

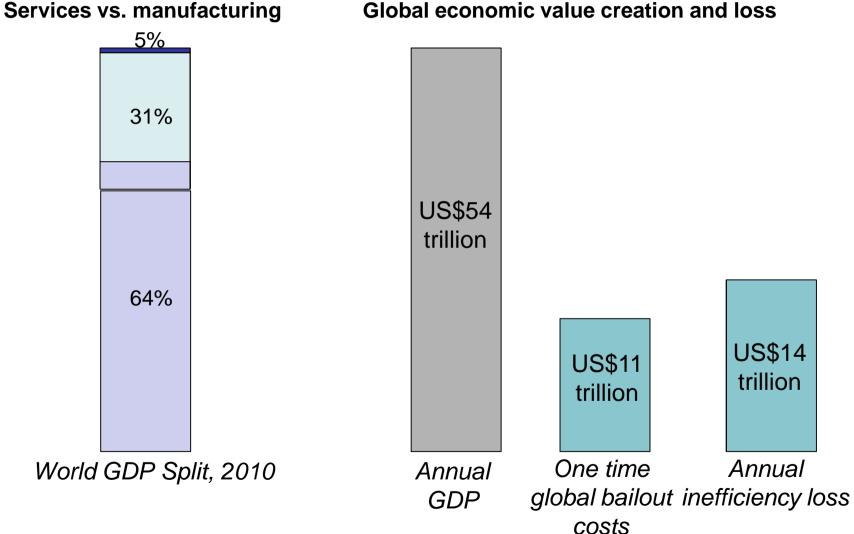
## Changing Industrial Value Chains: Unlocking Potential for Innovation and Knowledge Development through Partnerships

## Ivanka Visnjic, PhD Business Model Innovation Project Lead Cambridge Service Alliance

PRO INNO Europe, 4<sup>th</sup> Annual Partnering Event 5<sup>th</sup>-7<sup>th</sup> April, Munich



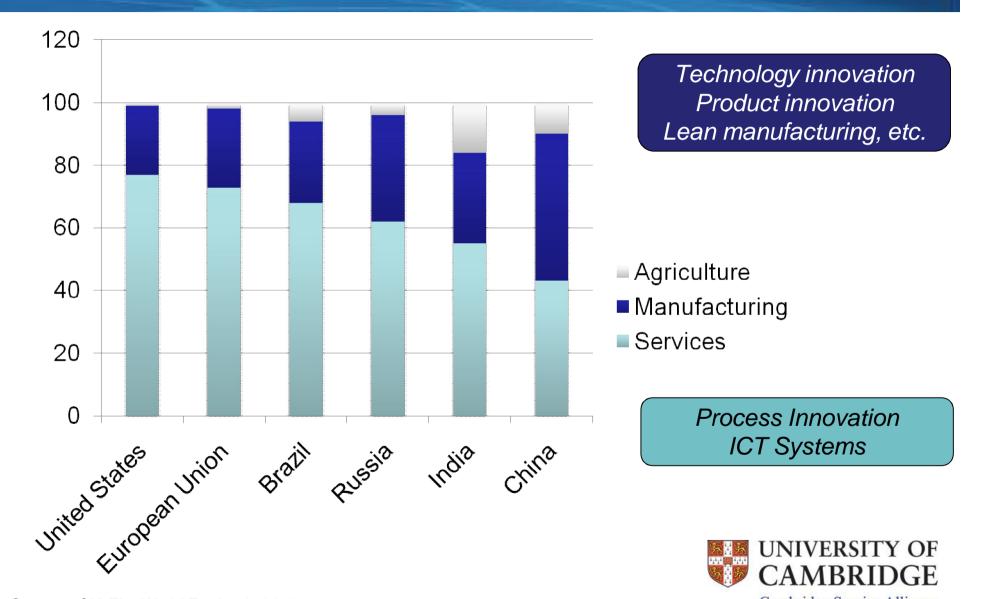
### WORLD VALUE CREATION TODAY: KEY STATISTICS



Global economic value creation and loss

Sources: CIA The World Factbook, Neely (2010), Fang (2008) IBM Institute for Business Value 2009 Survey, BBC

## DEVELOPMENT MEANS HIGHER SHARE OF SERVICE ECONOMY GOOD OR BAD SIGN?



Cambridge Service Alliance

Sources: CIA The World Factbook, 2010

## THE ADVENT OF IT PROMISES TO CHANGE THE SERVICE WORLD

#### Digitalization of services:

- Retail.... Amazon, eBay
- Finance... PayPal, Kiva
- Tourism & Hospitality... Expedia, Groupon
- Communications... Skype, VOIP
- Education... Live Mocha, Academic Earth
- Healthcare.... m-health
- Government... DVLA (e-taxes)

#### Instrumentalization of services:

- Sensors, RFID, smart meters, mobile phones, digital cameras, crowd-sensing
- HP, Siemens, IBM, GE, Cisco, etc
- Energy, water, construction, oil excavation, complex engineering solutions

#### The wealth of data produced..

- From 60 million transistors per human in 2001 to 1 billion transistors by 2010
- 1.3 billion of RFID tags in 2005, 30 billion by 2010



## CAMBRIDGE SERVICE ALLIANCE: WHO WE ARE

#### **Cambridge Service Alliance**

•...is a global partnership between businesses and universities that brings together leading firms and academics with interest in strategy and delivery of complex service systems and their providers.

#### **Founding partners**

• Founded in 2010, by the University of Cambridge, IBM and BAE Systems, the Alliance is currently expanding its partnership to researchers from other universities and other companies with interests in complex service systems.

#### **Themes of research**

- Business Model Innovation
- Performance & Information Analytics
- Service & Support Engineering



# HOW FIRMS AND ECOSYSTEMS POSITION THEMSELVES TO TAP INTO SERVICE POTENTIAL?

#### SERVICE PROVIDER'S PERSPECTIVE

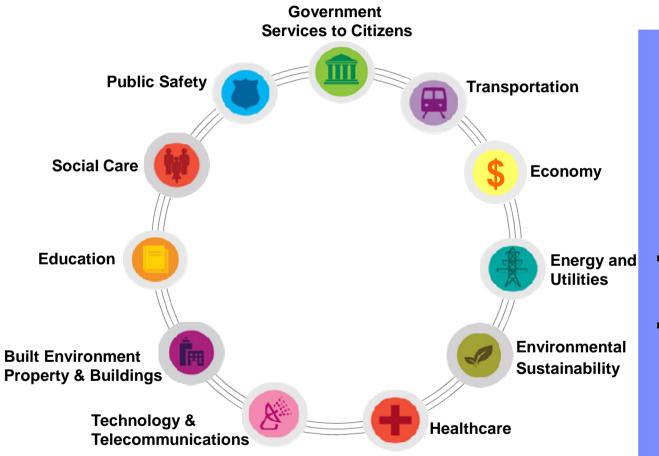
- 1) Embracing complexity to provide comprehensive solutions by:
  - Extending the scope of service activities (e.g. from warehousing to all-in supply chain consulting)
  - Moving from provision of service as process to service as outcome (e.g. repair vs. train-per-day)
  - Extending the time span of service provision (e.g. from refurbishment to lifetime care of building)
  - Effect: accountability brings higher risk, but higher investment and innovation potential
- 2) Creating partnerships to provider comprehensive solutions through:
  - Competence-led partnerships (e.g. state-of-the-art logistics software through 4-firm collaboration)
  - Efficiency-led partnership (e.g. outsourcing of labour-intensive service components)
  - Effect: complex service systems, providers are competing on their ability to forge partnerships and manage their accountability spread.

#### ECOSYSTEM PERSPECTIVE

Pursuit of ecosystem optimization through reconfiguration. Balancing three core objectives:

- Maximize competencies and investments
- Minimizes costs
- Maximizes accountability

## INNOVATION AND OPTIMIZATION OF COMPLEX SERVICE SYSTEMS: THE ROLE OF REGIONS AND CITIES



CHALLANGES: Waste due to inefficiencies and suboptimization

#### WHAT ARE THE SOURCES OF VALUE CREATION:

- Optimizing sectorial ecosystems
- Optimizing across sectorial ecosystems

HOW TO CREATE THAT VALUE? IT-led service innovation and Institutional change



Note: Illustration adapted from IBM Institute for Business Value, Cullen, M (2010)

## UNLOCKING VALUE IN PUBLIC SERVICES: AN EXAMPLE OF PARTNERSHIP BETWEEN PUBLIC AND PRIVATE ORGANIZATIONS

#### **'SERVINNO':**

#### Business model innovation

- From project-based building contractor to all-in, relationship-oriented service provider
- Client-centric Servinno provides end-to-end services for councils
- Blue-collar job, simple processes... how do they add value?
  - Integrated solution for client, a one-stop-shop
  - Control over back-office processes allows them to apply IT, collect data

#### Implementation challenges

- Cultural resistance
- Client-service provider competition
- Fragmented departmental decision making
- Election cycles

#### Results

From regional to national scope and 100% growth in three years



## **IMPLICATIONS FOR POLICY AND LOCAL AUTHORITIES**

#### **IMPROVEMENT POTENTIAL**

#### **POTENTIAL CHALLENGES**

Breaking internal resistance

Citizen level	
<ul> <li>Raising awareness and engaging residents</li> </ul>	<ul> <li>Effective way to engaging with masses, rather then, for example, smaller specialist group</li> </ul>
	then, for example, smaller specialist group
Firm level	
<ul> <li>Sharing information and creating</li> </ul>	<ul> <li>Findings "small-scale" innovation potential for</li> </ul>
environment for firms to partner	'day-to-day' businesses

#### **Regional level**

 Active involvement of the authorities:
 breaking institutional barriers to collaborate and co-create value

- pro-innovation procurement processes

• Assuring innovation and knowledge protection in complex, collaboration-led world with difficult-to-codify knowledge.

• Protect innovation while allowing for appropriate level of competition: the role of patents or other mechanisms (e.g. contracts, systems)?

