Creating IT-enabled Business Options

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Agenda

- Why justify IT investment?
- What are business options?
- Process of creating business options
- Where are the 'options' opportunities?
- Business Options cases from
  - Trinity Health
  - GE Aircraft Engines
  - UPS – video clip
- BREAK
- How to prepare for creating business options?
- Weaknesses and Opportunities
- Issues in creating business options
- Traits of option exploiting organizations

Why does an organization want technology justification?

- What are the CFO’s real concerns?
- What are the CIO’s fears?
- What is the objective of an IT investment justification?

IT Justification is important…
…but not executed well

- 86% of IS professionals believe that IT value is a priority, but under 15% conducted post-implementation measurement*

Commonly used retrospective approaches

- Cost-Benefit analysis
- Net Present Value (NPV)
- Return on Assets (ROA)
- Total Cost of Ownership (TCO)

*Source: Giga Group survey

Most financial justification approaches consider tangible investments only

- How do we account for investments that create assets that provide agility to businesses?
  - First mover
  - Killer Apps
  - Process superiority
  - Flexibility to launch products quickly
  - Improved image from greater reliability
  - Tighter integration with partners
  - Compatibility with other products

What are IT-enabled business options?

- IT-enabled business options are choices afforded, but not necessarily anticipated, from
  - IT investment to
  - exploit business opportunities to
  - derive competitive advantage
Flexibility or Agility as a Business Option

Option + 2nd Investment = Asset

Airlines: Option + Aircraft = Revenue

Server Capacity + Business Application = Necessary Business Benefit

Information Technology

Creating Business Options

A process

Where are the opportunities for IT-enabled business options?

<table>
<thead>
<tr>
<th>Cost Mgt</th>
<th>Design</th>
<th>Production</th>
<th>Logistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunity</td>
<td>IT Investment</td>
<td>Options Enabled</td>
<td>IT Investment</td>
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</tbody>
</table>

Cost Mgt can lead to Competitive Advantage*

Options creation at AirTran and JetBlue

- Managing Costs lead to lower cost per seat/mile
  - US Airways 11.8c
  - AirTran 8.4c
  - JetBlue 5.8c
- Leads to Available Cash
- Cash gives opportunities to invest in business options
  - Purchase profitable routes
  - Sweet deal on canceled Boeing plane orders
  - Hire experienced laid off workers

Where are the opportunities for IT-enabled business options?

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<tbody>
<tr>
<td>Fully allocated costs; ABC</td>
<td>Knowledge Based Systems</td>
<td>Robotics linked with design and admin. systems</td>
<td>Real Time samples, tests, modification</td>
</tr>
<tr>
<td>BPR</td>
<td>TCO, Price-based-Costing</td>
<td>Design Input</td>
<td>BPR</td>
</tr>
<tr>
<td>Contracting</td>
<td>Use Designers Knowledge</td>
<td>Rapid Develop., Testing</td>
<td>BPR</td>
</tr>
<tr>
<td>Niche mktg.</td>
<td>BOM – Costs</td>
<td>Update Design</td>
<td>TCO, Price-based-Costing</td>
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<tr>
<td>AMT Choices</td>
<td>Mfg. Errors</td>
<td>Simulated Testing</td>
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Options Payoff for AirTran, JetBlue

“... keep on giving”

- New planes
- Lower fuel costs and maintenance costs
- Happier customers
- Additional Routes
- Higher occupancy rate
- Connections to more cities
- Hiring laid off workers
- Lower pay scales
- Younger employees have lower medical bills
- More cash
- Lower capital borrowing costs
- Lock-in lower fuel prices with hedges

* With apologies to Michael Porter

Source: How Discount Airline Profited from the Bigger Rivals Woes
Wall Street Journal
August 12, 2004

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Wall Street Journal
August 12, 2004
Industry Examples of IT Enabled Business Options

- GE Aircraft Engines
- Trinity Health’s Adverse Drug Event (ADE) System
- UPS Worldport Operations

BREAK

Expected Outcomes from Business Options

- Caveat - IT-enabled business options are 'price of entry' which must be availed to create outcomes
- Outcomes include
  - New business opportunities – GE, UPS
  - Risk mitigation – Trinity Health
  - Improved customer service – UPS, Land’s End
  - Cost Control – Holy Cross Health System
  - Cost control in competitive markets can be as valuable as other outcomes

Weaknesses of IT-enabled business options

- Risk
  - business option might not payoff
  - limit future options by being locked into an IT infrastructure
  - short shelf life of the option – when competitors or vendors create better options
  - Time consuming strategic thinking and planning
  - Drain on people and systems resources
  - Requires spending 'political capital' when the outcomes are unclear

Reducing risk from IT-enabled investment in business options

- Identify dual purpose IT investments that also accomplish
  - Cost reduction
  - Improved time to market
  - Greater accuracy or quality of products
  - Partner with business leaders
  - Fix 'pain' points of the organization
    - Lost contract bids
    - Aggressive competitor
    - Causes of litigation

How to Prepare for IT-enabled Business Options?

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How to Prepare for IT-enabled Business Options at UPS
How to Prepare for IT-enabled Business Options?

- Provide something of value
- Bundle services with products
- Merge IS into CRM
- Build SCM partner alliances
- Start with one
- Join an e-Hub
- Forum for dialog
- KM sharing incentives
- Engage customers in design and test
- Strategy to exploit cost information
- Allocate profits to develop systems
- Communicate consequences
  - Higher customer expectations
  - Customers’ unwilling to pay
  - Limited bargaining power
  - Lack of integration
  - Substantial IT investment
  - Lack of communication between functions
  - Limited job flexibility
  - Unclear strategy
  - No immediate ROI
  - Resistance to cost cutting
  - Integration of upstream systems
  - High training customer reps
  - Centralized database
  - Data standards
  - Demonstrable contribution to partners
  - Understanding of business processes
  - Integration of systems
  - Highly trained
  - Centralized database
  - Data standards
  - Interface engine
  - Deep understanding of business processes
  - Cross-functional teams
  - Cross-trained employees
  - Involved customers

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<td>• Align strategy with immediate ROI • Eliminate cost cutting</td>
<td>• Lack of communication • Budgeted job functions</td>
<td>• Limited bargaining power • Lack of integration • Adjusted IT investment</td>
<td>• Higher customer expectations • Customers unwilling to pay</td>
</tr>
<tr>
<td>• Strategy to exploit cost information • Distribute profits to develop systems • Communicate incentives</td>
<td>• Forums for dialog • Share incentives • Engage customers in design and test</td>
<td>• More value added • Object with one • Join an e-Hub</td>
<td>• Provide something of value • Service with products • Merge IS into CRM</td>
</tr>
<tr>
<td>• Benchmarking data • Manager’s deep knowledge • Plans to address scenarios under various situations</td>
<td>• Cross-functional teams • Hybrid managers • Cross-trained employees • Involved customers</td>
<td>• Demonstrable contribution to partners • Understanding of business processes</td>
<td>• Integration of systems • Highly trained • Centralized databases • Data standards</td>
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Issues in Business Options

Some partly baked ideas:
- Can Knowledge Management and Discovery initiatives be tied to Options?

KM and Business Options

Exxon Mobil’s oil exploration

Source: Wall Street Journal
August 17, 2004

Issues in Business Options

Virtual alliance organizations
- What options can be created among virtually connected partners?
- Who owns the business option?
- Who bears the risk of the IT investment?
- What role does the bargaining power of the partner play?

Option creation in e-hub environments

Example: Cisco-led e-Hub (now i-Hub)

Options creation in e-Hub environments

Who will benefit?
Traits of options exploiting organizations

- An ambidextrous organization?
  - Flexible yet stable business processes
  - Encourages taking risks while rewarding successes
  - Has visionaries as well as doers
  - Insulates risk-takers from nay-sayers
  - Thinks 'integration' of systems, data, customers
- Cold reality
  - Not all firms have the $ to take on risks
  - Few options will be successful
  - There will be false-starts
  - People will get 'burnt out'
  - Serendipity will play a role