

# The state of PM research in American Universities

by Carl Pritchard

Carl Pritchard, PMT's US correspondent has been talking to the US project management research community.

If there's a single underlying theme that ran through all of the discussions I had with representatives of various institutions in the United States regarding the current state of PM research, it was that most of the really compelling research is being done overseas or through the Project Management Institute (PMI).

Independent research at the university level seems to be choked by the fact that most of the academic project management programmes are aligned with other programmes within



Jeff Pinto

the Universities, rather than independent, stand-alone efforts.

That doesn't mean there isn't any meaningful research going on within American institutions of higher learning, it just means that those attempting to leverage research in the States have to dig a little deeper. Professor Jeff Pinto (he holds the Andrew Morrow and Elizabeth Lee Black Chair in the Management of Technology at Penn State University) says that while research is limited, the most exciting work that's being done right now is in the realm of virtual teams. 'That's one of the hot areas right now, with more and more projects—project teams are no longer co-located. A lot of PMs are trying to manage teams that are literally spread across the globe. [It's a matter of] how do they communicate?'

Pinto has a theory regarding the paucity of deep research into project management from the institutions of higher learning. He believes it's rooted in the nature of the profession. 'It's always been that practice has outstripped theory. It took until the 50's until someone hit the term project manager... so we've been playing catch-up. There's been a huge gap. We're still kind of in the 'explaining mode,' rather than being prescriptive.'

Pinto points out that that's not inherently negative. 'The descriptive is important to



Gary Klein

describe what's seemingly idiosyncratic or ad hoc. . .let's try to understand it, and help others to apply it better. The descriptive mode ensures that companies don't cave in to management-by-magazine-ad. The whole quick-fix mentality is incredibly dangerous. If people don't understand the whys and wherefores, it's a band-aid. PM loses credibility.'

Gary Klein (University of Colorado at Colorado Springs Cougar Professor of Information Systems) cites a couple of

research efforts underway at his institution. 'The first research project involves attaining consonance among the project stakeholders. For a number of reasons, each significant stakeholder pulls the project in a direction established by their own goals, biases, position, and background. This leads to unintended conflict, misunderstandings, and eventually impedes success of the project. So the long term goal is to expose just what blocks achieving consonance among the stakeholders and what interventions may exist at various stages of the project to promote common understanding.'

'A second research project is focused at the programme level and examined more squarely in the context of information technology programmes.' Klein says: 'The issue concerns the interdependencies among projects and



Anne Marando

the uncertainties of the IT environment in meeting organizational level goals. How must individual projects adapt to the more global goals that may require sacrifices at the project level? At the higher level, what organizational climates and practices can promote success at programme and project levels?'

Klein says if the research bears the fruit they hope it will bear: 'The first study will have the more direct impact to the individual project managers. Since the study is still in the early stages, there is nothing concrete yet to work with, but if practices can be isolated that tend to promote a more common understanding among the stakeholders for a project we can add to the set of procedures that a PM has to draw on in achieving success.'

Notably, Klein's description falls within the 'descriptive' mode that Jeff Pinto describes. Klein adds, 'The second study will identify higher level organizational practices, such as how project managers and team members are evaluated and rewarded, how projects within programs are prioritized, how organizational uncertainties impact individual projects, how resource interdependencies can be more effectively addressed.'

At Brandeis University, Anne Marando (Chair for Management of Projects and

Programs Division of Graduate Professional Studies) says most of the work they do at their institution is to work to identify skill sets and areas that are directly applicable in the field. She says there is a need for more research in certain arenas. 'One is to look at Agile methods versus traditional. They're in opposite camps and both have strong marketing engines to sell their approaches. There are companies that have a mandate from the top to use Agile, and those that have a mandate to do the more conventional project methodologies. I've tried to have my students look closely at the methods, trying to find ways to tailor elements out of both methods to get people where they need to be. There are a lot of myths out there about the methods and what they can and cannot do... The key is to find methods that are appropriately morphed to fit corporate needs.'

Dr. Pinto believes the work that is being done is heading in the right direction. 'One of the things that always attracted me to the field is that I really felt like the field naturally lent itself to practical, problem-based research. When I did work in the 80's on critical success factors (CSFs), it was to find ways to help PMs to do a better job. Based on the folks that I know, all of them come in with the attitude 'How can we fix the problems?'

He points to some compelling work in the field as representative of where research can go. He cites the work of Dr. C. William Ibbs at the University of California at Berkeley and Dr. Young Hwak at George Washington University on project management maturity\*. Pinto says 'It's looking at what we should be doing in the field to generate better project managers'. He says it's following a more prescriptive perspective.

**Dr. Neeraj Paolia, an assistant professor in the eBusiness and Technology Management Department at Towson University, says he's encouraged by his institution's efforts to assess the interdependent elements of resources, goals and projects and how they influence programme outcomes.**

**'This study is the first empirical evidence to document the effect of programme management practice. The results indicate that programme performance is at least partly determined by collaborative behaviors among the constituent project managers. Using the results of this study, programme managers can structure interdependence as an intervention to promote collaborative behaviors within the programme.'**

The future of research remains largely a mystery. While thought leaders like Pinto believe much of the ground-work for problem-based research is currently being established in Europe, the ultimate nature of the research has yet to be seen. Klein believes that much of the effort in the years ahead will be tied directly to the

notion of project management maturity. Klein says 'More needs to be understood about the organizational learning aspects of projects, how best practices are retained and distributed in an orientation of projects. There are innovation and learning cycles promoted for organizations, but these receive little attention at the project level, or at least seemingly little success. From a conceptual standpoint, we must better understand how organizations can better align their projects to serve what they are intended to serve, turning organizational strategy and vision into daily operations.'

Marando concurs. 'We should be looking for ways to migrate information from the theoretical to the practical... There's not a lot of research from an academic perspective talking about which techniques work best and when.' Specifically, she believes that one of the key elements of research should be to



Dr Neeraj Paolia

tie project management more innately with business analysis. 'We'd like to see research that would tie the BA relationship with the project manager's role. There's no universal vocabulary. I think that would be interesting research—training project managers on business analysis and seeing how closely requirements management approaches tie to positive project management.'

**From his perspective, Neeraj says the future should be looking at the world of multiple projects and the world of education. 'I would like to see academic research explore the issues and practices in emerging multi-project environments such as programme and project portfolio management. Another important area is the evaluation of numerous PM certifications and training programs and their relationship with actual competence and job performance.'**

While project and job performance remain critical consideration for future research, the shared opinion seemed to be that any meaningful research that contributes to the day-to-day performance of the project manager should be welcomed and pursued.

\*Young, H.K., Y.Y. Chih and C.W. Ibbs, 'Towards a Comprehensive Understanding of Public Partnership (PPP) for Infrastructure Development,' *California Management Review*, 2009, Vol. 51, No. 2, pp. 51-78.