STEVENS ALLIANCE FOR TECHNOLOGY MANAGEMENT

# Managing Outsourcing Strategies to Ensure Sustainable Innovation Performance

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A company's commitment to innovation is directly related to its long-term success. With the outsourcing of business functions in order to cut costs, streamline processes, and improve competitive standing, many have speculated on the link between outsourcing and innovation.

Corporate executives have long argued that outsourcing non-critical activities to focus on core competencies leads to higher productivity and increased innovation. Carly Fiorina, Chairman and CEO of Hewlett-Packard, has been widely quoted as saying, "There is no job that is America's God-given right anymore." Her company and many others employ outsourcing strategies in an effort to make their operations more efficient and able to sustain innovation over the long haul.

Politicians have inevitably entered the outsourcing - innovation debate. Some talk of the need to ensure free trade so that competition can flourish and innovation can thrive. Others argue that for the US to remain the dominant competitive world leader, jobs at home must be made more secure and less subject to the corporate need for low cost labor. Lou Dobbs, in his book "Exporting America", goes so far as to say that it is a "matter of national security".

The varied views reflect a debate being held at the national and industry levels. Few, however, have attempted to assess outsourcing's impact on innovation at the micro or company level, although some insightful anecdotal evidence is beginning to appear

in mainstream business media. Business Week's October 11, 2004 cover reads, "The Innovation Economy: Special Report -The Technologies and New Ideas That Are Changing the World." One of the issue's articles, "Scouring the Planet for Brainiacs", stresses that worldwide innovation networks, comprised of in-house as well as outsourced workers, are the new keys to R&D's "vitality and competitiveneness". It is filled with stories about how companies including Microsoft, IBM, and others, are using global sourcing as a way to develop higher levels for Research in Innovation and Competition at the University of Manchester asserts that "Firms, even large multinational corporations, can no longer expect to be totally dependent on their in-house research and technology resources to maintain innovative performance".

In contrast, The New York Times on December 19, 2004 described Dell Computer's homegrown assembly strategy. According to their account, all of Dell's assembly plants remain in the US and the company is arguably the most competitive, efficient computer company in the world. Experts from all fields agree that Dell, like no other company of its kind, has managed to figure out the productivity puzzle without hiring a single off-shore and/or outsourced assembly laborer.

In an effort to further enhance its competitiveness, Dell continuously asks its workers to innovate in its quest for higher efficiencies and lower costs. In a recent effort to drive increased productivity, one experienced assembly employee, who had been with the company for many years and knew how each and every second of assembly time was spent, suggested the re-design of one of Dell computer's innards, an innovation that enhanced the product while speeding up

assembly time. Innovation, in this case, was achieved through constant collaboration among in-house, on-shore workers.

So which strategy should a company use, and when? On the one hand, companies claim to have expanded their innovative capabilities through outsourcing. On the other, a powerhouse like Dell attributes much of its success to a strategy that keeps their assembly plants here in the US and uses local workers to innovate. How can executives get beyond the multitude of anecdotes in business periodicals, newspapers, consulting journals, and television talk shows and understand the impact that outsourcing can have on innovation within their own organizations? What should companies do to maximize innovative performance and at the same time achieve optimum cost structures?

Our research may hold some insights. For over two years, we have been interviewing senior executives and surveying project teams in a diverse set of companies -- from large, multinational corporations to smaller organizations -- about these and related topics. Our findings reflect analysis of 17 different organizations representing the financial services, manufacturing, healthcare, government, software, and outsourcing industries. We

currently have analyzed over 200 cases and our initial results, with respect to the impact of outsourcing on innovation, suggest that executives need to focus on some basic and historically important issues as they source from the global market.

Although the long-term effects of extensive outsourcing on innovation are as yet unknown, our findings indicate that certain factors that have been important to innovation in the past are affected when the backdrop of outsourcing is imposed. Executives need to understand these factors and moni-

tor the effects of changes in the business's culture of innovation.

PriceWaterhouseCoopers' recent report, "Innovation Study," showed that highly innovative companies come in many different shapes and sizes: from technology to textiles, engineering to education. The successful companies were differentiated from their relatively less successful counterparts in a number of key factors, grouped under three categories: innovation climate, people, and the process of innovation. We find that these key factors are affected by outsourcing in varying ways and degrees. Understanding the relationships will be vital to achieving future innovation performance in a climate of outsourcing.

The major conclusions of our research, in the context of the key innovation factors, are contained in the eight key findings summarized here.

## Focus on the Basics: Innovation Climate, People, and Process



#### Factor 1. The Innovation Climate

The innovation climate can be described as the "feeling" one gets when walking through the company's doors. It is the atmosphere established by a leadership that is committed to the pursuit of new ideas and the encouragement of individuals to set loose their creative juices. If a person believes that the climate is open and that their input is valued, then individuals are more likely to use their capabilities to innovate.

Outsourcing often involves distancing leaders from followers and peers from peers. The proverbial "doors" to the company offices are often virtual, and are sometimes difficult to discern. Leaders can find it challenging to hang on to coherent, well-defined messages regarding creativity and openness.

**Key Finding 1:** Our analysis shows that those who feel more distant from one another, whether in the form of geographic or socio-emotional distance or both, tend to be less innovative.

Key Finding 2: There is a significant and positive relationship between innovation and project success. In cases where team members felt free to use creative ideas toward achieving their goals, project success, measured by on-time, on-budget, and customer satisfaction performance, was significantly higher than among those that perceived the innovation climate to be negative.

When companies outsource some or all of their operations, innovators throughout the entire organization are often subject to mixed messages with regard to the stability of their own positions. In April 2004 a former Agilent employee said in an interview with Fast Company, "We've had throwaway clothes, throwaway cars, and now we have throwaway people." When outsourcing becomes part of the organizational strategy, it is likely to influence the innovation climate. This leaves individuals, as well as the company as a whole, susceptible to related risks of innovative inhibition and other defensive mindsets.

The behavior of role models and leaders is crucial in sustaining a positive innovative climate.

Key Finding 3: There is a strong relationship between a positive innovation climate and leadership. Team members who believed they were free to express new ideas and use unique prob-

lem-solving techniques also believed that their leadership was strong, highly effective, and cared about their organizational future.

**Key Finding 4:** Our data also show that those who feel more distanced from their fellow team members perceive their leaderships to be less effective.

Given these confluences between innovative behavior, distanced workers, and leader effectiveness, the need for good managers becomes even more critical. To maintain a vibrant innovative climate, especially when teams are distanced by space and time or psychological factors, leaders need to focus on ways to reinforce innovator confidence, while outsourcing continues.

Frequent communication, messages of encouragement, and visits in person to those responsible for the ideas of tomorrow, will help to stave off widespread negativity. Exemplars must serve as cultural liaisons, helping followers, who have varying backgrounds both demographically as well as

organizationally, to get to know one another. This will help create a free-flowing atmosphere conducive to the generation of new ideas.

### Factor 2. People: Trust Is the Key

Historically, when stable, established, business models prevailed, trust was considered a traditional, unthreatened quality of most organizations. Trust in leadership, team members, and the innovative climate, all contributed to high levels of new product and service developments. In the PwC study referenced above, trust was found to be the single most significant factor influencing successful innovation.

As companies outsource to disparate global provider networks, however, trust is often one of the first things impacted in a significant and negative way - opening the possibility for erosion of innovative performance.

**Key Finding 5:** There are strong and significant relationships between trust levels and feelings of distance among team members. Those who feel less distanced from one another have higher levels of trust.

**Key Finding 6:** High levels of trust correspond significantly to positive innovative behavior. This supports the finding in the PwC report that trust is a key input to innovation.

**Key Finding 7:** There is also a highly significant correlation between trust and leadership, underlining the need to focus on this aspect of the link between outsourcing and innovation.

In what Business Week termed "worldwide innovation networks", distance and cultural anomalies become interwoven into a set of complex corporate relationships while individuals are left to their own devices to assess whether their new found co-workers can be trusted. In these uncharted waters, some find it hard to conceptualize the notion of trust and how to measure it, let alone how to minimize the lack of trust that can emerge. In an interview with a large multinational financial services company, that uses worldwide outsourcing extensively, one executive described it in this way: "I have thought about this a lot. I am not sure how to assess if I trust someone or not. I am trying to use old markers to evaluate virtual workers and this does not work."

Most managers told us that trust in an out-

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sourcing arrangement is most often measured by on-time, on-budget project deliverables. While this is one facet of why individuals and organizations tend to trust one another, other factors such as building rapport and personal risk-taking on behalf of others, are just as important -- if not more so, over the course of time and multiple projects and partnerships. It is no coincidence that the trust measures of on-time, on-budget performance are also key criteria in most service level agreements. It makes sense that the SLA or contractual obligations are used as substitutes for traditional trust measures in globally and organizationally disbursed environments. But in doing so, teams and organizations alike might be losing innovative potential.

To guard against the detriments that lack of trust can have on innovation, leaders need to create shared team experiences that support cultural understanding and relationship-building and emphasize common goals. Seeding teams with a few members that have worked together in the past, who are specifically trained to develop trust among new members coming into projects without previous working history, will lead to longer lasting social networks within global partnerships.

#### **Factor 3. The Innovative Process**

Creative individuals take information from diverse sources and find patterns in that information, which lead them to solve problems in new ways. A successful power broker on Wall Street described this phenomenon in the following way:

"Analysts today have 5 terminals on their desks, maybe more. I like taking all the paper-based reports, articles, research, and anything else I can get my hands on and lay them all out on a big table. I walk around and look at the different pieces of information and try to find the pieces to a puzzle. In this way I can determine what companies are likely to be good investments. I like the fact that I can see everything all at once. I can't find complex

patterns on a computer screen, one image at a time."

Piecing together puzzles, a cornerstone of innovative thinking, depends on a "system-

wide view" of the domain. As connections between system elements increase, information flowing along those connections increases and new possibilities emerge, possibilities that would not have been produced purely by logical analysis. Outsourcing sometimes takes components of an organizational system and de-couples them from the rest. By separating certain individuals, departmental functions, and business processes, innovation may be affected because certain key connections, as described above, may never be made.

On the flip side, outsourcing provides companies the opportunity to add more experts to their resource pool. By adding new nodes to the network in the form of other organizational entities, the chances of increasing innovative performance may improve. As new people are added to the mix of problem solvers, companies can benefit from their fresh perspective and ties to a common goal. It is this promise that drives the creation of the global innovation networks described in "Scouring the Planet for Brainiacs." These networks consist of in-house engineers, contract designers and manufacturers, university scientists and dozens of technology suppliers.

**Key Finding 8:** Innovation is positively related to goal interdependence, face to face interactions, and clear communications between culturally distinguished team members and organizations.

Leaders and outsourcing managers should ensure that the goals of team members are closely linked. Project mangers should consider holding face-to-face meetings when possible, especially at critical junctures in the project and to prepare for important customer interactions. In addition, frequent, active discussions about the business context (the system-wide view) and how each team member is connected to it in a meaningful way, will expose innovators to issues they need to understand in order to effectively exercise their creative powers.

In summary, the issue of outsourcing and innovation has been a topic of discussion by businessmen, pundits, and politicians for quite some time. However, until recently, their focus has been on macro-level issues – concerns that are critical to things

like economics and free trade, but that do not necessarily help executives to understand the innovation impacts of outsourcing within their own organizations. While outsourcing has provided increased shortterm profit due to lowered labor costs, what has been its longer-term effects on innovation? If, in the long-term, competitive advantage turns more on innovation than on labor costs, how can outsourcing strategies be effectively executed to ensure sustainable innovation performance? While the answers to these questions are still forming, executives can find guidance for managing outsourcing while sustaining -or enhancing - innovation performance from our research.

First, companies must maintain a positive innovation climate. This can be challenging in environments where concrete blocks and street addresses no longer define the organizational space. Leaders are critical. They must focus on infusing the innovative atmosphere with positive reinforcement and cultural experiences that help distanced workers acclimate to their teams and in turn, together create radical or incremental innovations.

**Second**, companies must work with innovators worldwide to promote trust and shared responsibility. Trust is the most important factor in the innovation of new products and services, yet it is the first thing that is tested and often lost in global relationships.

Lastly, organizations need to proactively and clearly illuminate the broader business context for dispersed and compartmentalized workers. It is only when complex puzzles take shape, and combine with creative flair, that innovation thrives.

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