

# Designing a SSME Discipline and Curriculum at UC Berkeley

**Education for Service Innovation - 4/18/2006**

Robert J. Glushko

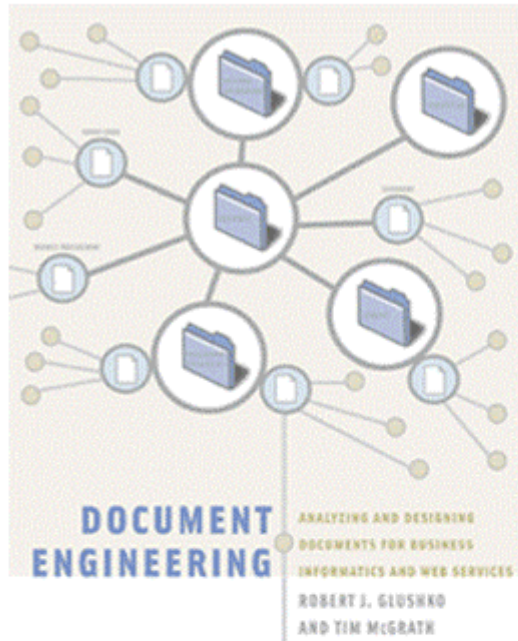
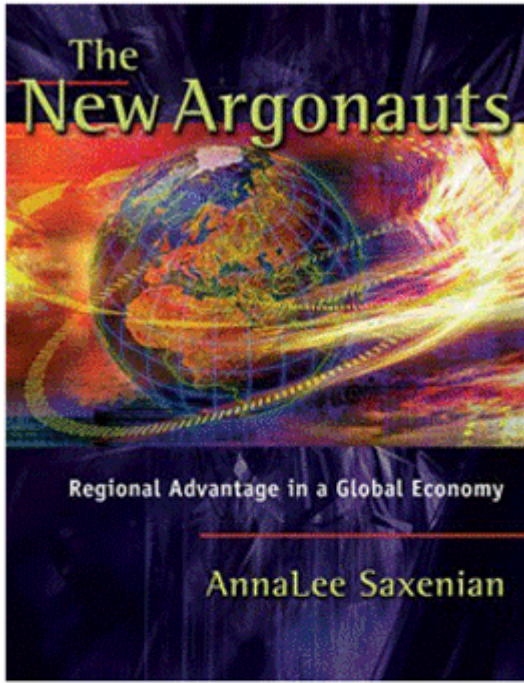
## Who Am I, and Why am I Here?

- Adjunct Professor at the University of California at Berkeley in the School of Information (a refugee from Silicon Valley)
  - One of the founding faculty members of the Services Science, Management and Engineering program
  - A services scientist for 25 years without knowing it
- 

## The Berkeley SSME Core Faculty

- Henry Chesbrough, Haas School of Business
  - Larry Downes, School of Information
  - Robert J. Glushko, School of Information
  - Rhonda Righter, Department of Industrial Engineering & Operations Research
  - AnnaLee Saxenian, School of Information (Dean)
- 

## What We've Been Up To...



## Who Are We, and Why Are We Doing This?

- Multiple disciplines
- Traditional and "non-traditional" paths to the university
- Some non-trivial "nudging" by IBM to bring us together
- We've come together out of the faith that the overlap of our disciplines might be a discipline in its own right.

## Getting from "Here" to "There"

- Monthly meetings
  - Inventory of our existing courses
  - Reading each other's publications
  - Sitting in on each others' courses
  - Guest lectures in each others' courses
  - Trial balloons with our industry friends
- 

## Where's The Discipline in this Workshop?

- to highlight the importance of services in the US and other developed economies and the role of service innovation in promoting productivity and growth
  - to identify and make explicit the knowledge and skills that industry has empirically observed are important to service innovation, and the gaps in our existing *curricula*
  - to outline and debate some initial *curricula* developments that address the unique educational needs of careers in the service economy
  - to identify how existing *curricula* can be enhanced to enable service innovation knowledge and skills to be acquired
  - to understand and define the areas for additional funding investments in the development of service innovation research and education
- 

## A Discipline != Curriculum

- A *discipline* is a principled model of a coherent body of research and practice
  - A *curriculum* is a program of study leading to a degree or certificate
  - No single curriculum can cover the entire SSME discipline
  - Corollary: The SSME discipline can and should generate different curricula
  - But surely we want to be able to evaluate and compare curricula... and for that we need an SSME discipline
- 

## Designing A Discipline

- So don't start from any existing curriculum or courses

- Instead, ask "What are the key concepts, themes, and challenges that a SSME discipline should encompass"
  - Treat every participant's discipline as an equal partner until you have a principled reason not to do so
- 

## Examples of Cross-Disciplinary Questions

- Candidate disciplines: economics, engineering, law, organizational sociology, business strategy, business operations, information technology, user-centered design, ...
  - Does the discipline have a theory about how firms change over time?
  - What mechanisms does each discipline propose that firms use to seek and maintain advantages?
  - How does each discipline evaluate the success of innovations or adaptations?
  - How does each discipline propose that firms encode what they learn in new mechanisms, organizational forms, or information technology?
  - How does each discipline explain why and how services combine, standardize, and evolve?
  - How does each discipline propose to evaluate and optimize a service?
- 

## Designing A Curriculum

- It has been provocative and encouraging to take this more abstract approach to design a SSME discipline before we consider designing a curriculum based on it
  - But there isn't sufficient institutional support to create SSME from a blank slate
  - We will continue our efforts to design the discipline, but in the meantime, we have to get on with designing our curriculum
- 

## The SSME Certificate and Curriculum at UC Berkeley

- Starting this Fall, grad students in Business, Engineering, or the I-School can get a Certificate in SSME by completing:
- A new Fall required course: *The Information and Services Economy*
- A new Spring required course: *Information and Business Architecture*
- A 1-unit survey course "SSME Lecture Series"

- About 3 courses from a long list of SSME-related electives
- 

## The Information Systems Clinic (Fall 2006)

- Mission is to give students real-world experience in the design, implementation, deployment, and evaluation of information and information systems
  - Hosted at the School of Information but open to students from engineering, computer science, business and other disciplines as an SSME elective
  - Primary client base will be organizations on the UC Berkeley campus, but the Clinic will also work with campus IT organizations and industry partners
  - Many projects will involve business process analysis, document modeling, and web services. Organizational capability assessment, technology transfer, and change management will also be important themes
- 

## Some Hard Challenges

- The case for affiliated faculty
  - The case against affiliated faculty
  - What does "I support the SSME program" mean?
- 

## But We're Giving It A Go

- We're committed to starting a certificate program in Fall 2006
  - We have some dedicated research staff (aka grad students) helping us design the discipline and curriculum
  - We are now telling the world about it: [ssme.berkeley.edu](http://ssme.berkeley.edu)
-