Association for Information Systems
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AMCIS 2003 Proceedings

Americas Conference on Information Systems (AMCIS)

December 2003

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THE SMALL IT BUSINESS, THE UNIVERSITY, AND COMMUNITY PARTNERS: A MODEL FOR SYNERGY

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Abstract

The very small IT business suffers from the lack of resources and lack of a sufficient customer base. Universities have the human and computing resources, but may not be particularly good customers for the small IT business. Community-based organizations have very significant IT needs, but few resources. Is there a way to find synergy among these desperate groups to create a win for each? This research discusses a model of development for the small IT business that has seeks to leverage the assets of the desperate groups while offsetting the limitations of each group to create a unique IT business that serves the needs of each party.

Keywords: Small business, community-based organizations, action learning

The Players

The typical IT small business starts with a dream, a founder with solid technical skills and maybe a few clients pulled away from a previous employer, and little else. Hardware and software assets are tight—or non-existent—and the only financial assets available are earmarked for paying salary and expenses until a "real" job comes along. The hope of the founder is that she/he can make ends meet with friends acting as clients until more jobs come along and it becomes possible to hire the next employee(s). But, the reality often is that the founder is so busy doing the current job that there is no time to market and sell the next job. As the jobs with current clients wind down, the founder is faced with lots of time to market and sell, but no income. Worse, the next job pays old bills and the founder never does get the break of the big job to propel the business to the next level of development where coverage of fixed costs are "assured" and financial assets may now be leveraged into company growth.

There is no question that the small IT business needs tangible resources in the form of hardware/software/networking—and money—to make the intangibles such as skills and contacts pay off. It would also be desirable to have ready access to willing customers, especially ones where the effort was light and the returns reasonable. Could it be that the university offers the former resources and the latter the ideal customers? We look first at the university and then at community-based organizations as the pillars on which to build partnerships.

Universities continue their long struggle to maintain their importance to businesses while vacillating between a business orientation and education in basic disciplines (e.g., Byrne, 1992; Chiet, 1985; Frost, 1997). Given these struggles, it is not surprising to find outdated curricula and out-of-touch faculty, (Oviatt and Miller, 1989). Universities have begun to realize that, just as they need to upgrade their own IT infrastructure, they also need to attend to academic needs. Accordingly, universities are buying computing resources for instructional purposes. Faculty training and development are usually not on the shopping list, so faculty become self-taught or the equipment sits with little usage.

Students frequently see college as a "ticket," a "foot in the door" of the corporation where their careers may be launched. As outdated and irrelevant as some university course offerings may be, students hope that the degree will speak volumes and that employers will hire based on the degree without close assessment of the student's underlying skills.

The labor market for IT/Systems has been very tight in recent years. Organizations are ideally looking for highly skilled individuals. Absent their availability in great numbers, organizations appear to be happy to find energetic, trainable individuals

with up-to-date basic skills and *some* relevant experience. Yet getting state-of-the-art, relevant experience as an intern, or as a part-time student worker, is not often possible.

Community-based organizations (CBO) such as the United Way or smaller sub-agencies offering services such as nursery school care, after-school programs, or even programs for seniors have neither the resources of the university nor the IT knowledge of the students. What they do have is an IT wasteland with manual systems—if that—one-two old 486-based computers sitting in the corner collecting dust or used only infrequently by a volunteer, and no concept of the usefulness of information technology to their mission. There are three more attractive characteristics of CBOs: there are lots of them in the neighborhood, they are hungry to do more with less, and the see the university as a significant source of intellectual credibility.

Toward a Model of Synergy among the Players

So, we have the business organization with clear and pressing resource needs, universities struggling with limited resources to satisfy multiple constituents, students caught in the middle and hoping for the best, and community-based organizations with IT needs. While these entities may collide and generate some casual energy, a more symbiotic relationship might create significant opportunities for all.

This was the premise of a company founded at an east coast university in the late 1990s. The plan was to establish the company as an independent entity, physically located on campus, but with a separate mailing address. The campus location provided convenience for students who would work for the company while the separate mailing address created legitimacy with clients, including the university, and of course, the IRS. University IT resources, up to some reasonable level, were permitted with the understanding that the primary goal of the company was development of students' IT skills—a secondary goal of profit was understood and accepted—and that the principal, a faculty member, would keep a perceptible distance between academic and business activities.

Students were recruited to be corporate officers and "consultants" assigned to individual projects on an "as available" basis. The incentives were aligned to the motivations of the students: primarily gaining experience on resume-enhancing IT projects and, secondarily, some money. Officers were not paid or granted stock, but were treated as officers in all decisions of the company and recognized as officers on company stationery. Officers were required to commit to a length of service that would not be disruptive to the company—generally one year. All other workers were treated as consultants: hired on a per project basis, paid at a negotiated rate, and recognized to the IRS on a 1099 income statement. Job descriptions, statements of roles/responsibilities, and contracts were all part of the personnel process.

As first steps, the officers organized the company and prepared strategic And tactical plans. Strategy revolved around the alignment of the IT physical resources at hand, the capabilities and characteristics (e.g., transient nature of students) of employees, and the types of customers and projects that would meet our goals. One of the tactical plans was to the develop an internal training program to ensure the availability of requisite skills for targeted projects. These projects, it was planned, would be development projects with discreet, definable beginnings and ends. No product sales, on-going support, or even outsourcing of efforts were to be considered. The thinking was that project work would best meet the relative instability of student tenure; that is, a student might be available for one project, but not the next due to graduation, heavy course load for the semester, or other required work. The officers reasoned that the low cost structure of the company (due to "free" computing resources and a low-cost labor pool), the credibility of the university, and the low risk attached to project failure made for powerful marketing tenets with local CBOs, of which there were many. Through previous research we had evaluated the needs of several local CBOs and discovered that there were many opportunities for providing IT services to this target market: IT infrastructure issues, front- and back-office applications, and programming (providing services such as computer literacy training directly to CBO clients) were all possible. At about this time an offshoot of the local United Way formed a group to provide access to technology and computer literacy and academic training using technology to CBOs in the area providing services to Pre-K to 12th grade children of low income or minority families. This group's plan was to establish computer centers in the participating CBOs, offer computer literacy training to the CBO's clients, gift a refurbished computer to the client at the end of their literacy training, and then continue with training on academic subjects using technology now in the hands of the client. All of this meant potential work for the IT company setting up computer learning centers, providing training, refurbishing computers, and more.

Also at this same time the university adopted notions of an engaged campus and began offering courses enriched with service-learning (S-L) requirements where students completed community work as a part of the course. With S-L as a requirement, the "labor pool" jumped—without cost to the IT company. Many assignments for the CBOs were completed without cost, but the

IT company was developing both the skills and the reputation needed for sustaining the business. These projects lead to other projects with other non-profits not related to the technology efforts. Among the first was a project to select, procure, and implement software for a dance studio. A second project grew out of the network of leaders associated with the dance studio; in this case, the request was for the selection and implementation of software to support fund raising management for a museum. Another project called for the rewriting of state standards for technology in the K-12 curriculum into "kid-friendly" language and the related development of a rubric for assessing performance against those standards. Still another project—still ongoing—is the development of an ISP capability within the IT company to support local internet access for families of children receiving a gifted computer.

In each of the above projects and in all others engaged in by the IT small business, the pattern was the same: meet with the prospect to understand the issues, propose a working relationship, execute the proposal. While a small core of consultants seems to be in on every project, each project is a new start with a project team being assembled to assess, sell, and deliver the project. This small IT company has grown, albeit slowly, by leveraging the resources of the university, the talents and needs of the students, and the many opportunities for IT projects among local CBOs. The IT company is still private, still seeking "controlled growth," and still contributing to itself and its neighbors. Does this represent a unique set of circumstances not to be repeated or are there some planks on which to build similar relationships?

Lessons for Partnerships

While much did happen in the "town and gown" community at the startup of the business, there are some more universal items to be considered.

- While this may be a little unfair, the university is more willing to throw resources at a problem than solve them. This creates an opportunity for the private company to leverage free resources toward an identified university problem. In today's economy, universities seem very willing to provide cheap resources vs. the more costly solutions.

- The small IT company in this scenario needs to be formal (i.e., registered) and for-profit to give it stability, focus, and credibility

- Traditional classroom teaching approaches such as lecture, case analysis, simulations, field research and observation, and multimedia methods are often the pedagogical vehicles employed in delivering IT courses. These approaches cannot be depended upon to provide the challenge, reflective growth opportunities, or understanding of the long-term implications of short-term projects. This is particularly true when dealing with a discipline or topic area characterized by rapid technological change and turbulent environments. We must not only teach students what they need to know for the here and now, we must also teach them how to continuously build, expand, adapt, and innovate to real-world applications that have yet to evolve. Action learning is a developmental approach that focuses on experience-based learning programs. The basic philosophy is that students learn more effectively within the reciprocity of a social situation and while engaged in the solution of real problems (Pedler, 1991; Weinstein, 1995). "The action referred to in action learning is not temporal or simulated. Students need to take real positions, make moral judgments, and define them under pressure. Action learning, then, as a form of management education elicits managerial behavior, not student behavior. Students derive knowledge not *about* management but rather about their own capacities to take action." (Raelin, 1997: 369)

- Community-based organizations represent opportunities for IT projects that are akin to projects in the corporate world. The size and scope is generally smaller, the risks less severe, but the CBOs are a good proxy for for-profit companies with respect to IT work.

While the nature of the efforts described above required that most measures be anecdotal and focused on "soft" IT skills, we believe that a successful "first run" of the action learning approach could lead to the identification of measurable "hard" skill performance indicators under stringent conditions.

- A greater ability to identify, analyze, and design solutions for hardware infrastructure issues in computing and networking.

- An increased facility in designing software solutions that meet, even exceed, stated project objectives.

We hope to complete research of this nature in the coming months.

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