Where we are ...

Objectives

- Understand tradeoffs involved in inhouse versus outsourced development
- Identify criteria for selection of vendors
- Describe the trade-offs with insourcing, outsourcing, and offshore development
Agenda
- Definitions
- Vendor Selection
- Outsourcing
  - Why/Why Not to Outsource
  - What is Being Outsourced
  - Deciding to Outsource
- Offshoring

Definitions
- Insourcing
  - Performing development, maintenance, and delivery of IT products or services within the organization
- Outsourcing
  - Purchase of an externally produced good or service (often previously internally produced)
- Offshoring
  - Purchase of an externally produced good or service from a vendor located in a country different from that of the organization

Offshoring versus Outsourcing
(Source: Jim Senn, GSU)

<table>
<thead>
<tr>
<th>Offshoring</th>
<th>Outsourcing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractor (domestic)</td>
<td>Offshore outsourcing</td>
</tr>
<tr>
<td>Internal Process</td>
<td>Company's employees at another location</td>
</tr>
</tbody>
</table>
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Vendor Selection

- Needs assessment
- Request for proposal (RFP)
- Evaluation
- Selection of vendor
- Contracting
- Execution and monitoring
- Maintenance

Selecting Off-the-Shelf Software Packages

Prewritten, precoded application software, commercially available for sale or lease

- Appropriate when:
  - system requirements well-known
  - complexity high
  - system is large
- Need high degree of confidence that software will meet needs
- Geared to common requirements
- Best when little customization is required
Selecting Customized Software Vendors

- Application software developed by a vendor specifically for your requirements
  - Appropriate when:
    - System requirements are not well-known
    - Complexity high
    - System is large
  - Allows you to tailor your software to meet your needs
  - Geared to specific requirements
  - Best when a lot of customization would be required of a software package

Financial Viability of the Vendor

- Does vendor have sufficient capital/surplus to meet on-going obligations and absorb unexpected financial losses?
- Does vendor have contingent liabilities (e.g., lawsuits) that could adversely affect its financial condition?
- Has vendor achieved profitability from its operations?
- Concentration of revenue in one or relatively few customers?

Other Vendor Characteristics

- Can vendor provide timely on-site and/or telephone support?
- Does vendor track user questions/problems?
- Does vendor adequately test new products and releases?
- Does vendor have sufficient knowledgeable staff?
- Does vendor provide quality training and documentation?
**Contract Terms and Conditions**

- Is the timeframe within which the vendor is required to respond to problems/questions clearly defined?
- Is the extent of vendor support, training, and documentation clearly defined?
- Is the timetable for all deliverables and payments clearly defined?
- Has a favorable relationship between deliverables and payables been negotiated?
- Are all costs clearly defined?
- Are there penalties if contractual agreements are not met by the vendor?
- Does the contract allow for in-house use of the package for acceptance testing purposes prior to purchase?

**Software Packages: Package Characteristics**

- Does it provide the needed functionality?
- Is it easy to use?
- Is its design flexible enough to allow changes?
- Does it have good documentation and help functions?
- How difficult is it to interface the package with existing systems?
- How responsive is the vendor to problems?

**Tips for Success**

- Use network to help you identify qualified vendors (Trade Shows, User Groups)
- Build penalty and performance clauses into contracts (share risk and reward)
- Define responsibilities and activities
- Project management is critical
- Clearly define expectations up front
- Define scope/change control process at start
- Price is important, not everything
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Types of Outsourcing

• Software Development
  – Off-the-shelf product (e.g. Peachtree Accounting)
  – Customized off-the-shelf product (e.g. Oracle Financials)
  – Built from scratch (e.g. customized application)
• Service/Process Delivery
  – Portion of process (e.g. PC support)
  – Entire process (e.g. help desk)
  – Entire department
  – An application (e.g. sales force automation; see http://www.cio.com/summaries/outsourcing/app )

Why Outsource?

• Need for organizations to focus on core competencies
  – production, sales, finance/accounting
• Realization of greater economies (lower costs)
  – Vendors argue they can recapture scale because they specialize in IS and have lower costs because of volume discounts, sharing of resources and expertise, etc.
  – Savings are partly passed on to customers (theoretically, at least!)
Why Outsource (Cont’d)?

- Need for greater flexibility and expertise in workforce
  - Provides value-added specialized knowledge the agent brings to the transaction
  - Enables flexibility because no long term commitment to employees

Why Not Outsource?

- Loss of Strategic Assets
  - IT frequently represents ability to lead the industry and change structure of the industry. Should that strategic asset be traded away or lost control of?
  - Managers who do not realize that IT can be a strategic weapon are more likely to trade this strategic asset

Why Not Outsource (Cont’d)?

- Do not realize greater economies (actually higher costs!)
  - Vendors argue that they can recapture economies of scale, but if the contract overly favors the outsourcer, the organization may pay more than if the function were insourced.
- Cost savings might have been achieved internally
  - Large companies should be able to achieve economies of scale on their own.
  - In-house data centers can automate and streamline operations and invest in new productivity-improving technologies just as outsource vendors do
Why Not Outsource (Cont'd)?

- Cannot readily access or utilize increased systems expertise
  - Experts on your system may now belong to the vendor
- Lose “loyal” workforce
  - Even if the vendor hires your best people, vendor may put them on other accounts to attract new customers
  - OR, if you outsourced to get vendor’s expertise you may just be getting your own
- Threat of vendor opportunism
  - Extreme outsourcing (selling assets, people, etc) puts you at mercy of vendor
  - Excess fees that client thought were covered may be assessed

What is Being Outsourced?

Source: Aquent Survey

Large Co’s. vs. Small Co’s.

Currently

Considering
1. The activity does not concern strategic assets of the company, nor is it a core competency; outsourcing would allow the firm to focus more on its core capabilities.

2. The cost to go outside is considerably less than doing it internally; costs move from fixed to variable.

3. There will be an increased flexibility in personnel because the services can be acquired as needed.

4. Other organizations are outsourcing this function, encourages the firm to follow suite.

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**Should You Outsource?**

Is the supply system or service being considered...

<table>
<thead>
<tr>
<th>A Core Competency Strategic Asset?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does firm have internal expertise?</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
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**Likely Outsource, But...**

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<td>A Core Competency Strategic Asset?</td>
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**If Outsource, Legal Protections Critical**

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Offshoring: Myths vs. Truth

- No official statistics measure growth of offshoring
- Domestic outsourcing is more popular than offshoring
- Most job losses in the U.S. are not due to offshoring
- Although 20% of jobs could be affected by offshoring, there is no guarantee that they will be
- Offshoring is not just a U.S. phenomenon

When Does Offshoring Make Sense?

- No face-to-face servicing requirement
- High information content
- Work process is “telecommutable”
- High wage differential with similar occupation in destination region
- Relatively low set-up barriers
- Low social networking requirement

Based upon these criteria

13 Million jobs in the US are candidates for offshoring

A study by the UC-Berkeley Fisher Center’s Real Estate and Urban Economics group estimates

ROI – Information Technology

Typical IT Scenario
Annual cost per programmer (US $ 1000s)

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</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>100+</td>
<td>60</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offshore</td>
<td>150</td>
<td></td>
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</tr>
</tbody>
</table>

A 100 person Indian software development team can result in $6M savings per year

Run rate savings are often 50%+ with overall net savings of 30%

1 Fully loaded cost including salary, benefits, space, and overhead costs like transportation, catering.
Barriers to Offshoring

• Few English speakers
• Lack of understanding of Western business culture
• Poor intellectual property protection
• Infrastructure issues, lack of skilled workers

Source: Hirschheim et al. 2005

Offshoring Best Practices

• Hire an intermediary as a broker and guide to quickly move through learning curve
• To manage risks
  – Pay attention to legal issues and contracts
  – Communicate strategy to stakeholders
• Establish meetings and communication with suppliers (and their workers) to work effectively
• Think about production and transaction costs

Rottman & Lacity, MISQ Executive 2004

Summary

• Selecting a Vendor
• Outsourcing
  – Definitions
  – Factors For/Against
  – Guidelines for outsourcing
• Offshoring trends and considerations