Business Process Management: Amazon

MIS 460 IT Strategy Group 1:
Caitlin Chamberlain, Andrea Dragoni, Julie Payton, Sammi Devlin, Marlana Perillo Gentile, Jasmine Mina, and Akash Bajaj
History of BPM

1980’s -- Total Quality Management
1990’s -- Business Process Reengineering
1995 -- Managerial/Collaborative Work
1997 -- Learning Organization, Knowledge Management
2001 -- Business Process Management
#1 Priority

- BPM is a collaborative effort between business units and the IT world.
- BPM is an approach that is designed to produce better processes.
- BPM has recently been identified as the number one business priority.
“If it doesn’t make three people angry, it is not a process”

Beyond Reengineering (Michael Hammer, 1996)
Different Perspectives, Different Detail

**Scope**
- Planning
- A “context diagram”
- Clarify boundaries, process vs. organization
- Decomposition
- Boxes

**Concept**
- Understanding
- “Business-oriented” overview of concepts
- Maximize participation
- The “flow of work,” case by case (“tell a story”)  
- Boxes and lines

**Detail**
- Specification
- All detail for implementation
- Completeness and rigor
- Detailed flow (perhaps in BPMN) plus “out of context” rules, procedures, logic, etc.
- Boxes, lines, operators, …

---

**Process Model** (e.g., BPMN)

We use decomposition to clarify scope
The Process

Business Process Innovation

Business Process Management

Manage Change

Process Design

Specification and Modeling

Goal Specification, Environmental Analysis
Organizational Analysis

Process Models

Process Implementation
Workflow Modeling and Implementation

Manage Execution

Process Enactment
Workflow Execution / Run

Time

Export for other reporting purpose

Target Metrics

Metrics / Audit Events

Implemented Processes

Process Evaluation
Warehousing / Controlling / Process Mining

Managing

Process Monitoring
Business Activity Monitoring

Monitoring Results

Business Process Monitoring

Business Process Automation
IT Migration Success Criteria

1. Strong Executive Commitment
2. Motivated Engineers
3. High Cloud Readiness and Low Migration effort
4. Strong Vendor Partnership Around Cloud Licensing and Support
Appian BPM Suite Component Breakdown

Figure 1. The Appian BPM Suite Component Breakdown before Migration

Figure 2. The Appian BPM Suite Component Breakdown after Migration
Amazon’s Business Model Canvas

Key Partners
- Suppliers and manufacturers
- Network of sellers

Key Activities
- Merchandising
- Production and Design
- Intellectual: Kindle platform

Key Resources
- Publishers
- Physical: Warehouses
- Human: Web and application development

Value Propositions
- Price
- Convenience

Customer Relationship
- Self-service
- Automated services

Customer Segments
- Mass market

Channels
- Amazon.com
- Mobile apps
- Other retailers

Cost Structure
- Cost-driven
- Economies of scale

Revenue Streams
- Retail sales
- E-books and content
- Comission on reseller sales
- Prime monthly subscriptions

Legend
- Online Retail
- Kindle Ecosystem

DigitalBusinessModelGuru.com
BPM Improves the Business Model

• BPM Migration to the Cloud

• Logistics (Delivery)

• Big Process – Far More Important than Big Data
BPM Improves the Business Model

- Communication with Key Partners and Customers
- Reduce Error Rate
- Acquired Kiva system to improve infrastructure
## As-Is To-Be Analysis

<table>
<thead>
<tr>
<th>Business Strategy</th>
<th>AS-IS</th>
<th>TO-BE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AS-IS</strong></td>
<td><strong>TO-BE</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Business Strategy</strong></td>
<td><strong>Products &amp; Services</strong></td>
<td><strong>Products &amp; Services</strong></td>
</tr>
<tr>
<td></td>
<td>• Wide variety of products that range from several departments</td>
<td>• Amazon Publishing</td>
</tr>
<tr>
<td></td>
<td>• Server Space</td>
<td>• Cloud Play</td>
</tr>
<tr>
<td></td>
<td>• Overnight delivery</td>
<td>• Same-day delivery</td>
</tr>
<tr>
<td></td>
<td><strong>Competitors</strong></td>
<td><strong>Competitors</strong></td>
</tr>
<tr>
<td></td>
<td>• #1 online retailer</td>
<td>• Increase brand awareness in other countries</td>
</tr>
<tr>
<td></td>
<td>• Netflix</td>
<td>• eBay</td>
</tr>
<tr>
<td></td>
<td>• eBay</td>
<td>• ShopRunner</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business Strategy</th>
<th>AS-IS</th>
<th>TO-BE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Customers &amp; Clients</strong></td>
<td><strong>Customers &amp; Clients</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Competitors</strong></td>
<td><strong>Internal Decisions</strong></td>
<td></td>
</tr>
<tr>
<td>• Netflix</td>
<td><strong>Governance</strong></td>
<td></td>
</tr>
<tr>
<td>• eBay</td>
<td>• Relentless focus on customers</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business Strategy</th>
<th>AS-IS</th>
<th>TO-BE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal Decisions</strong></td>
<td><strong>Governance</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Partners</strong></td>
<td><strong>Partners</strong></td>
<td></td>
</tr>
</tbody>
</table>
## As-Is To-Be Analysis

<table>
<thead>
<tr>
<th>Business Structure</th>
<th>AS-IS</th>
<th>TO-BE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Org Structure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Key Processes</strong></td>
<td>Customer Service</td>
<td>Maintain exceptional customer service</td>
</tr>
<tr>
<td>Human Resources</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IT Strategy</th>
<th>AS-IS</th>
<th>TO-BE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Technology Scope</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Key Applications</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>System Competencies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IT Infrastructure</th>
<th>AS-IS</th>
<th>TO-BE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Architecture</strong></td>
<td>physical disk space/servers</td>
<td>Movement toward Cloud</td>
</tr>
<tr>
<td><strong>Key Process</strong></td>
<td>Delivery logistics</td>
<td>Kiva Systems for fully automated warehouses</td>
</tr>
<tr>
<td>Human Resource</td>
<td></td>
<td>Delivery logistics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Human Resource</td>
</tr>
</tbody>
</table>
Amazon’s Business Problem

“Amazon.com uses Business Process Management (BPM) software to automate a number of mission-critical financial operations processes. These involve disparate teams across the company and include handling confidential financial data for payment, payroll, and accounting processes. Managed correctly, the automation and execution of these financial process applications helps ensure that the company maximizes profit, reduces errors, and eases compliance burdens.”

~ Appian.com
Amazon’s Solution

- Use BPM software to automate important financial operations processes/tasks
- BPM software helps Amazon.com handle a large number of invoices each day
- Appian BPM Suite creates a technology system that combines everything into a single application
- Emphasize a positive user experience
## Ansoff Matrix

<table>
<thead>
<tr>
<th>Existing Markets</th>
<th>New Markets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market Penetration Opportunities</strong></td>
<td><strong>Product Development Opportunities</strong></td>
</tr>
<tr>
<td>- Expand post-delivery surveys to social networking sites</td>
<td>- Reach out to new suppliers for more innovative products</td>
</tr>
<tr>
<td>- Improve interface to be more aesthetically pleasing</td>
<td>- Make more of their own products (Amazon Kindle)</td>
</tr>
<tr>
<td>- Keep up with evolving technology</td>
<td>- Update existing products with new features</td>
</tr>
<tr>
<td><strong>Market Development Opportunities</strong></td>
<td><strong>Diversification Opportunities</strong></td>
</tr>
<tr>
<td>- Introduce the company in more countries</td>
<td>- Offer services as well as tangible products worldwide</td>
</tr>
<tr>
<td>- Make Amazon more popular in existing locations</td>
<td>- Example: Taxi Service</td>
</tr>
<tr>
<td>- Target older generations who are less tech savvy</td>
<td>- Create an Amazon weight loss program where food will be delivered</td>
</tr>
<tr>
<td></td>
<td>- Example: Includes a workout regimen</td>
</tr>
</tbody>
</table>

**Existing Products/Services**

**New Products/Services**
## Pestle Analysis

<table>
<thead>
<tr>
<th>Political</th>
<th>Economic</th>
<th>Social</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Legal Factors</td>
</tr>
<tr>
<td>Technical</td>
<td>Legal Factors</td>
<td>Environment</td>
</tr>
<tr>
<td>Environments</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Boston Matrix

Market Growth

High

Low

Market Share

High

Low

High

Low
Mintzberg’s 5 Ps of Strategy

This is the choice a “player” will make in every possible situation; it is the company’s course of action for business in the future.

This discusses how a company will cater to the personality of their target market – it unites individuals by common thinking.

This defines where the company will be within the marketplace; it delineates their position in the “environment.”

This is a specific maneuver or aspect of the company that will help to sustain competitive advantage.

This is a study of past patterns of consumer behavior that will help a company moving forward.
Porter’s 5 Forces

- Threat of New Entrants
- Bargaining Power of Suppliers
- Rivalry Among Existing Competitors
- Bargaining Power of Buyers
- Threats of Substitute Products or Services
<table>
<thead>
<tr>
<th>Environmental Factors</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political &amp; Legal Environment – HIGH</td>
<td>Demographic Environment – MEDIUM</td>
</tr>
<tr>
<td>Global companies and country specific limitations on technology usage; Data Privacy Laws; Accounting</td>
<td>Requires new approach to considering “processing” as an asset which may provide an obstacle to older generation. Technologically savvy younger generation may be reluctant to depend on</td>
</tr>
<tr>
<td>Complementors – MEDIUM</td>
<td>Social Environment – LOW</td>
</tr>
<tr>
<td>Economic conditions, employment turnover, competition</td>
<td>Integration with both social and mobile networks is available</td>
</tr>
<tr>
<td>Technical Environment – MEDIUM</td>
<td>Macroeconomic Environment – MEDIUM</td>
</tr>
<tr>
<td>Slow or lack of internet connection One company holds key to entire BPM platform</td>
<td>Investment in new technology may be cost prohibitive in poor economic conditions</td>
</tr>
</tbody>
</table>
SWOT Analysis

Strengths

• Large customer database
• Most successful online retailer
• Customers can easily compare prices
• Successful promotions and advertisements

Weaknesses

• Purchases are from distributors – not manufacturers
• Not everyone who looks at products makes a purchase
SWOT Analysis

Opportunities
• Expansion is always an option
• Desire to purchase online continues to grow
• E-Commerce is increasing in popularity

Threats
• Market entry is very easy
• Lots of competition
• Consumers still prefer to make in store shopping purchases when it comes to certain products
Alternatives

• Purchase specialty software programs
• Handle exceptions individually
• Auto match documents
• Use a manual spreadsheet to handle exceptions
• Develop internal system for purchase-to-pay
Recommendations

• BPM platform that eliminates writing code
• Tailor BPM platform to specific needs
• Integrate BPM platform with ERP platform
• Build applications for all purchase-to-pay operations
• Use social/mobile interfaces to access BPM platform
<table>
<thead>
<tr>
<th>Step</th>
<th>Step Description and Objective</th>
<th>Assigned Responsibility</th>
<th>Target Completion Date</th>
<th>Issues/Comments/Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Migrate to Amazon Web services cloud from Appian BPM Suite that only controls finances</td>
<td>IT department, CIO</td>
<td>3 months</td>
<td>Transition failing or transition time</td>
</tr>
<tr>
<td>2</td>
<td>Strong executive commitment to cloud services</td>
<td>CEO</td>
<td>Immediately</td>
<td>Time</td>
</tr>
<tr>
<td>3</td>
<td>Engineers set up the cloud system</td>
<td>Engineering team</td>
<td>3 months</td>
<td>Time, budget, technological issues</td>
</tr>
<tr>
<td>4</td>
<td>Transfer all the web-based data from the BPM models</td>
<td>IT department, CIO</td>
<td>1 month</td>
<td>Time, possible internet failures</td>
</tr>
<tr>
<td>5</td>
<td>Create strong partnerships around cloud licensing and support</td>
<td>CEO, VP marketing</td>
<td>3 months</td>
<td>Time, failed relationships</td>
</tr>
<tr>
<td>6</td>
<td>Test security of cloud system</td>
<td>CIO</td>
<td>1 month</td>
<td>Budget, time</td>
</tr>
</tbody>
</table>
Questions?
Works Cited

• http://www.appian.com/bpm-customers/story/amazon.jsp
• http://extreme-touch.blogspot.com/2013/08/normal-0-21_FALSE-false-false-false.html