Japanese Creative Services on Open Model Initiative

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Yoshinori Hara
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Kyoto University
# Top 50 World-Wide Innovative Companies

<table>
<thead>
<tr>
<th>2009 Rank</th>
<th>Company</th>
<th>HQ Country</th>
<th>Known for its Most Innovative (% who think so)</th>
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<th>Company</th>
<th>HQ Country</th>
<th>Known for its Most Innovative (% who think so)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Apple</td>
<td>U.S.</td>
<td>Product (47%)</td>
<td>26</td>
<td>Infosys</td>
<td>India</td>
<td>Process (40%)</td>
</tr>
<tr>
<td>2</td>
<td>Google</td>
<td>U.S.</td>
<td>Customer Experience (26%)</td>
<td>27</td>
<td>LG Electronics</td>
<td>South Korea</td>
<td>Product (46%)</td>
</tr>
<tr>
<td>3</td>
<td>Toyota Motor</td>
<td>Japan</td>
<td>Process (35%)</td>
<td>28</td>
<td>Telefónica</td>
<td>Spain</td>
<td>Business Model (40%)</td>
</tr>
<tr>
<td>4</td>
<td>Microsoft</td>
<td>U.S.</td>
<td>Process (26%)</td>
<td>29</td>
<td>Daimler</td>
<td>Germany</td>
<td>Product (40%)</td>
</tr>
<tr>
<td>5</td>
<td>Nintendo</td>
<td>Japan</td>
<td>Product (48%)</td>
<td>30</td>
<td>Verizon</td>
<td>U.S.</td>
<td>Customer Experience (38%)</td>
</tr>
<tr>
<td>6</td>
<td>IBM</td>
<td>U.S.</td>
<td>Process (31%)</td>
<td>31</td>
<td>Ford Motor</td>
<td>U.S.</td>
<td>Product (36%)</td>
</tr>
<tr>
<td>7</td>
<td>Hewlett-Packard</td>
<td>U.S.</td>
<td>Process (39%)</td>
<td>32</td>
<td>Cisco Systems</td>
<td>U.S.</td>
<td>Process (27%)</td>
</tr>
<tr>
<td>8</td>
<td>Research In Motion</td>
<td>Canada</td>
<td>Product (53%)</td>
<td>33</td>
<td>Intel</td>
<td>U.S.</td>
<td>Process (35%)</td>
</tr>
<tr>
<td>9</td>
<td>Nokia</td>
<td>Finland</td>
<td>Product (38%)</td>
<td>34</td>
<td>Virgin Group</td>
<td>Britain</td>
<td>Customer Experience (45%)</td>
</tr>
<tr>
<td>10</td>
<td>Wal-Mart Stores</td>
<td>U.S.</td>
<td>Process (49%)</td>
<td>35</td>
<td>ArcelorMittal</td>
<td>Luxembourg</td>
<td>Business Model (63%)</td>
</tr>
<tr>
<td>11</td>
<td>Amazon.com</td>
<td>U.S.</td>
<td>Customer Experience (41%)</td>
<td>36</td>
<td>HSBC Holdings</td>
<td>Britain</td>
<td>Process (32%)</td>
</tr>
<tr>
<td>12</td>
<td>Procter &amp; Gamble</td>
<td>U.S.</td>
<td>Process (27%)</td>
<td>37</td>
<td>ExxonMobil</td>
<td>U.S.</td>
<td>Process (47%)</td>
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<tr>
<td>13</td>
<td>Tata Group</td>
<td>India</td>
<td>Product (44%)</td>
<td>38</td>
<td>Nestlé</td>
<td>Switzerland</td>
<td>Product (47%)</td>
</tr>
<tr>
<td>14</td>
<td>Sony</td>
<td>Japan</td>
<td>Product (40%)</td>
<td>39</td>
<td>Iberdrola</td>
<td>Spain</td>
<td>Customer Experience (40%)</td>
</tr>
<tr>
<td>15</td>
<td>Reliance Industries</td>
<td>India</td>
<td>Business Model (35%)</td>
<td>40</td>
<td>Facebook</td>
<td>U.S.</td>
<td>Customer Experience (51%)</td>
</tr>
<tr>
<td>16</td>
<td>Samsung Electronics</td>
<td>South Korea</td>
<td>Product (41%)</td>
<td>41</td>
<td>3M</td>
<td>U.S.</td>
<td>Product (44%)</td>
</tr>
<tr>
<td>17</td>
<td>General Electric</td>
<td>U.S.</td>
<td>Process (36%)</td>
<td>42</td>
<td>Banco Santander</td>
<td>Spain</td>
<td>Business Model (37%)</td>
</tr>
<tr>
<td>18</td>
<td>Volkswagen</td>
<td>Germany</td>
<td>Customer Experience (38%)</td>
<td>43</td>
<td>Nike</td>
<td>U.S.</td>
<td>Customer Experience and Product (36% each)</td>
</tr>
<tr>
<td>19</td>
<td>McDonalds</td>
<td>U.S.</td>
<td>Customer Experience (55%)</td>
<td>44</td>
<td>Johnson &amp; Johnson</td>
<td>U.S.</td>
<td>Customer Experience (42%)</td>
</tr>
<tr>
<td>20</td>
<td>BMW</td>
<td>Germany</td>
<td>Customer Experience (37%)</td>
<td>45</td>
<td>Southwest Airlines</td>
<td>U.S.</td>
<td>Customer Experience (45%)</td>
</tr>
<tr>
<td>21</td>
<td>Walt Disney</td>
<td>U.S.</td>
<td>Customer Experience (68%)</td>
<td>46</td>
<td>Lenovo</td>
<td>China</td>
<td>Business Model (35%)</td>
</tr>
<tr>
<td>22</td>
<td>Honda Motor</td>
<td>Japan</td>
<td>Product (47%)</td>
<td>47</td>
<td>JPMorgan Chase</td>
<td>U.S.</td>
<td>Process (62%)</td>
</tr>
<tr>
<td>23</td>
<td>AT&amp;T</td>
<td>U.S.</td>
<td>Product (33%)</td>
<td>48</td>
<td>Fiat</td>
<td>Italy</td>
<td>Product (30%)</td>
</tr>
<tr>
<td>24</td>
<td>Coca-Cola</td>
<td>U.S.</td>
<td>Customer Experience (38%)</td>
<td>49</td>
<td>Target</td>
<td>U.S.</td>
<td>Customer Experience (60%)</td>
</tr>
<tr>
<td>25</td>
<td>Vodafone</td>
<td>Britain</td>
<td>Product (25%)</td>
<td>50</td>
<td>Royal Dutch Shell</td>
<td>Netherlands</td>
<td>Process (45%)</td>
</tr>
</tbody>
</table>

Reference: Bloomberg Businessweek
Issues of the Knowledge & Servicizing Economy

- Rapid Commoditization
  - Decreasing values (price sensitive, difficult to maintain uniqueness)
  - Instability in business continuity

- Bipolarization
  - Cloud Environment (A few asset-heavy, large companies vs. many asset-light, small companies)
  - Focus on open, global market, or on closed, domestic market
  - In Japan, suffering from “Galapagos syndrome” (latter case)

- Constraints of Asset Utilization
  - Human resources, energy resources, time, etc. are limited and restricted
Our Solution

- Pursing the balance of **business sustainability and profitability** (productivity, efficiency)
- Focus on maintaining and developing **value creation with intangible assets**
- Reveal **“governance rules”** behind the scene and utilize them on the IT environment

Analyze **Japanese Creative Services**, and reconstruct the framework that hooks with the context of global, open, IT environment
Defined as Japanese value-added services influenced by such contexts as natural, cultural, historical, and/or lifestyle factors.
Shinise [じんせい] （老舗）

- A shop of long standing (usually more than 100 years old)
  - Mainly private, family-owned companies

Story-based brand development
Omotenashi (Japanese hospitality)

Keiunkan, an Onsen Ryokan (Japanese hot-spring hotel) since 705, is the oldest hotel in the world.

Kongo Gumi, a construction company since 578 (more than 1,400 years old) built many shrines/temples, the Osaka Castle, etc.
Japanese (Highly Contextual) Food

Edo-mae Sushi

Dialectic interaction
Increase service literacy by encouraging each other

Kyo-kaiseki - a high-quality Japanese food

Invariant structure
Based on “Umami” (amino acids) that is produced from dashi (Japanese soup stock made from fish and kelp)
Not based on oil or sugar
Not just using Japanese food materials
Japanese Traditional Cultural Activities

Tea ceremony

“Iemoto system” (a sustainable mechanism)

Traditional incense-smelling ceremony

Flower arrangement
Cool Japan

Manga

“Otaku” animation

Cosplay

Figures

Respect diversity

Japanese pop idols

Business co-creation with customers
Characteristics of Japanese Creative Services (1)

- Anecdotal Values based on Nature, Culture, History, and Lifestyles
  - Recognize the value of contexts
  - Knowing Process
    - Focus more on the process and circumstances
    - Create new tacit knowledge through the process
  - cf. Knowledge -- Can be extracted by formalization and standardization, but the service level would be restricted
Stories focused on Culture and History

Ogawa School for “Sencha” (green tea) ceremony
Characteristics of Japanese Creative Services (2)

- Omotenashi (Japanese Hospitality)
  - Dialectic
    - Interact between service providers and consumers to increase the sensitivity for understanding service value (i.e., service literacy)
    - cf. Dialog -- Provide what the consumer wants

- Omonpakari
  - Guess what the consumer thinks, and/or the circumstances state, then act with such implicit role model
Co-creation of Values between Service Providers and Consumers

☐ An ethnomethodological approach - analysis of interactions

- Customers cannot simply ask for what they want; instead they need to make their actions culturally accountable
- Customers perform a role in a sense that they do not admit that they do not know; they at least show that they are capable of acting in the culturally appropriate way
- The chefs on the other hand respect this performance and treat the customers as more knowledgeable than they may be. The more customers acquire skills and knowledge to evaluate Sushi, the harder the chefs need to work to respond to the customers
- This tension therefore seems to help grow the Sushi culture

Chefs strive to impress customers even more.

Customers struggle to learn more about Sushi.

tension (dialectic relations of service)
Characteristics of Japanese Creative Services (3)

- Duality Structure in Inheritance of Authority and Service Competence
  - Long-term Trust Relationship
    - Put emphasis more on the long-term relationship between service provider and consumer than the short-term profitability only
  - Duality
    - Sustainable because of changing, and changeable because of sustaining (co-existence of contrary concepts)
    - cf. Dualism - Distinguishing contrary concepts with each other may result in falling into short-term goal
Service Inheritance Structure

- Japanese Service Inheritance Structure ("Iemoto System")
  - Iemoto: Top management of a school who gives authority
  - Natori: Expert/Higher Manager who maintain technology/methods

US Service Inheritance
- HQ
- Employee
- Branch
- Service
- Service Clients

Authorization Structure with Manual-based Duplication

Japanese Service Inheritance
- Iemoto
- Natori
- Deshi
- Dual Hierarchical Structure
- Authorization Structure
- Technology Structure
- Service Clients
# Summary of Japanese Creative Services

<table>
<thead>
<tr>
<th>Japanese Creative Services</th>
<th>Other Typical Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dialectic</strong></td>
<td><strong>Dialog</strong></td>
</tr>
<tr>
<td>• Co-creation of values by encouraging each other to increase service literacy through the interaction between service provider and consumer</td>
<td>• Follow what customer wants and needs</td>
</tr>
<tr>
<td><strong>“Omotenashi”</strong></td>
<td><strong>Tacit Knowing</strong></td>
</tr>
<tr>
<td><strong>Awareness, Anecdotal Values</strong></td>
<td>• Evaluate not just the result but also the process, context, and environment</td>
</tr>
<tr>
<td><strong>Duality Organization Structure</strong></td>
<td><strong>Knowledge</strong></td>
</tr>
<tr>
<td>• Co-existence of contrary concepts (Sustainable because of changing, and changeable because of sustaining)</td>
<td>• Exists as a result of the service process</td>
</tr>
<tr>
<td><strong>Long-term Trust Relationship</strong></td>
<td><strong>Simple Dualism Structure</strong></td>
</tr>
<tr>
<td><strong>Dialog</strong></td>
<td>• Change vs. Sustain</td>
</tr>
<tr>
<td>• Follow what customer wants and needs</td>
<td>• May fall into short-term profitability goal only</td>
</tr>
<tr>
<td><strong>Knowledge</strong></td>
<td><strong>Simple Dualism Structure</strong></td>
</tr>
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<td><strong>Simple Dualism Structure</strong></td>
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Creative Service Knowledge Management

- Objectives
  - Integrate, Accumulate, and Evaluate of Characteristics of Creative Services on top of IT Environment
  - Human Resource Development for Creative Service Designers
    - Pursing a designer who can design serve applications based on IT environment such as OMI
    - Accumulate creative service patterns towards global service enhancement

- Approach
  - Utilize OMI (Open Model Initiative) being developed at University of Vienna
    - Apply to OMI for implementing such unstructured characteristics as dialectic interaction, tacit knowing, and dynamic evaluation
    - Develop design methodology to distinguish IT-initiated knowledge management process and human-dependent tacit knowledge process
Designing Creative Service Knowledge Management System

Japanese Creative Services (Shinise, Food, Cultural Activities, Cool Japan)

Service Globalization

Characteristics of Japanese Creative Services
- Omotenashi Interaction
- Tacit Knowledge Management
- Dynamic Service Evaluation Model
...

Accumulate Templates

University of Vienna, OMI Consortium Member
Example: Community-based Knowledge Sharing, Business Process Management, Finance, etc. (http://www.openmodels.at)

OMI (Conceptual Design Environment, Domain Specific Modeling Development)

ADOxx (Meta-modeling IT Development Environment)

Japanese Creative Service (An Application of OMI)

Can design service model on top of OMI

CSD (Creative Service Designer)

Kyoto University

Human Specific Knowledge/Know-how

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OMI (Open Model Initiative) as a Hybrid Modeling Framework

- Develop a prototype of characteristics of Japanese Creative Services working with University of Vienna
  - OMI: Meta modeling framework, hybrid approach, customization, seamless integration with IT development environment

Characteristics of Japanese Creative Services (Process, Evaluation)

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View (1): Omonpakari
- A Japanese Service Interaction Model -

Knowledge
Interaction (Ad-hoc)
Runtime Role Model
High-Context Information (Culture, History, Lifestyle)

Service Provider
Proactive Anticipation

Interaction
Service Consumer
View (2): Dynamic Service Evaluation Modeling

- Analyze the dynamic behaviors between expectation and satisfaction of a service consumer
- Extract relationship between CS (Customer Satisfaction) and Estimation Gap (MEV - EV)
- Distinguish Novelty satisfaction (above expectation) with familiarity satisfaction (meet expectation)

View (3): Develop and Accumulate Japanese Service “Kata” (Templates)

- Extraction of “Kata” from Each Japanese Creative Service
  - Common “Kata” and domain/school dependent “Kata”
  - Crystalized essential knowledge derived from ascendants’ experience
  - Extract meta-model of “Kata” (“Kata” of “Kata”)
    - “Kata” is not a homogeneous manual
    - Not directly be copied, but be created with such meta-model
  - Accumulate “Kata”
    - Cf. flower arrangement, tea ceremony, Kendo, Judo, Karate, etc.
  - Share with others who have different cultural backgrounds
Summary

Japanese Creative Services
- Categorized as a high-context, sustainable business model
- Less commoditized value co-creation process and brand development
- Omotenashi (Japanese hospitality), Omompakari model, Iemoto system, ...

Japanese Creative Services on OMI
- Extending the business architecture to redefine the roles of human being and IT/machines towards open, global market
- A case of cultural & social computing
- Core competence: an extensive, hybrid modeling
Thank you for your kind attention!

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