One Strategy for IS Departments: Staking a Claim to Project Management

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ABSTRACT

We share the experience of our IS department in regard to project management and School of Business curricula. What started out as ordinary service on School of Business committees evolved into a departmental strategy: staking a claim to project management. And while this strategy sort of found us before we found it, IS departments at other schools may decide to proactively pursue this strategy. Sharing our journey provides the opportunity for IS colleagues to determine if such a strategy could be of benefit in their situation and to take away insights for how to proceed.

Keywords

IS curriculum, project management, hard skills, soft skills.

INTRODUCTION

Two major challenges faced by IS educators today are: declining enrollment, and keeping pace with changes in the IS profession. We share with fellow IS educators a strategy adopted by our IS department that is strengthening our identity and value within our School of Business, as well as within our University and with our industry partners. This strategy was in plain sight before we recognized and embraced it. The strategy: staking a claim for project management.

Here, we explain our journey, share what we have done, describe our vision for the future, and relate these efforts back to the challenges we all face as IS educators.

HOW IT BEGAN

Our journey began back in 2005, with two seemingly unrelated ventures. One was triggered by internal curriculum continuous improvement efforts; the other endeavor was prompted by our industry partners.

Enter Stage Right: Industry Clamor for PM Training

In 2005, our industry partners were begging us to offer workshops that would prepare their employees to sit for the PMP (Project Management Professional) certification exam. No faculty members in the School held this certification. The School of Business Associate Dean found money to bring in a consultant for a 5-day workshop to prepare interested faculty members to sit for the PMP certification exam and earn the PMP credential. Understanding that project management is cross-disciplinary, the Associate Dean extended the invitation to all full-time faculty in the School of Business. About a dozen faculty members attended the workshop, or at least parts of the workshop, with representation from IS, management, marketing, and finance. Only two faculty members went on to complete the PMP certification, and both were from the IS department.

The School began offering PMP prep workshops for local industry, with the teaching of the workshops spread among the two PMP-certified faculty members and an industry practitioner. At this point, the industry interest also triggered the development of a Project Management Concentration (12 hours of electives) option in our MBA and MS IS programs.

Forming the PM Concentration involved: (1) adjusting the 3-hour project management graduate course already taught by the IS Department to be “general project management” instead of “IT project management”; (2) adding a new 3-hour course covering essentially the same material as the PMP-prep industry workshops already developed; (3) creating a new elective course to drill down on the areas of risk management and procurement management. To ensure the two new courses were on the radar screens of both MBA and MS IS students, they were cross-listed as MGMT and CMIS (e.g., MGMT 535 / CMIS 535). One of the PMP IS faculty members taught the new PMP-prep course, and an industry practitioner was hired as adjunct faculty to teach the drill-down on risk and procurement. The 12-hour concentration (4 courses) was rounded out by
identifying a list of courses already on the books that would be suitable as an elective choice in the PM Concentration (e.g., courses on Change Management and Quality Management). The PM Concentration was implemented in 2006.

The industry workshops and PM Concentration in our graduate programs continue today.

**Enter Stage Left: Group Work as a Needed Skill**

Also in 2005, our (AACSB-accredited) School of Business assembled a task force with faculty representatives from each department to identify the cross-disciplinary skills that all undergraduate business students need (i.e., general skills that we want all of our business graduates to acquire, regardless of individual major). This task force defined six such skills for our undergraduate majors:

- Written communications
- Formal business presentations
- Analytical reasoning
- **Group work**
- Professionalism, personal ethics, honesty
- Data/information acquisition

In Spring 2006, the Dean formed the Core Curriculum Integration Team (CCIT), charged to recommend strategies for the integration of the six cross-disciplinary skills into the School’s undergraduate curricula. After several starts and stops, mostly related to resource constraints, the School moved forward on the “Group work” goal by approving the development of a new course that all undergraduate business students would be required to take: MGMT 331 Managing Group Projects. In our School, students are admitted to the School of Business in their junior year, and the new MGMT 331 course was designed to be taken by business majors in their first semester in the School.

The CCIT definition of student learning goals for the new course, approved by the Dean and faculty in May 2010, is provided in Figure 1. These course goals map directly to the “Group work” cross-disciplinary skill as defined by the School in 2005. The content was designed to be a blend of traditional organizational behavior topics applied to teamwork (soft skills) and basic project management practices (hard skills).

**CHECKPOINT 1: IS THE IS DEPARTMENT AWARE OF WHAT THEY ARE DOING?**

The IS Department, like all of the academic departments in the School of Business, had a representative on each of the curriculum committees: the 2005 task force that identified the inter-disciplinary skills, and the subsequent CCIT team that developed the goals for the new group projects course (stated in Figure 1). The same IS faculty member represented the IS department on both of these committees – let’s call her “Jo.” Jo found herself providing guidance in the area of project skills, primarily because she had project management industry experience. Jo also was one of the IS faculty members who completed the PMP certification.

To answer the Checkpoint question: No, we were not aware. The IS department was not thinking strategically. We were simply serving on committees we were assigned to and contributing what we could.

**THE NEW COURSE: MGMT 331 MANAGING GROUP PROJECTS**

The CCIT recommendation defined the objective of this course in this way:

> To acquire skills needed to work effectively in a group to accomplish a stated goal. These skills include “soft” skills such as recognizing and constructively managing individual differences, and “hard” skills such as developing a project task list and schedule.

The new course essentially integrates organizational behavior with some project organization and execution practices. This is not what IS departments typically think of as a project management course. From an IS department perspective, however, we did recognize the MGMT 331 course as a response to the call we hear for more attention to the “soft” skills needed in project work. Jewels and Ford (2004, p. 361) contend that the “hard” skills, traditionally the focus of project management courses, “do not contribute to success as much as the so-called ‘soft’ skills of good communication and collaboration and connecting with people at all levels of an organization.” The value of communication and team skills in IS undergraduate programs is also reflected in recent curriculum guidelines (Topi, Valacich, Wright, Kaiser, Nunamaker, Sipior, and DeVreeda, 2009). In essence, the new MGMT 331 course represents a “more balanced approach between hard and soft concepts,” as called for by
Pant and Baroudi (2008, p. 127), with the intent that each will complement the other and the learning of both types of skills will be enhanced.

Given the defined learning goals, the next step was to develop and deliver the new MGMT 331 course. The course draws content from two separate disciplines: organizational behavior and project management. Who should develop the course? Who should teach the course? We squarely encountered the difficulty Richardson (2011) had identified: how do you find an individual with the background – and knack – to teach both the hard skills and the soft skills? For administrative/political reasons, team-teaching was not an option in our School.

In the end, three faculty members were assigned responsibility to develop the course – two management (OB) professors and the IS professor who had participated on the curriculum committees (Jo, you remember her). Our resolution to the teaching dilemma was a “train the trainer” approach. In the first year (2012-2013), when a management instructor taught the course for his or her first time, Jo taught the hard skills lectures in the first four weeks of the class. The OB instructors were expected to absorb the hard skills, so they could teach the full course after that.

<table>
<thead>
<tr>
<th>New Group Project Skills Course: Student Learning Goals</th>
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<tbody>
<tr>
<td>➢ Work effectively in a group to accomplish stated goal(s):</td>
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<tr>
<td>1. The business student collaborates in the effort to establish and document the common purpose and goals of the group.</td>
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<tr>
<td>o Creates a statement of scope, including definition of key deliverables and target dates</td>
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<td>2. The business student participates in breaking a large project into a list of specific tasks.</td>
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<td>o Generates list of tasks that will accomplish the scope of the project</td>
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<td>o Identifies and documents task dependencies</td>
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<td>o Develops a project schedule (e.g., Gantt chart)</td>
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<td>3. The business student participates in the implementation of effective internal and external communication practices for the group project.</td>
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<tr>
<td>o Develops and implements appropriate internal and external communication plans (e.g., project status reporting), defining who needs to receive what type of information, how frequently, in what format, and through what medium</td>
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<tr>
<td>o Utilizes appropriate communication and collaboration tools</td>
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<tr>
<td>4. The business student acts to minimize dysfunction within the group.</td>
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<td>o With self:</td>
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<tr>
<td>a. Identifies personal tendencies that may contribute to dysfunction in group work, and works to self-manage those tendencies</td>
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<tr>
<td>o With a dominating team member:</td>
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<tr>
<td>a. Uses interpersonal techniques to mitigate negative effects that a dominating team member can have on the group process and outcomes</td>
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<td>o With an underperforming team member:</td>
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<tr>
<td>a. Directly communicates with team member missing deadlines or delivering work that does not meet requirements</td>
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<tr>
<td>b. Works with appropriate person(s) to develop and implement an action plan to get the work done on time and to requirements</td>
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<td>c. Recognizes and addresses biases that may impede group performance</td>
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<tr>
<td>5. The business student meets his or her project commitments.</td>
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<td>o Clarifies the definition of a task or deliverable when uncertainty or ambiguity exists</td>
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<td>o Constructively and persistently works tasks to closure</td>
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<td>o Brings problems forward in a timely manner, including views on possible solutions</td>
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<td>➢ Contribute to the effectiveness of group meetings:</td>
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<tr>
<td>1. The business student effectively plans and leads group meetings.</td>
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<tr>
<td>o Establishes purpose of the meeting and who needs to attend</td>
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<td>o Arranges for meeting location that provides needed space, A/V aids, etc.</td>
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<td>o Prepares an agenda and distributes it before or at the beginning of the meeting</td>
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<tr>
<td>o Manages the meeting time and group dynamics to ensure purpose of meeting is achieved</td>
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<tr>
<td>o Concludes meeting by summarizing accomplishments, decisions made, next steps and team member assignments</td>
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<tr>
<td>o Ensures meeting summary is documented and distributed</td>
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<tr>
<td>2. The business student effectively participates in group meetings.</td>
</tr>
<tr>
<td>o Prepares for the meeting and arrives on time</td>
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<tr>
<td>o Follows the agenda, and offers contributions at the appropriate time</td>
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<td>o Listens and builds on points made by others</td>
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<tr>
<td>o Encourages participation from others in the meeting</td>
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Figure 1. “Group work” Student Learning Goals
Working from the CCIT recommendation for the course objective and the goals stated in Figure 1, the team of three faculty members developed a syllabus, which states: “This course is strongly geared toward skill development and acquiring task and interpersonal skills to work effectively in a group to accomplish stated goals.” The following learning objectives are stated in the syllabus:

- To learn and apply fundamental techniques for successful group projects;
- To become actively aware of individual differences including race, ethnicity and gender, and to manage differences in ways that are constructive and effective;
- To develop effective practices in completing one’s task assignments;
- To develop effective practices for handling situations that occur in group projects;
- To learn and apply best practices for effective meetings, in the role of meeting leader or meeting participant.

The syllabus also reflects decisions made about course design. A lecture/lab format is employed, with one lecture session and one lab session each week (the sessions are 75 minutes in duration). Early lecture sessions address the hard skills (basic project management techniques) so those can be immediately applied to project work. After that, lectures focus on the organizational behavior principles and interpersonal practices that comprise the soft skills.

Students are assigned to teams of four the first week of class. Lab sessions are utilized for group work, sometimes focusing on the hard skills and sometimes on the soft skills. Over the course of the semester, each team undertakes two projects. The first project has the teams tackle a pair of case study analyses, while applying project management techniques for the first time. This takes the team through application of all of the project skills taught (e.g., scope statement, task list, tracking and reporting status) as well as utilization of soft skills taught (e.g., diversity, meetings, providing negative feedback). Then the second project – the Case Competition project – has them use all of those skills again, culminating in a competition among teams for the best case analysis. This case is drawn from a real world local business and representatives from the business judge the team deliverables (a document and presentation) to determine the winner of the case competition.

Elements of the course design are in line with effective practices that have been noted by others. For example, Breslow (1998) encourages semester-long groups and recommends starting with smaller projects so students can receive and process feedback and make adjustments to how they operate. She also supports the utilization of some class time for group work, as it provides the opportunity for instructors to oversee the groups and provide direction where needed. The design of MGMT 331 also answers the call by Miller and Luse (2004, p. 128) for IS programs to “encourage business faculty to require… collaborative written and oral communication assignments in core business courses.”

As the design of the course evolved, the developers struggled in their search for course materials. Standard textbooks on project management were deemed to go too far beyond the basic project skills that are the focus of the course. Furthermore, nearly all of those textbooks took the perspective of project MANAGER rather than team MEMBER and the self-managed team skills that were our focus. And while dependable textbooks covering organizational behavior and interpersonal skills exist, none include the hard project skills of the new course.

After an exhaustive search of project management textbooks and practitioner books, looking for one that put forth a simple, cohesive set of project practices that did not overwhelm and that could be folded in with other subject matter (in our case, OB topics) came up empty, it was decided that Jo would develop the manual for the hard skills component of the course. The booklet, *Techniques for Managing Projects*, was custom published through McGraw-Hill and bundled with an OB book that covered the interpersonal skills.

Finally, a project management software tool was needed for students to use in MGMT 331, particularly to ease the work involved in developing a calendared project schedule and tracking progress. While Microsoft Project is appropriately used in an upper-level course for IS majors and in our graduate programs, the team developing the MGMT 331 course viewed it as too cumbersome for the purposes of this class. They feared students would get bogged down and frustrated with learning the software tool, and that this would interfere with the student learning goals that are the focus of the course – project practices (not software tools). The course developers identified a promising alternative: Smartsheet, a cloud-based spreadsheet application that includes a PM template. The School was able to negotiate a contract with Smartsheet that provides MGMT 331 students an individual account that remains active until the student graduates.

The MGMT 331 was taught for the first time in a Summer 2012 section, and then rolled out for all business majors in the Fall 2012 term.
CHECKPOINT 2: WHAT IS THE IS DEPARTMENT THINKING AT THIS POINT?

We finally got it! We could see that we were taking on an additional role in the School of Business now, a central role, a role that is valued. We were wearing an additional hat – faculty, students, and even administration looked to us for direction and advice on anything related to projects. We embraced this. We staked our claim to the discipline of project management – and not just within the School of Business. Our vision is to become the PM headquarters for the entire University, and to become known to industry in our region as the School that turns out graduates who demonstrate valued project skills. Now that we get it, we are taking intentional strategic actions to increase our new role and value. We share those with you next.

STRATEGIC EFFORTS UNDERWAY

We have three strategic efforts underway that we believe will expand our IS department’s PM identity and value – and in doing so, will contribute to aligning our program with the evolving IS profession and possibly even increase our undergraduate enrollment.

**Strategic Goal 1: When Students Think Project Management, They Think IS Department**

Students’ identification of the IS Department with project management starts in MGMT 331, when they see the author of the project skills book is an IS Department faculty member. And although School of Business faculty have not yet been trained on the project skills being pushed out in MGMT 331 (this is planned for Fall 2013), the IS Department chose not to wait. The IS Department faculty gathered for a rogue training session in early January, 2013, for Jo to present the skills being taught in MGMT 331. After that training session, several IS faculty members proceeded to encourage students to use the project practices in classes this spring, including some sections of our IS survey course, CMIS 342.

We also began an effort to establish MGMT 331 as a prerequisite for CMIS 342. There are 39 undergraduate courses in the School of Business that use group projects, including CMIS 342, and administration was reluctant to make MGMT 331 prerequisite to any of them for fear of slowing down a student’s path to graduation. Our department argued that there needs to be at least one course where instructors can count on all students having had MGMT 331, so instructors can require the students to re-use those project skills. Our department volunteered to take the responsibility for this, by offering up CMIS 342 to be that course. It took some work to convince the School curriculum committee that a prerequisite structure was needed, but we sold it and the paperwork to make MGMT 331 a prerequisite to our IS survey course is moving forward.

Why was this important to us? Two reasons. One, we want the student projects in CMIS 342 to run more smoothly, and the skills they are learning in MGMT 331 will contribute to that. Two, we want all business majors to view IS faculty as experts in project skills and, accordingly, the headquarters for project management as a career.

Finally, the IS Department had been staffing the two new courses in the graduate curriculum – all the while, arguing that the Management Department should be taking responsibility for some of the staffing since the courses serve both MBA and MS IS students. We stopped complaining. And we removed the “MGMT” cross-listing of those courses.

**Strategic Goal 2: Spread the Word**

We want people to know what we are doing, for two reasons: 1) because we think it’s good and others may want to do something similar, and 2) because having people outside the School applaud what we are doing strengthens our role and value within the School.

Ways we are spreading the word:

- Smartsheet, the company behind the project management software tool the School contracted for use by students, faculty, and staff, visited campus on January 28-29, 2013, to conduct and videotape interviews with people involved in MGMT 331. They are creating a marketing video that will showcase what we are doing in regard to teaching project skills. They view what we are doing to be leading edge in higher education.
- This submission to the SIGED Track of AMCIS not only allows us to share with fellow educators what we have done, but also to gain insights and reactions from colleagues for ways to improve and ways to extend.
- The Dean and faculty members involved with MGMT 331 development and delivery are working on the best way to share our curriculum innovation with AACSB members.
- The Dean and our Director of Continuing & Executive Education continue to share what we are doing with our industry partners. We collect kudos to share with MGMT 331 students and other interested parties, e.g.:
“Speaking from experience, the most successful projects are those that are led by a project manager who believes in and follows the practices outlined in your new course (MGMT 331). A person with these skills is highly-sought out, can make an immediate positive impact in our company, and is fittingly rewarded.”

Kathy Miller, ITS Director, COUNTRY Financial

“Projects help businesses translate strategy into reality. The information presented in this new course provides a great balance on the main areas project leaders must master.”

Nino Clarkin, PMO - Project Delivery Services, Edward Jones

- The Dean is seeking industry sponsorship of some element of project management within the School. One component that industry may want to sponsor is the Project Support Center we plan to establish, which leads to the next strategic goal we discuss.

**Strategic Goal 3: Establish a Project Support Center**

We recognize the implementation of MGMT 331 as the first step toward a larger School goal that stems from the original effort to identify cross-disciplinary skills all business graduates need. The larger goal is: To be recognized as the school that turns out graduates who demonstrate valued project skills. We want to prepare our graduates to stand out because they “get” project work and demonstrate standard, effective practices when placed on projects.

To hone the project skills and have them become routine practices, students need to continue using the skills throughout their time at our University. So a key strategic initiative now is to develop an infrastructure to support students in practicing and mastering these skills and to support faculty throughout the School in teaching and reinforcing the skills. In industry, organizations commonly establish a PMO (project management office) to define and support project management practices within the organization. We have designed a similar solution – the formation of a Project Support Center in the School of Business.

We recently submitted an internal grant proposal to our Excellence in Undergraduate Education program to establish a Project Support Center (PSC). The grant seeks funding for 1 course release for an IS faculty member to lead this effort and funding of a graduate assistant.

The mission of the PSC will be: To support project teams in the successful launch, execution, and completion of projects. The PSC will be the “go-to place” for students, faculty, and staff on any issue related to project work, be it a class project, student organization project, research project, or administrative project. The PSC will provide:

- Training on project best practices (based on the *Techniques for Managing Projects* book used in MGMT 331)
  - Initial training for School faculty and staff
  - Periodic training for new faculty and staff
  - On demand training if interest from other constituents on and off campus
  - Development of online training modules for MGMT 331 students and instructors, and faculty and staff across the University
- Smartsheet (project management software tool) first-level support
  - Logon administration
  - Help with questions users have
  - Develop and maintain online help resources via PSC website
- Templates
  - Maintain, enhance, extend project management templates (posted to the PSC website)
- Project Management Consultation
  - Consult with faculty, staff, and students on how to apply best practices and templates
  - Consult with faculty, staff, and students on specific problems or situations that occur
  - Provide feedback/critique to MGMT 331 students on their Scope Statements, Project Plans, etc.
  - Provide feedback to anyone on their Scope Statements, Project Plans, etc.
- Overall maintenance and enhancement of the PSC website

The IS faculty member receiving this grant also will develop and provide a recommendation for staffing going forward. For example, PSC staffing could involve a recurring course release for a faculty member, graduate assistants, an executive-in-residence, or some combination of those.
We expect the Project Support Center to prove and grow, ultimately serving as the foundation of a project culture within the School – a culture that values and supports the development of project skills for all students, faculty, and staff. And where does the leadership of the Project Support Center come from? Why, the IS Department of course, because we staked our claim!

CONCLUSION

This is one strategy for meeting challenges we face as IS educators, and a contextual one at that – it may not be a fit in other situations or at other schools. And it may be that there is an area other than project management that your IS department would want to stake claim to, for example, business intelligence (BI), mobile commerce, entrepreneurship, or some other sphere that you believe can boost your department’s identity and value. That said, there are facets specific to project management that we believe are critical to our success. We urge serious contemplation of these critical success factors when considering staking a claim to an area other than project management.

CSF #1: The chosen area needs to be “hot” – even outside of IS.

Within the field of IS, Computerworld identified project management as one of the top 10 IT skills for 2013, second only to application development (Pratt, 2012). But project management also is used and valued outside of IS. Tom Peters (1999) has declared “all work is project work.” As a career, project management is labeled “incredibly hot” (Career Overview: Project Management, 2012).

Cachet beyond IS can act to accelerate and maximize the expansion of your department’s identity and value.

CSF #2: The chosen area needs to be something your industry partners are asking for.

It is likely that your industry partners are clamoring for improved team project skills in the graduates they hire, as 94.4% of 400 U.S. employers surveyed identified team work and collaboration as being “very important” in 4-year college graduates (Casner-Lotto & Barrington, 2006).

Having industry support for your new venture provides outside validation for what you are doing. Interested industry partners can also provide needed resources (e.g., funding of faculty training, subject matter expertise shared with faculty and students, financial backing of specific initiatives like the Project Support Center, etc.).

CSF #3: The chosen area needs to be within reasonable reach of your faculty.

We all operate with limited resources, so it is imperative that the area chosen be one in which your department already possesses a degree of expertise, or is positioned to develop expertise at reasonable cost and in a reasonable timeframe.

For IS departments that are considering staking a claim to the project management discipline, our experience in doing this leads to the following targeted recommendations:

- Identify one or more IS faculty members to obtain the PMP certification, and support them in the effort.
  - This gives your department the credentials to take the lead in project management initiatives.

- Involve industry partners (we have yet to find a practitioner who is not excited about the project skills we are pushing out to our undergraduate students!).
  - This gives you “voices from outside” attesting to the importance and value of project management and the leadership that your department is providing.

- Consider involving members of your local PMI chapter (given the collaborative success reported by Poston and Richardson, 2011).
  - They could provide outside critique/feedback on students’ Scope Statements, Project Plans, etc.
  - They can bear witness to the importance of both hard and soft skills in project work.

- Consider folding the hard project skills into the undergraduate IS survey course, addressing soft skills at the applied level at which they are presented in our Techniques for Managing Projects book.
  - Combining the hard project skills with soft skills in organizational behavior made sense for us, but may not be feasible at other schools.
  - Teaching the project skills in the IS survey course would further solidify the IS department’s claim to PM.
In the end, firmly injecting project and team skills in our undergraduate curriculum – and consistently reinforcing those skills so they become routine practices for our students – helps to keep pace with the evolving IS profession and with undergraduate IS curriculum recommendations (Topi, et al., 2009). Ultimately, we believe identifying the IS department with the widespread domain of project management will prompt students who were not considering IS as a major to give IS a look.

REFERENCES


