Servitization

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Servitization

Definition:

“The innovation of an organisations capabilities and processes to better create customer value through a shift from selling product to selling Product-Service Systems”
More Definitions

- occurs when companies consciously **develop their businesses into services to add value**
  Vandermerwe and Rada (1988)
- is a **change in management philosophy** where service is re-evaluated as an **integral part of the supply transaction** with importance before and after the moment of object supply.
  De Toni et al., (1994)
- is the ability to **differentiate through supplier/customer relationship**, providing an escape from product providers cost leadership strategies.
  Robinson et al., (2002)
- is the move by manufacturing companies towards **offering goods and services** rather than goods alone
  Neely (2008), Baines et al., (2009), Ng et al., (2011)
- the **innovation** of organisation’s **capabilities and processes** to better **create mutual value** through a shift from selling product to selling **Product-Service Systems** - Neely et al. (2013)
Competitive Strategy

- **Customer Intimacy:** Combining detailed customer knowledge with operational flexibility. You are creating the best total solution for the customer.

- **Operational Excellence:** You have your processes so under control that you deliver best total cost to your customers.

- **Product Leadership:** You sell the best product on the market.

Adapted from Treacy & Wiersema, 1997
Questions to Consider

• *Is servitization simply an alternative business model?*
• *Do companies just add services to products?*
• *Does the product become a platform for service deliver?*
• *How can Information and Communication Technologies (ICTs) enable service delivery?*
• *How can servitization affect revenues and profits for a manufacturer?*
Traditional Excavator Purchase

- Cash
- Technology
- Service

Use

Cash
Monitor
Consumables
Selection & disposal
Purchase of Excavation Capability

Use

Cash

Disposal

Service

Monitor

Consumables

Technology
Service Types

Advanced services
- Fleet Management
- Availability contract
- Integrated solution

Intermediate services
- Overhaul
- Training
- Condition monitoring
- Help Desk

Base services
- Equipment
- Spares

Increasing responsibility and risk adoption
~ Customer revenue and lock-in
~ Servitization of OEM
~ Sophistication of PCS
Business Motivators

• Manufacturers are offering these advanced services because they can:

  • Help their customers be successful and fit in with their business plans
  • Growing business through opening up new revenue streams with existing customers through process innovations
  • Developing long-term business relationships that block out competition
  • Developing resilient revenue streams
# Practices and Technologies that are key to success

<table>
<thead>
<tr>
<th></th>
<th>Production Operations Favour</th>
<th>Advanced Services Favour</th>
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<tbody>
<tr>
<td><strong>Facilities</strong></td>
<td>Centralised facilities and located to exploit natural resources</td>
<td>Facilities that are co-located and distributed throughout customers operations</td>
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<tr>
<td><strong>Vertical integration</strong></td>
<td>Integrated where needed to control cost and quality</td>
<td>Integrated to ensure control over responsiveness and continuous improvement</td>
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<tr>
<td><strong>Technology systems</strong></td>
<td>Focused on the planning and control of material flow</td>
<td>Focused on informing and advancing actions on maintenance, repair and use</td>
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<tr>
<td><strong>Performance measures</strong></td>
<td>Focused on cost, quality and delivery of products</td>
<td>Focused on asset availability, reliability, performance and cost</td>
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<tr>
<td><strong>People deployment and skills</strong></td>
<td>Staff who are technically excellent, analytical, and highly reliable</td>
<td>Staff who are flexible, relationship builders, service-centric, authentic and technically adept.</td>
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<td><strong>Organisational processes</strong></td>
<td>Reactive to demands for after-sales support and tendency towards ‘heroic recovery’</td>
<td>Formalised to deal proactively with the condition, use and location of assets in the field.</td>
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Facilities location

Facilities that are co-located and distributed throughout customers operations

Rolls-Royce pre-‘TotalCare’

Rolls-Royce post -‘TotalCare’
ICT Systems

Technology systems focused on informing and advancing actions on maintenance, repair and use

Monitor
- Continuously sense critical systems and subsystems of asset
  - Transducers
  - Data storage
  - Fault code generation
  - Fault code recording

Transmit
- Periodically communicate with home
  - Base data: Satellite, cell phone, GPRS, radio, Internet
  - Fault code data

Store
- Compile historical records
  - Hard and soft storage system

Analyse
- Diagnose and predict behaviour
  - State and trend analysis

Respond
- Determine appropriate interventions
  - Get more data
  - Make contingencies
  - Repair/replace
  - Inform customer
  - Modify design

Technology systems focused on informing and advancing actions on maintenance, repair and use.
An Integrated Service delivery System

- Facilities that are co-located and distributed
- Vertically integrated within supply chains
- Exploiting ICTs for remote asset monitoring

Staff that are service-centric, flexible, skilled in relationships, and resilient
Performance measurement systems replicating those of customers
Process that are proactive and integrated with customers

A complex integration of practices and technologies.
Business Examples

*Rolls-Royce* *(Civil Aerospace)*

- Rolls-Royce TotalCare®
- ‘Power by the Hour’.........
- Airline operators pay per flown hour
- Long term contracts with pre-defined patterns of operation
- “piece of mind”
Business Examples

Alstom Transport

Northern Line (London Underground)
- 91 underground trains with 3 Spare trains available everyday’
- Mean distance between failure 14000Km / train
- Fundamental KPI - Lost Passenger Hours

West Coast Main Line
- 47 of 52 Pendolino Class 390 EMU trains available everyday’
- 1000 miles per day per train with narrow daily window for maintenance / repair
- Fundamental KPI - Lost Passenger Hours
Business Examples

**MAN Truck & Bus UK**

**MAN TGX 26.440:**
- 2 Years
- 300,000 kms.

<15p / km

- Up-Time Principal (UTP) and Fleet Management
- Replacement vehicle if > 24hr. downtime exceeded
- Driver efficiency improvement
- Fleet management
- £ ‘per kilometre use’ contracting
Business Examples

Caterpillar

Caterpillar dealerships

- Managing equipment fleets
- Optimising utilisation
Business Examples

**XEROX**

Xerox (Document Outsourcing)

- Document services optimising client print infrastructure
- Life cycle management – people, technology, service operations
- Reducing the total cost of ownership
Not just high value capital equipment!

Business models being shaped by Data & Technology
What we now know

• Well established examples of servitization exist

• The manufacturer focuses on the customer’s processes and the customer experience and value delivered by its products and services

• The product platform can be critically important

• The manufacturers technical competences, firmly rooted in design and production, are exploited

• Information and Communication Technologies are key, but only as a component in a tightly integrated system

• It can generate greater profits than product sales, though these can reduce as a proportion of revenue
Long-term Industrial Collaboration
Thank You!

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