

# **Building an IT Sourcing Strategy**

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# B.L.U.F

- Technological, economic, and demographic factors are converging to create the imperative for all organizations to develop an IT Sourcing Strategy
- IT Sourcing Strategies vary, not one size fits all, but all should start with a thorough collection of all the available IT work into a portfolio that can then be analyzed / optimized
  - ✓ 2 Models will be presented: a case study and a Gartner sourcing framework
- IT will develop new competencies in Sourcing Management in order to establish and evolve effective Sourcing programs
- Effective Process management is the key to taking advantage of Sourcing

# Convergence



**Invest in Building a Sourcing Strategy**

# Supply of Talent

IT jobs are increasing substantially:

- The professional-level IT workforce will grow at more than twice the rate of the overall workforce, creating 1 in 19 new jobs and adding more than 1 million new jobs by 2014.
  - ✓ “Computer/math scientist” jobs, which include programming, will increase 40% by 2012.
- The Forrester/ITAA Tech Sector Index at a 5-year high at end of 2006
- 1,900 open positions in healthcare IT in Northeast Ohio: May 2007

Traditional talent pipeline is slowing:

- A 2005 survey of college freshmen: 1.1% planned to major in computer science, down from 3.7% in 2000
  - ✓ Undergraduate college enrollment in computer sciences declined 59 percent from 2001 to 2005.
- At the 2006 ACM International Collegiate Programming Contest, only Massachusetts Institute of Technology ranked in 12 highest finishers. Most top spots were seized by teams from Eastern Europe and Asia

*Occupational Outlook Handbook, Department of Labor Bureau of Labor Statistics, 2004-2005.*

*Higher Education Research Institute (HERI), 2005.*

*Bajjou Shah, NOHIMS Presentation 2007*

# Virtualization

- Allows multiple operating systems (and applications) to run on a single physical server.
- Potential benefits in:
  - ✓ Consolidation: combine multiple servers with low utilization rates (5-15%) into fewer servers, resulting in more efficient combined utilization (60-80%)
  - ✓ Deployment: Deploy existing virtual images quickly on new servers, eliminates the need to install and configure operating systems on each new server received
  - ✓ Agility: Move operating systems and applications from one server type to another to meet changing demands.
  - ✓ Protection: Combine with storage area network (SAN) replication, virtualized images can be replicated to a secondary site, then loaded on to a different set of servers at the disaster site in the event of a primary site failure.

**Separating the applications (business processes => innovation) from the physical stuff they run on.**

# Virtualization

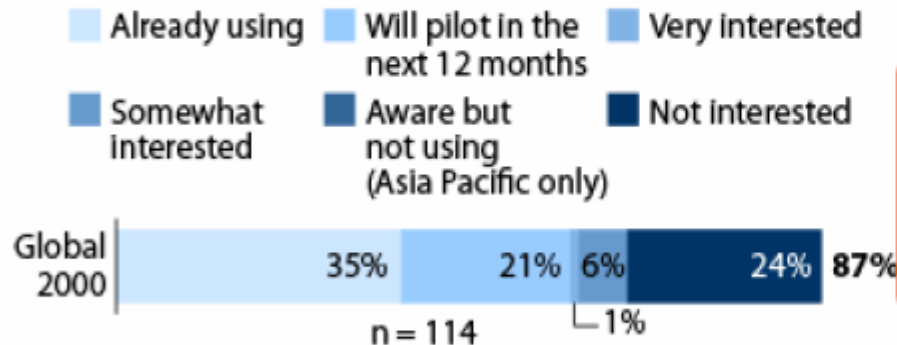
FORRESTER

February 2006, Trends "Server Virtualization Goes Mainstream"

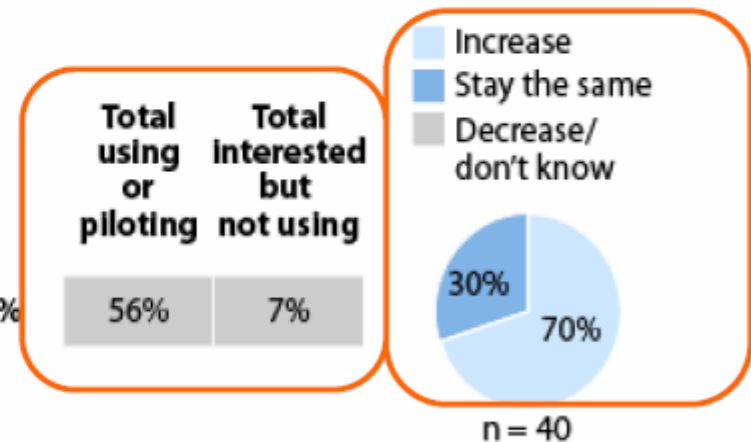
## More Than Half Of The Largest NA Firms Use Or Will Pilot Server Virtualization—Set To Increase

Many North American enterprises embrace server virtualization, but 24% aren't interested

For server virtualization, please indicate if you are "aware" of it, "not aware," or "already using."



For those using:  
Over the next 12 months,  
will your spending  
on server virtualization  
increase, decrease,  
or remain the same?



Base: 603 North American IT decision-makers  
(percentages may not total 100 because of rounding)

Source: Business Technographics® July 2005 North American And European Enterprise Infrastructure And Data Center Survey

# SOA

- Service Oriented Architecture (SOA): designing and integrating applications using collections of shared business services; modular pieces of software that perform discrete business functions.
- A SOA approach:
  - ✓ Moves the primary focus of IT projects toward process definition, visibility and control, away from the underlying technology or product implementation issues.
  - ✓ Helps to ensure that IT is positioned to enable business processes that are defined and controlled by the business, not by IT
  - ✓ Vendors who implement SOA principles will un-bundle integrated processes and provide them as stand-alone units or tasks that act independently or in an integrated fashion.
- Potential benefits in:
  - ✓ Delivering functional enhancements at a faster rate than with the integrated systems implemented in most environments today.
  - ✓ Users should be able to consume these enhancements based on need without being forced to large upgrades, but rather upgrading the components.

**Separating applications into autonomous shared services, or "black boxes," interaction between which can be viewed as a "contract" between services.**

# Data Center TCO

- Consumption of energy to power and cool hardware infrastructure is on the rise
  - ✓ Although typically associated with high-density servers (blades and rack-optimized systems), increased storage and networking devices also contributing to energy consumption and heat output
- Innovation will occur (i.e. servers, management software, liquid cooling); to cause an immediate reduction in energy consumption.
  - ✓ Over a period of one to three years, the curve will again go upward
- The “greening” of data centers. Developing environmentally friendly facilities.
  - ✓ Within the next 5 years, most businesses in the U.S. and Europe will be under pressure to demonstrate their commitment to their corporate social responsibility (CSR) issues.
- Rapidly increasing cost of new data center construction
- Rapidly increasing cost of underlying utilities

**Continuous, accelerated cycle of investment in data center infrastructure**

# Evolution of Outsourcing

- Large, multi-year investments in creating centers of excellence in a factory model
  - ✓ Economies of scale and process improvement focus
  - ✓ Deep rosters of talent, organized by skill and experience
  - ✓ Global delivery, Asia ↔ US ↔ Europe, work performed “where it makes the most sense”
- Moving beyond cost reduction to transformation
- Customer expectation of year-over-year 4-10% productivity improvement
- “One Team” concept – what is the right business decision mentality
- Risk Sharing –results-based contracts and sharing in costs/benefits

**Outsourcers optimizing to thrive in compartmentalized, disaggregated setting**

# Convergence



**Invest in Building a Sourcing Strategy**

# Sourcing Scenarios

1. Skills-based (Corporate Exec Board Case Study)
2. Process-based (Gartner)

# Scenario 1: Skills-based

- Develop business criticality scoring matrix for all IT roles:
  - ✓ Technical, Process Leadership, Business, People Leadership
  - ✓ The strategic business impact is evaluated and scored
  - ✓ For each skills dimension, the roles receive a score on a 1 to 5 scale, with higher scores representing lower business impact, and thus greater suitability for external sourcing.

Role Competency Rankings List

Job Family	Role	Technical	Process Leadership	Business	People Leadership
Business Management	CTO	3	1	3	1
	CAO	3	1	3	1
	Application Manager	2	2	3	2
	Continuity Manager	3	TBD	1	TBD
	Information Risk Manager	2	2	2	2
	Quality Manager	3	1	3	1
	Project Manager	3	2	3	2
	Relationship Manager	3	2	1	1
	Infrastructure Demand Manager	2	2	3	2
	Resource Manager	3	2	2	2
	Testing Manager	3	3	3	2
	<b>Financial Manager</b>	<b>5</b>	<b>2</b>	<b>3</b>	<b>2</b>
	Business Technology Manager (R&D)	1	3	2	1
	Release Manager	2	3	2	3
	Knowledge Manager	3	2	3	3
	Application Development	Technical Analyst	2	3	4
Application Developer		TBD	TBD	TBD	TBD
Release Analyst		3	4	4	4

**Technical**






- ① • Deep tech skills  
• Can solve difficult tech issues  
• Broad understanding of market direction
- ② • Deep tech skills  
• Can solve difficult tech issues  
• Knowledge of portion of tech market
- ③ • Tech experience/background  
• Active skill set  
• Broad understanding of market strategic direction
- ④ • Active tech skills  
• Can code  
• No view of broader tech market
- ⑤ • Basic computer skills  
• Not familiar with tech market

**Process Leadership**

- ① • Develop new process  
• Provide change vision
- ② • Develop strategic structure framework (i.e., mitigate risks)
- ③ • Develop tactical methodologies (i.e., implement and manage risks)  
• Enhance/maintain process
- ④ • Enhance/maintain process
- ⑤ • Execute process

# Scenario 1: Skills-based

- Add a “mode of collaboration” assessment to create a 3 x 3 table to chart the sourcing options and relative viability

Strategic Impact on the Business	Mode of Collaboration			Externalization Potential	
	Constant Collaboration	Frequent Collaboration	Occasional Collaboration		
<p><b>Drives Business Objectives</b></p> <p>Input to Business Objectives: Integral to realizing IT strategy, possesses substantial institutional/proprietary knowledge</p> <p>Implication: Role should remain primarily internal</p>	<p>Proximity: Constant collaboration with business required for service delivery</p> <p>Implication: Role must be co-located or within commuting distance of business</p>	<p>Proximity: Frequent virtual collaboration, some face-to-face collaboration with business required for service delivery</p> <p>Implication: Role may be outside of commuting distance of business, must be within three time zones or less</p>	<p>Proximity: Frequent virtual collaboration, very minimal face-to-face collaboration with business required for service delivery</p> <p>Implication: Role may be several time zones away from the business</p>	 <p>Difficult to Outsource</p> <p>67–100% Insource</p>	
<p><b>Influences Business Objectives</b></p> <p>Input to Business Objectives: Contributes to realizing IT strategy, possesses substantial institutional/proprietary knowledge</p> <p>Implication: Role may be externalized to some degree</p>	<p>Business Analyst</p>	<p>Application Manager</p> <p>Application Architect</p> <p>Information Risk Manager</p> <p>Technology Program Manager</p> <p>Project Manager</p> <p>Relationship Manager</p>	<p>Business Tech Mgr (R&amp;D)</p> <p>Release Manager</p> <p>Information Architect</p> <p>Continuity Manager</p>		 <p>May Be Able to Outsource</p> <p>33–67% Insource</p>
<p><b>Implements Business Objectives</b></p> <p>Input to Business Objectives: Executes on IT strategy, possesses limited business knowledge</p> <p>Implication: Role may be externalized to a high degree</p>			<p>DBA</p> <p>Release Analyst</p> <p>Applications Developer</p> <p>Stress Tester</p> <p>Technical Analyst</p> <p>Leading Edge Tech Developer</p>		
	<p><b>Offshore Potential</b></p>  <p>Cannot Offshore</p>	 <p>May Be Possible to Offshore</p>	 <p>Possible to Offshore</p>		

# Scenario 1: Skills-based

- To deal with roles “in the middle”, a forward-looking assessment provides further detail on the future portfolio of skillsets in the organization
  - ✓ A CIO Advisory Board, the next generation IT executive leadership, an Architecture Review Board, as well as business users create the skills road map.

“Grow” Skills				“Maintain” Skills		“Transition” Skills	
<ul style="list-style-type: none"> <li>➤ E-Skills                             <ul style="list-style-type: none"> <li>• Digital Assets Management</li> <li>• Web Security</li> <li>• Content and Personalization Management</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• Collaboration Software</li> <li>• Web Usability</li> <li>• Wireless</li> </ul>		<ul style="list-style-type: none"> <li>• Web Services</li> <li>• Web Graphics</li> <li>• Web Security and Entitlements</li> </ul>		<ul style="list-style-type: none"> <li>• Web Development</li> <li>• Web Application Servers</li> </ul>	
<ul style="list-style-type: none"> <li>➤ Performance Engineering                             <ul style="list-style-type: none"> <li>• Capacity Planning</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• Performance and Tuning</li> </ul>		<ul style="list-style-type: none"> <li>• Component Analysis</li> </ul>			
<ul style="list-style-type: none"> <li>➤ Document Work Flow Management                             <ul style="list-style-type: none"> <li>• Document and Work Flow</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• Imaging</li> </ul>					
<ul style="list-style-type: none"> <li>➤ Business Applications                             <ul style="list-style-type: none"> <li>• Unix/Client Server Application Packages</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• Telephony</li> </ul>		<ul style="list-style-type: none"> <li>• Middleware</li> </ul>			
<ul style="list-style-type: none"> <li>➤ Middleware                             <ul style="list-style-type: none"> <li>• MQ Series</li> </ul> </li> </ul>							
<ul style="list-style-type: none"> <li>➤ Data Warehousing                             <ul style="list-style-type: none"> <li>• Data Warehousing</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• Data Mining</li> </ul>					
<ul style="list-style-type: none"> <li>➤ Systems Engineering                             <ul style="list-style-type: none"> <li>• Testing and Quality Assurance</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• Configuration and Source Code Management</li> </ul>					
<ul style="list-style-type: none"> <li>➤ Logical Data Modeling                             <ul style="list-style-type: none"> <li>• Data Reengineering Tools</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• Managing Tools and Metadata</li> </ul>		<ul style="list-style-type: none"> <li>• Physical Data Tools</li> </ul>			
<ul style="list-style-type: none"> <li>➤ Information Risk Management                             <ul style="list-style-type: none"> <li>• Information Security</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• Disaster Recovery/Business Resumption Planning</li> </ul>					
<ul style="list-style-type: none"> <li>➤ Databases                             <ul style="list-style-type: none"> <li>• Oracle</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• Other SQL Databases</li> </ul>					

# Scenario 1: Skills-based

- The role descriptions are then completed with the universal skill set inventory, providing transparency regarding how thoroughly a given role coincides with the skills expected to be in demand.
  - ✓ Open and concise communication to staff on the skills they need to cultivate to position themselves for roles in the IT organization of tomorrow.

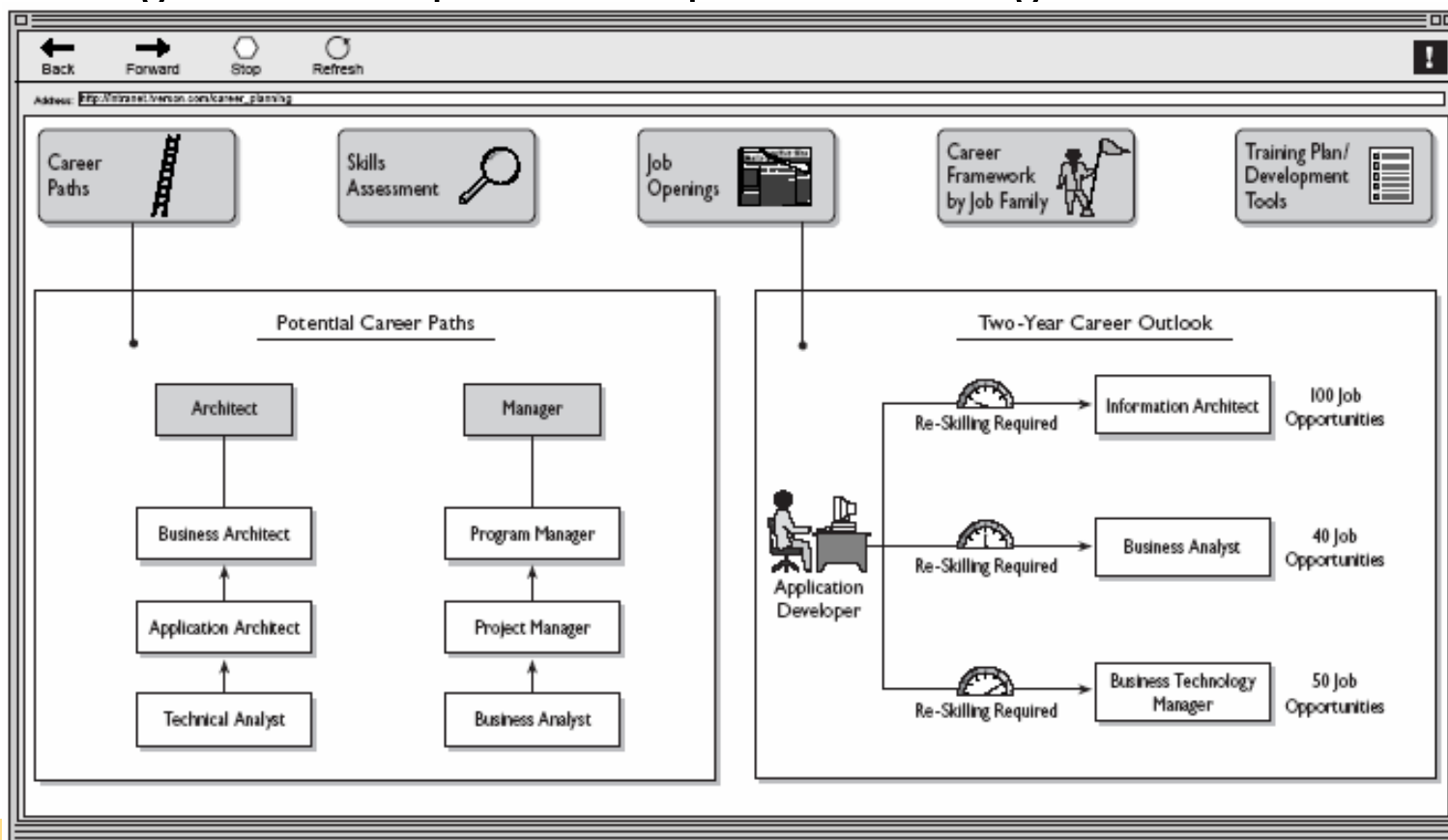
Role Description— < 1 of 35 > Job Family— < 1 of 9 >			
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>▪ Role Specific Responsibilities</li> <li>▪ People Management</li> </ul>		<b>Core IT Competencies</b> <ul style="list-style-type: none"> <li>▪ Project or Program Leadership</li> <li>▪ Change Leadership</li> <li>▪ Quality Principles</li> <li>▪ Problem Solving/Analytical Skills</li> <li>▪ Process Reengineering and Improvement</li> <li>▪ Business Knowledge/Analysis</li> </ul>	
<b>Qualifications</b> <ul style="list-style-type: none"> <li>▪ Experience</li> <li>▪ Certifications</li> </ul>		<ul style="list-style-type: none"> <li>▪ Business Partnership</li> <li>▪ Knowledge Sharing/Management</li> </ul>	<b>Skills to Grow:</b>  <b>Skills to Maintain:</b>  <b>Skills to Transition:</b>

# Scenario 1: Skills-based

- New role created: Resource Manager
  - ✓ One individual at each Business Unit or division
  - ✓ Not an HR role, but rather is very similar a professional staff manager in a consulting environment
  - ✓ IT Project Managers required to consult their Resource Manager at the beginning of the project life cycle.
  - ✓ Resource Managers have visibility into sourcing practices and an opportunity to educate project managers about external sourcing options.
  
- 4 main responsibilities
  1. Maintaining an understanding of employee skills, development plans, and career aspirations; ensuring this information is tracked within a database
  2. Keeping track of upcoming projects and resource needs
  3. Communicating resource needs and availability to other peer Resource Managers
  4. Recommending the best sourcing options for every project

# Scenario 1: Skills-based

- Commitment to helping internal staff adjust to the realities of global sourcing and the related new business directions
  - ✓ Resource strategy as an opportunity to migrate to more strategic roles with greater business-facing impact.
- To assist staff in preparing for the new sourcing realities, career-planning tools to help visualize paths to strategic roles.

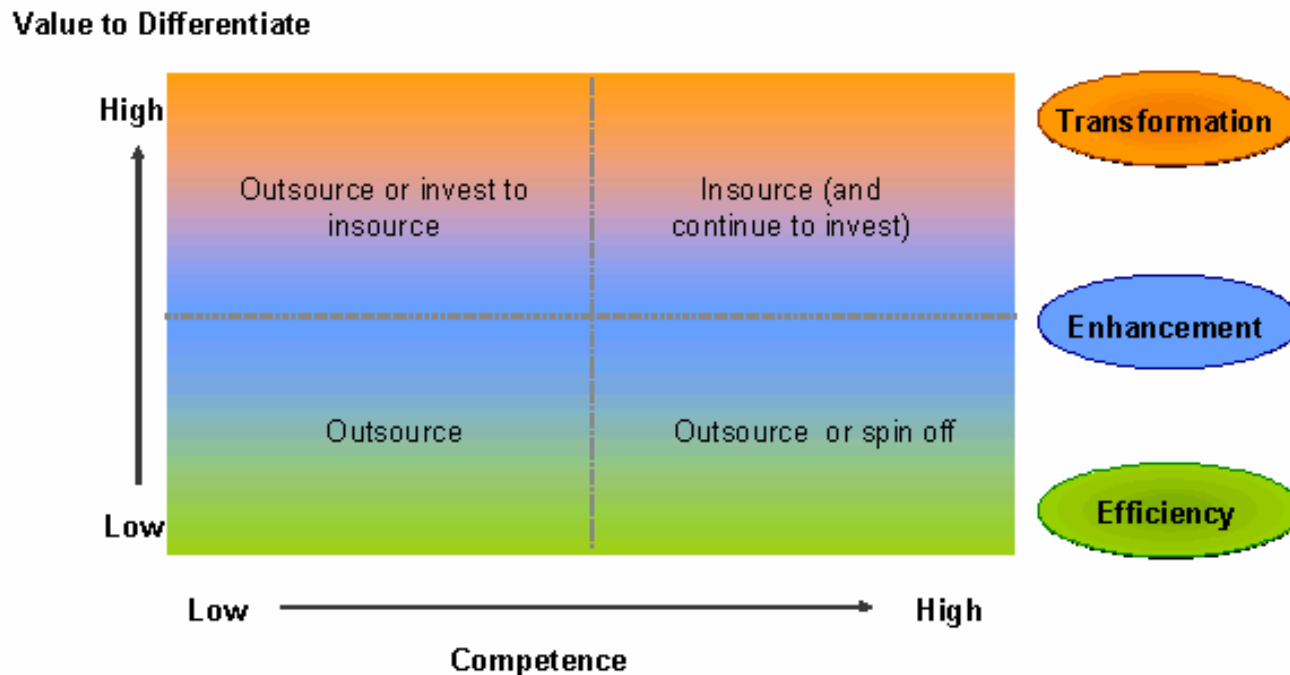


# Scenario 2: Process-Based

- Some businesses have become what Gartner calls "compulsive outsourcers," creating a mix of contracted and in-house services that are uncoordinated and missing expectations for efficiency and cost.
- Combination of sourcing options, "multisourcing" gains access to necessary skills, driven by a framework and process-focus
- Sort out how sourcing decisions align with, support and affect strategic business objectives.
  - ✓ Why are we sourcing? (Is the business goal to save money, improve operational efficiency, boost business performance?) Transformation, Enhancement, Efficiency
  - ✓ What specific processes should we consider?
  - ✓ Who can best perform or deliver these services to meet the goals? (Should the job be performed in-house or outsourced to external resources?)
  - ✓ How should the work be done? (Do we want a customized or standard service/process?)
  - ✓ Where should the work be done? (Will this work be performed domestically/onshore or nondomestically/offshore?)

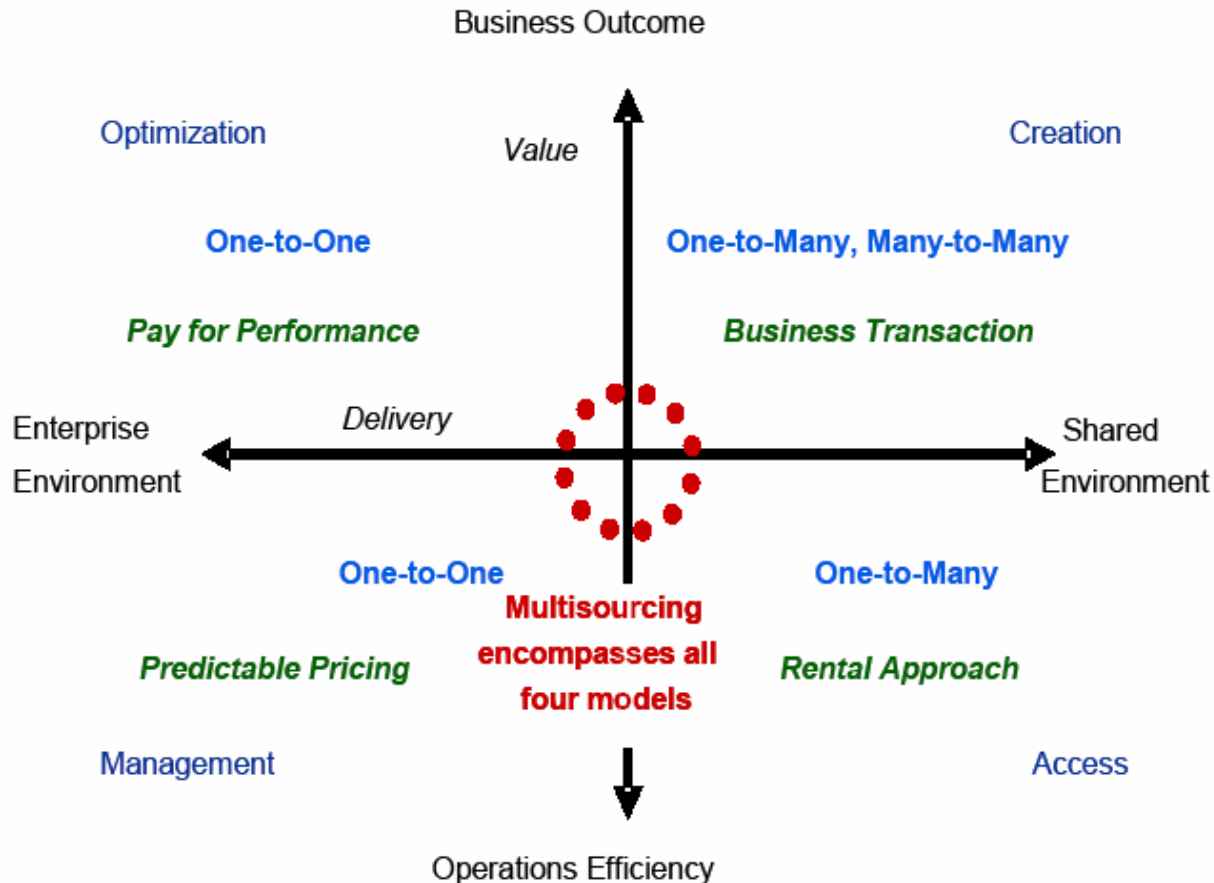
# Scenario 2: Process-Based

- Plot each process and IT service into a framework
  - ✓ Sets up the entire range of work to consider in sourcing decision making. “What?”
  - ✓ Begins to indicate whether this work should be done in-house or outsourced. “Who?”
- Senior leadership to be engaged in supporting multisourcing as a new organizational discipline and competency.
  - ✓ Commitment to set up the framework, leadership structure and governance so that all sourcing decisions are coordinated and consistent



# Scenario 2: Process-Based

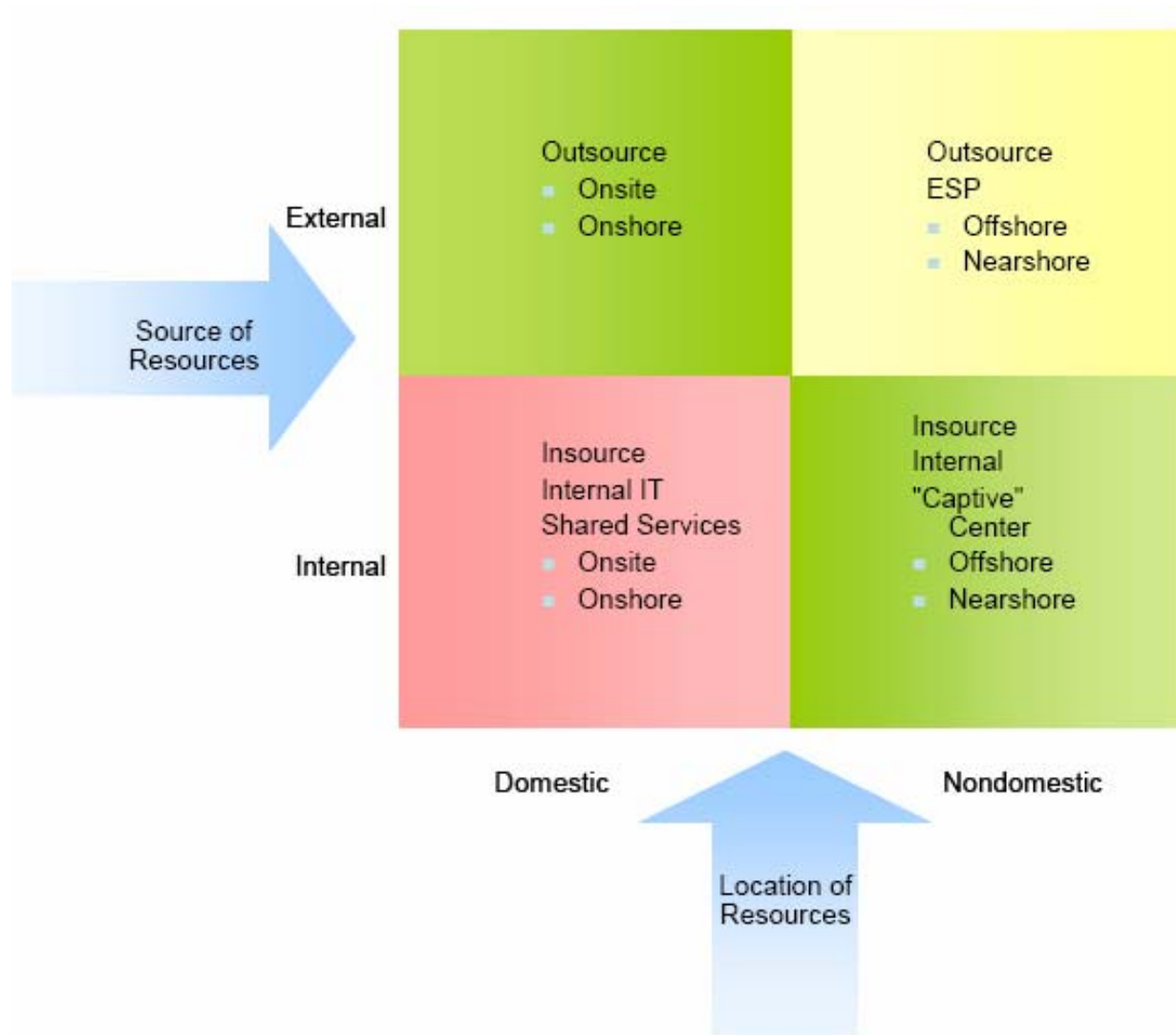
- Another framework visualizes the desired delivery (custom or standard) and the value (operational efficiency or business outcome): “How?”
  - ✓ Value: The vertical axis shows the value of a service by its direct impact on business goals.
  - ✓ Delivery: At one end are services in a customized environment, at the other end is standardization — a one-to-many service in which the organization adapts to the way the service is delivered, rather than the other way around or process effectiveness.



For processes which are candidates for outsourcing. Shows potential vendor relationship, pricing, and delivery models.

# Scenario 2: Process-Based

## ➤ Where?



Source: Gartner (February 2006)

# Success Factors

- It all starts with Process
  - ✓ Identify the work, break it down into smallest components possible
  - ✓ Think like a service provider: customer, benefits, metrics service owner, improvement plans
  - ✓ Major collection, analysis (“No Process Left Behind”)
- Define what to focus on, before moving to questions of how or where it should be done
  - ✓ Redefine your critical assets. Understand what will and generate innovation and business growth.
  - ✓ Business information, business processes and business relationships that fuel growth.
  - ✓ Let effectiveness, rather than cost, drive where to locate IT tasks
- Sourcing analysis is not a onetime event
  - ✓ A growing need for skillsets and organizational investments in ongoing management and optimization of IT sourcing

# References / Suggested Reading

- Iverson Financial Case Study (pseudonym), Corporate Executive Board
- Q&A: Understand the First Steps Toward Disciplined Multisourcing, Gartner, Oct 2006
- Stop Outsourcing and Begin Disciplined Multisourcing, Gartner Feb 2006
- Extreme Outsourcing, Ben Worten, CIO Magazine, May 2007
- Best Practices: Managing Large Deals and Vendor Selection Criteria, Technology Partners International (TPI), 2007
- Next Generation IT Infrastructure, Forrester presentation, April 2007

