Transforming Business Models with Technology and Innovations

Frontiers in Service Conference
Bergen, Norway
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Stephen L. Vargo
Shidler Distinguished Professor
Shidler College of Business, University of Hawai‘i
Reframing Business Model, Technological & Innovation Thinking: An S-D Logic Perspective

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Goods-Dominant Logic Model: Value Production and Consumption

Supplier -> Supply Chain -> Producer -> Consumer ("end user")

Value Creation, Product/Value Delivery, Value Destruction, Goods/Money
Rethinking Goods and Service(s)

Wrong Thinking about Goods: **Good are not why we buy goods**
- Service (benefits) they provide
- Intangibles (brand, self image, social connectedness, meaning)
- Inputs into holistic experiences

Wrong Thinking about Service: **“Services”** Stated as types of Goods
- Value-enhancing add-ons for goods, or
- A particular (somewhat inferior) type of good: intangible output

“Right thinking” About Service: **The S-D logic perspective**
- Service is a process, not a unit of output
  - Using one’s resources for another’s benefit
- Goods are delivery mechanisms for service
- Customers are not “end users”
  - just other service providers (employees, parents, CEOs, etc.)
THE SERVICE-DOMINANT LOGIC PERSPECTIVE
## Axioms of Service-Dominant Logic

<table>
<thead>
<tr>
<th>Premise</th>
<th>Explanation/Justification</th>
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| **A1** | Service is the fundamental basis of exchange.  
  - The application of operant resources (knowledge and skills), “service,” is the basis for all exchange. Service is exchanged for service. |
| **A2** | Value is always cocreated by multiple actors, including the beneficiary  
  - Implies value creation is interactional and combinatorial. |
| **A3** | All economic and social actors are resource integrators  
  - Implies the context of value creation is networks of networks (resource-integrators). |
| **A4** | Value is always uniquely and phenomenological determined by the beneficiary  
  - Value is idiosyncratic, experiential, contextual, and meaning laden. |
| **A5** | Value cocreation is coordinated through actor-generated institutions and institutional arrangements  
  - Institutions provide the glue for value cocreation through service-for-service exchange |
Value Co-creation through Resource Integration & Service Exchange

Resource Integrating Actor (Person, family, firm, etc.)

- Market-facing Resource Integrators
- Private Resource Integrators
- Public Resource Integrators

Economic Currency
Social Currency
Public Currency
New Resources
Value

Service
Micro Exchange Embedded in Complex (Eco)Systems of Exchange
Resource Integration & Service-for-service Exchange within Service-ecosystems

Institutions & Institutional arrangements/logics

Resource Integrators

S-D Logic

Resource Integrator/Beneficiary ("Firm")
Resource Integrator/Beneficiary ("Customer")
The Structure and Venue of Value Creation: Institutions & Service Ecosystems

Institution

• “any structure or mechanism of social order and cooperation governing the behavior of a set of individuals within a given human community.”

  (Stanford Encyclopedia of Social Institutions)

Service Ecosystem (S-D logic)

• relatively self-contained, self-adjusting systems of resource-integrating actors connected by shared institutional arrangements and mutual value creation through service exchange.
Resource Integration & and the Structuration of Service Ecosystems

Resource Integrators
Institutions

Micro
Meso
Macro
The Core Narrative & Processes of Service-Dominant Logic

- **Generic actors Involved in Resource Integration and Service Exchange**
- **Value Co-creation**
- **Service Exchange Enabled & Constrained by Endogenously generated Institutions & Institutional Arrangements**
- **Establishing nested & overlapping Service ecosystems**
“Hip-Pocket” S-D Logic

Components & Structural Perspectives

Societal:
National, Global, etc

(Sub)culture:
Brand, Market, “industry, etc

Exchange
B2C, B2B, C2C, etc
Broadly Drawing from...

- Science of Cognitive Computing
- Ecosystems
- Institutions & Institutional Arrangements
- Structuration Theory
- Service Exchange
- Value Determination
- Theory of Value Cocreation through Markets, Economy, Society
- Resource Integration
- Evolution Theory
- Practice Theory
- Complexity Theory
- Midrange Theory 1
- Midrange Theory 2
- Midrange Theory 3
- Midrange Theory 4
- Ecological Theory
INSTITUTIONS AND INSTITUTIONAL WORK
The world we live in is much more a man-made, or artificial one, than it is a natural one
- The significant part consists mostly of artifacts, called symbols (p. 2)

‘Judgment’ is a heuristic search
- The real-world economic actor is a satisficer, who accepts good enough, because (optimization) is not a choice. (p. 29)

Markets and organizations are social schemes that facilitate coordinated behavior, conserving the critical scarce resource of human ability to handle complexity (p. 49)
Institutions as the Building Blocks of Social Science

- "The discovery of the inescapable evidence of the interdependence of market phenomena overthrew [the] opinion that there was in the course of social events no regularity and invariance of phenomena [as found in] “natural phenomena”... (von Mises, 1949 p. 2).

- "One must study the laws of human action and social cooperation as the physicist studies the laws of nature" (von Mises, 1949 p. 3).

- Can we dig below the immense diversity of regularized social interactions in markets, hierarchies, families, sports, legislatures, elections, and other situations to identify universal building blocks used in crafting all such structured situations? Yes. (Ostrom 2005)

- The diversity of regularized social behavior that we observe at multiple scales is constructed from universal component organized in many layers. (Ostrom 2005)

- Institutions are both the “recursive organizers” of practices and the “practices with the greatest time-space extension.” (Giddens 1984, p. 17)
“Greater divisions exist within than between disciplinary camps.” (Scott 2000, p. 2)
Innovation: The S-D Logic Perspective

Continual creation of new markets by:

- Leveraging existing service institutions/ecosystems
- Dynamically reconfiguring service ecosystems
- Creating new ecosystems
- In short: doing “institutional work”
Institutional Work

Interplay of Actors, Agency, & Institutions

Development

- **Isomorphism** – institutional dominance
- **Agency** – Individual intention
  - Especially specialized: “intuitional entrepreneurs”
- **Structuration**: Duality of agency and structure

Institutional work = intentional form of structuration

- **Maintenance** of institutions
- **Disruption** of institutions
- **Creation** of institutions
Complimentary Institutionalizations and Upstream Adoptions Processes for UBER and Lyft

- Institutionalization of Pay per Distance Traveled
- Institutionalization of Customized Pick Up and Drop Off
- Institutionalization of eCommerce
- Institutionalization of Rating System to increase Trust
- Institutionalization of Mobile Communication and Data Exchange
- Institutionalization of Sharing Solutions
- Institutionalization of Mobile Applications for Ordering Services
- Institutionalization of Accepted Transportation Practices
- Institutionalization of Sharing Solutions
- Institutionalization of Accepted Transportation Practices
Select Institutional Work by Uber/Lyft: Maintenance, Disruption and Change

**Institutions maintained:**
- Pay for Distance Traveled
- Customized Pick Up and Drop Off
- Use of traditional Cars
- Etc.

**Institutions disrupted:**
- Professional Drivers
- Cash Payments
- Flagging Down
- Regulated Industry
- Etc.

**Institutions changed:**
- Rating System of Driver and Passenger
- Payment in Cloud
- Etc.
An Institutional Perspective on:

Technology

(Market) Innovation

Business Models
TECHNOLOGICAL INNOVATION
The Meaning of Technology

**Definitions**

- A means to fulfill a human purpose
  - Arthur (2009)

- **Useful knowledge**
  - Mokyr (2002)

- The application of scientific knowledge for practical purposes
  - Oxford New American Dictionary

- **And relationship to service**
  - Use of competences (knowledge and skills) for another’s benefit
  - Service = applied, beneficial technology (operant resources)
Arthur on New Technologies: Resource Integration

Combinatorial Evolution
“A novel technology emerges always from accumulation of previous components and functionalities already in place.” (p. 124)

More generally, the combinatorial evolution of institutions
What has Changed: Liquification

There is no services revolution; there is a service revelation, based on an IT and ICT revolution.
A Structurational Theory of Technology

S-D Logic

Institutional Properties

Technology

Practices

a) Technology as a product of human influence
b) Technology as a medium of human action
c) Institutional Conditions of Interaction with IT
d) Institutional Consequences of Interaction with IT

Adapted from Orlikowski 1992, p. 441
Duality of Technology

Technology as an Operand Resource

- Technology as a product of human action
- The outcome of design, development, appropriation and modification (function of both “design” and “use”)

Technology as an Operant Resource

- Technology as a medium of human action
- Institutions (norms, meanings, understandings) associated with technology enable it to influence action
- The introduction/acceptance often requires changes in daily practices
  - can result in changes in institutional and institutional arrangements
MARKET INNOVATION
Where was the Market...?

“Why would anyone want...”

- A horseless carriage (Model T)
- Talking movies
- A Television
- A Personal computer
- A Microwave oven
- The Internet
- An iPod
Implications for Understanding the Market

- There are no (a priori) markets
  - There are just micro-level, service exchanges
    - gifts, generalized reciprocity, service-for-service

- There is a market system:
  - transitory, contextual configurations of resources and exchanges, sometimes linked by institutions

- ...and hence markets can “exist”
  - They can:
    - Be envisioned --images of service potential
    - become institutionalized -- Intersubjective realities

- Thus, markets become performed within the Market
  - They exist because we act like they do
  - “Markets are functions of marketing” (and other business practices)
A Market as an Institutionalized Solutions

Resource Application (service)

Inter-subjective Agreement

Human Problem

Institutionalized Solution = A Market

De-institutionalization Re-institutionalization

Market performativity

Quasi-predictability
Some implications of S-D Logic for Innovation/ and Design

- Invention of things is a special case
  - More generally, we design institutions
    - Common solutions, markets
    - Meanings, symbols – facilitators of cooperation

- Innovation is a resource-integration function
  - New innovation comes from recombinations

- Innovation is not just a specialized function
  - Everyone is a innovator/designer

- The chief innovator is the value beneficiary (e.g., the customer)
  - Thus, innovating for innovators
BUSINESS MODEL INNOVATION
Institutional Logics

Reframing Organizational Institutionalization

“socially constructed, historical patterns of cultural symbols and material practices, including assumptions, values, and beliefs, by which individuals and organizations provide meaning to their daily activity, organize time and space, and reproduce their lives and experiences”

Working model

- Entrepreneurial team
- Organizational trajectory
- Institutional environment
- Narrative Logic(s)
Common Themes in Business Model Thinking (Zott, Amit, and Massa 2011)

Emerging as a new unit of analysis

Emphasize a systems-level, holistic approach

Firm activities play important role

Seek to explain how value is created (i.e., cocreated)
## Technology, Market Innovation & Business Models: A Partial Reconciliation

<table>
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<tr>
<th>Technology</th>
<th>Market Innovation</th>
<th>Business Models</th>
<th>S-D Logic</th>
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<tbody>
<tr>
<td>Tech as useful knowledge; (Mokyer 2002)</td>
<td>Market practices and performativity (Kjellberg and Helgesson 2006; 2007; Araujo and Spring 2006)</td>
<td>seek to explain how value is created (not just how captured (Zott et al. 2011)</td>
<td>Service Exchange</td>
</tr>
<tr>
<td>Duality of Technology; (Orlikowsky 1992)</td>
<td>Markets as institutionalized solutions (Vargo and Lusch 2014)</td>
<td>The “institutional logic” of the firm (e.g., et al. 2012)</td>
<td>Institutionalization</td>
</tr>
<tr>
<td>Social Construction of technology (Pinch &amp; Bijker 1984)</td>
<td></td>
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<tr>
<td>Enables increased density within value constellations (Normann, 2001)</td>
<td>Facilitation of exchange through “institutional arrangements” (Loasby, 2000)</td>
<td>Cocreation through firm and partner(s) activities (Zott et sl. 2011)</td>
<td>Value cocreation</td>
</tr>
</tbody>
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A Fractal Model of Value Creation

- Duality of Technology; (Orlikowsky 1992)
- Tech as useful knowledge; (Mokyer 204)
- Combinatorial Evolution (Arthur 2011)
- Etc.

• Market practices and performativity (Kjellberg and Helgesson 2006; 2007; Araujo and Spring 2006)
• Interpretive Flexibility; (Pinch and Bijker 1984)
• Markets as institutionalized solutions (Vargo and Lusch 2014)
• Etc.

Endogenously generated Institutions & Institutional Arrangements

Establishing nested & overlapping Service ecosystems of

Generic actors Involved in

Value Cocreation

Resource Integration and

Service Exchange Enabled & Constrained by

Technological Innovation

Market Innovation

Business Models Innovation

Market Innovation
Thank You!

For More Information on S-D Logic visit:

sdlogic.net

We encourage your comments and input. Will also post:

• Working papers
• Teaching material
• Related Links

Steve Vargo: svargo@sdlogic.net  Bob Lusch: riusch@sdlogic.net