A Brief Update on the Research Arm of the Center

Sandeep Purao, Ph.D.
Research Director, Center for Enterprise Architecture
The College of Information Sciences & Technology
The Pennsylvania State University

October 2011
Introductions

• Jon Becker
  – Doctoral student in IST
  – Interested in
    • how large EA projects are carried out
    • how stakeholder relationships evolve
    • how they can be managed to mitigate risks
Introductions

• Eric McMillan
  – Doctoral student in IST
  – Interested in
  • security concerns and their application to EA
  • supply chain and SCOR models and mapping to EA
Introductions

• Shuguang Suo
  – Doctoral student in IST
  – Interested in
    • critical success factors for cloud-based SOA
    • how cloud-computing can impact the IT function
Purpose

• Provide an overview of research activities in the Center

• Share with the group a sense of scale for ongoing EA–related research with direct links to the Center

• Share with the group the nature of ongoing EA–related research

• Share with the group the potential for participation in EA–related research activities
People

• What is scale of ongoing research at the Center for EA?

• Active participation from resident Doctoral Students: 4

• Active participation from resident Masters Students: 1
  – Professional masters student body not engaged yet

• Active participation from resident Honors students: 7

• Active participation from Penn State faculty: 4

• Active participation from faculty at other
Topics – I

• What are some of the topics being investigated?

• EA value measurement
• Semantic heterogeneity
• Conceptual modeling
• Impact of Cloud computing
• Mitigating EA project risks
• Overlaps with SCOR models
• Measuring soft skills for EA professionals
• Process Patterns for EA efforts
Topics – II

• What are some of the topics being investigated?
  • Tools for knowledge reuse across projects
  • Use of EA frameworks and methods
  • Use of EA models across different segments
  • Simulation of policy impact for healthcare IT
Themes

• The ongoing EA Research efforts have, therefore, dealt with the following general themes based on our previous discussions:

• Justifying EA efforts for organizational actors
• Understanding the state of the art for EA
• Documenting and Improving EA practices
• Developing EA competencies and skills
• Generating new approaches for improving EA practice
Funding Model

• Changes to the Research Funding Model

• New perspective:
  • Repositioning ourselves to be Partners with Researchers

• instead of

• Old perspective:
  • Fund a small number of year-long projects with Researchers
Anticipated Benefits

• The New Research Funding Model is likely to
• Be less risky
• Create partnerships with researchers
• Engage a greater number of researchers
• Draw on intrinsic motivations of researchers
• Leverage our resources in a more meaningful manner
Since our last meeting

• Much has happened, no need to repeat here

• Of the six presentations in the last meeting
  • Three were funded based on your votes
    – Based on revisions to the research funding model:
  • Guoray Cai, Penn State IST – Semantic Heterogeneity
  • Brian Cameron, Penn State IST – Value Measurement
  • Carson Woo, UBC, Canada – Conceptual Modeling
Research Outcomes

• A selection of research outcomes
  – Conference paper at MEDES on Investigating Risks in Large Projects considering these as Ecosystems
  – Journal paper at e-Services Journal for Sentiment Analysis in large-scale public sector projects to understand stakeholder involvement
  – Survey launched and carried out for Measuring Value in EA projects
  – Tool developed and tested for measuring Soft Skills (funded from external sources), now ready for testing
  – Initial work completed for understanding EA process patterns (funded from external sources)
  – Conference paper at AMCIS conceptualizing critical success factors for cloud computing and now moving towards case studies in the healthcare setting (funded
Research Outcomes

- A selection of research outcomes
  - Conference paper at CAiSE on EA model transformations
  - Ongoing work on a book related to EA fundamentals
  - Discussions related to a Research Compilation with contributions from Industry and Academia for EA-related research
  - Multiple doctoral, masters and honors theses under way / completed
  - Research presentations, e.g. Role of Data in Healthcare on the Capitol
Since our last meeting

• One Action Item – stalled

• Research Repository
  – Where are all of these research outcomes?
  – How do I see these?

• One student team working on developing the repository
• One student engaged (partially funded from the Center)
• Need one or two volunteers to represent our community
Your Involvement

• Research Memberships
• Thank you

• Participation at EA Meetings
• Thank you
Your Involvement

• Active Involvement in Research
  – Two specific instances of participation
  – More needed

• Work with
  – Faculty
  – Graduate students
  – Undergraduate students

• How
  – Invite them for internships
  – Throw open the doors for studies
  – Shape their interests towards what you need
Discussion

• More discussion on specific projects in the Research Group

• More discussion on the funding model in the Research Group

• More discussion on the linkages in Both Groups

• Q and A here