The Service Oriented Enterprise™

...and how we got here

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A Birds Eye View...

- Common language is required – defining terms
- Why is a discussion of service important?
- A Service Practitioner’s view
- The Service Oriented Enterprise
- Products as Service Systems

Implications for Service Systems Tools & Technology
- Optimizing knowledge resources
- Optimizing global skill pools
- Interconnection of service networks
Let’s consider some definitions…

**Service (s)**
The application of skills and knowledge (operant resources) for the benefit of another party. (Vargo and Lusch 2004a; 2006), *Service Dominant Logic*

Or

Service is any transaction of economic value that can not be dropped on your foot.

“The Economist“ -2006

**Service System**
Service has a greater focus on the management of knowledge as an asset and the channels through which knowledge, information and signals flow. Therefore, a *Service System* is a dynamic configuration of value co-creating resources that includes people, organizations, shared information, and technology connected holistically and organized to create new value outcomes by optimizing the creation and use of skills and knowledge for the benefit of others.
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World’s Large Labor Forces  
A = Agriculture, G = Goods, S = Service

The largest labor force migration in human history is underway, driven by global communications, business and technology growth, urbanization and regional variations in labor and infrastructure costs and capabilities.

<table>
<thead>
<tr>
<th>Nation</th>
<th>Labor %</th>
<th>A %</th>
<th>G %</th>
<th>S %</th>
<th>Service Growth</th>
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<td>49</td>
<td>22</td>
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<td>23</td>
<td>28%</td>
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<tr>
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<td>16</td>
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<td>14</td>
<td>66</td>
<td>21%</td>
</tr>
<tr>
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<td>21</td>
<td>69</td>
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</tr>
<tr>
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<tr>
<td>Nigeria</td>
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<td>70</td>
<td>10</td>
<td>20</td>
<td>30%</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>2.1</td>
<td>63</td>
<td>11</td>
<td>26</td>
<td>30%</td>
</tr>
<tr>
<td>Germany</td>
<td>1.4</td>
<td>3</td>
<td>33</td>
<td>64</td>
<td>44%</td>
</tr>
</tbody>
</table>

(A) Agriculture: Value from harvesting nature
(G) Goods: Value from making products
(S) Service: Value from enhancing the capabilities of things and their ability to interconnect and create value

Note: Pakistan, Vietnam, and Mexico now greater than Germany (since 2005)

CIA Handbook, International Labor Organization

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Service-providing industries are projected to account for most job growth, generating almost 19 million new jobs between 2004 and 2014. This is due, in part, to increased demand for services and the difficulty of automating service tasks.

Employment in professional and business services is projected to increase by nearly 4.6 million jobs. Growth in this sector is led by providers of administrative support services and consulting services.


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The U.S. trade deficit with China is such a hot political issue in Washington these days that it’s easy to forget the gains America reaps from doing business with China. So the latest trade data on services make for enlightening reading.

The Commerce Department’s Bureau of Economic Analysis calculates that America’s service sector had a $3.7 billion trade surplus with China last year. In 2005 the surplus was $2.4 billion, up from $515 million in 1992. U.S. service exports cover a wide range of economic activities, from parcel shipping to investment banking. Education is one of America’s top service exports (a $1 billion surplus). Advertising, technology, legal services, industrial engineering and other “business, professional and technical services” account for just over a third of the U.S. surplus, and financial services, for another $480 million.

China is now the ninth largest purchaser of American services. And the U.S. surplus could grow bigger if China meets all of its World Trade Organization commitments and opens its markets further. According to a study prepared late last year by Oxford Economics for the U.S.-China Business Council, America’s service-trade surplus could reach $15 billion a year by 2015.

Despite its continuing struggles to protect intellectual property, China is still paying for plenty of it. Chinese IP purchases, measured by payments of royalties and licensing fees, generate a U.S. surplus of $1.4 billion on their own. American service-trade deficits in areas such as passenger travel and goods transportation pale in comparison.

Progress toward greater openness has been slow and often inconsistent, but that’s hurting China as much, or more, as it hurts the U.S. By opening its doors to American expertise, China could boost the productivity of its own workers and businesses. The result would be a 1.2% increase in GDP by 2015, according to the business council study.

We’ve long argued that the bilateral trade statistics are meaningless as a sign of economic strength or weakness. They can be harmful if politicians use them to justify protectionist policies. The real meaning of the U.S.-China trade figures is that millions of consenting adults are doing a booming business—in services as well as goods.

U.S. exports $480 Billion in Services and represents 20% of all global trade.

If trade barriers were lifted there is a potential $1.7 Trillion in global benefit with $466 Billion for the U.S.
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Services Transformation— from your hometown to the world

• **In the beginning, all services are local**
  • Local craftsman, reputation and handshake important
  • Value based on product and leveraging local relationship
  • Value exchange based on barter, contributing to community

• **World becomes flatter, Industrial age matures**
  • Products become commodity – mass produce
  • Warranty Service - quality guaranteed
  • Service is part of Manufacturing dept. – cost center
  • Expansion to “regional” and “international” models
  • Distribution channel becomes local face of service
  • Backing up what you sell remotely becomes differentiator
  • Product centric market place
Bridging the Manufacturing Economy to the Services Economy

- **Product “Value Add” adjacent services** – heterogeneous
  - Margin pressures on mature or commodity products
  - Service becomes a profit center and a new silo in the enterprise
  - Leverage Infrastructure and knowledge to service adjacent products
  - Working across more of the customer enterprise – learning opportunity
  - Value focus is on extending a product’s overall value

- **Customer “Added Value”** – professional services
  - Leverages expert knowledge & infrastructure
  - Focus on time to value or total cost of ownership
  - Remove barriers to sale, eases customer burdens (HDTV)
  - Knowledge is gained from greater customer intimacy
  - Creates industry specialized solutions
  - Less about product, more about value based solutions
  - Service systems become complex and multilayered
Evolution, Evolution, Revolution - Darwin was right...

- The Service Oriented Enterprise – the tipping point
  - Products designed and engineered to be delivered as a service
  - Made possible by instrumenting the edge - we live in a connected world
  - WEB 2.0 platforms allows more symmetrical customer knowledge
  - Works to optimize the customer, not internal processes
  - Focus on co-creating customer value and sharing in customers success
  - Aligns the enterprise to interests of customer success
  - Removes division of labor in organizations
  - Holistic and seamless processes between front office and back office

- The Enterprise becomes a Service System
  - Economic metrics & valuations are changed
  - Customer Values perception are changed
  - Product Innovation is not enough
  - Operations is no longer just back office
  - Global skill pools and T-shaped people critical
  - Customer intimacy and collaborative value is key
Finding your way without a good map and guide can yield unexpected and unwanted results
Transformation Drivers for Service

Evolution of Technology Service

S.O.E

Solutions

Added Value

Value Add

Warranty

Value Add

People

Process

Technology

Globalization

Information Exchange

Product Maturity

Change

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What do these have in common?

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These are all complex Service Systems
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Services are Driving Revenue and Profits in Product Companies

Relative Customer Value for Customer Centric Models

- Basic Warranty
- Multi Vendor
- Value Add
- Added Value
- Soolutions
- True SOE

Innovation and Growth

Provider Growth and Profit

Diminishing Growth

Going out of Business

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Evolution, Revolution or INNOVATION

“IT IS NOT THE STRONGEST OF THE SPECIES THAT SURVIVES, NOR THE MOST INTELLIGENT, BUT RATHER THE ONE MOST ADAPTABLE TO CHANGE”

Clarence Darrow on Darwin’s theory of survival of the fittest

"If I had asked my customers what they wanted they would have said a faster horse."

“A REVOLUTION IS NOT A BED OF ROSES. A REVOLUTION IS A STRUGGLE BETWEEN THE FUTURE AND THE PAST.”

Fidel Castro

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Key Service Innovation drivers have been:
   • Globalization -the world really is flat
   • Product Maturity - what happens after the chasm?
   • Connected World – data anytime, anywhere, anyplace

Relationship is the key attribute and asset in service value
   • Relationship means more than just knowing the customer
   • Relationship is a state of connectedness between people
   • Sharing risk and rewards
   • Remoteness requires technology to efficiently keep relationships

Disruptive innovation comes after incremental innovation cost exceeds the potential return – can this curve be predicted?
   • Looking for answers gives you fixed results
   • Ask new questions and you get different answers and innovation

Customer integration is like marrying your customer, divorce is expensive
   • New customer acquisition costs 10 x retention
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The Service Value Paradox

To deliver high value services to customer at most effective costs then knowledge and skills must be optimized
How does this work?

= Instant Global News
≠ Data or Knowledge
Context is important

"The World is Flat"

Thomas L. Friedman
Multinational or Global Work Force Management?

OR

New Workforce Management and Optimization Systems Needed

- Skills are no longer constrained by borders
- Skills are no longer constrained by organizational boundaries
- Skills need to be multi-dimensional and multi-disciplinary
- Resources need to be deployed based on customer need not just lowest cost
- Labor arbitrage is not optimization
- Global workforce management must tie optimized schedules and prognostic information

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Service Value Network Integration

CRM is to Service as SCM or MRP is to Manufacturing

- EDI was developed to standardize and automate supply chain computer to computer communications.
- Companies more willing to connect back office partners than front office
  - Customer data is considered sacred and proprietary
- "Web 2.0 " interaction standards are needed
- Service Systems and Service networks are dynamic
  - Service Supply Chains are really value networks

Where is the Service System EDI Equivalent?
What if you build things that only work 172 million miles away?

And it needed service?
One last note…

It is not about creating new technology, it is about creating new VALUE!
Additional Service Science resources:


**The Service Research and Innovation Institute**: www.thesrii.org

**ASU – Center for Services Leadership**: http://wpcarey.asu.edu/csl/

**Univ. of Maryland – Frontiers in Service**: http://www.rhsmith.umd.edu/ces/frontiersconference.html

**CITRIS – University of California** [www.citris-uc.org/research/services_science](http://www.citris-uc.org/research/services_science)

**http://www.servtrans.com/services** - Publications, reading list

**www.bayarea-ssme.org** – San Francisco Area Service Science Lecture Series

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