CHANGING BUSINESS DYNAMICS IN THE AUTOMOTIVE SUPPLIER SECTOR

THE STRATEGIC USE OF MERGERS & ACQUISITIONS, OUTSOURCING, SUPPLY CHAIN CONSOLIDATION, AND IT BY AUTOMOTIVE SUPPLIERS

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The statements, findings, and conclusions herein are those of the authors and do not necessarily reflect the views of the project sponsor.

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Introduction

Automotive suppliers find themselves facing a business environment that continues to grow more competitive. Rising materials prices coupled with demands for price cuts, as well as the growing cost of health care and increased competition have created a business environment in which suppliers struggle to succeed.

While myriad options are available to suppliers as they cope with this business pressure, this study focuses on four specific strategies that have recently been particularly prominent in the supplier sector: Mergers & Acquisitions (M&A), outsourcing, supply chain consolidation, as well as the role Information Technology (IT) plays in these dynamics.

The research results indicate that respondents believe business fundamentals, such as a renewed focus on product and internal capabilities, are the factors most important to their success. Outsourcing, a major recent alternative in the industry, is generally frowned upon. Information Technology (IT) is viewed as challenging to manage but potentially very valuable when correctly executed in the appropriate business operations.

One of this study's chief benefits is that it provides details on trends that have previously been only broadly identified. For example, the trend for suppliers to take on a larger role in the design and engineering of components has been observed over the last few years. Research in this study verifies that this trend is indeed widespread. Ninety six percent of our respondents, as well as all of our interviewees, have indicated their firm has an increasing role in design and engineering.

This study was conducted in two phases. Phase one involved a series of interviews with executives from leading automotive suppliers. The interview results were used to develop for phase two a questionnaire that addressed the business challenges currently faced by suppliers. The interview and survey results are presented in this document.

Methodology

Research was conducted in two phases. In the first phase, structured interviews were conducted with executives from seven top performing suppliers: BorgWarner, Inc., Robert Bosch Corporation, Denso Corporation, Gentex Corporation, Johnson Controls, Inc., Magna International, Inc., and Yazaki North America, Inc. in June, 2005. The input gained from these interviews was used to design a survey instrument.

CAR then surveyed a population of discrete component suppliers with North American automotive sales over $250 million, about 110 firms. Responses from 36 firms were received.

In total, this study has benefited from the participation of over 40 companies, more than a third of the population under study. We believes this high level of participation enriches the data and makes for a highly representative sample.

Supplier Executive Interview Results

CAR researchers interviewed executives from seven of the foremost automotive supply companies to obtain their insight on managing their companies through the changing business dynamics of the automotive industry. While the interviews focused on the management features that characterize successful suppliers, the intent was to spotlight the transformational impacts of four key strategies: (1) mergers and acquisitions; (2) partnering with other suppliers; (3) outsourcing/offshoring; and (4) supply chain integration. The purpose of the study was to investigate the drivers in the current automotive industry that compel automotive suppliers to undertake these strategies, the reasons each is considered, and the extent to which Information Technology (IT) is taken into consideration when these strategies are developed.

The interviews served several purposes in formulating the direction of the study. First, they helped set the context of the survey and described the business dynamics driving the strategies being addressed in the survey. The interviewees explained that original equipment manufacturers (OEMs) are passing price pressures they face in the increasingly competitive automotive market down to the suppliers. Furthermore, the automakers are shifting the burden of design and production of modules and systems to the supply companies. In this environment the automotive suppliers are realizing they can no longer operate as isolated enterprises and this is forcing a re-examination of the suppliers' basic business structures and practices.

OEMs have been increasingly relying on suppliers for a greater proportion of the components, design, engineering, and total value of the vehicles they build. Competition among suppliers is intensifying in response to pressures in an evolving environment that includes the increasing need to cut costs, minimize costly inventories, assure just-in-time delivery, evolve from component to subsystem production, take on more design responsibility, and increase reliance on technology in design and manufacturing. Increasing costs of raw materials was also a continuing problem.

The interviews also addressed the factors that differentiated the most admired suppliers from the rest of the pack. It was not surprising that focus on the customer was a common theme in the respondents' stories about company strengths. According to most, companies that had a strong customer focus were generally organized to assure continuous coordinated contact with the customer. The successful companies worked to collaborate with the customer in defining their needs and product requirements.

Time is also a factor in success. The successful companies have a sense of urgency when it comes to bringing products and processes to market. However, these companies also take a long-term view in formulating strategy, developing customer relations, designing new products, and strengthening their organizations.

Not surprisingly, improving customer relationships was also recognized as the most common opportunity for improvement among the thought leaders. Maintaining and expanding the customer base is crucial to the success of any firm and especially critical to sustaining the profitability of automotive supply companies in the long run. Most of the thought leaders recognized the value of organizing divisions and business units to assure a coordinated collaborative relationship with existing customers. They also stressed the importance of extending the customer base to avoid overdependence on a small core of existing customers. This new focus on relationships with customers increases the importance of communication and coordination between the OEMs and the suppliers regarding design requirements and manufacturing process changes.

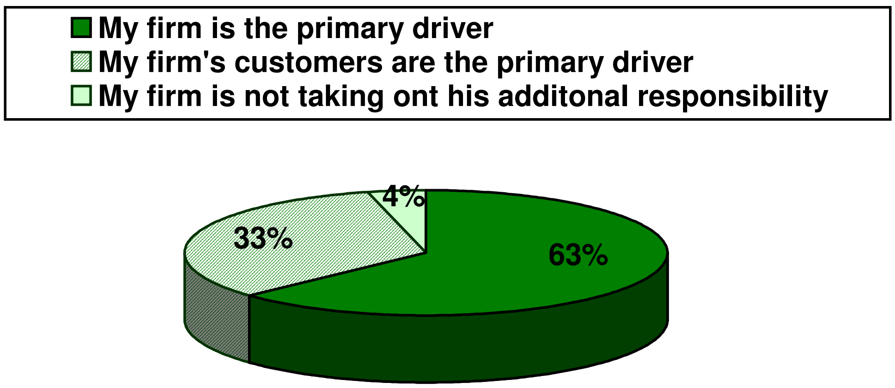
Most interviewees identified investment in people as key to their success. They talked about building a company culture based on support of human resources that instilled a sense of loyalty and commitment. Although the business environment continues to grow more challenging, the suppliers need to react quickly and meet this challenge through training and better dissemination of best practices.

The interviewees noted that suppliers often made mistakes about plant location decisions and logistics. They are too quick to build facilities where customers demand them and not where they would necessarily be most efficiently placed. Suppliers also ran into difficulties if they did not actively manage costs. Purchasing was viewed as a crucial function because of cost. Several interviewees mentioned the difficulties of outsourcing in low-cost countries. Because these firms place such a high emphasis on internal capabilities and expertise, they expressed a reluctance to turn even less critical company functions to outside firms, whether locally or overseas.

Finally, the respondents also stressed that despite the financially difficult business environment of the supplier sector, suppliers should not reduce Research and Development (R&D) spending. In fact, the intellectual property processes of the more successful suppliers were admired by all of the respondents.

Survey Results

Figure 1
Design and Engineering Responsibility

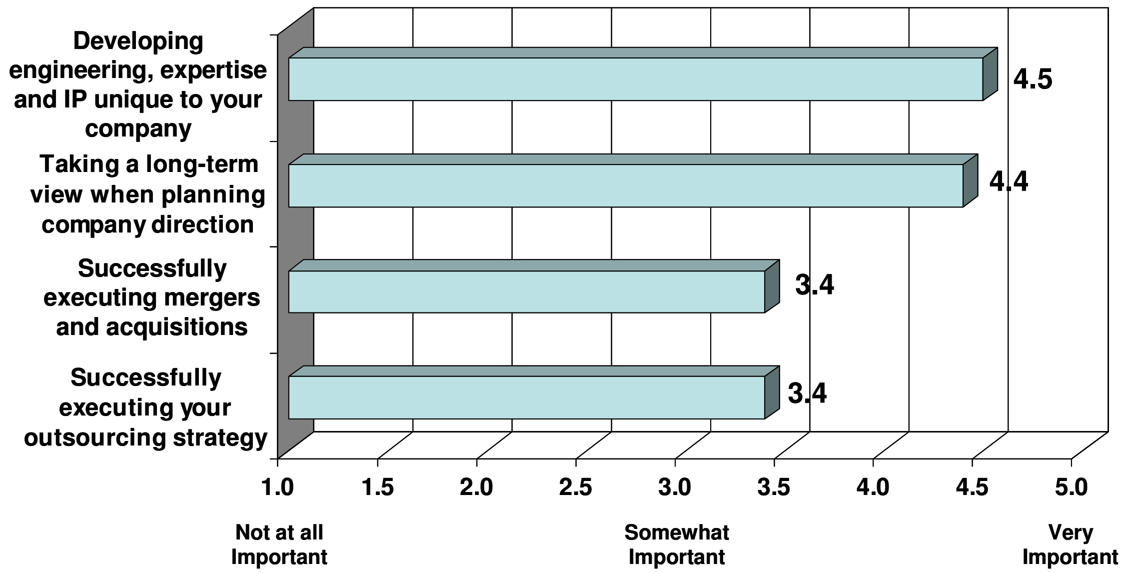


Question: Please indicate who is the primary driver behind your firm taking on additional design and engineering responsibility.

While many automotive industry observers believe the trend in suppliers taking on more responsibility for design and engineering is mainly a result of OEM demands, our research shows that is not the case among the firms we surveyed. Nearly two-thirds (63 percent) of the respondents indicated their firm is the primary driver of this dynamic. A full 96 percent of the respondents indicated that their firm has experienced the trend toward higher levels of design and engineering responsibility.

The population studied includes discrete component suppliers with North American sales over $250 million – about 110 of the largest automotive suppliers. These firms appear to have the resources and engineering capability to not only accept their customers' demands for additional engineering and design work, but to actively seek it out in search of larger financial rewards.

Figure 2
Key Factors for Long-Term Success



Question: Please rate the following factors in terms of their impact on your company's long-term success.

The respondents indicate that developing engineering, expertise, and Intellectual Property (IP) unique to their firm is the most important factor in terms of impact on their firm's long term success, with a rating of 4.5 on a 5-point scale. Taking a long term view when planning company directions was rated nearly as important, with a score of 4.4.

Successfully executing outsourcing strategy was rated the least important factor with a score of 3.4. Although still considered to be "somewhat important," this response is consistent with the respondents' largely negative views on outsourcing, which are borne out in future questions.

The respondents' emphasis on product and engineering is a theme that runs throughout this study. In this question, respondents indicate that developing engineering, expertise and IP unique to their firm is the single most important factor to their success. In subsequent questions, they reveal the importance of product and engineering emphasis in all the domains analyzed in this study.

The respondents' indication that taking a long term view when planning company directions is the second-most important factor to their long term success was shared by the executives interviewed in phase one of this study. Interviewees conveyed a circular flow in which financial success allowed their firm to focus on long-term issues, which in term made them more successful over time.

It may initially appear that successfully executing mergers and acquisitions is the same importance to the respondents as outsourcing, with a rating of 3.4. Analyzing the distribution of the responses, however, reveals that is not the case for all respondents. This analysis is discussed in Table 1.

Table 1
Successfully Executing Mergers and Acquisitions – Response Breakout

1 Not at all Important	2	3 Somewhat Important	4	5 Very Important
13%	15%	20%	33%	20%

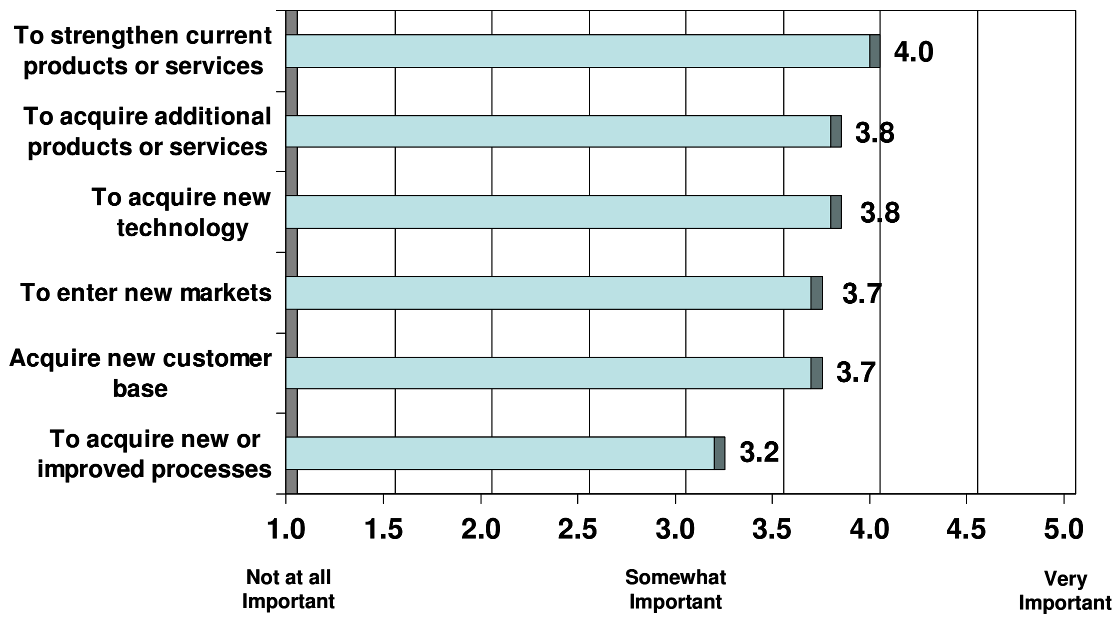
Question: Please rate the following factors in terms of their impact on your company's long-term success.

The impact of successfully executing mergers and acquisitions on the respondents' firms' long-term success had a broader range of responses than any other question asked in the survey. While the overall average response of 3.4 on a scale of 5 may appear to indicate that, relative to the other factors studied, mergers and acquisitions are not important to the respondents, it in fact emphasizes the disparity of approaches for company growth.

Within the overall rating of 3.4 out of 5, a full 53 percent of our survey respondents rated successfully executing mergers and acquisitions as either a 4 or 5 out of 5 in terms of importance. At the same time, 28 percent rated it a 1 or 2 and 20 percent rated it a 3 (due to rounding, the numbers do not add up to 100 percent). This kind of disparity does not appear anywhere else in this survey analysis. Mergers and acquisitions are unique in that, while they are critical to many of the respondents, others do not find them necessary.

Discussion of this topic in the interviews with executives from seven leading automotive suppliers reflected this disparity. While all interviewees looked favorably on organic growth, there was a lack of consensus on growing through mergers and acquisitions. While some interviewees embraced mergers and acquisitions, some believed their companies should grow only organically.

Figure 3
Reasons for Merger and Acquisition Activity



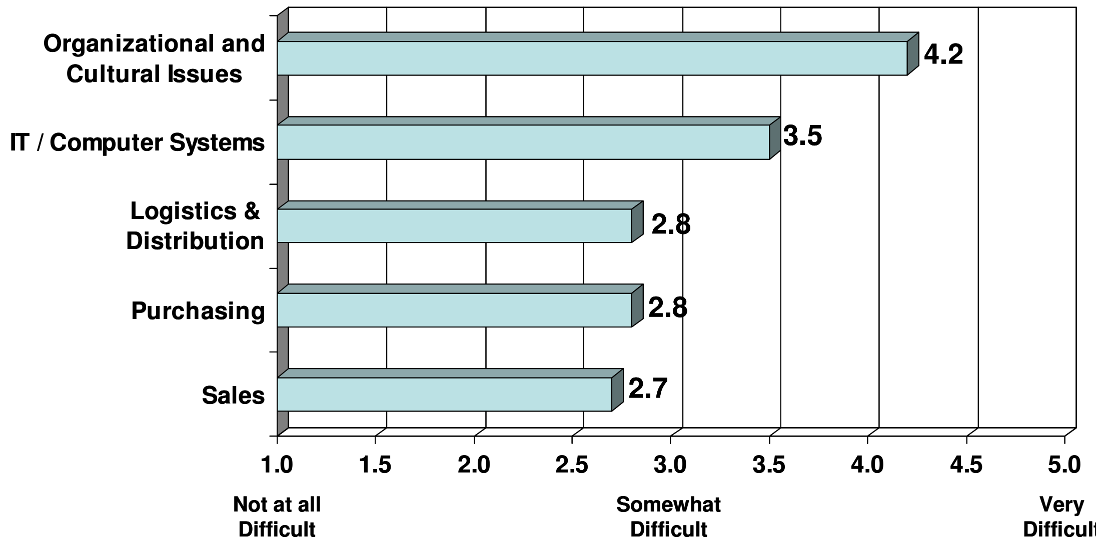
Question: Please rate the following factors in terms of their importance in driving your company to engage in a merger or acquisition.

The respondents indicated that strengthening current products or services is the most important factor in driving them to execute a merger or acquisition, with a rating of 4.0 on a 5-point scale. The ratings for four other factors, including to acquire additional products or services, to acquire new technology, to enter new markets, and to acquire a new customer base, ranged from 3.8 to 3.7. Acquiring new or improved processes was rated least important, with a rating of 3.2 on a 5-point scale.

The reasons for undertaking a merger or acquisition fall into two distinct categories. Product concerns are the most critical, with all three of the top reasons being related to products or technology. Market concerns are statistically of equal importance. The respondents indicate that gaining access to new customers is equally important to gaining access to new markets.

These findings are consistent with and complementary to those from other questions in the survey. Figure 2 indicates that developing engineering, expertise, and Intellectual Property unique to their firm is the most important factor in terms of impact on the responding firms' long-term success. They use mergers and acquisitions, for which the main drivers are product-related, to strengthen their firm in this regard.

Figure 4
Post Merger and Acquisition Business Process Integration



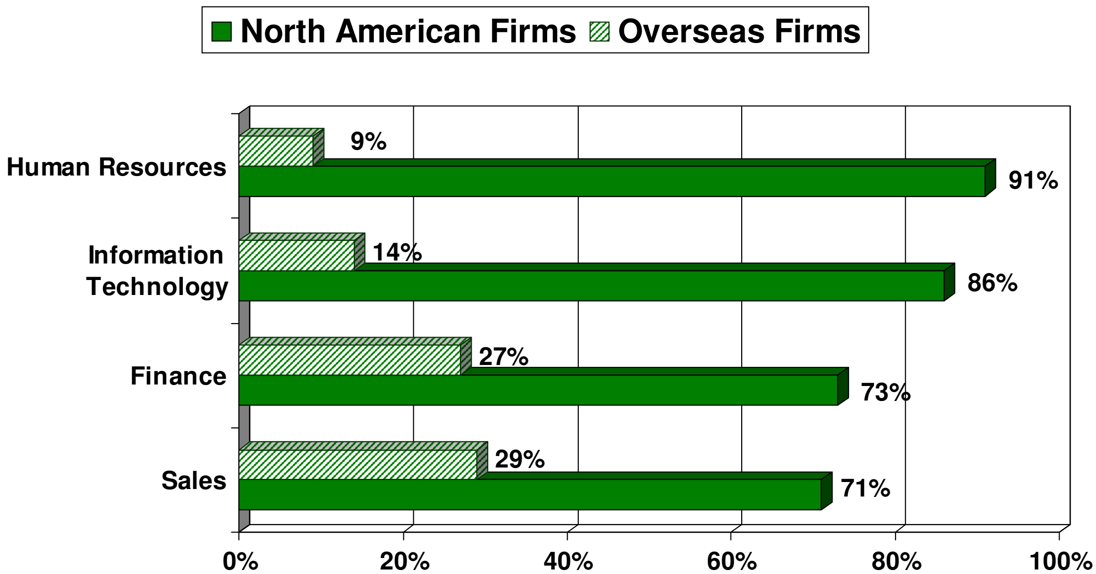
Question: Please indicate the difficulty of integrating the following processes or functions into the new entity after a merger or acquisition.

Once a merger or acquisition has been completed, the respondents indicated that organizational and cultural matters are the most difficult to integrate into the new entity, with a score of 4.2 out of 5. IT and computer systems were rate the second most difficult, with a score of 3.5. Three processes – sales, purchasing, and logistics & distribution - were nearly tied as the easiest to integrate, with scores ranging from 2.8 to 2.7.

While it may not be surprising that processes such as sales, purchasing and logistics were rated relatively easy to integrate, it is significant that IT and computer systems were rated as the second most difficult. While processes such as sales and purchasing are complex, their complexity is addressed through human intervention, which makes their reorganization and integration easier. IT, on the other hand, is much more technical in nature; disparate and fragmented systems make it difficult to integrate.

IT itself serves as a facilitator of the integration of other business functions. While IT and computer systems are critical for the integration of other processes, our respondents indicate them to be themselves very challenging to integrate.

Figure 5
Outsourcing Location



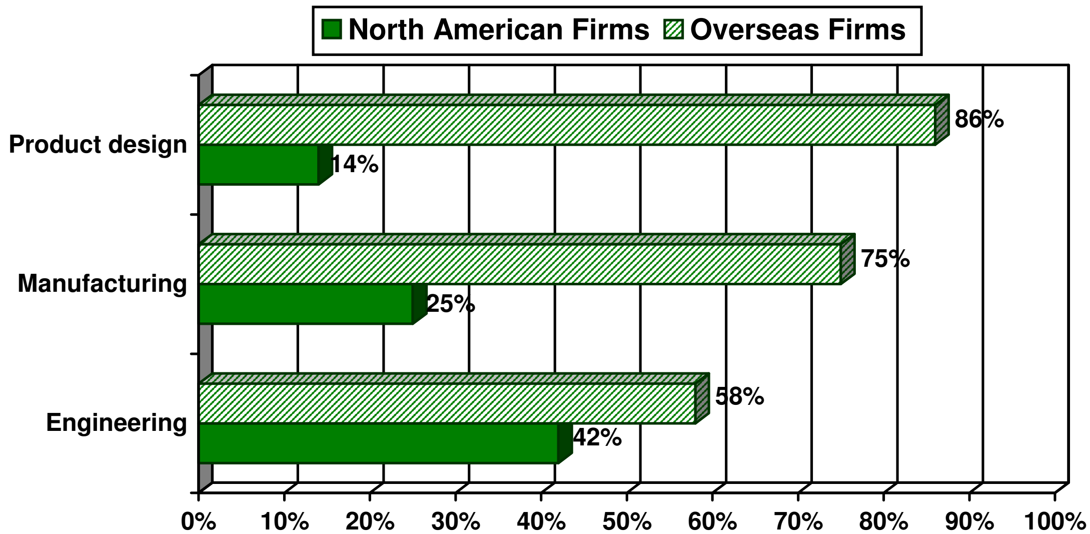
Question: Please indicate whether your firm has outsourced the following processes to North American firms (onshoring) or overseas firms (offshoring).

Outsourcing was rated as the least important factor for the respondents' long-term success (please refer to Figure 2), with a score of 3.4. The respondents who engage in outsourcing report that a substantial share of their outsourced processes go to North American firms. Human Resources had the greatest level of outsourcing to North American firms, with a score of 91 percent. IT followed with 89 percent, Finance with 73 percent and Sales with 71 percent.

While outsourcing is commonly defined as taking place overseas, our respondents indicate that, for many business processes, it is preferable to outsource locally. Each of the business processes rated least likely to be outsourced overseas (Human Resources, IT, Finance, and Sales) shares the characteristic of closely dealing with people. These business operations present challenges best solved locally and are less compatible with the time zone and language challenges presented by outsourcing overseas.

Both in the executive interviews and the survey results, the respondents indicated they are reluctant to outsource. When they do engage in outsourcing, they prefer not to send the work very far away, particularly for the business processes that deal with local issues.

Figure 6
Outsourcing Location



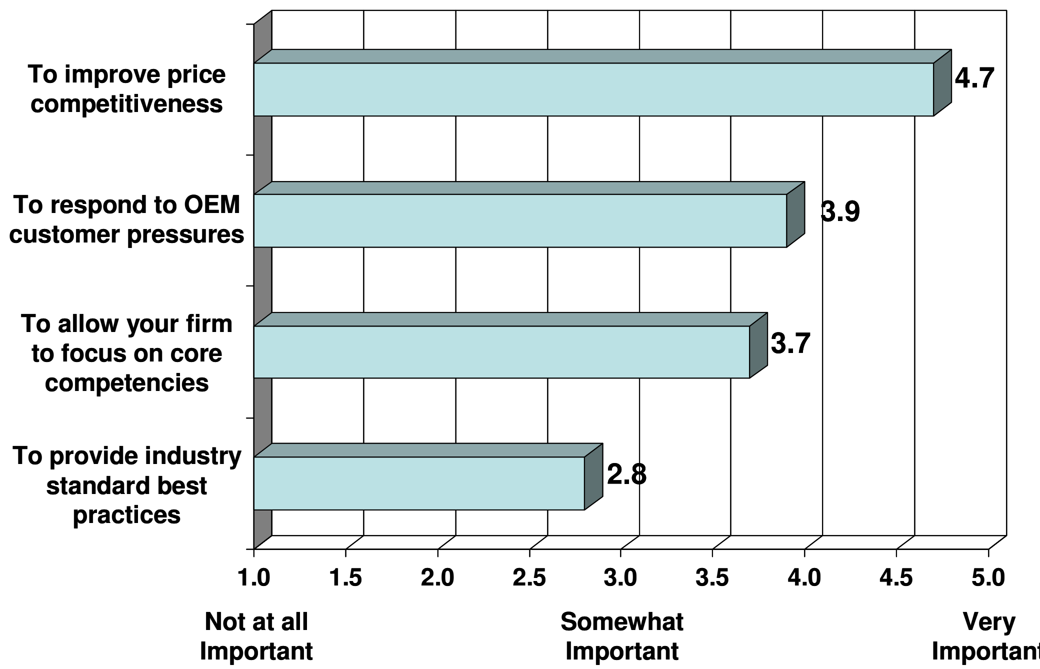
Question: Please indicate whether your firm has outsourced the following processes to North American firms (onshoring) or overseas firms (offshoring).

While the respondents indicated a preference for outsourcing in North America, three business operations were indicated as more likely to be outsourced overseas. The respondents who engage in outsourcing indicate that 86 percent of their outsourced Product Design is done overseas. Manufacturing is second with 75 percent and Engineering third with 58 percent outsourced overseas.

Product Design and Engineering are both technical operations which lend themselves well to outsourcing overseas because they don't require as high a level of interaction with local employees and customers as Human Resources, Information Technology, Finance, and Sales do. A Computer Aided Design (CAD) file sent electronically anywhere in the world can be worked on by employees in alternate time zones with little of the human interaction required in other business operations.

Study respondents indicated that by far the most compelling reason driving them to outsource is cost reduction (these results are discussed in detail in the next section). This motivation is clearly seen in the fact that 75 percent of respondents' outsourced manufacturing is done overseas. The lower wages found overseas are clearly a strong lure.

Figure 7
Reasons for Outsourcing

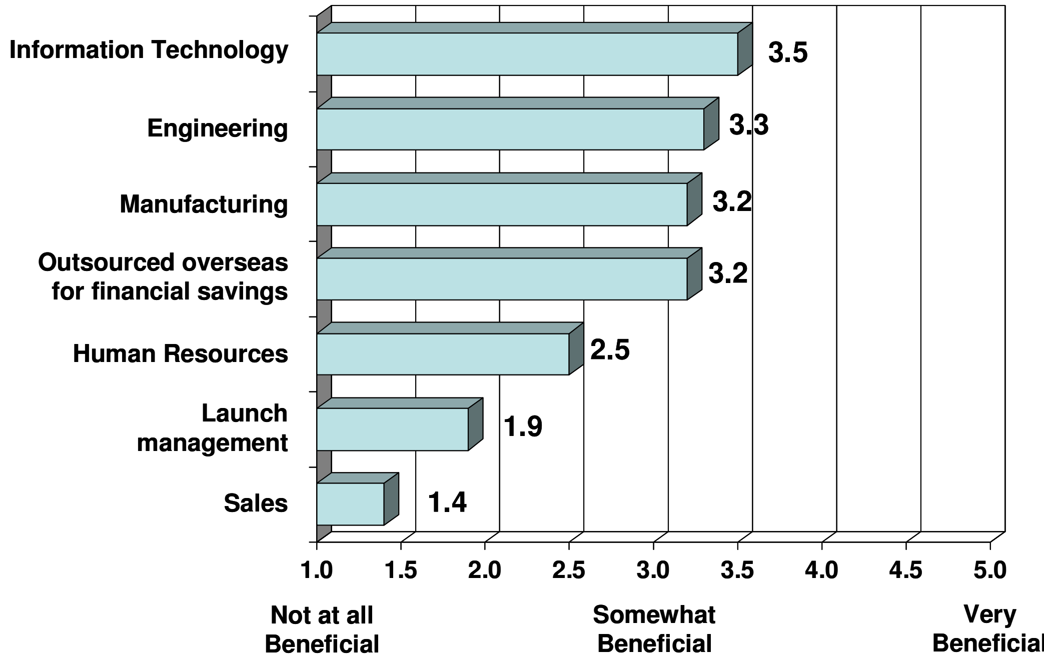


Question: Please rate the following factors in terms of their importance in driving your company to outsource.

As noted, outsourcing was rated as the least important factor for the respondents' long-term success (please refer to Figure 2). For the firms that do outsource, the primary reason was price competitiveness, with a rating of 4.7 out of 5. The second most important reason was OEM customer pressure, with a rating of 3.9. The factor rated least important was providing industry standard best practices, which was rated 2.8 out of 5.

While the respondents are reluctant to outsource, particularly overseas, those that outsource do so either because they found a financial benefit or their OEM customer pressured them to do so. The respondents outsource either because of pressure or cost, not because something can be done better, as indicated by the fact that providing industry standard best practices was rated the least important reason to outsource.

Figure 8
Outsourcing Benefit Comparison

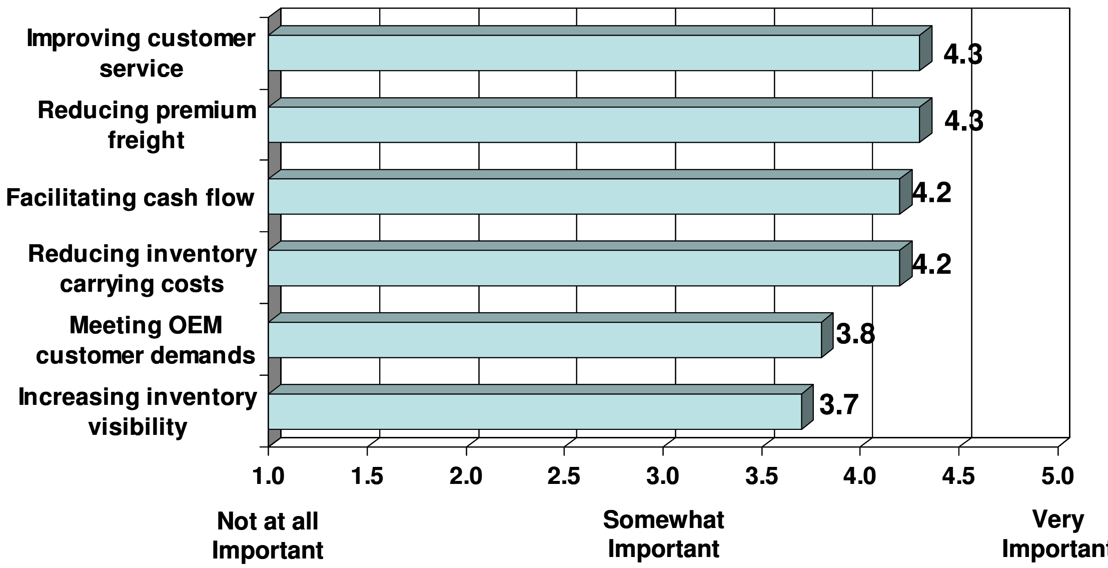


Question: Please rate the benefit to your firm of outsourcing the following functions.

The respondents indicated that Information Technology is the process which is most beneficial to outsource, with a rating of 3.5. Engineering was rated second most beneficial, with a rating of 3.3. Human resources, launch management, and sales were rated the least beneficial to outsource, with scores of 2.5, 1.9, and 1.4, respectively. It is noteworthy that the respondents' negative view of outsourcing is also evident in this question. Even the highest rated response only hit a level of 3.5 on a scale of 1 to 5, with 3 indicated as "somewhat beneficial" on the survey.

The rating of Engineering as the second most beneficial process to outsource presents an interesting management challenge for the respondents. In previous questions, they indicated product-related expertise and engineering are the most important factor in driving them to engage in mergers and acquisitions and developing these capabilities in their company is the most important factor to their firms' long-term success. At the same time, outsourcing Engineering can yield significant savings in the short term. Striking a balance between these disparate dynamics is critical.

Figure 9
Reasons for Supply Chain Optimization Activity



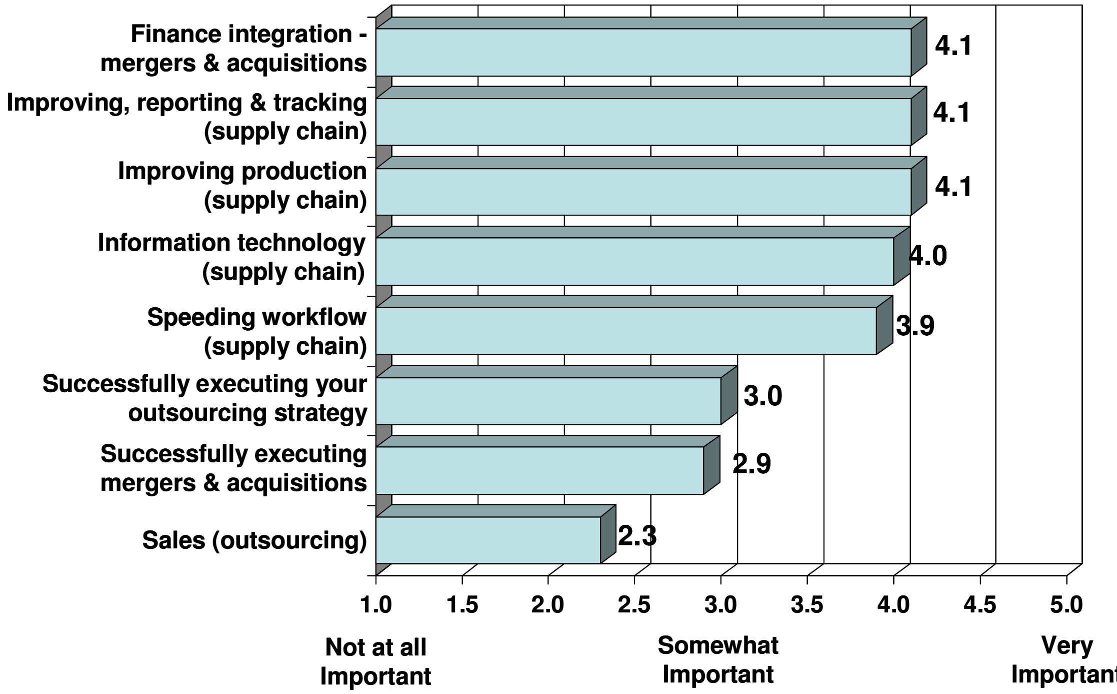
Question: Please rate the following factors in terms of their importance in driving your company to engage in a supply chain optimization project.

The respondents indicated that financial returns are the main factor driving them to engage in a supply chain optimization project. Improving customer service, reducing premium freight, facilitating cash flow, and reducing inventory carrying costs were rated from 4.3 to 4.2 on a 5-point scale. The range of the scores for these factors is very tight, indicating the difference in importance among the items is not substantial to the respondents.

Reducing premium freight, facilitating cash flow, and reducing inventory carrying costs all deal with direct financial benefits from supply chain optimization. Taken together, they are a strong and consistent indicator of the financial pressure that drives suppliers to engage in this practice.

While improving customer service was ranked highest, meeting customer demands was rated second from lowest, with a score of 3.8. The improved customer service resulting from supply chain optimization is therefore a result of the suppliers proactively engaging in this practice for financial gain, not bowing to customer pressure.

Figure 10
Information Technology



Question: Please rate the importance of IT in the following situations.

Throughout the study, Information Technology was rated as most beneficial in business processes that are technical in nature and are traditionally associated with IT solutions. Finance, reporting and tracking in the supply chain, production and planning in the supply chain, speeding supply chain workflow, as well as managing IT itself, were rated as the areas where IT is most beneficial, with ratings ranging from 4.1 to 3.9 out of 5.

The respondents indicated IT is least beneficial in assisting with business processes that typically have a high level of human involvement and problem solving. Managing outsourcing, managing the merger and acquisition process, and managing the outsourcing of Sales operations were rated from 2.3 to 3.0 out of 5.

The respondents indicate that IT, which is itself a technical field, is most valuable when applied to the management of other technical operations. They believe it to be less valuable in areas requiring large amounts of human decision-making and interaction.

One survey respondent expressed his views on IT in the following quote:

> ". . . I believe we have a weak IT group at our company. I also believe IT could be a positive, strategic advantage if properly managed with a more knowledgeable IT team."

Study results indicate that the potential exists for suppliers to gain a strategic advantage over competitors by successfully employing IT in business processes with which it is typically not associated. While respondents have indicated that IT is complex and challenging to manage, it may potentially provide them with significant strategic benefits if properly executed. Business operations that involve a higher degree of human interaction and decision making may present the next opportunity for the strategic application of IT solutions.