

Software Productization Center – Small Business Institute

A Case Study of Cooperation

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Abstract:

This paper chronicles the establishment and early experiences of the Millersville University Software Productization Center (SPC), and the coordination of its efforts with the University's Small Business Institute. The initial successes and struggles of the SPC are described. A review of the Center's development and approach are presented to offer a blueprint for possible replication elsewhere in academe. As a "case study" the paper is purely descriptive and without a related literature review.

Introduction:

In the summer of 2007 an interdisciplinary group of faculty joined together to prepare and submit a funding proposal to the Pennsylvania State System of Higher Education (PASSHE). This proposal was accepted and resulted in the awarding of a "PASSHE Planning Feasibility Study for University/Business Infrastructure Grant" in the amount of \$182,541. This three-year grant was to establish the Millersville University Software Productization Center (SPC). The initial interdisciplinary faculty coordinating team included: Dr. Stephanie Elzer, Computer Science, Dr. Patrick McCaskey, Director of the Millersville University Small Business Institute (SBI), and Dr. Theresa Russell-Loretz, Communication and Public Relations. In the fall of 2008, Dr. Nancy Mata, Art,

joined the faculty coordinating team, and Dr. Theresa Russell-Loretz exited to pursue additional responsibilities at the University.

This article describes the establishment of the SPC, its partnering with the SBI and the unique coordination that crosses not only departmental boundaries (Computer Science, Communications and Public Relations, Business Administration and Art and Design), but also spans two separate schools (The School of Humanities and Social Sciences, and The School of Science and Mathematics). Finally, in addition, the Office of the Vice-President for University Advancement was actively involved throughout the development of the grant application and the initial establishment of the Center's Advisory Board.

The Software Productization Center:

The term "software productization" refers to the process of turning a rudimentary software concept or early prototype into a marketable product. Thus the efforts of the SPC are primarily focused on assisting local entrepreneurs with market research, the technical implementation of a working prototype of the software concept, the development of business and marketing plans for the launching of the product, and the branding and physical packaging of the product. Once the collaboration with the SPC is complete, the entrepreneur should be prepared to sell their product, either by attempting to raise additional funds (through business loans, angel investors, venture capitalists, etc.) or by directly selling to a customer base.

The model upon which the SPC is based, much like the SBI model, leverages faculty expertise to guide and mentor students working with the participating entrepreneurs. The students play key roles in the consulting relationship with the SPC clients. In fact, slightly over 40% of the grant amount is comprised of student salaries. The structure and focus of the SPC allows it to achieve several important benefits simultaneously: 1) strengthening the regional economy by assisting fledgling businesses (and hopefully thereby creating local jobs), 2) providing valuable practical learning opportunities for Millersville students in multiple disciplines, and 3) increasing faculty awareness of the current issues facing regional businesses, thus facilitating the development of compelling and practical curriculum content.

Established in 2007, the mission of the Software Productization Center (SPC) at Millersville University is “to provide emerging technology-focused entrepreneurs within the Central Pennsylvania region with assistance in advancing software products from concept to marketable product”. The Center accomplishes this mission utilizing faculty expertise, the assistance of student interns from various disciplines, and support from community business leaders and technology experts. The Center:

- Serves regional economic and community development needs
- Enhances the quality of instruction and learning resources available to students
- Links the University community to regional business, government, and nonprofit resources

The SPC collaborates with selected applicants to (1) implement a working prototype of the software product, (2) develop business and marketing plans for the launching of the product, and (3) design branding and physical packaging of the product.

Eligible projects are restricted to software products that are intended to generate revenue and are still in the conceptual or very early development stages. Projects that are intended to support the business, but that would not be a source of revenue for the business, are not eligible and are not considered. The assistance provided by the SPC is in the form of guidance, expertise, and labor. No funds are directly provided to the selected clients, and no payment is solicited for these services. Once the collaboration with the SPC is complete, the client should be prepared to market the software product, either by attempting to raise additional funds through existing companies or venture capitalists, or by directly selling to a customer base. Eligible clients are entrepreneurs or businesses with revenue that comes (or will come) from selling software products. Clients are located in one of the several Central Pennsylvania counties. They fall into one of three categories:

- Individuals
- Startups (businesses with five or fewer employees which have existed for less than two years)
- Small businesses seeking to develop a new software product

An Advisory Board was recruited to assist and direct the activities of the SPC. Board members were sought who brought to the table certain experiences, knowledge and skills. These included:

- Software industry experience
- Knowledge of regional small business resources
- Small business experience

- Entrepreneurship experience
- Business startup experience
- Experience with small business legal issues
- Knowledge of venture capital and other forms of funding

The University's Alumni and Development Offices were consulted in the selection of the Advisory Board. However, it was held to be important, that this Board would serve no fund raising purpose. As a part of this consultation the Development Office also provided meeting space and food for the first two Advisory Board meetings. The SPC Advisory Board meets quarterly plays a vital role in the success of the center, including voting on the final selection of clients. The Board consists of seven regional business executives: (* = MU alum)

- *Mr. Daniel Betancourt, President and CEO. Community First Fund, a lending and support organization for startup businesses
- Mr. Charles Crystle, Founder, Mission Research, a highly successful software entrepreneur
- Mr. G. Yale Eastman, General Partner, Eastman Family Partnership, a scientist and retired founder of a successful high technology company, an angel investor and the only member of the Board whose picture has appeared on the cover of *Scientific American*
- *Ms. Jennifer Hammaker, Director of Business Development for the Innovation Transfer Network, a regional organization that supports cooperation between

- colleges and universities and business partners in technology commercialization
- *Ms. Cheryl Irwin, Vice President, Lancaster Chamber of Commerce and Industry
 - *Mr. Scott Landis, Barley Snyder, LLC, an attorney specializing in corporate and small business law
 - Mr. Jesse Stauffer III, CTO, GeographIT, a group leader at a high technology firm

The Millersville University `Small Business Institute:

The Millersville University Small Business Institute program at Millersville was established in 1986. Since that time the program has provided consulting support to approximately 300 local small businesses and an active learning experience to over 900 senior undergraduate business majors. Since its inception the Millersville University SBI has functioned as a participant in the parent national program.

(Much of the following material is drawn from various collateral material developed or revised for the marketing of the national SBI by one of this paper's authors while serving as the Vice-President of Marketing for SBI) Nationally the Small Business Institute began in 1972 as a cooperative venture between the U.S. Small Business Administration (SBA) and approximately 20 universities and colleges, with schools receiving \$250 per completed case while providing free management assistance for clients. SBI initially grew, and over time more than 500 universities and colleges have participated. At present perhaps fewer than 100 universities and colleges have active, reporting, programs.

Over the years, since its inception, the Small Business Institute Directors' Association (SBIDA) served as the coordinating body for the SBI program. In the spring of 2002 SBIDA, in order to better reflect its members and interests, officially changed its name to the Small Business Institute. In 1996 the SBI program became independent of the SBA. The SBI program is now self-funded by participating schools through a variety of sources, including nominal client fees, student fees, donations, and state and local grants.

SBI member schools provide, under faculty supervision, small business consulting experience for their students and management assistance to small businesses in their community using the SBI model. Some local SBI programs work with community organizations to develop economic development strategies to bring businesses to the community as well as to develop businesses that already exist. It is estimated that, since its inception, SBI programs have benefited more than 200,000 small businesses. During this time more than 500,000 students have participated.

Each local SBI program operates within a College or Department of Business or Management under the authority granted by the national SBI. Participating students enroll in courses such as Small Business Management, Small Business Consulting, Business Policy, Strategic Planning, Applied Management, Independent Study, etc. Each local SBI program uses student teams of two to four senior-level or graduate business students, under faculty supervision to conduct in-depth consulting and field case projects to analyze and create solutions for specific business problems. Each local SBI program is uniquely customized to meet the needs of the market it serves based on the expertise available at the sponsoring school. For example, some local SBI programs

work with small businesses in the area of technology transfer while others provide assistance in the development of advertising and promotional campaigns or marketing research. Each local SBI student team meets frequently with the small business owner over the course of the academic term to learn about the owner's goals and the business's history, to observe operations, and to identify opportunities and specific problems. Each local SBI student team usually focuses on a limited number of opportunities or problems, conducting an in-depth analysis of the business and its industry prior to recommending action to the small business client. At term's end, each local SBI student team delivers comprehensive written and oral reports recommending courses of action or solutions to the client

The SBI model of student consulting offers several benefits to the participating faculty. SBI clients' problems offer opportunities for incorporating real-life examples in lecture material thus improving teaching by increasing the student's retention level. SBI clients' problems offer case writers new ideas for case development. SBI clients' problems and implementation results, as well as student problems and successes, offer research opportunities that can lead to publishable material in numerous small business journals. Working with SBI clients and coaching student teams to discover solutions serves as a pseudo-internship for faculty without managerial experience.

The SBI model also offers significant benefits to the participating students. The SBI program offers students a chance to gain hands-on experience with small business, the economic sector providing the majority of new jobs. The SBI program provides the critical experiential training which supplements textbook and classroom knowledge, making students more immediately productive on the job. Participation in the SBI

program can lead to greater job opportunities, quicker promotion, reduced training, or more advanced responsibilities after graduation.

The SBI model offers valuable benefits to the participating colleges and universities. The SBI program is an excellent means for a university to provide community service. The SBI program enhances the credibility of the management curriculum for both the community and prospective students, which can enrich the diversity of the student body or increase its size. The SBI program enhances recognition of the management program among the university's constituents, which can lead to more financial contributions and grant opportunities.

The local business community also benefits through their participation. Businesses receive consulting at a nominal fee or at no charge. As a result of successful SBI consulting projects, SBI clients have been found to create new jobs within the community. As a result of successful SBI consulting projects, SBI clients have been shown to generate additional gross and net revenues.

The Cooperative Effort

As can be gleaned from the descriptions offered above of the two programs, there are many similarities and some differences between the two. The goals and potential benefits are essentially the same or, at least, quite similar, for: the faculty, students, schools and clients for both the SPC and the SBI. Both programs are offered at no charge to the clients. Both programs are designed to focus on the learning experience, and as such are easily classified as educational in nature. Both offer the students academic

credit for their participation. A conscious effort is made with both to complete projects within the time frame of either one or two academic terms. In as much as some SPC projects take longer they may differ from a more typical SBI project. While it has not yet been an issue, in such instances the SBI team may be offered internship credits and compensation beyond the first term. As an SBI team they are during the first term working within the framework of the SBI course and are not compensated. Since no comparable course structures exist in their departments, the students from Computer Science, Communications and Art generally participate as paid interns. While there are some obvious inequities in this situation, each student pays tuition to participate and, to date, due to the richness of the experience, this has not been seen as problematic from the SBI students' perspective.

Supervision requires careful cooperation among the participating faculty. For example the SBI students have course responsibilities that the other students do not have. Specific assignments have required that the students have had to report, from time to time, to faculty outside of their discipline. Extensive teambuilding is necessary not only among the students but also the faculty. As much as possible, an ego free approach has to be maintained. Each of the participating disciplines speaks a separate language and exhibits different work ethics. Thus there has been a significant learning process, not only among the students, but also the faculty, as we have developed the ability to cooperate.

The University has been highly supportive of this interdepartmental effort. Both Deans involved have actively participated in the process. On several occasions one or both have been present to introduce the faculty team at public announcements or public

programs associated with SPC. In addition, the Alumni and Development offices have been helpful. At the outset of the planning for the program, due to the organizational structure of the University, the team felt it was essential to involve their offices in the process. One reason for the support of the administration has been the use of external funding resulting from a successful grant application. The SPC program has also had a good deal of positive local press coverage. The careful use of press releases with the grant award, the naming of the Advisory Board, the various calls for client applications, and most recently, a planned rollout party for one client's product has led to high visibility for the SPC in both print and television coverage.

What Is Next?

The SPC program was funded by a three year "PASSHE Planning Feasibility Study for University/Business Infrastructure Grant". When the Advisory Board was put together one issue was to find a group who would not only offer excellent advice and guidance, but could through their contact and support also assist the team in locating continuing funding. The feasibility funding came from the PA State System of Higher Education. Now the SPC must determine if there is sufficient reason to take the program further, and if there is, locate long-term funding support. The SPC team is now working with the Advisory Board and the University's Development Office to properly fund the operation beyond year three.