

UoG / UESTC Joint School of Engineering

Engineering Project Management & Finance

Engineering Economics: Outsourcing,
Insourcing, Rightsourcing

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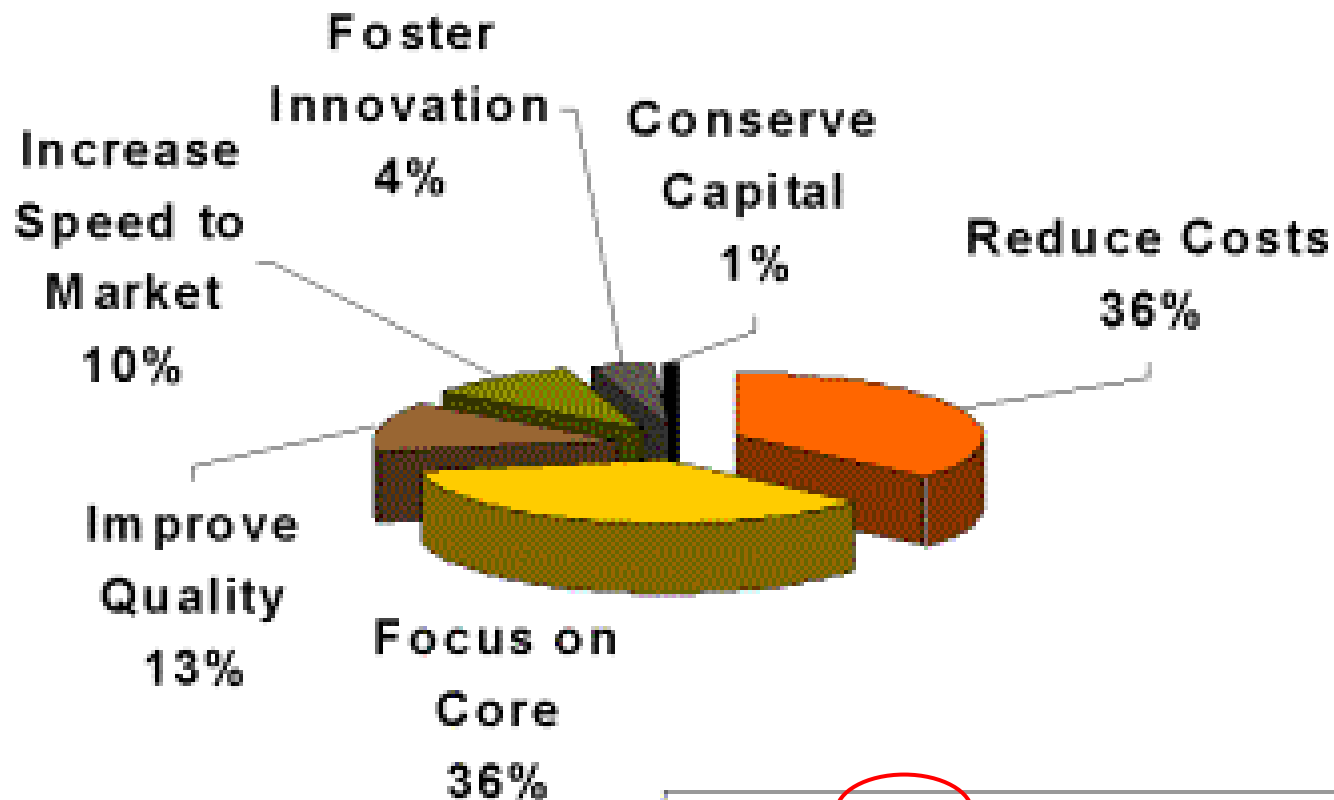


- Outsourcing -
 - “the strategic use of outside resources to perform activities traditionally handled by internal staff and resources” Dave Griffiths
- Why Outsource?
 - Provide services that are scalable, secure, and efficient, while improving overall service and reducing costs



Why do Companies Outsource?

Top Reasons for Outsourcing



Source: The 2001 Outsourcing World Summit

- An “easy way” to increase profits
- Nike, Cisco, Apple outsource most of their manufacturing
 - Each could focus on research, marketing
 - Each has gotten into trouble
 - **2001 – Nike reported unexpected profit shortfalls due to inventory problems**
 - **2000 – Cisco had to write down billions in obsolete inventory**
 - **1999 – Apple was unable to meet customer demand for new products**

- **Traditional role - reaction to problem**
 - Reduction and control of costs
 - Avoid large capital investment costs
 - Insufficient resources available
- **Modern role – business strategy**
 - Allows company to focus on their core competencies
 - Keeping up with cutting-edge technology
 - Creating value for the organization and its customers
 - Building partnerships



What Can be Outsourced?

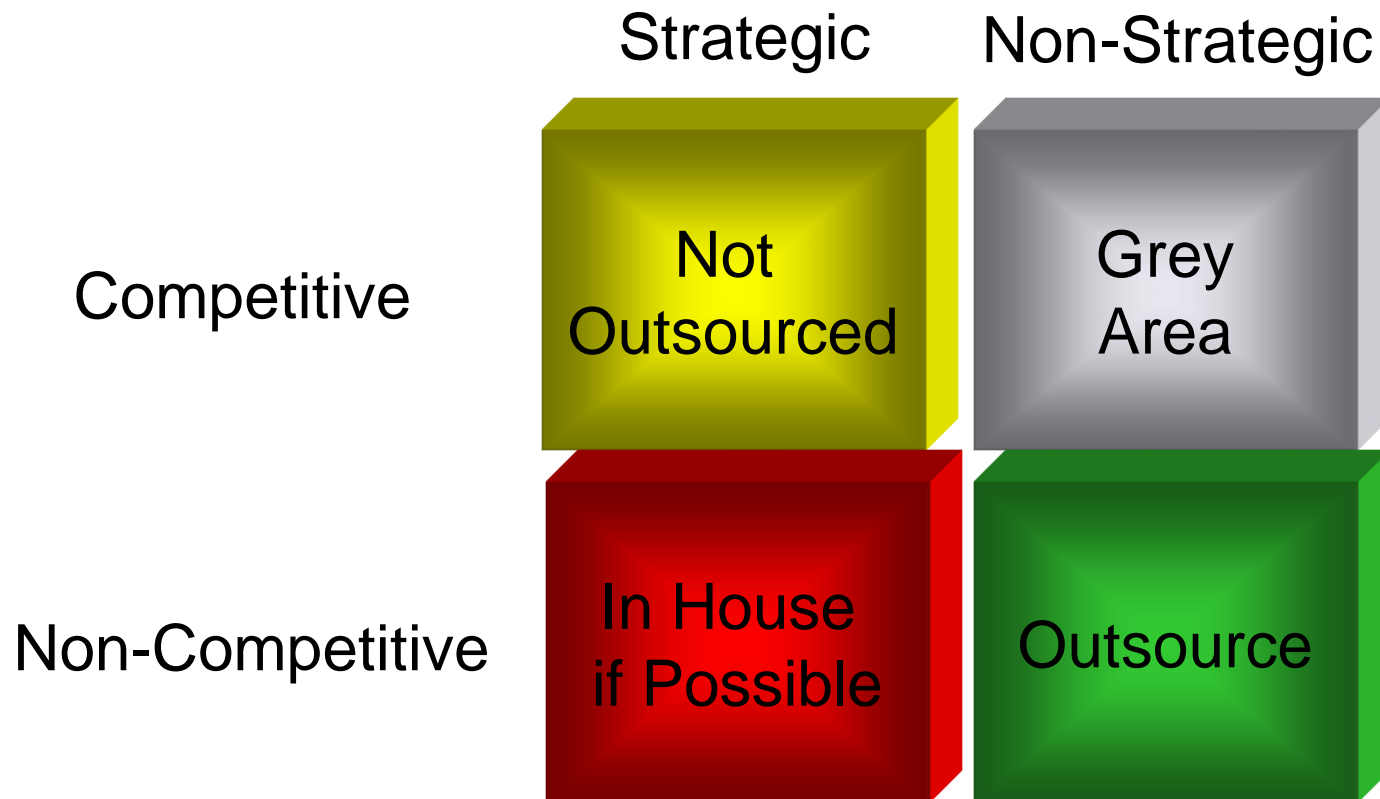
- system integration
- data network
- mainframe data center
- voice network, internet/intranet
- maintenance/repair
- applications development
- e-commerce
- end-user support system



Efficient Managerialism

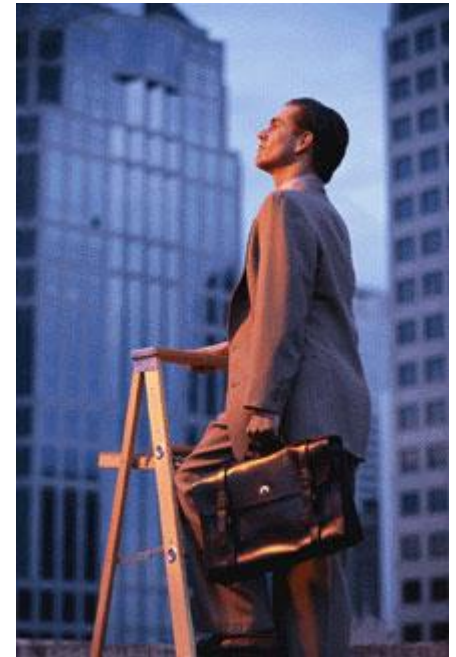


PricewaterhouseCoopers Model



How to Implement Outsourcing

- Program initiation
 - Identify critical and non-critical business activities
 - Identify possible outsource candidates and initiate discussion on options
- Program implementation Operations
 - Transferring staff
 - Service Level Agreement (SLA)
 - Establish communications between partners
 - Actual transfer of the service
 - Establish management procedures
- Contract agreement

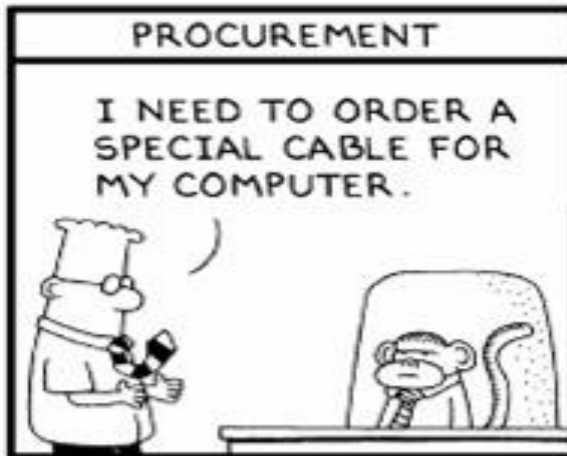


Problems With Outsourcing

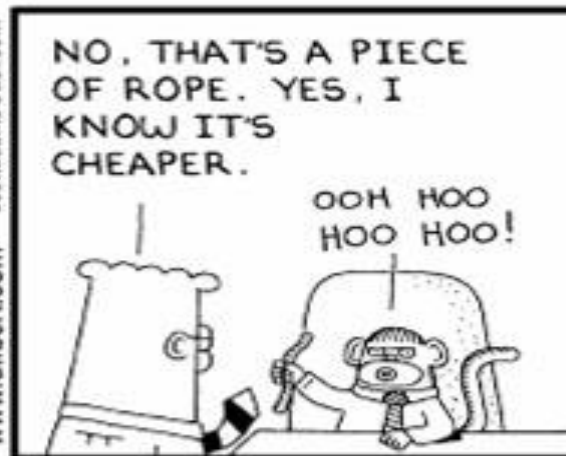
- **Loss of Control**
- **Increased cash outflow**
- **Confidentiality and security**
- **Selection of supplier**
- **Too dependent on service provider**
- **Loss of staff or moral problems**
- **Time consuming**
- **Provider may not understand business environment**
- **Provider slow to react to changes in strategy**



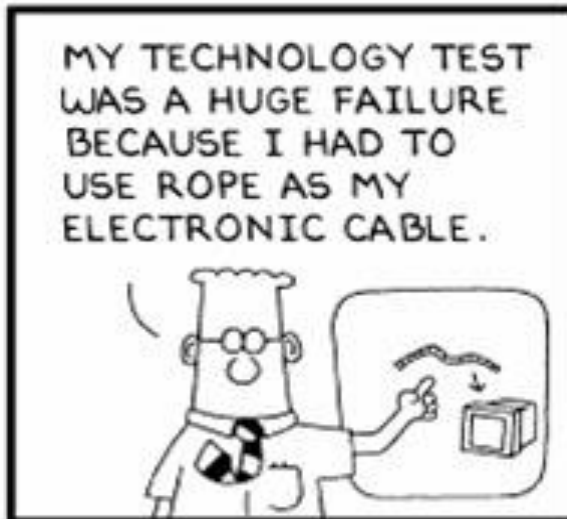
Problems With Outsourcing



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- WAN bandwidth
 - IT professionals
 - Hardware/Software
 - Security issues
 - 24/7 support
-
- Note: This example was created before Cloud Computing existed.
 - How do you think Cloud computing has impacted this business?

- ***In-House***

Activity costs, inclusive of labor and overhead

Raw materials, inclusive of shipping, storage, handling and overhead

Cost of invested capital

+ Estimated impact of outsourcing on costs and revenue

Total cost of performing activity in-house

- ***Outsource***

Proposal for outsourcing

Anticipated future pricing adjustments

Additional one time costs of outsourcing

+ Additional on-going costs of outsourcing

Total cost of outsourcing activity

Example: Database Outsourcing

- Health Areas
 - Clinic
 - Preventive Care
 - On-going support
 - Enhancement Care
- Benefits
 - Savings of 25% - 40%
 - Pay-per-gig pricing
 - Off-site data storage
 - Automated
 - Free up server space



“The total cost of ownership for an in-house email system is likely to be in the range of \$200 to \$400 per user per month.....

Outsourcing should reduce TCO by 10% to 30%.” Ferris Research, June 2001

Typical Services

- **Email Hosting**

- Email@yourdomain
- POP3 access
- IMAP4 access
- Outbound SMTP
- Virus Scanning
- External POP Access
- 24x7 Web-based Support
- Spell Check
- Email Forwarding
- Unlimited Attachment Size
- Unlimited Storage Folders
- Multiple attachments

- **Custom Webmail**
 - Customizable, private-label WebMail interface
 - Wireless WAP Access
 - Automated User Signups
 - Integrated Ad Server
 - Customizable to any language in the world
 - Programming API's for front and back end system integration



- Companies have now recognised that ‘outsource everything’ is not optimum
 - Service and quality levels
 - Not as cost effective as calculated (management overhead)
 - Outsource companies get ‘wise’ to the downsides; insist of volume and product ‘ramp’ agreements
 - Outsourcing core activities loses company value
 - Job losses / overseas supplier not political acceptable
- BUT... properly managed and good partners
 - Can deliver enhanced customer and client benefit
 - Outsource to skilled partner exploits strengths (not just cost)

- The latest ‘fashion’ in business is rightsourcing
- Previous desire to ‘outsource everything’ damaged company value; reduction in share price
- ‘Foolish’ companies outsourced key strategic value operations and suffered consequences
- Rightsourcing is taking a careful look at customer needs, strategic plans for the company, and recognising core competencies
 - Does this sound like common sense?

- Read the following:
 - ★ – CIPS PG Outsourcing Guide
 - ★ – Outsourcing revolution_ Corbett
 - ★ – Insourcing: Manufacturing - A Viable Solution in a Global Economy?

Skim

Read

Understand

Critique