> SPO software will continue extending its reach beyond professional service organizations and into internal IT and other service branches within organizations. Real competition will center around verticalization as SPO vendors continue attracting new clients by building vertical solutions. (Hams El-Gabri, Gartner analyst, SPO Summit, July 2002)

IT Professional Services Organizations (PSOs) and Consultants

Sometimes referred to as system integrators or consultancies, IT PSOs provide consulting service, most of which is to help technology adopters implement new IT. The implementation services by IT PSOs are much broader than that by software vendors. As such, IT PSOs usually enjoy lucrative consulting fees. For IT PSOs, PSA is an opportunity not only because PSA might be a new source of consulting revenue, but also because PSA may help them "get their own houses in order." In fact, PSA's earliest adoption was among IT PSOs.

IT PSOs shaped the PSA community in several ways. Foremost, adoption by large PSOs validated the PSA product and its market potential. The high-profile adoptions by the two largest IT PSOs, Andersen Consulting and EDS, are examples. Commenting on EDS's adoption of Evolves's PSA, Hofferberth said,

> The size and strength of EDS as a world-class information technology service company, combined with the fact that this is one of the largest sales ever in the PSA industry, makes this a watershed event in this rapidly growing market. The Evolve/EDS contract is further validation of how forward-thinking professional services organizations are recognizing the compelling value proposition of automating the service chain. EDS is a respected leader and I believe others will follow as PSA continues to gain momentum.

Despite such expectations, many large IT PSOs have yet to adopt PSA, partly because they have not found a compelling need for it. An enterprise application consultant said in an interview:

> Big consulting firms, especially those doing e-business consulting, didn't care because they were making so much money with unbelievable market valuations at the end of the century. That was different from 10 years ago when ERP came about and those big manufacturers all had productivity and efficiency problems. Back in 1999, I helped some large consulting firms build very good ROI models showing that they could make much more money with PSA. But they already were making good money without PSA.

Additionally, through their existing consulting services, IT PSOs introduced PSA solutions to their clients. For example, through Andersen Consulting's vast client base, Novient secured several "blue-chip" deals. Further, where adoption of PSA did occur, IT PSOs often got involved with implementation consulting. IT PSOs' own adoption status did not prevent them from helping their clients implement PSA.

PSA Vendors

Two types of PSA vendors (pure-plays and large ERP vendors) came to the PSA market with different opportunities in mind. On the one hand, as shown in the quotes below, pure-plays recognized the opportunity to apply enterprise software to *underserved* service organizations.

- Service industry was underserved by traditional enterprise software, which requires large upfront capital expenditure, does not allow easy access, and requires non-billable overhead to support. (David Jarrat, PSA vendor Portera, interview, December 2001)
- ERP solutions deal with materials and products. Our solution deals with people, project, and services. (Stacy Pingree, PSA vendor Maconomy, interview, December 2001)

PSA is the core business for these firms in their long-term struggle for survival and growth. On the other hand, large enterprise software vendors considered PSA as a new product line for a new revenue stream. For example, PeopleSoft's move into PSA and now ESA, as interpreted by the trade press, was primarily driven by a declining global ERP market. PSA seemed a logical means to leverage PeopleSoft's existing customer base. Similarly, Microsoft Business Solutions' entry into the PSA market was interpreted as part of Microsoft's strategy to move from its traditional desktop application market to the business application market.

Market entries by large software vendors suggested that there was a significant market for PSA. However, a closer look at the PSA products offered by these vendors, where available, showed that their functionalities were quite rudimentary, far behind the PSA pure-plays. "SAP and Oracle are paying lip services," said an analyst. At one PSA conference, a speaker

representing a user of SAP's ERP solution told the audience that his company's "PSA is SAP." Talking with him afterwards, we found that he had never heard of PSA prior to the conference. He suspected that SAP brought him to the conference "probably because SAP wants to get its name there as a viable solution provider for service organizations."

Nonetheless, vendors brought the PSA community together by reaching out to almost all organizations that might be interested in PSA. For instance, most vendors organize user conferences annually. Some vendors listened to their users very carefully and even developed next software versions jointly with dominant users. Importantly, most vendors also developed close relationships with key analysts. Some PSA vendors hire public relations (PR) firms to manage their relationships with analysts and the trade press. As still another initiative, executives at Tenrox (PSA vendor) wrote a book on PSA published by John Wiley with the foreword by Gartner's Kempf. Apart from their own user conferences, PSA vendors frequently sponsor conferences either featuring PSA/SPO or with broader scope. One vendor even asked us to help arrange a presentation at our school's executive education program.

Conference-Organizing Firms and Conference Organizers

To conference-organizing firms specializing in IT, PSA represented an opportunity to run a series of conferences on a new theme. First Conferences' PSA 2001 conference illustrates how conference companies helped bring the PSA community together. In preparing for PSA 2001, primarily by searching the Web, Alex Popov identified major PSA vendors, their customers, key analysts, and system integrators. Furthermore, to *his* surprise, there was no academic involved in the PSA market. So he contacted several professors, including one of us, at business schools near the conference site. As to the conference's business model, in addition to vendor sponsorship, each paying attendee paid approximately $1,000 to FC. Most speakers covered

their own expenses. After the conference, Popov told us in an interview: "The show was very successful in that it was able to bring together virtually everybody in the market. All key players were there!" Despite the success claimed by Popov, FC canceled the PSA 2002 conference and Popov left FC. Our interview with an executive at FC revealed that FC's management was disappointed by the PSA 2001 conference and by the PSA market overall. He said,

> This is a vendor-rich market. A lot of technology companies, struggling for revenue, are looking for problems and opportunities. After the conference, we spoke with a lot of intended customers and found that there was no demand as such. Management consultancies have been selling ERP in non-traditional industries for so many years, but there is no immediate demand for it, even within their own organizations. Our conference ended up with a vendors' show, which is of course not a great prospect for a conference organizing company. FC has to identify a new departure.

Trade Publications and Journalists

Striving for circulation and advertising revenue, editors and writers for trade publications saw PSA as an opportunity to attract an audience interested in either the solution or the problem it intended to solve, or both. Over the past four years, articles about PSA appeared in roughly four types of trade periodicals: (1) general technology publications such as *Computerworld* and *Information Week*, (2) new product launch publications such as *Computer Reseller News*, (3) finance and accounting professional publications such as *The CPA Journal*, and (4) publications covering technology and business issues for specific countries such as *Canadian Business*. So far, there has been no print periodical dedicated to PSA only. However, online portals such as PSASoftware.com (sponsored by Lawson) and OpenPSA.net collect news and articles on PSA.

Journalists have shaped the PSA community by publicizing significant ideas and news drawn from the community itself. A good example is the PSA article published by *Information Week*. Although we do not know specifically how that section editor became aware of PSA, the article's writer Norbert Turek offered a general description:

> The way a new concept like PSA got on the radar of the staff at *Information Week* is

> typically a writer or editor covering the beat (1) hears from the PR person, or a marketing exec, from a PSA company such as Niku; (2) realizes – through other media or direct contact – that a product or company deserves mention; or (3) attends a meeting – such as a conference or company briefing – and likes what he/she hears.

Business Schools and Academics

Upon receiving Alex Popov's invitation in July 2001, neither of us was the PSA expert he was looking for then. Nevertheless, the one of us first contacted wrote to the other in an email:

> I believe I've stumbled into a research opportunity. Essentially, I've been made aware of a new organizing vision in-the-making, something called professional services automation (PSA). It would appear to present a good opportunity for a case study over the next year. What is fresh here is the chance to study the front end of the organizing vision development process. What do you think?

In the PSA community, we became observers for the most part, except that a vendor approached us hoping to demonstrate its products in our school's executive program, we were invited to post our research on a conference web site, and, further, an analyst proposed a joint research program with us on the business benefits of PSA. (While the latter initiative is interesting to us, it has yet to bear fruit.) Eventually, we want to report our findings back to the community in a useful form. We plan to do so by writing papers and articles, lecturing in our own classes and executive workshops, as well as talking with our informants and others in the community.

Summary

As summarized by Table 2, a variety of players became interested in PSA and have been talking, writing, hearing, and reading about it. Although the common curiosity in PSA helped define the discourse community, what really brought these players together were the *opportunities*, personal or organizational, commercial or otherwise, reflecting purposeful interests, offered by PSA. Thus, what might be mere frustration for most people seeking to organize personal project data was recognized as a venture idea by Niku's Farzad Dibachi. While others passed on or rejected the white paper project requested by Dibachi, David

Hofferberth found "maybe there is something to this!" Viewed by some as ERP sold unsuccessfully to non-traditional industries, PSA, to Alex Popov, was something that might bring "a grand success" to his company. Finally, to some of our academic colleagues, PSA might look like an in-the-making fad "bathed in the glory of hyperbole rather than manifesting substantive, fundamental issues."[22] But for us, PSA was our "chance to study the front end of the organizing vision development process."

Insert Table 2 about here.

To pursue the opportunity in mind, as shown in Table 2, each player engaged in the PSA community created and sustained by this very engagement. Clearly, such engagement is not cost free. Each player had to acquire and invest *resources* in order to stay in the game. Here, required resources included not only time and money, but also *discursive* means, by which we mean the vehicles that each player employed to engage in the community's conversation. The last column of Table 2 displays the various discursive resources used by various players in the PSA community. Among these, players own certain of them. For instance, IT research analysts write and sell their research reports; conference firms organize conferences; and academics compose research papers. Typically players had to invest their own resources in PSA. For example, Hofferberth was not paid for his initial research on PSA in 1998 and had to invest his own time. Most speakers at FC's PSA 2001 conference did not collect a speaker's fee and had to cover their own expenses. However, some skillful players managed to mobilize others' resources. As mentioned earlier, at SPO Summit 2002, Gartner made vendors pay all conference expenses and every attendee's travel and accommodation. PeopleSoft's nationwide product workshop, "PeopleSoft ESA Road Show," was in fact sponsored by its marketing partner – HP.

[22] We borrow this expression from Weber's (2002: viii) discussion of the quality of IS research.

With time, money, and discursive resources invested in PSA, the realization of opportunity for any player was by no means assured. Investment in PSA, just as in any IT innovation, was *risky*. In this case, we observed that players redefined their opportunities and constantly assessed the opportunities against the risks they faced. After all, the opportunities for some players were, to some extent, defined and redefined in the community's discourse. Initially, around 1999 and 2000, it was generally perceived that IT PSOs lacked a tool to manage their professional workforce and projects, and that PSA met such a need. Later on, the market opportunity was "literally" expanded to all kinds of service organizations. Did such a broader opportunity really exist? Or was the opportunity merely the result of marketing campaigns by frustrated vendors and analysts, seeing too many vendors pursuing IT PSOs? At FC's two-day conference, due to lukewarm attendance on the first day, Siebel withdrew the exhibition of its PSA product the next day even though its sales office was just across the street from the conference. Obviously Siebel evaluated its opportunity in PSA and responded accordingly by restraining resource commitment. Such a limited-engagement tactic, we suspect, may explain why some well-established enterprise software vendors, years after they announced their PSA initiatives, could still not produce PSA solutions with functionalities comparable to offerings by pure-play vendors. Although Siebel did not withdraw completely from the PSA community, some disappointed players did drop out. For instance, having canceled the PSA 2002 conference, First Conferences was looking for "a new departure." Norbert Turek, who had already moved on to other topics, wrote "I was an expert [on PSA] for three weeks in 1999, but no more." As the discourse "streams and flows in one direction and then another" (Swanson & Ramiller, 1997: 465), opportunity may be re-evaluated. When PeopleSoft launched its ESA product, a former PSA analyst who had dropped out told us that he became interested in this market again and

would like to revisit it in "the new light shed by ESA."

LAUNCHING PSA AS COMMUNITY ENTREPRENEURSHIP

As should be evident from our description of the PSA launching process, many actors were highly *entrepreneurial*. Among the waves of new IT, these actors recognized and pursued PSA as an opportunity, invested their own resources, and mobilized others' resources, relative to the perceived risks they assumed. Indeed, this process closely resembles entrepreneurship as defined by those who view it as a behavioral process (see, for example, Hisrich, 1995[23]). Still, we note that the process of launching PSA differed significantly from the conventional view of entrepreneurship typically represented by one individual entrepreneur or one group of entrepreneurs competing in the same industry. We discuss the difference in detail below and provide five propositions,[24] which underpin a new theoretical concept – community entrepreneurship.

One may view Niku's Dibachi and Novient's Kopcha and Caldwell as typical entrepreneurs who start their own businesses. Similarly, PeopleSoft and other large software firms' PSA initiatives may be viewed as *corporate entrepreneurship* or *intrapreneurship* (Kanter, 1988; *Strategic Management Journal*, 1990). However, it would be misleading to characterize other PSA players as "externalities" (Porter, 1980), "others" (Meyer, 1996), or part of the social structure for entrepreneurship (Martin, 1984), relegating them to the background. From our perspective, there were multiple entrepreneurs in the PSA community from multiple industries simultaneously: analysts, consultants, vendors, conference organizers, journalists, and

[23] Hisrich (1995) defines entrepreneurship as "the process of creating something different with value by devoting the necessary time and effort, assuming the accompanying financial, psychic, and social risks, and receiving the resulting rewards of monetary and personal satisfaction and independence" (p. 10).
[24] The propositions are not meant to be causal but rather are conceptual tools for future theoretical and empirical development.

academics. Moreover, their collective engagement was necessary to launching PSA. More generally:

Proposition 1: *Multiple entrepreneurs from different industries come together as a community to launch the organizing vision for a new IT.*

Table 2 shows that *purposeful interests* enable entrepreneurs from different industries to pursue different personal or organizational opportunities: a new market to research, *guru* status, a new implementation practice, innovative software for underserved market, a new product line, a new conference series, a new topic to publish, and a better theory. With such diverse opportunities in mind, entrepreneurs came to the PSA community not coincidentally. They became interested in PSA because they all recognized the broader opportunity that PSA might offer one day, enabling them to realize their own opportunities and fulfill their own interests. Thus:

Proposition 2: *Each entrepreneur pursues his/her own personal or organizational opportunity in the light of the broader opportunity perceived to be offered by the new IT.*

As mentioned earlier, opportunities entail resources. In the PSA case, entrepreneurs invested their own resources and mobilized others' resources to pursue their differentiated opportunities. Both the *amount* and *type* (i.e., time, money, and discursive resources) of the resources matter. For example, in fiscal year 2002, Niku spent approximately $105 million developing and marketing its software. That amount of money would be astronomical for academic research on PSA such as ours. Too, if we were not careful in managing our own discursive resources such as this paper, no money would buy us a better theory. In fact, discursive resources are crucial in the launching PSA process because, well before a mature market is established for PSA, most community interactions were discursive and it was during

such discursive interactions that the PSA vision was formed for launch. Hence:

Proposition 3: *Each entrepreneur invests his/her own resources and helps to mobilize others' resources, including, most importantly, discursive resources for advancing the vision.*

Notwithstanding the different opportunities pursued and resources employed by the various actors, their chances of success (or failure) were highly interdependent. For example, most IT consultants were waiting to see which vendor would win the day. "They will partner with whomever they can make money with," said Hofferberth. On the other hand, the successful in-house implementations of PSA solutions by IT PSOs such as Andersen Consulting and EDS became notable case studies that Novient and Evolve, respectively, publicized in order to build their own sales success. As another example, although Hofferberth was respected as the first analyst, sometimes even referred to as the "father" of PSA, his reputation and the success of Aberdeen's PSA practice are closely linked to PSA vendors' collective market and PSA adopters' overall success. He said, "I wouldn't be in this business if people weren't deploying these [PSA] solutions." Therefore:

Proposition 4: *Each entrepreneur's success in pursuing his/her opportunity depends on the success of other, although not necessarily all, members of the community.*

Given their interdependence, PSA entrepreneurs, along with other actors in the community, constituted a multi-agent system for the launching of PSA and thus should be examined together. Such a multi-agent perspective reveals that no single entrepreneur or group of entrepreneurs controlled any developmental path in the community (Van de Ven, 2002). This revelation paints a different picture from the conventional representation of entrepreneurs, usually in charge of making decisions on key business processes and functions to maximize their own interests. In the PSA community, seemingly more powerful actors (e.g., more skillful, resourceful, or

dominant actors) are not completely free to pursue their self-interests. Their power is constrained by the extent to which less powerful actors are willing to support the emergent vision. Although Hofferberth took the lead to name the software and seemed dominant in the discourse for PSA, he did not *own* the organizing vision. Others could *appropriate* the vision in their own ways and might even create competing visions. For instance, Kempf conceived the SPO vision as "a new branding campaign." Unlike branding campaigns often headed by marketing executives in business enterprises, the SPO campaign lacked any decision-making authority and largely relied on efforts of and support from those actors favoring the vision and the *consensus* they might reach. No one was or is responsible for the campaign's outcome, even though the particular path community members chose to take might make or break the success of the launching process. In sum:

Proposition 5: *No single entrepreneur controls the organizing vision's developmental path, which is subject to discursive contention as well as cooperation in the launching process, with consequences for the launching's success.*

Indeed, the process of launching PSA represents a very different kind of entrepreneurship, which we call *community entrepreneurship*.[25]

Definition: *In the context of information technology, community entrepreneurship is the process of pursuing different, but interdependent opportunities represented by a new IT undertaken collectively by multiple entrepreneurs, who assume the risks of mobilizing resources in a community of organizations and people supportive of the IT.*

[25] Several entrepreneurship scholars have previously used the term *community entrepreneurship* (see, for example, Johannisson & Nilsson, 1989; Haugh & Pardy, 1999). Our use of the term breaks with their use in two ways. First, our definition of community as a body of organizations and people having a common interest in an innovation transcends the relatively narrow definition of community tied to a geographical or administrative area. Second, community entrepreneurs, in our definition, aim to pursue *personal* or *organizational* opportunities, rather than to facilitate entrepreneurial activities as a *collective* or *community* goal in a geographic or administrative community. They are viewed as a community only in their interactions around the organizing vision for the innovation.

A community entrepreneur is an individual entrepreneur first. Each pursues his/her own opportunities, invests and acquires resources, assumes risks, and reaps personal or organizational rewards if successful. However, each entrepreneur's success (or lack of it) depends on that of other entrepreneurs in the same community, where they collectively shape the organizing vision by engaging in the on-going conversation about the innovation. Here, the size and constitution of the community and the level of vitality in the discourse have a direct impact on community entrepreneurs' collective possibility of success. Accordingly, launching an organizing vision is itself an entrepreneurial process.

CONCLUSION

In just a few years, PSA has evolved into a class of enterprise software offered by scores of vendors and deployed in hundreds of service-oriented companies. A community of organizations and people, with whom we have interacted in the last 15 months, emerged to launch an organizing vision for PSA in their on-going conversation about it. At the core of the community were multiple entrepreneurs pursuing diverse but interdependent opportunities, mobilizing resources, and assuming related risks. Although our study has covered a significant portion of PSA's launching process, the process continues. As we concluded the present study, the discourse on PSA remained largely dominated by vendors and analysts, far from "growing on its own." PSA entrepreneurs must work hard if it is still their hope that PSA will eventually gain momentum and take off to "sweep the industry."

As for us, academic entrepreneurs in the PSA community, it is about the right time and place to assess our own success here. As we have described, each entrepreneur's success depends on the success of other entrepreneurs in the community. While PSA vendors are struggling with their sales in a challenging economic environment, PSA analysts are still "educating the market"

about the benefits of PSA, and some IT consultants are waiting to partner with the market winner, it is not clear at this point whether PSA will become remarkably fashionable or broadly institutionalized eventually. Thus, it is impossible for us, within 15 months, to claim success in explaining the on-going diffusion process of PSA. Further, we realize that we would need to integrate the PSA case with studies of other IT innovations in order to answer the broad question: How does new IT come to be applied and diffused among organizations?

With these limitations in mind, we have achieved some success in our pursuit of a better theory. First and foremost, we contribute to organizing vision theory by offering a rich analysis of the constitution of, motivations for, and interactions in a diverse interorganizational community that launches such a vision. Our case shows that real people and their organizations, driven by diverse but interdependent opportunities represented by an IT innovation, came together as a community, played different roles, and interacted to launch a specific vision. We generalize from our case to introduce *community entrepreneurship* as a core concept in advancing organizing vision theory. Both the social/behavioral structure and the cognitive structure that shape the early diffusion of IT innovations have now been carefully theorized (i.e., community entrepreneurship and organizing vision, respectively).

Second, our study usefully informs research on the origin of institutions on both theoretical and methodological fronts. Theoretically, we respond to DiMaggio's 15-year-ago call for studying the role of interest and agency in the creation of institutions. Taking a broad view of the diverse interests of multiple agents in the PSA community, we found that past power-based explanation for institutionalization tended to deemphasize the interdependent interests of actors. Power is constrained by such interdependence. Overt pursuit of self-interests in an innovation's early diffusion may dampen institutional entrepreneurs' overall ability to institutionalize it. To

the extent that they are aware of the interdependence of interests and opportunities, entrepreneurs skillfully induce cooperation in a community entrepreneurship process, whose success may be a necessary condition for institutionalization. Methodologically, we have expanded the examination of institutionalization from reconstructing histories of dominant institutions to studying *contemporarily* the diffusion of an emergent innovation before it is, or fails to be, institutionalized. As just mentioned, such expansion may usefully reveal the conditions for institutionalization. In addition, our multi-agent perspective should be helpful for researchers conducting case studies on the institutionalization of specific innovations. Until now, these studies have focused on one powerful actor, or a group of competing actors, leaving other actors in the background. Where organizational fields are concerned, much may be lost by this.

Third, our study is the first empirical attempt to explain the process of launching management fashions. Prior research has been silent on this. Apparently, "all of a sudden," management knowledge entrepreneurs select a technology and talk and write about it. The process of launching PSA, not yet fashionable, reveals that launching a fashion is not such an "all-of-a-sudden" phenomenon – it often takes many community actors years of entrepreneurial efforts to launch a potentially successful fashion.

Fourth, our concept of community entrepreneurship should be useful to the study of entrepreneurship. A recent review of this literature (Swedberg, 2000) showed that social scientists examine entrepreneurial behaviors, the causes of entrepreneurship, and its cumulative effects. Some researchers have analyzed entrepreneurs within specific social and cultural settings (Glade, 1967; Martin, 1984; Shapero & Sokol, 1982) and found that "successful entrepreneurship usually involved more actors than the entrepreneur himself or herself, and the behavior of these other actors must be taken into account in the analysis" (Swedberg, 2000: 37).

We contend that it is not enough to analyze these "other" actors as social or cultural context only. They are often important entrepreneurs in their own right in the same community! Here, we paid attention to this community phenomenon and examined multiple entrepreneurs and their different opportunities and interactions over a period of time. In the context of IT innovations, we suspect community entrepreneurship is quite common. Future research on other innovations and their entrepreneurial communities should be in order.

In addition to the theoretical contributions, our study offers some practical implications for community entrepreneurs. In our conversations with players in the PSA community, most were not consciously aware of such a community, not to mention taking strategic actions to develop their positions within it. Because it is within the community that entrepreneurs recognize opportunities and mobilize resources, recognizing the community and strategically developing their own positions should be important first steps toward successful community entrepreneurship. Second, because of their highly interdependent opportunities, entrepreneurs within and between industries should strive for cooperation. In the PSA community, there are alliances between vendors and analysts, and between vendors and consultants. Strategic cooperation between other industries may also be useful in achieving collective success. Within each industry, for example among PSA vendors, cooperation is of course problematic. However, as multiple vendors may be selling to the same customer in a nascent market, the drive to differentiate as represented by the numerous acronyms in the PSA community may be more of a hindrance than a help, confusing potential customers. Third, motivating others to cooperate requires leadership and social skills (Fligstein, 2001). Different industries of entrepreneurs may need different skills at different times of the community's evolution. For example, as we described earlier, the skill of brokering may be more essential to analysts than to others. Finally,

instead of short-term betting on the Next Big Thing, all parties may be better off by closely monitoring and strategically engaging the community development of organizing visions upon which our collective success must rely.

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Table 1
Launching PSA: A Chronology

Year	Major Events
1995	Changepoint enters software business and ships version 1.0 of its software product. Novient's precursor, InfoWave is founded to develop resource management software for professional services organizations.
1997	In November, Niku is founded.
1998	In December, Niku releases the first version of its software labeled "Professional Services Automation." Niku and a few other vendors approach Aberdeen Group, asking for writing white papers for their products.
1999	In November, Aberdeen's R. David Hofferberth publishes the first market research report on PSA. In December, a five-page feature article on PSA appears in *Information Week*.
2000	In February, PeopleSoft debuts PeopleSoft PSA. In May and June, Novient holds a PSA seminar series in eleven US and European cities. Gartner's Ted Kempf serves as the featured speaker. In June, Andersen Consulting announces to adopt Novient's PSA solution. In July, Novient and Andersen Consulting form alliance. Gartner organizes PSA Summit in July. Advised by Kempf, Novient abandons PSA to adopt the Service Process Optimization (SPO) term.
2001	In January, EDS announces to adopt Evolve's PSA modules. In February, Kempf publishes a report to define SPO. In June, Lawson Software acquires a PSA pure-play Account4. SPO Summit 2001 is held in August. In August, PeopleSoft CEO Craig Conway announces Enterprise Service Automation (ESA) as "the next big thing!" In November, First Conferences organizes PSA 2001 conference.
2002	In April, John Wiley & Sons publishes the book "Professional Services Automation" (Melik & Melik 2002), written by executives of a PSA vendor – Tenrox. First Conferences cancels PSA 2002 conference. In June, Solution 6 acquires Novient; Exigen acquires Portera's PSA business. SPO Summit 2002 is held in July. In September, Microsoft Business Solutions announces to deliver its PSA product in the fourth quarter of 2002.

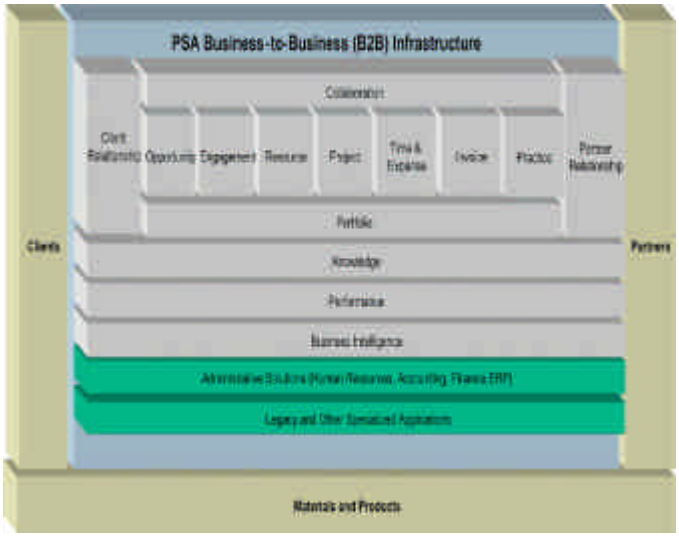
Table 2
Active Players in the PSA Community

		Representative Organization (People)	Opportunity Represented by PSA	Community Engagement	Discursive Resource
IT Research Firm (Analyst)		Aberdeen (R. David Hofferberth) Gartner (Ted Kempf)	New line of market research for client retention or acquisition Becoming thought leader or *guru*	Brokering diverse industries, especially vendors and users Sensing, aggregating, and voicing opinions Naming and defining PSA and outlining the PSA market	Market research report Consulting (for vendors and users) Conference presentation Newsletter White paper
IT Professional Services Organization (Consultant)		Andersen Consulting, now Accenture	Improving efficiency and profitability New consulting and implementation revenue stream	Adopting and implementing PSA solutions Partnering with vendors to sell and implement PSA	Consulting (mainly for users) Conference presentation Advertisement
Vendor	Pure-play	Changepoint Niku (Farzad Dibachi) Novient	Underserved market of service organizations Core business; main source of revenue	Reaching out to potential users and other groups in the community	Conference presentation and exhibition Product workshop Webcast Advertisement User conference Book Newsletter Online portal
	Non-pure-play	PeopleSoft Lawson Microsoft Business Solutions	New product line for new source of revenue	Partnering with or acquiring pure-plays Reaching out to potential users and other groups in the community	
Conference-Organizing Firm (Organizer)		First Conferences (Alex Popov)	New series of shows for new revenue source	Bringing key players to the conferences	Conference Newsletter
Trade Publication (Journalist)		*Information Week* (Norbert Turek)	Interesting new topic to attract readership and advertisement	Publicizing ideas and news	Magazine Article Advertisement
Business School (Academic)		Our school (Us)	Advancing theory	Observing interactions and reporting community knowledge	Research paper Executive workshop Classroom lecture

Appendix
PSA Basics Offered by Selected Members of the Community

Definitions of PSA	
Hofferberth, 2002 (Aberdeen)	A suite of integrated applications designed for services-centric organizations that enables personnel across the services value chain to become more productive and profitable; those goals are attained by increasing efficiency through improved planning, increased collaboration and personnel utilization, enhanced financial management and integrated knowledge management.
Kempf, 2001a (Gartner)	Software designed to track and allocate the major resources of services companies or departments – people, intellectual capital and time – to their output.
Melik & Melik, 2002 (Tenrox)	PSA software provides the tools, techniques, and technology that enable project- and service-oriented organizations to manage personnel, resources, projects, and clients.
Novient (Solution 6)	More and more service providers are using technology to improve the ways they manage and deliver services. PSA is the solution for the service economy—much the same as enterprise resource planning (ERP) and customer relationship management (CRM) solutions have automated other business processes.
Turek, 1999 (*Information Week*)	A new breed of software that can track the complex and evolving information related to an IT staff, including schedules, skills, career goals, and knowledge base. They can also capture performance metrics and let workers map their own career development.

Core Modules or Functionalities of PSA



Source: Hofferberth, 2002

Source: Kempf, 2001b

Major Vendors		Research & Analysis Firms Covering PSA	
Changepoint	www.changepoint.com	Aberdeen Group	www.aberdeen.com
Evolve	www.evolve.com	AMR Research	www.amrresearch.com
Lawson	www.lawson.com	Gartner	www.gartner.com
Microsoft	www.microsoft.com/BusinessSolutions	IDC	www.idc.com
Niku	www.niku.com		
Novient	www.novient.com		
PeopleSoft	www.peoplesoft.com		