Sound Business Model and a New Technology: Essential to Product and Process Innovation

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Question

• Why Leaders become Losers?
  – To cherish traditions, old buildings, ancient cultures and graceful lifestyles is a worthy thing – but in the world of technology to cling to outmoded methods of manufacture, old product lines, old markets, or old attitudes among management and workers is a prescription for suicide.

  • Sir Leuan Maddock
  • New Scientist, 1982
New Organization???

• In 2003, Apple introduced the iPod with the iTunes store, revolutionizing portable entertainment, creating a new market, and transforming the company.
• But Apple was not the first to bring digital music players to market.
• Why iPod and not the Rio (1998) or Cabo (2000), succeed?
The Power of IT to Accelerate Organizational Transformation

- Otis Elevator - a manufacturing company
  - Transformed to a logistical and service company
  - Benchmarking with Ritz Carlton, Southwest Airlines, Disney and UPS

- Equity Bank – a MFI
  - Converted to a Commercial Bank (2005)
  - Aiming to be the most preferred bank not only in Kenya but in all of Africa
Business Model - Definition

- A Business Model defines how an organisation interacts with its environment to define a unique strategy, attract the resources and build capabilities required to execute the strategy, and create value for all stakeholders.

  » L. Applegate (Jan 2008), Harvard Business School
Business Model: Elements

- **Customer Value Proposition**
- **Profit Formula**
  - Revenue model, cost structure, margin model, resource velocity
- **Key Resources**
  - People, technology, equipment, facilities, etc.
- **Key Processes (operational and managerial)**
  - Includes also company’s rules, norms, metrics
    » M. Johnson et al (Dec 2008), Harvard Business Review
• Best Practices for SAP implementation in Kenya (Research)
  – The study established that top management support, effective project management, business process reengineering, data conversion and phased project implementation approach are critical to success in SAP project implementation in Kenya.

» C. Kirimi & F. Acosta (2009), Strathmore University
Mapping of Processes

• CVS, Cisco and Otis Elevator
  – are among the many companies gaining a market edge by competing on technology-enabled processes – carefully examining their working methods, revamping them in interesting ways, and using readily available enterprise software and networking technologies.


• Hilton, Nairobi Hospital, Gertrudes, Equity Bank
Equity Bank Ltd.

- Implemented new technology (Finacle Systems) in 2005; cost more or less Ksh1B.

- New Business Model
  - Customer Value Proposition
  - Profit Formula
  - Key Resources
    - aggressive staff capacity building through hiring of new staff with specialised skills and competencies as well as staff training and development
  - Key Processes
    - Application Business Process Re-engineering
Disruptive technology and disruptive innovation are terms used in business and technology literature to describe innovations that improve a product or service in ways that the market does not expect, typically by being lower priced or designed for a different set of consumers...
## Equity Bank’s Product Innovation

<table>
<thead>
<tr>
<th>Cash Back</th>
<th>A product allows customers to use their ATM cards to pay for their shopping and at the same time withdraw cash from retail stores and petrol stations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fanikisha</td>
<td>These all-inclusive products target women in business, enabling them to access affordable loans from Kshs1,000 to over Kshs10 million.</td>
</tr>
<tr>
<td>Hekima Milele</td>
<td>A mortgage and investment product developed as a result of the strategic collaboration between Housing Finance (HF), British-American Insurance Company (Kenya) Limited (BAICL) and the Bank, leveraging on the competitive advantages of the three institutions.</td>
</tr>
<tr>
<td>Kilimo Biashara and Uvuvi Biashara</td>
<td>These products provide affordable credit facilities to farmers and fishermen.</td>
</tr>
</tbody>
</table>
Equity Bank Results (2005-2007)

- **Growth in Customer Deposits**
  - 2003: 3,369
  - 2004: 5,081
  - 2005: 9,048
  - 2006: 16,337
  - 2007: 31,536
  - **250% growth in 2 years**

- **Growth in Customer Numbers**
  - 2003: 252
  - 2004: 413
  - 2005: 556
  - 2006: 1,014
  - 2007: 1,840
  - **230% growth in 2 years**
Equity Bank Results (2005-2007)

Growth in Total Assets

- 2003: 3,924
- 2004: 6,707
- 2005: 11,457
- 2006: 20,024
- 2007: 53,129

Growth in Gross Loan Portfolio

- 2003: 1,734
- 2004: 3,099
- 2005: 5,885
- 2006: 11,428
- 2007: 22,226

364% growth in 2 years

278% growth in 2 years
Equity Bank Results (2005-2007)

- 375% growth in 2 years
- 836% growth in 2 years
Equity Bank Results (2005-2007)

Growth in Liquid Assets

- 2003: 2,025
- 2004: 3,282
- 2005: 4,655
- 2006: 6,364
- 2007: 25,588

Growth in Staff Numbers

- 2003: 354
- 2004: 550
- 2005: 884
- 2006: 1,394
- 2007: 2,418

450% growth in 2 years

174% growth in 2 years
Apple’s Innovation

• It took a good technology and wrapped it in a great business model.

• Apple’s true innovation was to make downloading digital music easy and convenient.

• The company built a ground breaking business model that combined hardware, software, and service.


• Consumers find it convenient to use mobile phones, video, internet access, etc. through one single device – i.e. convergence.
Apple Results

• In just 3 years, the iPod/iTunes combination became nearly $10 billion product, accounting for almost 50% of Apple’s revenues.

• Apple market capitalization catapulted from around $1 billion in early 2003 to over $150 billion by late 2007.

  – M Johnson et al (Dec 2008), Harvard Business Review
### Otis Process Innovation: Fivefold Improvement

<table>
<thead>
<tr>
<th>Step in Business Process</th>
<th>Proportion of Elapse Time</th>
<th>Cycle Time Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Proposal</td>
<td>3%</td>
<td>10x</td>
</tr>
<tr>
<td>Sales Processing</td>
<td>8</td>
<td>4x</td>
</tr>
<tr>
<td>Order Fulfillment</td>
<td>30</td>
<td>5x</td>
</tr>
<tr>
<td>Field installation</td>
<td>41</td>
<td>12x</td>
</tr>
<tr>
<td>Closing Activities</td>
<td>18</td>
<td>2x</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>5x</strong></td>
</tr>
</tbody>
</table>
Otis Elevator Results

Figure A  United Technologies Stock Price January 1, 2003–January 1, 2004

UTC SHARE PERFORMANCE

Source: Company documents.
Conclusion

• Information Economy Benefits
  – New Technology + Old Organization = Ok, but disappointing results
  – New Technology + New Organization = 10x Results