The new shape of (e-)Services: the “quiet” revolution in services thinking, innovation & (agile) delivery

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Agenda & take-aways

- Services are 75-80% of US GDP
- Services result from business process outcomes
  - Want to change a service? Change the process!
- Thanks to recent standards, business processes are:
  - Represented, configurable and managed at the technology level
    (the “new” e-Services)
  - Becoming “standardized” & commoditized
- Market environments are turbulent and agility is overtaking planning
  - Need for “agile” processes (and flexible services)
- Service innovation is now more important than product innovation
  - But we still think in terms of product innovation
  - Need to track, measure & evaluate progress
What’s a service?

• Economics:
  – Intangible and perishable… created and used simultaneously (Sasser et al, 1978)
  – All economic activity whose output is not physical product or construction (Brian et al, 1987)

• Marketing:
  – Characterized by its nature, relationship with customer, decisions (customization and judgment), economics, mode of delivery (location and nature of physical or virtual space) (Lovelock, 1983)
  – A time-perishable, intangible experience performed for a customer acting in the role of co-producer (Fitzsimmons, 2001)

• Technology:
  – An encapsulated unit of work, exposed as a standardized (SOAP) interface.
Christensen definition

• Operational definition:
  – Something you hire (rent) to get a job/task done (a problem solved)
    • From: Clayton Christensen, Innovator’s Solution (HBP)

• Focus on customer need expressed as a problem he/she has to be solved (not what you can solve)
  • Not the “solutions looking for problems” approach

• Shifts emphasis from (one-time) buy to (on-going) rent
Importance of services

U. S. Service Sector Growth

Source: Jim Spohrer. © 2005 IBM Corporation
The shift to “service thinking”

- Platform (product) as service-delivery vehicle
  - Computer (services)
  - Cell phone (services)
  - iPod (services)
  - Residential/commercial buildings (services)
    - Maintenance
    - Entertainment
    - HVAC
  - Automobile (services)
  - Appliance (services)
  - Apparel (services)
    - OLED and paper-based “electronic” clothing
  - Etc.
Behind a service – its process(es)

- Loan application
  - Service: Request loan and receive loan documentation
“Orchestrating” the process

Script

1. Initiate A-1; move 0-1 to I-3 & I-5
2. Initiate A-3 & A-5 in parallel; when both done move 0-3 to I-6 & 0-5 to I-8
3. Initiate A-8; move 0-8 to “Output”
4. Initiate A-6; move 0-6 to “Output”
Consumer “orchestration” example

My financial processing rules

Note:
I’m creating my own service based upon available “service-parts” from financial institutions
Standards allow organizations to

- Build, acquire, rent services

3rd party provided service (BPO)

Business Unit \(_A\) provided service

Service \(_A\)

Business Unit \(_B\) provided service

Service \(_B\)

Business Unit \(_N\) provided service

Service \(_N\)
Normative (standardized) models

• What are they?
  – A process model constructed from a predefined set of alternatives
  – Prescribed view of how the process should be seen and behave

• What is their value?
  – Simplification of modeling (constrained choice vs. green field)
  – Overcoming complexity; lack of transparency
  – Standardization enables
    • Exchange of models across units & organizations
    • Description of common problems and metrics
    • Exchange of industry norms (benchmarking) and best practices
Standardized process content

- In order to “plug-and-play” services between organizations, the underlying processes (and data) must, to some extent, be standardized as well.
- Enter the era of process standardization (and commoditization).

**Harvard Business Review**

Will You Survive the Services Revolution?

by Uday Kamkar

Business processes—from making a mousetrap to hiring a CEO—are being analyzed, standardized, and quality checked. That work, as it progresses, will lead to commoditization and outsourcing on a massive scale.

**The Coming Commoditization of Processes**

by Thomas H. Davenport
Supply chain standardized model

Plan
- P1: Plan Supply Chain
- P2: Plan Source
- P3: Plan Make
- P4: Plan Deliver
- P5: Plan Returns

Source
- SI: Source
  - Stocked Products
- S2: Source
  - MTO Products
- S3: Source
  - ETO Products

Make
- MI: Make-to-Stock
- M2: Make-to-Order
- M3: Engineer-to-Order

Deliver
- DI: Deliver
  - Stocked Products
- D2: Deliver
  - MTO Products
- D3: Deliver
  - ETO Products

Return Source
- RS1: Return Defective Products
- RS2: Return MRO Product
- RS3: Return Excess Product

Return Delivery
- RD1: Return Defective Product
- RD2: Return MRO Product
- RD3: Return Excess Product

SCOR (Supply Chain Operations Reference model)
800 + organizations using these standard processes world-wide
What’s standardized?

Supply Chain SCORcard

<table>
<thead>
<tr>
<th>Overview Metrics</th>
<th>SCOR Level 1 Metrics</th>
<th>Industry Benchmarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual</td>
</tr>
<tr>
<td>Supply Chain Reliability</td>
<td>Delivery Performance to Commit Date</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>Fill Rates</td>
<td>63%</td>
</tr>
<tr>
<td></td>
<td>Perfect Order Fulfillment</td>
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</tr>
<tr>
<td>Responsiveness</td>
<td>Order Fulfillment Lead Times</td>
<td>35 days</td>
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<tr>
<td>Flexibility</td>
<td>Supply Chain Response Time</td>
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<td>Production Flexibility</td>
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<tr>
<td>Cost</td>
<td>Total SCM Management Cost</td>
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<tr>
<td></td>
<td>Warranty Cost</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Value Added Employee Productivity</td>
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<tr>
<td>Assets</td>
<td>Inventory Days of Supply</td>
<td>116 days</td>
</tr>
<tr>
<td></td>
<td>Cash-to-Cash Cycle Time</td>
<td>196 days</td>
</tr>
<tr>
<td></td>
<td>Net Asset Turns (Working Capital)</td>
<td>2.2 turns</td>
</tr>
</tbody>
</table>

1. Metrics

2. Industry benchmarking

3. Prescribed level 3 processes
Other emerging process standards
Enabling agility with services

Agility

Sense
Changes in the environment

Respond
Changes in what is processed and how

Pool of available services

Market turbulence

Time frame to adapt

BAM

Events

Process/service orchestration (BPEL, xFML)

Message-oriented Middleware (MOM)

Email messages (SMTP)

Hypertext messages (HTTP)

Service messages (SOAP, etc.)

Services (WSDL, UDDI)

Application software

ERP

CRM

SCM

Custom

USR

Components & Objects

DB

DWH

DM
Service innovation

• Improve back stage process productivity
  – Applying six sigma, process reengineering, and other transformation activities to the back stage (e.g. process improvement)

• Improve front stage scope
  – Addressing more or better the custom requests of clients, as well as exploiting more of the unique capabilities of providers

• Improve coordination
  – Standardize processes and interactions to boost quality (compliance) and productivity (e.g. SCOR)

• Improve dynamic evolution
  – Continuously migrate provider-client pairs to higher value creation and capture points on an ongoing basis (e.g. agile)

From: J. Spohrer, IBM

“Innovation is not a natural act in the service industry”

A. Gershman, Director of Research, Accenture
Innovation: A service-stack perspective

3rd party provided service (BPO)

Business Unit_A provided service
Activity_1 → Activity_2 → Activity_3 → Activity_n

Business Unit_B provided service
Activity_1 → Activity_2 → Activity_3 → Activity_n

Business Unit_N provided service
Activity_1 → Activity_2 → Activity_3 → Activity_n

Dynamic, scope-able, client-configurable services

Build, acquire, rent & bundle services

Service offered

Service_A
Service_B
Service_N
Innovation thinking needs re-thinking

Aligning Innovation with the Life Cycle

Main Street (early)

Established offers in existing markets to next level

Surface modifications to improve customer exper.

Main Street (early)

Existing technology to new markets

Improve customer-touching processes

Reframe established value proposition

Restructure industry relations


A failing grade for the innovation academy
And monitoring

- EU has initiated studies and trial assessments of service innovation activity by country & sector
  - Determine type and level of activity
  - Shape policy on support and incentives for
- No equivalent work known in the U.S.
  - Shades of e-commerce and outsourcing/offshoring?
Wrapping up

• Once relegated to the “other” category of GDP, services are now being distinguished from “product thinking”
• Services, in turn, are driven by their underlying business processes and these are in turn being
  – IT-enabled
  – Standardized and commoditized
  – Made “plug-and-play”
• This can and will drive significant changes in how “service innovation” is conceived of and executed
  – While standardization will permit outsourcing, innovation will drive new business models
• It will also permit a shift from plan-and-command to sense-and-respond modes of visioning & execution
• Evolutionary or revolutionary? Your call.