Panel: Software Engineering Education for a flat world

Daniel Port  
*University of Hawaii*  
dport@hawaii.edu

Ramanathan Narayanan  
*Tata Consultancy Services Ltd*  
r.narayanan@tcs.com

Outsourcing and off shoring are inevitable buzz words today. Outsourcing refers to a firm sending its work to be done by another firm. Off shoring refers to work done at a geographical location far removed from the firm’s location. The firm doing the job at the remote location could be a branch of the parent firm or an outsourced vendor / partner. In any case the business drivers are cost reduction, access to skilled resources, complementary process capabilities, supplementary domain / technology competencies and 24x7 customer servicing ability.

How does Software Engineering education prepare students for a career in such a globalized scenario? Are the issues involved relate only to cultural diversity or is there a technical CS/SE component to it? How does a Hungarian CEO handle his British or Indian Project Managers? How does an Indian Project Manager relate to her Chinese or Chilean team members? How does the entire team serve the customer whose business spans the entire globe?

Has the global IT outsourcing phenomenon made the motherhood statements taught in SE courses no longer optional but an imperative to stay in business? Can we identify specific course modules that should pay special emphasis for a flat world career – Project Management, Configuration Management / Version control, Requirements Modeling and Analysis, Peer reviews? Do the traditional methods of distinguishing a good design from a bad design apply – how about GUI for example? What is the role of heavy weight and agile methodologies in this context? Can there be a one-size-fit-all model curriculum to address careers in an outsourcing firm and an outsourced firm?

If certain types of jobs are more amenable for being sent out (basic programming, testing for example) how do SE teachers retain the students’ interest in them? Can they convince students that the Body of Knowledge is required even for “managing” outsourced work? Are there industry categories that are outsource-proof? Should we respect any ontology of the types of jobs at all?

A full fledged conference (first of its kind) held in Zurich in Feb 2007 discussed some of the above issues ([http://seafood.ethz.ch/](http://seafood.ethz.ch/)). An ACM report has discussed the subject in a comprehensive manner ([http://www.acm.org/globalizationreport/](http://www.acm.org/globalizationreport/)). This is the right time that CSEET starts gathering its thoughts on the issue.

The outcome of the panel should set the ball rolling for revisiting SWEBOK with the added dimension of outsourced offshore software development.