CHANGE MANAGEMENT IN IT AND MIS EDUCATION FOR GLOBAL COMPETITION: TEN SOUGHT-AFTER RECOMMENDATIONS FROM THE INDUSTRY ADVISORY BOARDS

L. Roger Yin, Univ. of Wisconsin-Whitewater, USA, yinl@uww.edu

ABSTRACT

This paper outlines a change management mindset for IT and MIS program faculty members to embrace recommendations from industry advisory board as if they were coming from difference perspective within the same system rather than considering them merely from the outside looking in. A change of view at our role from a discreet entity reacting to others to an embedded system approach that any IT or MIS program is an integral part of larger systems and expanded global context is introduced. The top recommendations from the industry advisory boards, though not comprehensive, service as reference points for IT and MIS programs who are searching for tools to proceed with accreditation requirements including self study, audit review, and assurance of learning assessment and other activities.

Keywords: Industry Advisory Board, IT and IS Curriculum Design, Change Management, Assurance of Learning, Information Systems Education, Information Technology Education, Globalization, Accreditation, AACSB

INTRODUCTION

In the rapid process of adapting to globalization, many U.S. based companies have changed their ways to handle IT and MIS operations. In a recent report by Forrester Research [1], there are a number of "myths" in IT outsourcing have been updated: (1) Companies are becoming experts at managing service contracts as opposed to managing programmers, etc.; (2) Companies can be their own general contractors and assemble a best in breed service provider portfolio which includes smaller and even niche vendors; and (3) Some companies are tooling themselves for the multi-sourcing world can thus use any type of reputable vendor anytime anywhere.

Alarmingly, thus far this "smart-up" phenomenon of companies managing an international IT and MIS workforce for multi-layered projects has little immediate impact to inform the curricular changes in academic IT and MIS programs. How do we prepare our students to compete in the global IT and MIS job market? One solution to resolve this burning issue is to form an industry advisory board whose expertise would cover globalization and internalization of IT and MIS practices.

In this paper, the author first suggests a shift of mindset and identity of an academic IT or MIS program from that of a discreet entity to an intersection within an embedded system. The author then reviews top recommendations made by industry advisory boards to six IT, MIS, and CIS programs and departments affiliated with Organizational System Research Association. This compilation of ten sought-after recommendations is by no means inclusive. Nonetheless it provides an invaluable reference to all IT related programs at post-secondary level to critically examine the curricular redesign processes [2].

REPOSITION THE ROLE – FROM A DISCREET ENTITY TO THE INTERSECTION OF AN EMBEDDED SYSTEM

In many conventional IT or MIS curricula, streams of courses are sequentially ordered mostly based on difficulty levels of content rather than applied necessity of the industry. Even considering recent demand for project management and business communication skills, the majority of IT or MIS curricula are simply answering by adding or rearranging those courses discreetly as either new requirements or often time electives. Concerns of politics and in-house expertise aside, there have been many curricular redesign efforts in IT and MIS programs that are based on perceptions of students, graduates, faculty, and occasionally industry professionals [3]. While the outsourcing and offshoring trends will continue and exacerbate

[1], we educators in the IT and MIS areas must stop questioning how did it happen and respond to the phenomenon by jointly developing proactive solution before the issues of enrolment decline are forcing us to make unwanted adjustments.

To reach the "tipping point" that we all become aware of the consequences of making or not making the inevitable changes in the IT and MIS curricula [4], we need to reposition the role of our programs in regard to the expanding context of global economy and labour market. In the past, a conventional way to establish a professional curriculum in an IT or MIS program is to place it as a discreet entity feeding and being fed by other associated entities, including the academic discipline, the university houses the program, and the business environment in the local or regional context. This discreet view of a professional curriculum is depicted in Figure 1.
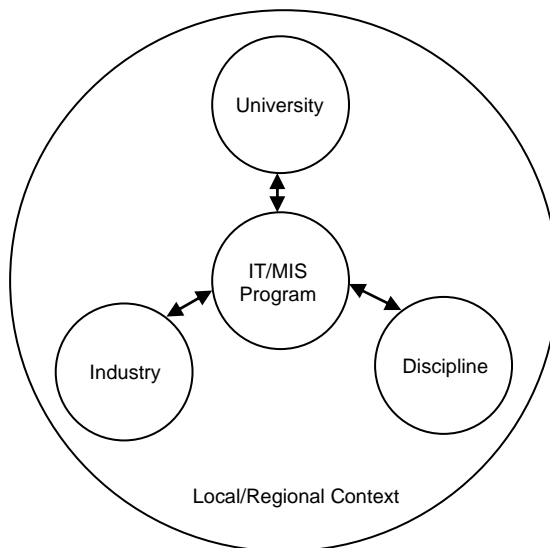

Figure 1 – Discreet Entities

The most severe flaw of being a discreet entity in a socio-economic system is that a professional program becomes an island, though once self-sufficient, has become vulnerable as the need and demand of it decrease while the alarm sets out a few years too late. This may be the reason why a large number of IT and MIS programs are struggling today.

To remedy the desert island syndrome of being isolated in an ivory tower, the author recommends that we IT and MIS educators start to consider adopting an embedded system view at our program role. This holistic and expanded view, as outlined

in Figure 2, puts the IT and MIS program as both an integral part and intersection of other systems, including the IT field, the university setting, and the business environment that are all dynamically situated in a global context.
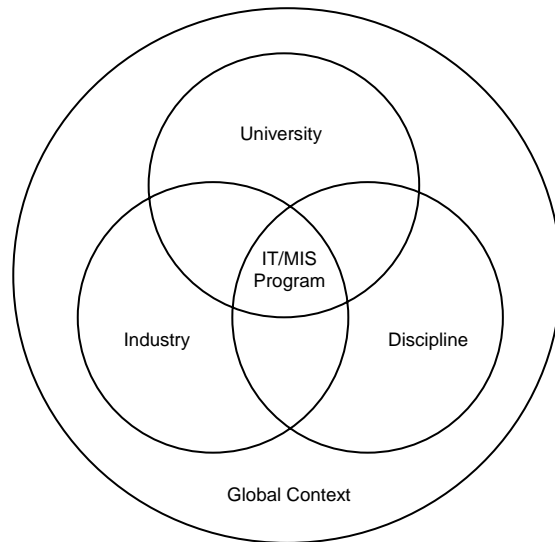

Figure 2 – Embedded Systems

Only after the recognition that an IT or MIS program *is* part of the industry, an industry advisory board can function as a co-dependent partner with the professional program in the evolving worldwide ecosystem of business and IT [5].

TOP TEN RECOMMENDATIONS FROM THE INDUSTRY ADVISORY BOARD

As mentioned above, the list of recommendations is by no means exhaustive. Nonetheless, in the midst of program audit and review and assurance of learning processes mandated by accreditation agencies typified by AACSB [6], these recommendations should serve as a check list or basis of an action plan for the IT and MIS programs who are encountering expected restructuring or reengineering to better justify the commitment to continuous improvement.

Recommendation #1: Implementing an Industry Advisory Board If Not Yet In Place

The evolution of curriculum in any IT and MIS program is constant. The profession moves more quickly than most and keeping up is a constant

challenge for both faculty and students. It is also a challenge for industry professionals. However, the respective views of each group on what should and should not be in the curriculum at any point in time is likely to be mostly aligned but each might have a distinct point-of-view to share with and inform the other in a timely manner.

Recommendation #2: Department Restructuring & Merger

The primary consideration in making this recommendation is to both increase the potential for resources in the program while maintaining economic efficiency and the fit between the content of this program and existing programs in other areas.

The IT and MIS department should focus on applied business computing which represents the bulk of the current curriculum and is in keeping with the nature of the program. There might be a consideration to change the name in keeping with the norms elsewhere in either the discipline or the industry.

Recommendation #3: Core IT and MIS Service Courses

The advisory board is often unable to ascertain if there was currently a "big picture" of what skills & abilities all the graduates will leave the institution with. This endeavour is a worthwhile one to undertake institutionally from the perspective of an outsider. And, as this review is undertaken, it would surprise the board members if the university did not generally want to ensure that all its graduates were IT and MIS literate. Also, service course offerings often mean additional resources coming into the program and department which is always welcome.

Recommendation #4: Adding Faculty Resources

It is often recommended the immediate hiring of additional faculty and a reduction in the number of course sections taught by part-time faculty. At this stage of its development, the IT and MIS department needs both additional resources and new perspectives. Building on the core strength of what exists, this additional resource will address a number of issues identified in this report and

certainly assist the department to move forward productively.

Recommendation #5: Encouraging Faculty Scholarly Activities

It is necessary to have a distinction between professional activity and scholarly activity, even if ultimately that is professionally-related. For those of the faculty with both the skills and qualifications to do credible research and publish with refereed journals should be encouraged, supported, and rewarded in this endeavour. For others, there is less likelihood of conducting scholarly research but at a minimum it would be helpful to see their interest in attending and getting engaged in the scholarly developments in the field of IT and MIS education.

Recommendation #6: Dropping Outdated Courses

The converging field of IT and MIS changes in a rapid pace. Though theories and methodologies do not change too often, the specific technical skills certainly do. For instance, last year's "killer App" may not be as hot or high in demand this year. In order to keep the curriculum current, it is necessary to update the technical content regularly. However, if the subjects or skills no longer has practical needs in the industry, they should be eliminated to make room for more current and promising technological solutions.

Recommendation #7: Rationalization of Offerings

The advisory board feels that some rationalization of current offerings in the IT and MIS areas is required. Though the latest technologies may not necessarily be the greatest, they do possess timely meanings to the general users and the industry. It is difficulty to determine whether a vender-neutral or vender-specific approach is better, but the adoption rate and interest from the industry should nevertheless serve as key factors for curriculum decisions.

Recommendation #8: Recognize Academic Priorities

Being in the IT and MIS education business is more expensive than some other types of programs. Support needs will be different and generally more intense. And costs will be higher. It is important for senior academic administration to ensure that the acceptability of this situation is communicated to support departments.

Recommendation #9: Branding & Advertising Strategy

Every IT and MIS program has its potential, with restructuring and renewed vision, to be a "jewel" in the university crown. If the IT and MIS program moves quickly to implement the changes noted herein and to seize the momentum in terms of realigning itself to a BBA granting program with high level of flexibility for students to gain practical knowledge in integrating business and IT, it will give it first-mover advantage.

Recommendation #10: Curriculum Standards & Accreditation

Generally, the advisory board felt the IT and MIS department should carefully analyze its own curriculum in relative terms of its general level of difficulty, integrity and currency. To quickly accomplish this task, within the IT/IS academic setting, there are several potential accrediting bodies (e.g., AACSB, ABET) that provide useful guidance on model curricula and standards that can help with this assessment.

Of these, it may be most helpful to consider the recommendations on curriculum made jointly by Association for Information Systems (AIS), Association of Information Technology Professionals (AITP) and Association for Computing Machinery (ACM) in the form of IS2002 (see http://www.is2002.org). This is a "model curriculum" developed by recognized experts in the IT/IS education field that many of the continent's leading schools have adopted (some with modifications) in their own programs. Similarly, Organizational Systems Research Association (OSRA) provides another view of curriculum possibilities, focusing on non-programming articulation of applied business information technology training in its OEIS 2004 model curriculum [7] (see http://www.osra.org/curriculum.html). Any reputable professional educator in this field would likely recognize the value of these thoughtful,

proven model curricula as a fundamental guide or benchmark reference to ensuring high-calibre programs in the IT and MIS discipline.

CONCLUSION

While IT and MIS jobs are victimized by the corporate trend of outsourcing and offshoring in North America, the illusion of having more new IT positions stay domestic may hardly happen [1]. In response to the decline of enrolment in the IT and MIS programs, we educators must seek proactive way to stay competitive and sustain the strength of our programs. One feasible approach is to replace the view of the IT or MIS program as a conventional isolated entity in an ivory tower with that as an embedded, integral part of other larger systems in the global context. With the new approach being validated, we can naturally take advantage of the recommendations made by the industry advisory boards to help us strive and more clearly see the future need of IT and MIS education.

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