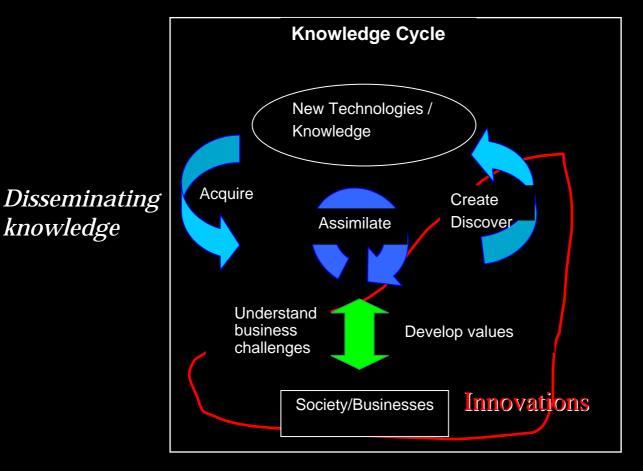


Value Creation: Innovation and Globalization; the economic challenges and their impacts on higher education and skills development

Dr Diem Ho
Member of the IBM Academy of Technology
UNICA Rectors' Seminar, July 4, 2008
University of Zagreb, Dubrovnik
diem_ho@fr.ibm.com



Innovation and the Roles of Higher Education



Creating new knowledge

Application of knowledge

"Business schools need to have a two-track faculty, with the second track being a clinical faculty, that is, ...those who would bring into the classroom the world of practice and experience". JEFFREY E. GARTEN (former YSM dean)

knowledge

Globalization: look for where the best is in a flattened world

International



HQ in one country Sell in many Export/Import

Multinational



Replicate operations in many countries (HQ, R&D, Manu, etc.)

Globally Integrated



Draw on global skills and global delivery. Tasks performed in one location for customers in many

19th

20th

21st

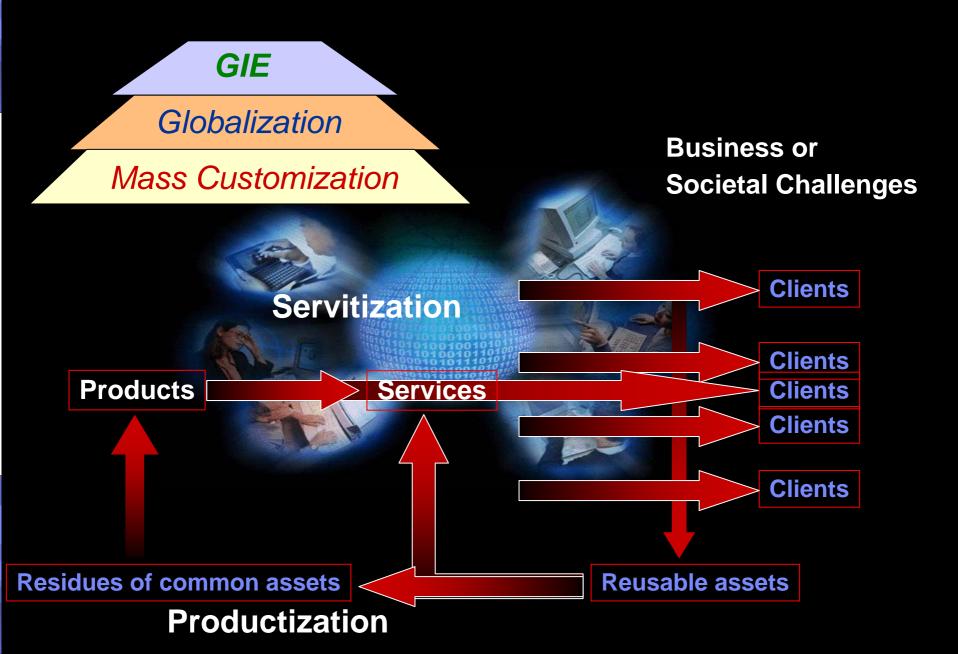
Services Science and Engineering: Value Creation

HOW VALUES ARE CREATED

Services focus on creating Utility Value or Perceived Value for a product/asset. They are in contrast with Engineering which focuses on Cost and Quality

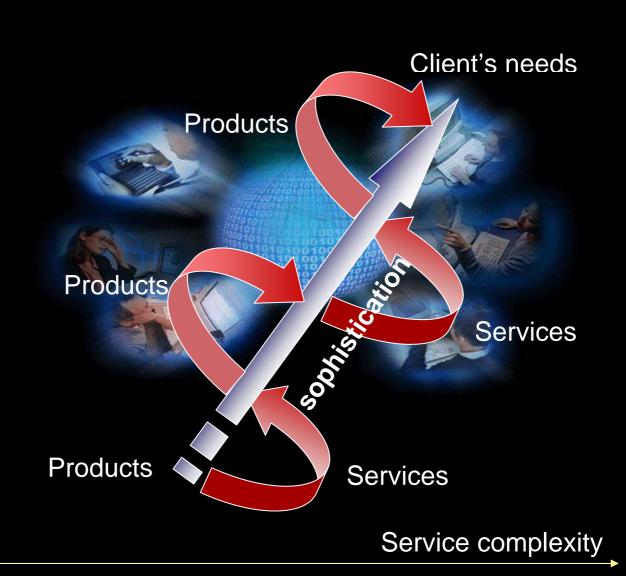


Route to Market: Servitization vs Productization



Economic Evolution: Servitization and Productization

Product complexity



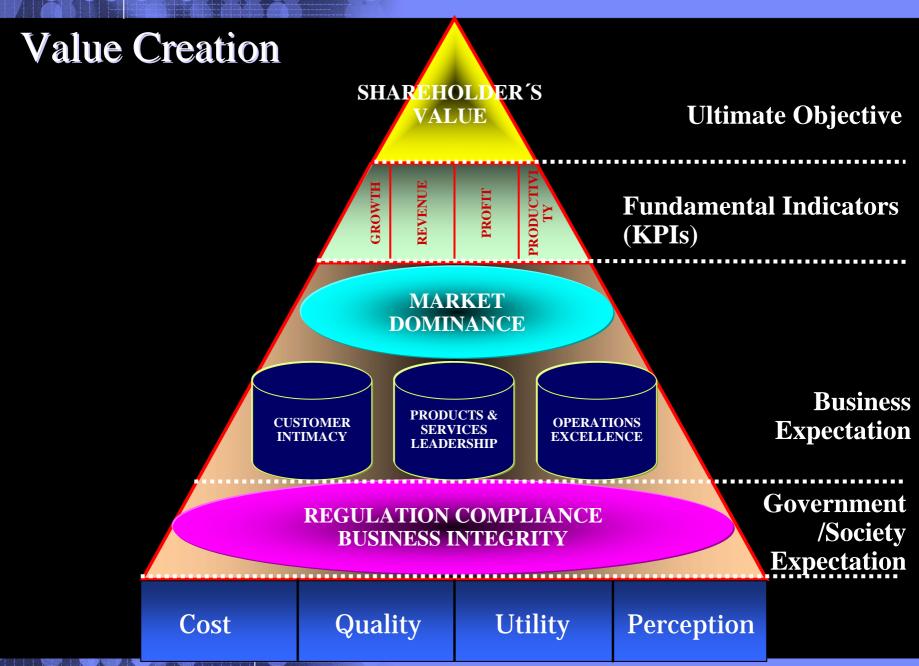
The Globally Integrated Enterprise

- Extends reach into local markets
- Reallocates works to meet talents
- Optimizes and integrates key operations
- Eliminates redundancies and excess overhead
- Leverages capability wherever it is located



Value Creation: Value Matrix Where Innovation and Globalization can target? Can Value Creation be measured? Where values should show up?

Values	Revenue Growth	Market Share	Profit	Productivity
Challenges Customers Products/Services Market/Competition	Pi	ustomer Intimacy roducts/Services Tarket Dominance	Leadership)
Operations/Processes/Resources	O_{j}	perations Excelle.	nce	
Business Integrity	R	egulation Compli	ance	



Example; Become a globally integrated enterprise to tap the power of globalization to deliver unique value in an open collaborative ecosystem

- Lower the center of gravity
- Improve cost and effectiveness by moving work to where it can best be performed
- Focus IBM's resources where we create the greatest value and excel in business collaboration

Case Study: IBM has integrated global operations and sustains trust in a distributed environment by lowering the center of gravity



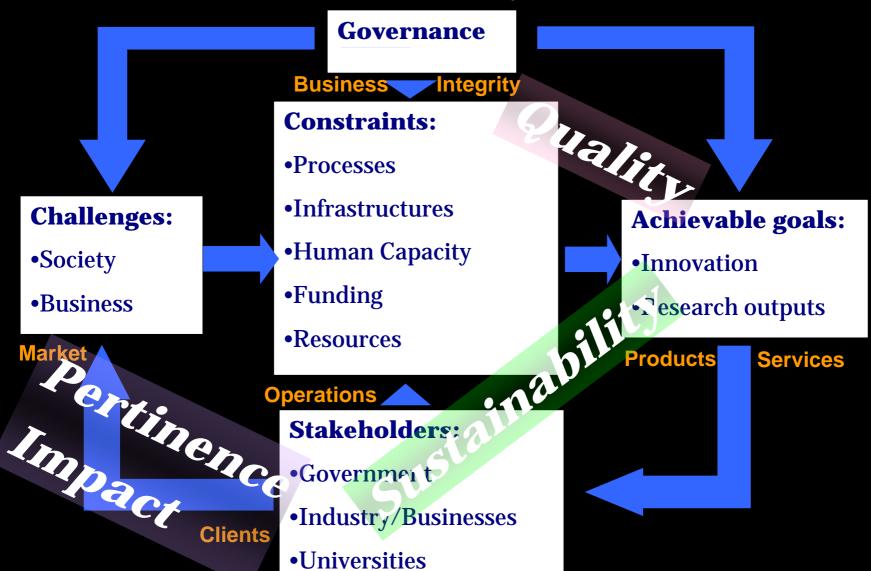


The 21st Century Demands Uniquely Skilled People

- Cross-disciplinary programs and degrees
- Fusing technical competency with industry-specific knowledge and business-process expertise
- Success requires open collaboration among academia, government and industry to transform how the pipeline of future skills is built



Innovation Ecosystem



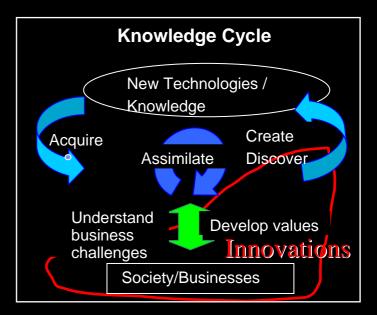
Innovation and Globalization: Critical Success Factors

Innovation: Value Creation through Inventiveness and Newness

- Quality
- Pertinence
 - Impact
- Sustainability

Globalization: Value Creation through Improved Productivity/ Affordability/Marketability

- High Valued Skills
- Fruitful Collaboration
 - Intellectual Capital Sustainability
 - Trust
- Seamless Integration

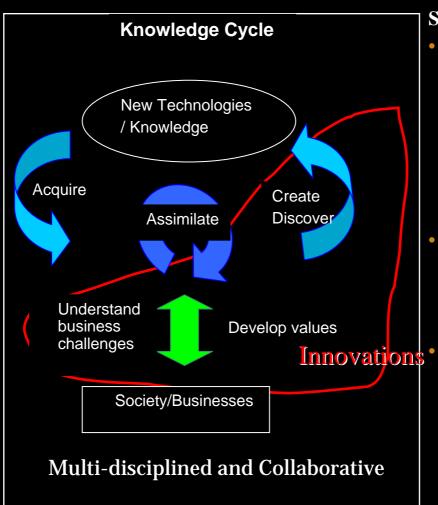




Impacts on Higher Education

Faculty perspectives:

- Standing out among the out -standings
 - Patents
 - Publications
- Pushing the frontier of innovation and relevancy
 - Government/industry
 - **Partnership**
 - practicality
 - alignment with government/industry strategic objectives
- **Committing to change**
 - •Continual learning



Student Perspectives:

- Hitting the ground running
 - Employability
 - Knowledge
 - Experiences
 - •Insight
 - Project based approach
- Preparing for innovation
 - •Versatility: wider spectrum
 - •Major
 - •Minor
- **Expecting the unexpected**
 - Adaptability
 - Methodology
 - Framework



About the speaker: Dr Diem Ho is Manager of University Relations for IBM Europe, Middle East and Africa (EMEA).

His mission is to build and manage relationships of mutual value for IBM and the academic community.

Diem's past research interests covered many disciplines in Science, Technology and Finance/Economics. He has published widely in physics, mathematics, image processing, remote sensing, engineering, optimization and finance.

Last year he co-edited/authored a special issue of the *Computational Economics* on Stochastic Process and Data Analysis published by Springer.

In recent years, he has lectured intensively on Higher Education Reform and is a member of the peer review teams for the EFMD-EQUIS and EPAS accreditation programs and a member of the EPAS committee.

He is an associate editor of the journal of *Computational Economics* and is a member of the IBM Academy of Technology.

Before assuming his current position, he was an EMEA practice leader with the IBM Management Technologies Consulting Group, specializing in using Technologies to address Business Challenges in Banking and Finance sector.

Before joining IBM, Diem was a university professor and he continues to supervise PhD thesis to-date. Diem obtained two Master degrees and a PhD in Magnetospheric Physics at Stanford University, California.