

## Improve your odds with Infosys Predictability



Right Questions



Business Insights



Integrated Solutions



Value Multipliers

# Enabling Business Innovation: The Case for a New Approach to Services Sourcing

– Basab Pradhan, Richard Baldyga, R. Arun Kumar, and Stephen Lane

## Executive Summary

Pressured to deliver short-term quarter-to-quarter results, today's businesses are driven to manage operational efficiencies, making it a challenge to maintain strategic and innovation focus in today's global economy. To be world-class competitors in this environment, enterprises need to deliver breakthrough results by combining business alignment with continual operational efficiency.

Outsourcing plays an important role in enterprise evolution as evidenced by the successes achieved in manufacturing process innovation in industries such as automotive, apparel and electronics. Leaders in these sectors have evolved into mature practitioners, applying advanced models such as global sourcing to achieve significant breakthroughs in manufacturing efficiency, business alignment, and innovation.

One of the key features of sourcing maturity in manufacturing has been the modularization of components and production processes, which has enabled companies to outsource more effectively and achieve greater benefits using global supplier networks. Indeed, global sourcing has become a competitive imperative in and of itself, not only in manufacturing but in business process and IT services, which are key contributors to enterprise innovation and competitiveness.

Although many organizations have applied the concept of modularization to IT infrastructure management, it is largely absent in the sourcing of business process and application assets and their associated execution phases. Current services sourcing models are not as mature as their manufacturing counterparts. They were developed to deliver operational efficiencies, not enable business innovation. Therefore, faced with a host of business challenges and continually changing economic conditions, enterprises are demanding a new model for services sourcing, one that can be continually adapted to deliver operational efficiencies and strategic capabilities.



Modular Global Sourcing is just such a model. It applies the fundamental concepts of modularization to business process and IT application and infrastructure services sourcing decision making, implementation, and ongoing management. Developed by Infosys to help enterprises at any maturity level realize the full benefits of global sourcing, it provides both a conceptual foundation and a set of actionable frameworks for business and IT leaders to:

- **Think** about outsourcing services at an enterprise-wide level to create alignment between business, operations and IT;
- **Structure** business and IT assets and their execution phases in a well-defined modular fashion to achieve flexibility; and,
- **Act** on a global level using strategic global delivery to ensure predictability of cost, quality, risk, and meeting shared business objectives.

This White Paper, one of a series of Infosys' Strategic Global Sourcing Points of View, introduces the Modular Global Sourcing model and examines the role of business process and IT services sourcing as an enabler of business innovation. Other publications in the series examine the role of modularity in services sourcing in greater detail, share proven execution frameworks, and explore other leading-edge concepts in strategic services sourcing.

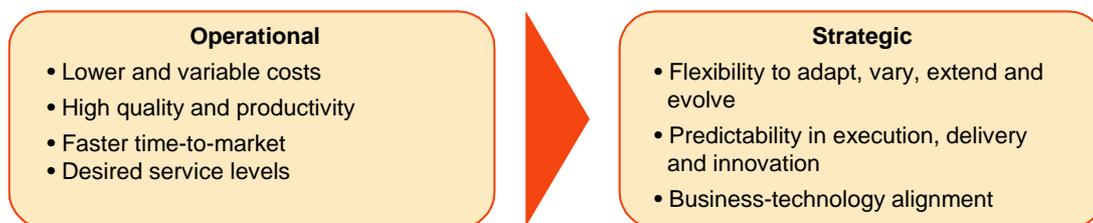
## The Need for a Strategic Services Sourcing Model

Customers are demanding more from businesses. Competition is increasing in intensity as new players and business models emerge. Product life cycles are growing shorter and managing across global boundaries is becoming more complex. These and other factors are increasing pressure on operating margins, which in turn is forcing enterprises to try to become more agile and innovative to maintain competitiveness and profitability.

To meet these challenges, enterprises must align business with technology to speed decision making, integrate processes, share knowledge, and collaborate across internal and external boundaries. Static processes must be made more flexible to allow for faster responses to changing business realities. The availability and application of resources and skills must be made more predictable in terms of execution, timeliness, and quality to enable innovation. At the same time, productivity and cost management must be maintained and enhanced.

However, in spite of the operational efficiencies accrued through current services sourcing models, there is a growing realization among business and IT decision makers that such approaches are not always adequate to meet current business challenges. Therefore, a new services sourcing approach is required, one that combines the best of existing models and, at the same time, applies a new way of thinking. This involves shifting the focus of the role of services sourcing from operational efficiency to strategic alignment (Figure 1).

**Fig 1: Rethinking Services Sourcing**



## Outsourcing and Enterprise Evolution

Although outsourcing is a widely accepted business practice today, it was not always the case. Monolithic manufacturers once owned every asset and process, from raw materials to the finished product. Only after they began to realize the benefits of partnering with lower-cost specialty suppliers did companies begin to see outsourcing as a viable method for achieving operational efficiencies. Next, industry leaders began to rely on external suppliers and service providers to deliver complementary skills and capabilities. Eventually, the idea of balancing core competency and strategic sourcing — a concept pioneered by the apparel industry — was adopted and refined in such sectors as automobiles and electronics.

### **Nike Focuses on its Core Business**

Nike is the world's largest supplier of athletic foot ware, a technology and fashion intensive sector that requires high levels of marketing and production flexibility. In order to focus on these strategic activities, the company sources nearly 100% of its manufacturing through a global supplier network. This enables Nike to create maximum value by concentrating on preproduction (research and development) and postproduction activities (marketing, distribution, and sales). The entire process is integrated by what is, perhaps, the best marketing information system in the industry and a highly sophisticated supplier coordination and governance program.<sup>1</sup>

The automobile industry is especially mature with respect to how it uses sourcing strategically in manufacturing. As such, it offers key lessons and best practices that can be applied to services sourcing. Initially, auto companies controlled every aspect of the product life cycle, focusing on meeting customer demands for better performance. Once industry leaders learned to optimize a particular dimension, they began to standardize components and processes. This made it possible for companies to begin to rely on external suppliers to help reduce manufacturing costs and achieve greater flexibility to respond to changing consumer demands.

Globalization increased opportunities for even greater cost savings as automakers began to source parts from low-cost offshore manufacturers. Then, in the 1980s, Japanese firms introduced greater levels of collaboration into sourcing, working closely with worldwide supplier network, sharing insights and integrating them into their quality processes.<sup>2</sup>

Driven by customer demands for more choice and greater convenience, these companies graduated from simply outsourcing parts and low-level sub-system manufacturing to the production of higher value assemblies such as seating and braking systems. This allowed the reuse of such systems across different makes and models, thereby adding even greater economies of scale and production flexibility. This practice of modularization of assets and production processes enabled leading automobile companies to become more innovative and to better adapt to new business challenges.<sup>3</sup>

### **Volkswagen Goes Modular**

Many automotive designers and engineers have adopted a modular approach to better manage their complex production processes. Supply systems are not managed as a whole but instead are structured into modules of production processes. Volkswagen expanded on this approach in its truck factory in Resende, Brazil. The company provides the factory where all modules are built and trucks are assembled, but the independent suppliers obtain their own materials and hire their own workforces to build the separate modules. To ensure consistency in the overall production process, Volkswagen does not 'make' the car, in the sense of producing or assembling it, but the company has established a process architecture and interfaces between production. The company has also set quality standards that each supplier must meet as modules proceed from production/assembly stage to the next.<sup>4</sup>

As a result of combining modularization with strategic thinking and global sourcing, today's leading automobile companies rely on external suppliers and strategic partners not only for parts and assembly but also for design, process engineering, prototyping, testing, and production. Together, companies on both sides of the supply chain equation are practicing enterprise-wide collaboration and achieving high levels of integration to deliver operational efficiencies, production flexibility, and business innovation.

### **BMW Relies on Strategic Sourcing to Build Its Next-Generation SUV**

In 2000, BMW outsourced the engineering and production of its X3 compact sports utility vehicle to Austrian auto supplier Magna Steyr. This pioneering agreement rested on Magna Steyr's ability to match the innovation, road feel, and quality evoked by the BMW brand. To accomplish this, the company put a team of 500 engineers to work to learn and internalize the client's engineering, production, and quality processes. This group became the core of a global delivery team — spanning locations from Pune, India, to Detroit, USA.

BMW's experiment in strategic sourcing has been a success. The company managed its headcount by using Magna Steyr engineers instead of increasing hiring. The client has also saved a minimum of \$1billion by not having to build a new factory, using the supplier's production facilities instead. Magna's engineers have even matched BMW's vaunted ability to innovate by pioneering a new four-wheel drive system, a system that the client plans to adapt to its larger X5 SUV.<sup>5</sup>

Meanwhile, mature sourcing practices have been adopted in other industry sectors. For example, Dell and other computer manufacturers are using offshore partners to do more than just cut costs. They are taking advantage of the distinctive skills and high performance offered by Asian suppliers (which had earlier helped them design and manufacture computer peripherals), outsourcing such vital business activities as component design to accelerate entry into areas such as digital cameras and mobile phones.<sup>6</sup>

## **Services Sourcing: Current Trends and Changing Requirements**

Although business process and IT services outsourcing have been practiced in various forms since the 1980s, the past few years have witnessed a tremendous increase in their adoption rate by enterprises of all sizes and across all industries.

There are several key trends that are now shaping the services sourcing landscape:

- Offshore outsourcing is now center-stage and mainstream
- The nature of services spend is moving away from infrastructure to business processes and applications
- Engineering advances and standardization are increasing the ability to modularize business process and IT services

In the face of these trends, current IT and business processing services sourcing models can be characterized as either monolithic (e.g., total outsourcing) or fragmented and piecemeal (e.g., project-based offshore outsourcing) in how they are executed. Because these two dominant models arose in response to a particular set of business needs and market forces, each has its own strengths and weaknesses.

Total outsourcing, for example, evolved in an environment in which key drivers were based on the need to improve basic IT performance while managing costs better. The linkages between IT infrastructure and application assets were so complex and inter-dependent that there was often little choice but to outsource entire operations to a single large service provider.

In taking this approach, however, companies lost the ability to adapt and improve their IT environments to business and technology changes. Locked into long-term contracts, they found that the value and productivity of their sourcing relationships were limited and tended to diminish over time. They lost the flexibility not only to easily change basic service requirements but also to keep pace with new business challenges as well.

### **External Viewpoints on Services Sourcing**

External Viewpoints on Services Sourcing “The aim [of strategic sourcing] is to harness external sources that are capable of adding more to the enterprise value chain than they can achieve through internal resources.” – Gartner Group, October 2002

“There is increasing client skepticism about the relevance, value, and role of the major IT service providers.” – META Group, July 2003

“CIOs are disappointed by the failure of outsourcers to improve productivity. Many are dissatisfied with their large investments in enterprise software and question the value of long-term outsourcing.” – McKinsey Quarterly, 2003 Number 2

“The traditional consulting model is dead. The next-generation model combines global delivery that capitalizes on low-cost resources with high-quality strategic consulting.” – AMR Research, April 2004

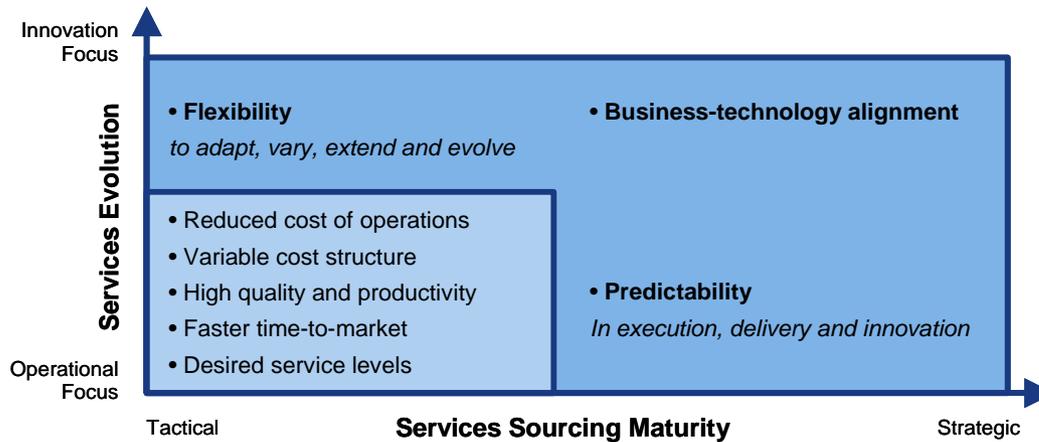
This lack of flexibility resulted in reducing and, in some cases, canceling out anticipated savings. Moreover, because total outsourcing relies mainly on onsite operations and the large-scale transfer of people and assets, it has made it difficult for service providers to integrate global delivery into their organization and business models.

As the need to reduce costs took on a greater importance, organizations began to respond to the limitations of total outsourcing by chipping away at the monolith and outsourcing parts of infrastructure, applications and processes to lowest cost providers in a piecemeal manner. At this time, the global delivery model, (GDM) pioneered by Infosys in the early 1980s, emerged as a disruptive force in the industry and led to the rise of offshore outsourcing. Enabled by the availability of highly educated technically skilled low-cost work forces in India and other emerging economies, the GDM has achieved broad acceptance through its ability to deliver lower costs, higher quality, and productivity.

Since its introduction, several early adopters have gained valuable experience with GDM, moving beyond individual projects and applying it on an enterprise level. The majority of enterprise clients and service providers, however, have not reached the same level of maturity. Their approaches remain piecemeal and fragmented. They lack standardization and overall alignment with business needs. And, because of their tactical approach, these companies are not able to leverage the more strategic benefits of global sourcing.

In summary, current services sourcing models have a limited strategic impact. They do not use the concept of asset and process modularization in a global sourcing context. They operate within narrowly defined activity-based, organizational, and/or geographical boundaries that are best suited to delivering operational efficiencies. Therefore, they are not applicable to the needs of enterprises that are looking for more in terms of business alignment, flexibility and predictability, which are the key enablers of business innovation. For that, enterprises require a services sourcing model that transcends the limitations of existing approaches while retaining their benefits (Figure 2).

**Fig 2: The Next Stage in Strategic Services Sourcing**



### Modular Global Sourcing: Conceptual Shifts

Modular Global Sourcing represents conceptual shifts in thinking about role of business processes and IT services as enablers of business change. Drawing on key lessons and best practices from mature sourcing models such as those used in manufacturing, it defines an approach to the sourcing of business process and IT services that encompasses the following principles and concepts.

- Thinking in on an enterprise level manner, instead of taking a narrow view, to enable the alignment of business and technology;
- Structuring business and IT assets and their execution phases in a well-defined modular fashion, instead of in a monolithic or a fragmented manner, to achieve sourcing flexibility; and,
- Acting strategically on a global scale, instead of using offshore outsourcing in a piecemeal fashion, to ensure predictability with regard to costs, quality, risks, and resource utilization.

Together, these conceptual shifts and supporting execution frameworks, when undertaken in the appropriate sequence, provide a basis for accelerating business results and the faster realization of sourcing benefits (Table 1).

**Table 1: Modular Global Sourcing: Conceptual Shifts**

Conceptual Shifts	From	To
<b>Thinking Enterprise -wide</b>	Process/IT horizontal focus Static roadmap Operational efficiency focus	Enterprise-wide holistic view Compass for dynamic navigation Blend of strategic and operational focus
<b>Structuring Modular</b>	Black box Frozen All-at-once Rigid Monolith or Fragmented	Transparent Evolving Prioritized Flexible Modular
<b>Acting Global</b>	Resources Static roles Full-time equivalents Random or Ad-hoc Activity management	Deliverables Refreshed competencies Just-in-time skills Predictable Process management
<b>Accelerating Results</b>	Reactive Fear of change Transactional 5 years to maturity	Proactive Embracing change Collaborative 18 months to maturity

### Thinking enterprise-wide for alignment

One of the major impediments to successful global sourcing has been the lack of alignment between business strategy, operations, technology and sourcing. To overcome this impediment, business and IT decision-makers need to take a strategic, enterprise-wide view of business processes, applications, and IT. They need ask such fundamental questions as “where is the business today?” and “where does it need to be?”

Current approaches to sourcing are typically focused on specific technologies or projects or conversely, entire IT infrastructures. In neither case is there an explicit link to other business processes or functions, however. Once plans are developed, they remain fixed; the equivalent of a road map that provides directions from point A to point B, without allowing for changes in the itinerary.

An enterprise view of the relationship between business and sourcing strategies, on the other hand, provides a compass for business and IT decision-makers to chart new directions in response to change. The chief benefit of this way of thinking is the ability to align business value with IT and process value, arrive at mutually shared objectives, and create sourcing solutions to support strategic imperatives.

## **Business and Sourcing Alignment in the Financial Services Industry**

As an early adopter of the offshore model, a leading global financial services company had achieved significant operational efficiencies through outsourcing to selected service providers (The existing sourcing strategy had already led to a cost reduction to the tune of 25% over the previous two years). By 2002, the company's outsourcing had increased to 2,000 people and \$120 mn (more than tripled as compared to the previous year). However, the company felt that piecemeal outsourcing albeit on a large scale could only realize limited benefits. The traditional outsourcing model had hit an economic ceiling. In fact, increasingly the company felt that it had to achieve strategic alignment between business and IT (so as to identify and exploit new sources of value creation), and rationalize IT consumption enterprise wide.

The company created a sourcing decision framework to optimize the value of IT investments and achieve greater flexibility and responsiveness in its service supply channel. Infosys partnered with the company in developing a leaner and more effective global engagement model. This necessitated taking an enterprise view to examine the entire business rather than individual silos and thus identifying opportunities for optimization. Another key focus area was to align IT to business by various measures – more comprehensive performance metrics that captured value of IT to business.

Infosys helped reduce IT consumption (37%) further while increasing predictability and alignment. Moreover, Infosys developed methodologies and tools that are used by the company in managing engagements of other vendors.

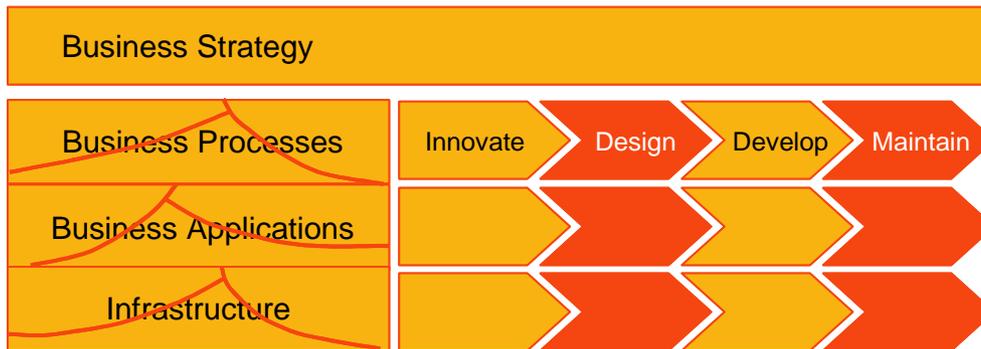
### **Structuring modular for flexibility**

Modularization in a strategic sourcing context involves deconstructing complex business processes, supporting IT applications and infrastructures, and their execution phases (i.e., how they are innovated, designed, developed, and maintained). At the same time, connections and interdependencies between modules remain clear, which allow each one to be separately examined and analyzed, while maintaining a view of the whole. In this way, modularization provides a change of perspective, one that enables decision-makers to view processes and IT as flexible, transparent, and evolving structures, as opposed to black-boxes, monoliths or disconnected pieces.

By logically organizing business processes, applications, and IT infrastructures and their execution phases in a modular fashion and applying a sourcing decision framework, executives and stake holders are able to assess each module ('what') and execution detail ('how'). This facilitates a better understanding of each module's role, importance, criticality, relative position and its relationship to other modules and subsystems and the interfaces by which they interact. The modules are then examined from a sourcing perspective to better understand the associated costs, risks and priorities, which in turn enables more informed, best-of-breed sourcing decisions that are competency driven to reflect the appropriate retain, outsource, offshore, and transition choices.

The modules are then examined from a sourcing perspective to better understand the associated costs, risks and priorities, which in turn enables more informed, best-of-breed sourcing decisions that are competency driven to reflect the appropriate retain, outsource, offshore, and transition choices. This allows for the simplification of organizational structures and better resource utilization (Figure 3).

**Fig 3: Modular Structuring for Flexibility**



Applied to complex business process and their related IT and execution elements, modularity enables greater optimization and easier change management at an individual module level. This, in turn, increases adaptability and uncovers hidden value by reducing redundancies, all with minimal disruption. Ultimately, modularity is a key contributor to achieving greater flexibility in the management of assets, delivery processes, and people.

### Acting global for predictability

One of the chief benefits of sourcing maturity is that it enables enterprises to access and take full advantage of the global delivery model in more than just an ad hoc project-focused manner. Achieving such a level of maturity is a gradual process, however, one that starts with enterprise-wide thinking and the modular structuring.

These activities are the prerequisites that enable the development of an overall sourcing strategy for guiding business and IT decision-makers toward immediate quantifiable benefits. Leveraging these benefits, decision-makers can then justify and act on follow-on sourcing initiatives, creating additional efficiencies. In this way, each stage delivers return on investment that can be applied to deliver additional benefits, ultimately leading to process improvements and business innovation. Moreover, as processes mature, outsourcing contracts can be adjusted to leverage individual service providers' distinctive capabilities.

### Mortgage Company Realizes Measurable Benefits through Global Sourcing

A premiere U.S. specialty mortgage company needed to streamline its business processes and improve the capabilities of its supporting information systems. Leveraging its expertise in the mortgage business, Infosys helped the company evaluate existing processes to determine how to expand technology and prepare for a new wave of corporate expansion and recommended solutions and initiatives that fit the company's needs.

The two companies then collaborated to developing an overall approach to redesigning the client's core business systems, deciding where and how the work would be carried out through a rigorous risk/cost assessment process. The results included a 100% increase in productivity (doubling the previous benchmark for transactions handled per hour), a 70% improvement rate in the rate confirmation process for customers, 99.5% quality levels, up from 97.5%, and a savings of 25% on overall loan-origination costs.

For this cycle to be fulfilled, however, there needs to be a foundation for ensuring predictability in terms of quality, scheduling, cost, skills availability, and other sourcing success factors. That foundation is a sourcing governance model in which every contingency, dependency, and decision criterion is identified, defined, and codified, thus ensuring better coordination, reduced complexity, and increased dependability of output.

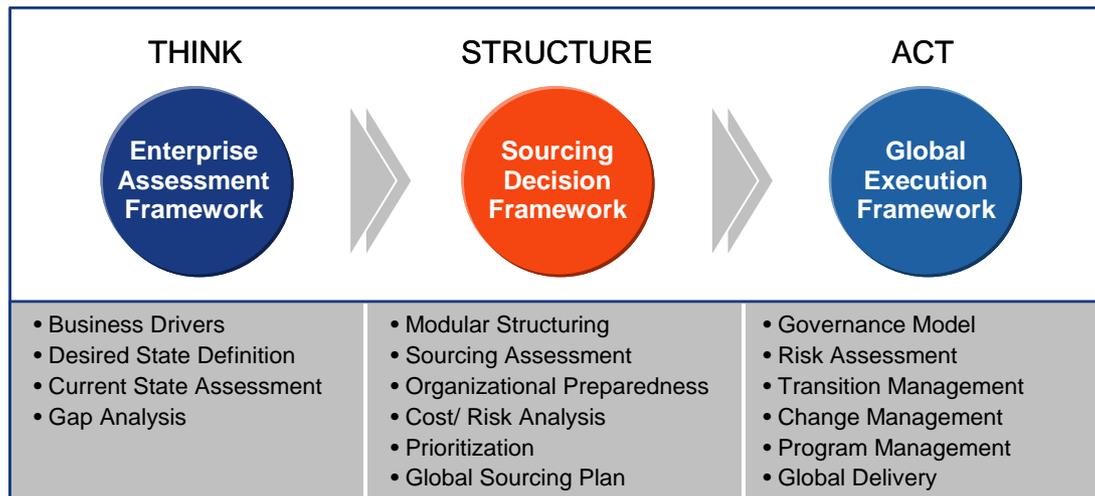
## Accelerating Results

Taken together, customized as per business needs, and executed properly, the concepts and activities that make up the Modular Global Sourcing model can help bring about the faster realization of the benefits inherent in strategic services sourcing on a global scale. To help enterprises move beyond the core concepts of the model and into the activity phase, Infosys has developed a set of three execution frameworks.

Aligned to the three core concepts of Think, Source, and Act – these frameworks represent the collective experience of Infosys, some of its most mature clients, and thought leaders in the field of services sourcing. It combines Infosys’ execution excellence in global service delivery, full service capabilities, domain expertise, and solutions focus with best practices and governance models.

Each framework – Enterprise Assessment, Sourcing Decision, and Global Execution – consists of a set of tools and activities designed to guide business and IT decision makers through each phase of the Modular Global Sourcing model. Together, they help facilitate and accelerate enterprise modular global sourcing strategy development, decision making, and execution (Figure 4).

**Fig 4: Modular Global Sourcing Frameworks**



## Enabling Innovation through Modular Global Sourcing

Modular Global Sourcing represents Infosys’ vision for the future of outsourcing. It is a model for enterprises to be in step with continuously changing business realities. As such, it represents a conceptual shift in thinking about IT and business process services sourcing on a global scale. At the same time, it defines a set of actionable frameworks and steps that business and IT decision makers can undertake to put the concepts into practice to realize operational efficiencies and enable business innovation, regardless of their current level of sourcing maturity.

Defining a process for applying modularization across processes, applications, IT and their execution elements, the model promotes flexibility in the form of best-of-breed sourcing decisions. It lets companies avoid lock-ins and provides a long-term view of sourcing at an enterprise level while enabling short-term adjustments as required. Further, it accelerates sourcing maturity to deliver predictability and better alignment between business and IT.

### **Strategic Sourcing of Order Management Process Drives Cost Savings and Innovation**

Executives at one of the world's largest hardware, software and IT solution providers realized that the company was more global than it needed to be. It had 28 order management centers located around the world, a situation that led to the replication of systems and processes and a cost structure that amounted to more than four-times the industry best-in-class norm per \$1,000 of sales.

A combined client/Infosys team conducted a thorough assessment of the entire process, examining in detail its overall structure and complexity, business rules and decision processes, transaction volume variability, and individual cost points. Using the Modular Global Sourcing Model, the team identified several areas for potential improvement including innovation, automation, system and process consolidation, reengineering, and customization, in addition to a flexible staffing model and other changes that, taken together equal a potential 75% cost savings to drive the cost per \$1,000 of sales closer to the best-in-class figure.

With modularization, enterprises can better focus on those business processes and supporting elements that provide competitive advantage and lead to innovation. This helps in organizational restructuring, role changes, retraining and deployment decisions, as well as in creating a new set of job roles.

A key feature of Modular Global Sourcing is that it is relationship-driven and enables the business and IT leaders to act as business integrators. It provides a conceptual basis and set of execution frameworks for planning, realizing, and reapplying operational efficiencies and reinvesting cost savings to enable business change. At the same time it provides the structure needed to leverage best practices from existing sourcing models and promotes the accumulation of knowledge capital that can be shared across the enterprise for continuous innovation.

In summary, the emphasis of Modular Global Sourcing is not only on how and where to outsource, but also on the importance of why and what to outsource and to whom. The driving principle is a proactive focus to embrace change without the constraints of locked-in, long-term contracts. Customized to the needs of each enterprise, and executed properly, this model accelerates the results of global sourcing.

More information about Modular Global Sourcing is available at [www.infosys.com](http://www.infosys.com) or by contacting Srikanth lyengar at 510-742-2940, [MGS@infosys.com](mailto:MGS@infosys.com)

## About the Authors:

**Basab Pradhan** serves as Senior Vice President and Head of Worldwide Sales for Infosys Technologies Ltd. He oversees all sales initiatives in the more than 30 countries in which Infosys does business. In addition to his primary responsibility, which consists of driving growth for Infosys' global services business, he is also one of Infosys' principal thought leaders on the subjects of IT outsourcing and organization design. Basab joined Infosys in 1994, serving in various capacities including regional manager and vice president of sales for West & Midwest North America. In these roles his work has centered on creating and implementing IT strategies for Infosys' clients in that region. Basab can be reached at [bpradhan@infosys.com](mailto:bpradhan@infosys.com).

**Richard Baldyga** serves as Vice President of Outsourcing Solutions for Infosys Technologies Ltd., managing global IT initiatives that leverages Infosys' Global Delivery Model to achieve high quality, rapid time-to-market and cost-effective solutions for Global 2000 customers. Richard brings over 20 years of information technology Professional Solutions experience to Infosys. His previous roles include CEO and President of RadixOne, a Sprout Group portfolio IT Services private company; Vice President of Global Solutions for Compuware's Professional Services organization. Richard can be reached at [richard\\_baldyga@infosys.com](mailto:richard_baldyga@infosys.com).

**R. Arun Kumar** serves as Outsourcing Solutions Specialist as part of the Strategic Global Sourcing Unit for Infosys. He anchors the Infosys' differentiated strategic sourcing point-of-view initiatives and is responsible for establishing Infosys as a thought leader in outsourcing. Arun joined Infosys in 1999 and has served in various sales and business development roles in West North America. Arun has previously worked as Vice President and Head of Business Unit at Virtusa Corporation, a software services company, and as Regional Sales Manager with Nokia Mobile Phones. Arun can be reached at [r\\_arunkumar@infosys.com](mailto:r_arunkumar@infosys.com).

**Stephen Lane** serves as Group Manager in Corporate Marketing for Infosys. A 25-year IT industry veteran, Stephen is a former software product manager, outsourcing advisory consultant, and services industry analyst. He has been involved in global sourcing in one form or another since the early 1990s when he managed a team of offshore software developers. Prior to joining Infosys, Stephen was a well-known and widely respected researcher, writer, and speaker on global sourcing best practices. He currently spearheads Infosys' marketing efforts focused on Strategic Global Sourcing and Outsourcing Solutions. Stephen can be reached at [stephen\\_lane@infosys.com](mailto:stephen_lane@infosys.com).

---

## References

- <sup>1</sup> Make Versus Buy: Strategic Outsourcing, James Brian Quinn and Frederick G. Hilmer, The McKinsey Quarterly, 1995 Number 1
- <sup>2</sup> Are You the Weakest Link?, Michael E. Raynor and Dwight L. Allen, Strategy & Innovation, HBS Jan-Feb, 2004
- <sup>3</sup> The Innovator's Solution: Creating and Sustaining Successful Growth, Clayton M. Christensen and Michael E. Raynor, HBS Press, Sep 2003
- <sup>4</sup> Managing in an age of modularity, C.Y Baldwin and K.B. Clark, Harvard Business Review, Sep-Oct, 1997
- <sup>5</sup> Look Who's Building Bimmers, Gail Edmondson, Business Week, Dec 1, 2003
- <sup>6</sup> Offshoring Goes on the Offensive, John Hagel III, The McKinsey Quarterly, 2004 Number 2
- <sup>7</sup> Strategic Global Sourcing: Best Practices and Building Blocks for Effective Sourcing Governance, Richard Baldyga and Sunder Sarangan, View Point, Infosys Technologies Ltd., February, 2004