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1. Presentation Summaries

1.1. "Introduction to Unilever," John Rothenberg, Senior Vice President, Supply Chain, Unilever

Unilever is an Anglo-Dutch firm with two chairmen, two headquarters, but one strategy: the Path to Growth. The company is a $50 billion global business focused on the fast-moving consumer goods area. At Unilever, supply chain is one of the six strategic elements that underpin the company's overarching Path to Growth strategy. The strategy aims to double Unilever's growth by 2006. Supply chain's mission is to act as the fuel for that growth by reducing costs and enabling the company to quickly implement its innovations. In order to do that, the company must build new capabilities that support new business models. For example, the channel structure in North America is changing quickly. The fastest trend is the rise of dollar stores (the previous trend was club stores). Unilever knows it must go where consumers go. Logistics must support the flow of materials from new suppliers that provide innovative raw materials to an ever-shifting mix of retail outlets.

Unilever's Path to Growth consists of a three-phase progression. The first, and recently completed, phase, "Build the Basics," built the infrastructure to support growth. Unilever recently completed this phased, which refocused factories, changed the scope and scale of distribution centers, and integrated IT systems across the company. (Integrating IT was a challenge in itself, because it required uniting the operations of three recently-merged companies: Lever Brothers, Helene Curtis and Chesebrough-Pond's). Unilever is in the second phase of growth now, "Exploit the Basics," in which it will exploit improvements to manufacturing and IT. The third phase, "Raise the Bar" is set for 2004-2006 and will focus on strategic differentiation, raising the bar with Six Sigma, global innovation, global sourcing and fulfillment chain processes.

Mr. Rothenberg sees supply chains as interwoven networks, not linear chains. The network structure implies a new way of managing. Networks require working in a shared collaboration environment, which is quite a contrast to proprietary supply chains, in which a single company controls the chain. Unilever is aggressively implementing collaborative opportunities with retailers as well as suppliers.

1.2. "Logistics at Unilever Home and Personal Care (HPC)," Fred Berkheimer, Vice President Logistics, Unilever

Mr. Berkheimer expanded on the theme of supply chains as networks, providing two examples of Unilever's experience.

Networked supply chains require flexibility, agility and strong relationships with partners. They also require technology to link the network and coordinate it toward delivering customer/consumer value. The benefits which Unilever anticipates from a networked supply chain are greater speed and flexibility;
reduced infrastructure asset costs; gaining leading-edge IT; and expanding capabilities by leveraging partners' process expertise. All of these benefits support Unilever's growth goals.

The first example that Mr. Berkheimer detailed was that of Unilever's use of Transplace for inbound transportation. Transplace is a web-based ASP for managing inbound transportation. Unilever chose inbound transportation for this partnership, as opposed to outbound transportation, because inbound transportation offered the greatest opportunity for gain. Unilever already enjoys solid performance and visibility in outbound transportation, but it had poor visibility into the inbound. The new approach offered a way to gain visibility and to eliminate issues such as rogue shipping. In short, inbound logistics was the area where Unilever had the least control and visibility -- the company had the least to lose and the most to gain. Unilever will test the performance of Transplace and compare that performance to the performance of outbound transportation to compare the two approaches.

The second example is Unilever's Network Mega Center Design -- an ambitious project to consolidate 28 warehouses down into 5 new large-scale distribution centers. The design is to gain a common warehouse, located regionally within one day of most customers. Each warehouse will support a variety of different shipments (full pallet, picked case, custom pallet, etc.) Previously, Unilever had multiple warehouses that focused on a single type of shipment (many inherited from the merger of its precursor companies). To execute this new design, Unilever is relying on an alliance structure with partners who have expertise in each of the needed areas. The design was completed by operating partners, an engineering firm, general contractor and Unilever. The final location selection and incentive negotiations were conducted by firms Delta and ProLogis. Construction, project management and financing was provided by ProLogis. Rather than design, select sites, finance, build, and operate these new megacenters itself, Unilever realized that it could leverage the resources of a network of partners. The result is the accelerated delivery of higher supply chain performance without taxing Unilever's inhouse resources or capital.

1.3. "Customer and Alliance Relationships at Unilever HPC," Anne Racine, Customer Logistics Manager, Unilever

Unilever has a dual team approach to customer and alliance relationships -- a Customer Strategy team and a Customer Service team. The Customer Service team handles the day-to-day, operational issues with Unilever's major retail customers. The Customer Strategy team, in contrast, focuses on the strategic issues that will help Unilever achieve its growth plan. The Strategy Team believes that the best way for Unilever to meet its growth targets is to improve alliances with customers.

From its experiences with customer alliances, Unilever has learned three important lessons. First, alliance relationships can't be built without a mutually-beneficial value proposition. Second, common ground, experiences and shared values can turn the initial value proposition into an effective, long-term alliance. Third, both partners must be committed to finding true value and savings. Customer alliances are not about cost shifting.
Ms. Racine gave an example of Unilever's alliance with CVS Drug Stores to illustrate how the alliance was forged and the benefits it brought. The idea for an alliance originated in 1994. At the time, CVS was feeling out of touch with its supply chain and wanted to extend its view. CVS invited Unilever to share its vision of EDI and was excited by the opportunity Unilever described. Unilever had knowledge and experience with EDI that it could offer to CVS. The initial meeting quickly expanded into an immediate action: Unilever and CVS people visited CVS stores together to look for opportunities for improvements, focusing first on non-technical areas such as distribution center loading and unloading processes and packaging issues. Early successes gained senior management attention. Unilever then helped CVS create their own EDI program. Unilever had a well-documented EDI program and shared its people, information, resources and time with CVS, bringing CVS to the point where CVS could conduct EDI with Unilever. Following that success, the two companies continued with CMI, VMI and CPFR. The two companies are now working on project Visibility together. What started as a small project -- helping a customer get a vision of what was possible with logistics -- expanded into a deeper relationship that has created a very strong alliance with CVS and has helped CVS become one of Unilever's most technologically advanced customers.

One of reasons for the successful alliance, Ms. Racine said, was that both CVS and Unilever had a very similar approach to growth, namely growth by acquisition. That helped CVS understand what Unilever was going through when Unilever merged three companies into one, and it helped Unilever understand what CVS was going through when CVS purchased Revco and Arbor drug.

In short, Unilever saw an opportunity, responded to it, and worked with its alliance partner to the benefit of both partners. As value was created, top management became interested, and that built momentum.

1.4. Discussion

In the discussion, participants shared their experiences with customer alliances. Gillette mentioned significant commercial benefits that emerged from Gillette's alliance with Carrefour. Gillette was a late entrant into the VMI alliance that Carrefour was forming with its top suppliers, but it was able to add an innovation into the system, namely building in a price check. The result is that Gillette does not have to do adjustments in the deductions and claims management on the back end, thereby getting the benefits of faster payment and less labor spent on reconciliation. Furthermore, following the successful VMI alliance, Carrefour asked Gillette to the first company on the launch of a pan-European product. The alliance required a coordinated approach into all the EU markets at the same time. The deal came about because of the good will created during the first alliance.

Both Boston Scientific and FedEx reiterated the importance of showing the value-added benefit of a proposed alliance. Boston Scientific noted that this was especially important with partners who are not far along in technology and will have to make a greater investment in technology to get the benefits. Once the potential partner understands what they can gain and how systems across the two companies
can be integrated for mutual benefit, they will be more likely to join the alliance. FedEx added the importance of building credibility and trust and being seen as a resource in a win-win alliance.

Siemens described an alliance with suppliers that the company has started. The alliance is a networked supply chain in which the suppliers have relationships not only with Siemens but with each other. The alliance has a Supplier Council that makes decisions. For example, the council is responsible for freight costs that are shared by all alliance partners. Council members work together to optimize the freight costs and redesign material flow if necessary. The dilemma for Siemens in the alliance was the issue of giving up control in order to get the benefits. The lesson learned: someone needs to own the process across the network, (i.e., someone must know where the parts are, when they are coming, and when they are going out). Siemens also tackled the difficulty of a long-time supplier who chose not enter the alliance. After a difficult decision process, Siemens chose to change to a new supplier who would participate in the alliance. Siemens also took care to help its alliance partners, for example negotiating long-term supply agreements with them when they agreed to build a new facility next to Siemens, and helping them fill capacity at the new facility with other customers, not just Siemens. This was an unusual move, but one which rewarded the supplier for its investments in infrastructure, new hires, and the alliance.

1.5. "Outsourcing and Strategic Alliances at Clockspeed," Charlie Fine, Chrysler Leaders for Manufacturing Professor of Management, MIT Sloan School of Management

Prof. Fine introduced the concept of clockspeed into outsourcing and strategic alliance decisions. "Clockspeed" refers to the timespan in which an industry changes. Some industries, such as microelectronics, operate at a fast clockspeed, with innovations and change coming at a fast pace compared to industries like mining, where change occurs at a slower speed.

There are numerous factors to evaluate when making an outsourcing decision, but the two primary factors are dependence and clockspeed. When a company decides to outsource a process, it becomes dependent on the supplier for that process. Therefore, the strategic sourcing decision involves considering what processes your company can afford to be dependent upon other firms for. Dependence can take two forms: dependence on the design of the process, or dependence on the execution. For example, a company may retain knowledge of how to design a product, but outsource the manufacturing. In full outsourcing, the company would be dependent on both design and manufacturing.

Prof. Fine used the example of GM to illustrate the sourcing decision process. GM's Powertrain division was deciding whether to outsource the engine block casting of its engines. The first question to ask when making the decision is whether the engine block is a strategic differentiator for GM. In other words, does the customer care whether GM is casting the engine block? The answer was that the customer does not care. The second question was that of clockspeed: how quickly does clockspeed change in the industry? It turns out that clockspeed in this industry was slow. Finally, GM evaluated its
competitive position in the industry. GM was in the middle of the pack with respect to cost-efficiency on engine blocks, in contrast to Toyota whose costs for casting the engine block were the cheapest in the industry. Therefore, GM had the opportunity to save money by outsourcing. Given the slow clockspeed of the industry, the fact that engine casting was modular (not an integral part of the product), the availability of numerous suppliers, and GM's competitive positioning, GM decided to outsource engine block casting.

Likewise, a consumer products company could pose similar questions when deciding whether to outsource bottling of its shampoo. For example, if bottling the shampoo 1) is not integral to the product, 2) is not characterized by a dominant supplier 3) does not operate on fast clockspeed, 4) the customer is indifferent to who bottles the shampoo, and 5) the bottling is not a strategic or cost differentiator, then it makes sense to outsource bottling of the shampoo.

In contrast, IBM's decision to outsource the design and manufacturing of chips to Intel for the IBM PC was a strategic miscalculation. There were few suppliers in the industry and the clockspeed in the industry was so fast that when a supplier got ahead, it was easy to stay ahead. The fast clockspeed makes it hard for IBM to invest and regain its position in the PC industry that it created.

1.6. "Role of Supply Chain in a Growth Company," Alan Jope, Chief Operating Officer, Unilever

Mr. Jope outlined Unilever's building blocks on its path to growth, with supply chain being one of the strategic thrusts of the company. Unilever's goal with this growth strategy is to double growth within 5 years.

First, Unilever will focus its portfolio on those brands that offer the most potential for growth. For example, Unilever's Suave and Dove brands are the company's largest. In absolute and percentage terms, those brands grew the most last year. The brands are large and strong enough to cut through the clutter. This focus on a few brands represents a strategic change for Unilever, which previously followed a category strategy. This change in strategy puts a different pressure on the supply chain: it requires a supply chain strategy of rationalized manufacturing sites and distribution sites with increased use of outsourcing. The challenge of Unilever is that the company must make outsourcing an organizational competency.

Second, Unilever will be putting in place a new organizational structure that supports and drives growth. Unilever reorganized to a matrix organization, with the horizontal axis being teams responsible for operations and the vertical axis being processes such as brand development, finance, HR, and so on. From a people perspective, the company has identified the competencies possessed by leaders who deliver growth. Unilever assessed all of its executives on those dimensions and had to let go 30% of its vice presidents who did not have those competencies. Thus, in January 2001, the company had new leadership and 60% of its people were shifted to new jobs as a result of the matrix structure. Whereas some change theorists would say that the amount of change Unilever went through was too much in one
year, the reality is that Unilever had a great year in 2001. Dramatic change in both people and structure worked just fine. Mr. Jope recommended that when going through an organizational change, it was better to be aggressive and get it done quickly rather than draw it out and have too many stages.

Third, Unilever needed financial fuel for growth. It focused on reducing overhead and improving bottom-line profitability in order to find space in the P&L to drive growth. Fourth, the company will innovate and pioneer new channels. To accomplish this, Unilever's supply chain has to learn how new competencies. For example, nonwoven fabrics are a new product area (disposable fabrics for face cleansing, sunscreen application, and so forth).

Finally, Unilever is building an enterprise culture (in the sense of being enterprising). Unilever went through a participative process of defining its values and determine what behaviors express those values. For example, a behavior such as "made decisions with 40-70% of available information" reflects Unilever's value of innovation and speed.

1.7. "Collaboration: Coordinating the Supply Chain," Yossi Sheffi, Professor and Co-Director, MIT Center for Transportation and Logistics

Prof. Sheffi provided several case studies of collaboration among customers and suppliers using collaborative forecasting and planning (CPFR). Among the early pilots of CPFR, (between companies such as Nabisco and Wegman's in the Planters nut category and Kimberly-Clark and Kmart in the Depend product line), results were very encouraging. For example, in the Nabisco-Wegman's pilot, sales went up, inventory went down and service level went up. Similarly in the Kimberly-Clark-Kmart pilot, in-stock rates increased from 86.5% to 93.4% without any overall increase in inventory levels. Retail sales increased by 14% and the companies avoided costs by discovering discrepancies in plans early. The unexpected benefits of the collaboration were improved coordination around product rollovers and new product introductions. As Prof. Sheffi pointed out, however, many of these early pilots relied on manual processes more than technology. Although several software providers exist in the CPFR space (Syncra, Manugistics, i2, Logility and Eqos), much of the success of the pilot programs relied on coordination that resulted from simple weekly phone calls between the collaborating companies.

Prof. Sheffi detailed the case of Superdrug and J&J to show collaboration in action. The pre-trial work included Superdrug finding a CPFR partner. Superdrug chose J&J for four reasons: 1) Superdrug had done work with J&J previously, 2) J&J had a similar culture to Superdrug, 3) both companies were committed to speed without fuss, and 4) J&J was enthusiastic about the project. With the partner selected, the next step was to set the collaboration objectives, which included the agreed-upon sales forecast and developing a scorecard for benefit tracking. The front-end agreement focused on expectations and responsibilities. The timeline of the project was to select the partner in April, develop the front-end agreement and joint business plan in May, do training in July, and run the collaboration project in August through December, with weekly collaboration calls.
The collaboration encountered various problems of a technical and people/process nature that were solved in short order. For example, J&J and Superdrug had trouble aligning on exception criteria -- how to decide when a minor discrepancy in the order flow or forecast warranted further attention. Their ultimate solution was to use the software vendor (who had experience with CPFR) to decide the criteria. Another problem was visibility of data at Superdrug, due to firewall problems and slow response. The solution was to change Internet providers. A third problem was inconsistent data feeds from the supplier, which resulted from bar code inconsistency. The people and process problems centered on lack of time to do the project. Initially, management anticipated that people would be able to do the project in addition to their daily duties, but the project required more work than expected. The solution was to redefine people's roles and responsibilities.

The collaboration project itself focused on weekly collaborations on the sales forecast and on the order forecast vs. actual order. The companies measured inventory, actual sales vs. sales forecast, and order sent vs. order received. The results of the project were a stock reduction in RDC of an average of 13%, an RDC availability increase of 1.6%, forecast accuracy improvement of 21% and DOS reduced by 23.8% against an increase of 11.8% for non-trial lines. In addition to these measurable results, the project had several subjective successes, namely that the collaboration highlighted relevant issues and gave access to a range of previously unavailable data (such as the supplier's internal forecasts of orders and sales). Overall, the collaboration improved the communications between Superdrug and J&J, further raising J&J's profile within the category supply team at Superdrug.

1.8. "Strategic Alliances in Distribution (3rd Parties & Outsourcing) at HPC," Joe Ehnat, Director Warehousing, Unilever, John Seiple, President and Chief Operating Officer, North America, ProLogis, and Edward Frantz, Senior Vice President, GENCO Distribution System

To create and manage its new distribution network of 5 million square feet of warehouses, Unilever created an alliance with seven companies to handle specific aspects such as warehouse operations, warehouse management systems, layout, and warehouse rack design. Before the alliance, Unilever had 27 distribution centers as a result of its mergers. Unilever knew that to be world class, it had to bring costs down yet have a network that could supply any customer in the country within 24 hours. Unilever's solution was a megawarehouse concept, to build a network of 5 distribution centers with about a million square feet of space each. Each warehouse would operate several businesses under one roof (for example, laundry brands that turn 13-14 times per year and Health & Beauty Aids, which turn 7 times per year).

In order to build the new distribution network quickly, Unilever turned to its strategic alliance partners for their expertise. The alliance gave Unilever access to world class capabilities while reducing costs. For example, Unilever relied on ProLogis to design, build, finance and manage the project -- leasing the completed warehouses to Unilever. ProLogis created a dedicated team for Unilever with a global services account manager, a senior product manager, strategic alliance contractors, architects and
engineers. ProLogis maintains ownership of the warehouses, so that if Unilever needs to change tactics, ProLogis can accommodate that. Similarly, GENCO provides direct logistics, reverse logistics, asset recovery and freight management.

Unilever uses metrics to track the performance of its alliance partners, looking at metrics such as cost per case, throughput, safety and case fill. Over time, Unilever plans to migrate to gain-share arrangements with its strategic partners, so that partners can share in the benefits of driving down costs.

1.9. "Strategic Alliances in Purchasing at HPC," Regina Bonney, Director, Best Practice Source, Unilever

Ms. Bonney described the role of strategic supply chain management at Unilever and the nature of its strategic alliances. The role of supply management is to provide the fuel for Unilever's growth, ensuring best supply at best price to deliver sustainable growth. For example, the supply management group established a supply management program that resulted in a EUR 1.75 billion buy savings at the end of 2002.

The tag-word for the transformation to world-class supply management is "Unileverage," namely taking advantage of Unilever's size and global scale. Unilever defines world class supply management as a process that is fully integrated throughout the business, active in innovation, driving efficient operating processes, and attracting the best people, suppliers and service. To accomplish this, Unilever is transforming the role of the buyer from a purchasing agent to a strategic supply manager who is knowledgeable in markets, brings in suppliers, and acts as a business partner on teams.

Ms. Bonney also explained Unilever's strategic approach to evaluating supply management processes. Unilever uses a quadrant to assess its approach. The quadrant rates the risk of the process to Unilever on the vertical axis and the value of the process on the horizontal axis. In the lower lefthand corner (low on both value and risk) are "routine" processes. These processes are ones in which spend is low; the items are industry-specific, readily available with many producers and low switching costs. Unilever's approach to this quadrant is to simplify the process, by using tools such as Ariba, procurement cards, and electronic catalogs. In short, no alliances take place here: the goal is to minimize the routine administrative cost and treat the transactions as "no-touch."

The upper lefthand quadrant (high risk, low value) is called "bottleneck" processes. Here, spending is low and the process has no consumer impact, but it may have unique specifications or constrained supply. In this quadrant, Unilever develops alternative sources to ensure supply availability, creates contingency plans, fosters competition, and eliminates technical constraints if possible. The goal is to avoid shortages.

In the lower righthand corner (high value, low risk) are "leverage" processes that are characterized by high spend (due to large volume or high price), but the supply items do no differentiate the product and there are many producers. In this quadrant, Unilever's actions are to regularly assess market conditions,
maximize negotiating advantage (Unileverage) and economies of scale by concentrating the business while maintaining competition.

Finally, in the upper righthand quadrant (high value, high risk) are "Strategic" processes. These processes have a significant P&L impact and include the buying of key ingredients or packaging that has a limited supply base. This quadrant is where Unilever focuses on alliances. The goal is to strive for high value-added relationships, to increase the role of alliances to develop new materials or packaging. The goal in these alliances is to develop high-level process improvements that help both partners.

**Nature of Strategic Alliances**

When choosing strategic partners among suppliers, Unilever looks for suppliers who have superior technical capability for innovation or for joint product development. Some of them may have poor IT systems, but Unilever will weigh that on balance with the innovation potential. Alternatively, Unilever may also ally with a commodity supplier who is very efficient and has superior information systems. Unilever will partner with these companies if they can synchronize their factories and deliveries to Unilever's product cycles and thereby lower total supply chain cost.

To succeed, the alliance partners must be willing to dedicate people to Unilever, just as Unilever dedicates people to its key customers. In turn, Unilever will share consumer insight with these trusted suppliers. Together, the partners can bring about innovation in packaging (the perception of the product), raw materials (product performance) or technical demonstration of performance (e.g., cleaner, brighter). In these joint development alliances, suppliers share where they are heading in the future, and Unilever shares its own future directions. Suppliers develop ideas not solely for Unilever, but ideas that they can ultimately commercialize. If joint development takes place, the companies sign commercial agreements that define who owns what in terms of the patent, the technology, and so on.

**Challenges**

The challenges to strategic alliances are twofold: global and electronic. That is, as a global company, Unilever needs alliance partners who can operate on a global platform, not just in one region. Alliance partners must understand global markets and regulatory environments. Second, the introduction of certain e-commerce tools has threatened strategic partners. For example, reverse auctions undermine alliances because of their price-only focus. Likewise, eRFP and eRFQs bring in new potential suppliers who previously may not have participated in the bidding process.

In summary, the nature of strategic alliances at Unilever is changing. Some strategic alliance suppliers may not remain as alliance suppliers because of technical or global shortcomings. Likewise, some new suppliers will enter the arena as alliance partners because of the technical expertise, new product breakthroughs or global reach that they offer. Overall, alliances may deepen, becoming partnerships or joint ventures.
1.10. "Strategic Alliances in Manufacturing at Unilever HPC," Xavier Garijo, Director, Contract Manufacturing Unilever

The pressure of business in today's world is pushing companies toward strategic alliances in manufacturing. In the past, contract manufacturing functions did not actively consider make vs. buy decisions. Contract manufacturing was a response to lack of capacity or forecast accuracy. It was a reactive process, considered more of a penalty rather than a benefit to the company. Nowadays, the competitive environment is demanding collaboration between companies to leverage synergies of expertise.

Two environmental factors are driving strategic alliances in manufacturing. First is the complexity of consumer/retailer demand (the need to be more responsive and flexible with shorter, more frequent production cycles and faster, bigger innovations). Second, margin pressures demand a faster return on asset investments while the life expectancy of products decreases. Amortizing asset investments over 10-15 years no longer works -- five years is the norm. Stronger and fewer consolidated customers drive prices lower.

Unilever's approach to alliances in manufacturing is to do an internal capability analysis first and then identify partners. Unilever asks partners to identify drivers in their own supply chain and then manage more of the supply chain on Unilever's behalf. For example, co-packers manage daily product scheduling, RM and PM release, material purchasing, QA, supplier KPIs (key performance indicators), inventory control and finance. Unilever manages supply chain planning, deployment planning, accounts payable, system capabilities and the IT helpdesk. The benefits of the alliance include greater visibility into product flow, simplification, higher innovation and an increase in real-time information.

1.11. Summary

At the end of the workshop, participants shared their most important learnings. Among the key learnings mentioned were:

* the rising importance of alliances and outsourcing
  - how Unilever is actively using alliances to drive growth by leveraging the expertise and resources of its partners
  - the components and factors involved in outsourcing decisions
  - how to make outsourcing decisions, paying attention to what is integral vs. modular
  - the difficulty of implementing IT and integrating information systems across companies. Many pilots rely on manual processes first, and then build on that success with information integration and standardization.
  - the consumer goods industry is moving more toward outsourcing than away from it, and therefore the ability to manage alliances will be an important skill set for the future.
* Unilever's embrace of supply chain as a strategy (many companies say they are using supply chain as a strategic thrust, but few are actually doing it)
* brands
  - the value of brands: through all the change, the strength of the brand will continue
  - Wal-Mart's goal is not to kill brands but to deliver everyday low prices through branded products
* the quest for innovation
  - the use of a best-practice group to bring both internal and external best practices together to add value to the business
  - the willingness to look outside and bring expertise and innovative ideas from suppliers into the firm.

2. Themes

2.1. Rationale for Alliances and Outsourcing

Companies use alliances and outsourcing for a myriad of reasons. For Unilever, the top strategic goal is growth. Partnering with other companies is a means toward growth. Some of the reasons for partnering include:

Efficient, Low-Cost Execution

Outsourcing lets a company replace inefficient internal processes with much more efficient services from a best-in-class provider. Payroll processing, HR benefits, logistics, and even manufacturing are all processes that might be more efficiently performed by a provider that is dedicated to that process. Often, economies of scale influence this value proposition because the service provider has much higher volumes than the company. Under this rationale, the company looks for a provider with higher performance levels and lower costs than the company itself. Outsourcing is thus a way to buy efficient performance.

Collaboration for Efficiency, Service Quality, and Cycle Time

In the supply chain arena, many alliances have improved coordination between supply chain partners as a key goal. In particular, CPFR (Collaborative Planning, Forecasting, and Replenishment) is a means for suppliers and customers to manage the flow of goods far more efficiently. Too many supply chain inefficiencies and problems arise from simple misunderstandings between the companies.

Prof. Sheffi discussed a number of CPFR projects between CPG companies and major retailing chains. These included Nabisco with Wegmans, Kimberly-Clark with Kmart, Sara Lee with Wal-Mart and Procter & Gamble with 4 American, British, and German retailers. Each of these projects saw improved supply chain performance with some combination of accelerated cycle times, higher service levels, increased sales, and reduced inventory relative to sales.
Global Optimization vs. Local Optimization

The move from internally-focused supply chain management to external alliances and outsourcing is a move from local optimization to global optimization. Companies now recognize that they can reach the next level of performance by working with suppliers and customers. Much of the dreaded bullwhip effect arises from lags in information flows, mis-coordination, and inaccurate demand forecasting. Data sharing, CPFR, and closer relationships improve the performance of the entire supply chain.

In the quest for global supply-chain wide optimization, Unilever stresses alliances that create mutual gain. Rather than shift a problem, risk, or cost from one part of the supply chain to another, companies should work together to eliminate the problem entirely. As Unilever moves forward with its alliances, it is exploring mechanisms for gain-sharing – providing incentives to partners in order to improve performance for the benefit of both parties.

But, global optimization does have costs and seemingly counterproductive effects. For example, Unilever is moving to global sourcing -- using "Unileverage" to rationalize its supply base. In some cases, this means replacing a lower-cost local supplier with a more costly global supplier. Although some local costs may go up, global optimization will create a net efficiency and service level improvement. The global gain offsets local pain.

Expertise

Outsourcing and alliances also provide access to specialized expertise. This is a major reason why Unilever went to ProLogis when Unilever wanted a new network of megacenters. ProLogis had the specialized knowledge for the massive project. Since Unilever has no intention of building new warehouses every year, it makes sense to find a provider that specializes in this complex task.

Innovation

Access to innovation is a related reason for many alliances and outsourcing arrangements. By finding mutually complementary core competencies, a company can leverage the innovations of its partners. At Unilever, three examples illustrate how partners bring innovation to the table. First, Unilever looks to raw materials suppliers for new innovation materials. These innovative materials include new ingredients for facial cleansers, additives for detergents, and novel materials such as the new nonwoven fabrics that form the basis for disposable wipes. Second, Unilever looks for packaging partners that can help Unilever products have better shelf-appeal. Packing companies create new bottling, boxing, and printing techniques that freshen the look of products. Third, partners bring innovative best practices, such as using a 3PL for managing distribution operations.

Local Expertise

Partners also bring local expertise to the relationship. Although global companies would like to create economies of scale based on world-wide uniformity, such uniformity is not always possible. Local government regulations impact ingredients or packaging. Local customs and trends affect marketing or product mix. Supplier partners (local raw materials suppliers or packagers) have the requisite
knowledge of local health, safety, and packaging regulations. Customer partners (local retail chains) provide insight into local consumer preferences.

**Finance**

Partners can also aid in the financing of either capital assets or operating capital. Unilever's top strategic goal is growth. But growth requires investment that can be expensive. Thus, Unilever is looking for ways to enlist the financial resources of partners. For example, Unilever is in the midst of a $200 million project to build a new network of 5 megacenter DCs. Unilever outsourced the project to ProLogis, which owns the megacenters and financed their construction. By outsourcing, Unilever converted the project from a large up-front capital investment into a stream of modest lease payments.

But this arrangement is more than just cost shifting. Unilever recognizes that an alliance that damages the other partner is not in Unilever's long-term best interests. The key is to ensure sustainability -- using the open-book policy for a good partnership to make sure that the partner has the requisite financial resources for a long-term relationship. Other companies also act to share financial burdens and ensure the survival of alliance partners. Prof. Fine noted how Boeing supports tooling makers like Cincinnati Milacron -- ordering extra parts or funding R&D efforts to help stave off the effects of severe cyclic downturns in capital expenditures that characterize the tooling industry.

**Indirect Benefits**

Some alliances, especially supply chain alliances, have indirect benefits. The partnership generates more than the anticipated objective numerical benefits. For example, Superdrug's CPFR project with J&J raised the profile of the retailer within J&J. Partnerships are much better than arms-length transactional relationships in helping companies understand each other and work together more effectively. Gillette also indicated that sharing data has extended benefits when the data is used to improve manufacturing processes.

**Access to Additional Partners**

Alliance partners also provide access to other potential partners or valuable service providers. As companies create and nurture networks of partners, more companies will interconnect to gain access to their partner's partners. One partner would vouch for the suitability of a third company reduces the time and money spent evaluating and certifying new partners. This speaks to Unilever's view of web-like supply networks, rather than linear supply chains. For example, with Unilever's megacenter project, Unilever outsourced the creation of the megacenter to ProLogis. ProLogis, in turn, brought in Delta (for handling local government incentives related to site selection), St. Onge Company (for warehouse layout) and others.

**2.2. What to Outsource**

Outsourcing is growing at a rate of 23% per year because companies are discovering that they do not need to do everything themselves. Yet, not all processes should be outsourced. Outsourcing the wrong
process could be counterproductive, expensive, or even fatal to a company. Several of the presenters provided heuristics for determining what to outsource and what to keep in-house.

**Core vs. Non-Core**

The most crucial aspect of outsourcing is in making the distinction between the core competencies, which should be kept in-house, and the non-core activities, which are candidates for outsourcing. Unilever's definition of "core" derives from its top-level corporate strategy of growth with a focus on global brands.

One element of the core vs. non-core distinction is the issue of controlling one's destiny. Becoming excessively dependent on partners reduces the strategic options available to a company. For example, IBM's decision to outsource key elements of the IBM PC to Intel and Microsoft proved to be a drastically incorrect move.

Unilever also looks beyond the core competencies to consider other crucial processes related to the core. Processes that nurture the core, protect the core, or help the company exploit its core competencies are also held internally. Prof. Fine said that the sourcing decision is like deciding where to plant a seed (either inside or outside). Companies need to think carefully about what they wish to sow, nurture, and reap inhouse in order to harvest long-term profits.

**Five-Stage Model**

Prof. Fine enumerated five variables that predict the wisdom of insourcing vs. outsourcing.

* modularity of components/processes: modular elements are more outsourcable than integral elements of a product or business
* quantity of providers: the fewer the number of providers, the less outsourcing make sense
* clockspeed: the faster the clockspeed, the more you want to insource.
* importance to customer: if the customer cares about it, don't outsource it.
* benchmark performance level: if you have best-in-class performance on the process, don't outsource it.

**Value Equation**

Unilever uses a value-equation approach to outsourcing as part of their process for evaluating outsourcing opportunities. In this model, the net value of outsourcing is defined by three terms:

\[
\text{Net Value} = \text{Internal Value From Focus} + \text{External Value From Provider} - \text{Transaction Costs}
\]

This equation is used in addition to careful analysis of core vs. non-core activities. For activities that are non-core, the equation helps the company assess the value of outsourcing that non-core activity. Although the equation looks like a simple financial model, many of the terms have qualitative elements. Outsourcing is more than just a financial decision, because outsourcing's impact is more than just financial.
Value Equation: Internal Value from Focus

When a company outsources, it frees up a range of internal resources to concentrate on more important core processes and strategic activities. With outsourcing, management and employees can focus more on what is important. In some types of outsourcing, a fixed cost or upfront investment is converted into a more modest stream of payments, letting the company reserve its financial resources for more strategic investments. Outsourcing lets a company create higher levels of internal value by focusing resources on higher ROI strategic activities.

Value Equation: External Value from Provider

The value created by the provider is a key part of the value proposition for outsourcing. Providers can create value by being more efficient, more effective, or more innovative than the internal counterpart of the outsourced process. The source of the provider’s value can fall into one of two categories: value from high economies of scale or value from high levels of expertise. Value from high economies of scale occurs when the provider can aggregate the volume of activity from multiple companies through standardization. Rather than each company doing its own internal low-volume process, the provider does a high-volume, high-efficiency business on behalf of multiple companies. Value from high levels of expertise occurs when the provider can accumulate large quantities of knowledge that would be hard for each client company to replicate.

Value Equation: Transaction Costs

Subtracted from the two value terms are the inevitable transaction costs of outsourcing. Whereas internal coordination costs may be low and hidden, working with a partner leads to more formalized processes that have higher, more visible costs. Extra transaction costs arise from having to formally specify what the partner is to do, managing that external activity, and then inspecting the results. Having a partner in another city do some routine task is different from having an internal department on the next floor do that same task. When outsourcing, companies can easily underestimate the transaction costs because the internal analogs are hidden from view.

Unilever decomposes transaction costs into 3 categories:

1) Oversight costs: the cost of managing the relationship, performance, information exchange, service delivery, and monies.

2) The switching costs: the cost of changing from insourcing to outsourcing (as well as the potential costs of changing the arrangement at a latter date)

3) Risk: The potential costs of problems associated with the outsourcing arrangement

Unexpected costs sometimes cause companies to oscillate between outsourcing and insourcing. They outsource on the perceived cost benefits and insource when they realize the magnitude of unexpected costs.
Role of Culture

On the surface, outsourcing and alliances focus on objective performance improvement and a business-like exchange of monies, goods, and information. But subjective factors play a crucial role in the success of any partnership. For example, Unilever indicated its alliance with drug store chain, CVS, went more smoothly because both companies were growing by mergers and acquisitions. The partners understood the special issues of managing a supply chain while integrating newly merged business units together. Prof. Yossi Sheffi noted how a similarity of culture between Superdrug and Johnson & Johnson aided their CPFR project. Sharing a similar culture or similar corporate history helps the partners understand each other and appreciate the issues that each faces.

2.3. Downsides to Partnering

The presenters and audience members also shared stories about the downsides of alliances and outsourcing.

Avoiding a Bad Case of Intel Inside

IBM had tremendous expertise in both chips and software when it embarked on development of the IBM PC in the early 1980s. But the company outsourced the CPU to Intel and the operating system software to Microsoft to accelerate its time to market and leverage those partners’ expertise in smaller, low-cost computer systems. Although the IBM PC was a stellar success, Intel and Microsoft reaped the lion’s share of the profits and IBM eventually became a marginalized maker of the machines that it invented. Thus, outsourcing can be very dangerous.

This key danger of outsourcing is well known. Companies must preserve and nurture some form of competitive advantage in the form of core competencies. Most of the presenters stressed the importance of identifying a company’s strategic core competencies before outsourcing or partnering. A company that outsources its future has no future.

Exceptions: The Devil's in the Details

An important part of any partnership is managing exceptions -- discrepancies in operations and plans. Whereas an internal business process manages exceptions informally, alliances and outsourcing arrangements need formal processes to cope with them. This includes defining what constitutes an exception and creating some mutually agreeable mechanism for resolving them.

In particular, a major element of CPFR is in detecting and correcting exceptions in the flow of orders and the forecasts of the two companies. Prof. Sheffi delved into this issue in describing how Superdrug and J&J created a CPFR program. Managing exceptions involves: defining the exception (metrics and thresholds), defining how to detect/measure exceptions (data and process), creating a resolution process, and defining a set of KPIs to assess the success of the overall effort. For example, Superdrug and J&J created a weekly cycle for CPFR that featured data processing during the early part of the week, a mid-week conference call to resolve found exceptions, and an end-of-week adjustment and review process.
Even agreement on the definitions of exceptions can be difficult for two reasons. First, different companies use different metrics and timeframes (e.g., one company might measure forecast error in percentage terms on a rolling 2-week basis and the other might measure it in absolute weekly item-count terms). Second, companies may have differences of opinion on whether a minor error or inaccuracy really merits being declared an exception. Minor statistical fluctuations are inevitable and inconsequential -- coordinating the resolution of minor issues is not worthwhile. Yet some companies have less tolerance for error, either due to cultural reasons or due to a very tightly-run operations with narrow margins for error. Superdrug and J&J disagreed on the definitions of some exceptions and decided to let their CPFR software vendor (Syncra) define these exceptions.

**Manual Labor with Automated Systems**

Prof. Sheffi noted that software automates data sharing and exception detection in supply chain alliances but does not do the work of resolving the exceptions. The manual labor attendant with CPFR seems to be a real bottleneck to more widespread use of CPFR. The manual processes do not scale. For example, in the various pilot projects described by Prof. Sheffi, most projects focused on a couple dozen SKUs from one CPG maker and a small number of DCs or stores (although one project did extend to nearly 6000 stores).

Scalability is a major issue: Wal-Mart does forecasts for every SKU in every store, some 70-80 million forecasts per week. Clearly, more automation is required. Prof. Sheffi argued that more automated resolution of exceptions is an algorithmic challenge for future generations of CPFR software. With improved software, companies could pursue much broader supply chain alliances and create alliances with smaller partners.

**Imperfect Partners**

It's easy for some corporate committee to create a list of mandatory prerequisites for the perfect partner. But perfection is too much to hope for. Real partners have real foibles and seldom pass the test for the perfect partner. Unilever found that it must be more flexible in partner selection than sticking to a strict list of prerequisites. For example, some potential partners might be a klutzy innovators -- great at creating new innovative materials, but terrible at routine daily execution. Or, other partners might be efficient Luddites -- having excellent performance metrics, but being unable/unwilling to adopt the technology needed for effective supply chain coordination.

Unilever uses a more flexible case-by-case rationale when selecting partners. The company can also regulate the volume of business that it does with imperfect partners. For example, Unilever might buy a smaller fraction of materials from a klutzy innovator -- gaining access to the partner's innovative materials while insulating Unilever from the risks of relying on an erratic partner. Unilever will also help partners perform better or adopt needed new technologies -- growing better partners as much as picking the best off-the-shelf partner companies. Finally, partnerships are not static, everlasting entities -- companies, like Unilever, regulate the volume of business they do with each partner and the duration of the partnership. Although no one in the room wanted to take Sun Microsystems' approach of being able to escape any partnership in 90 days, companies can change their partnerships over time to meet new needs.
2.4. Speed

Alliances and Outsourcing support the need for speed. Rather than taking the time to develop a new skill in-house, companies can outsource to companies that have that skill. Unilever outsourced design, construction, and management of its new network of 5 megacenters because its partners could do the project much faster than Unilever could.

Speed Makes it Easy to Have Open Partnerships

Unilever surprised the audience with the company's preference for non-exclusive uses of the innovations that its partner's bring to Unilever. The audience wondered why Unilever would not want to keep any and all innovations out of the hands of its competitors. Unilever's response reflects the realities of first-mover advantage in a high-speed competitive world.

Being the first is more important than being the only company with an innovation. That competitors might buy the same innovative ingredient from Unilever's supplier is not a major threat because Unilever's product will already be established in the market. Unilever also argued that commercialization of innovations, by its partners, provides a long-term benefit to Unilever. Unilever benefits from its partner's economies of scale when those partners sell in higher volumes to other companies. Moreover, having partners that are more broadly connected makes those partners more innovative. Captive partners would be both less cost efficient and less innovative.

Is Speed Good for Brands?

Prof. Fine pointed out that brands are slow-speed entities. Companies invest millions (or even billions) in creating a long-lasting brand image that creates a steady stream of revenues from loyal customers. The success of this is illustrated by the classic anecdote of how "my grandmother used Tide detergent, my mother used Tide, I use Tide." Yet, the pace of life has quickened, leading to the question of attention deficit disorder among consumers. Unilever believes that a hectic life actually increases brand buying -- that consumers just buy the brand that they trust, rather that spending time evaluating alternative products.

Although brands are slow clockspeed entities, Unilever pointed out the numerous ways in which the products change at a faster clockspeed. Innovation in facial cleansers is on a six-month cycle, even though the Pond's brand of facial skincare products dates back to 1846. Likewise, detergents have changed over the years with innovative stain removers, color-safe bleaches, and fabric softeners. The point is that many companies, Unilever included, try to combine speed of innovation with the stability of a long-term brand.

2.5. Open Questions: Crouching Threats, Hidden Value

Presenters and audience members raised a number of unresolved issues -- questions that seem to have no answer or contradictory opinions about the answer.
How do we Know that Quality and Speed is Worth It?

Unilever and others are wrestling with how to justify and measure efforts that improve non-financial performance levels. Although everyone acknowledges the theoretical importance of speed and service levels, at a practical level it’s too easy to resort to a cost-based focus. For example, CPFR reduces mistakes in forecasting, inventory, and order flow. But how should the company account for the associated cost avoidance?

Alliance initiatives like CPFR involve both upfront investments (new software and integrated data links) and ongoing labor costs (manual exception resolution). Although CPFR has undeniable benefits, the biggest benefits are non-financial. But, how much should companies pay for a 1-day reduction in some cycle time or a 1% improvement in forecast accuracy? While Gillette felt that CPFR is easy to justify, other companies are wrestling with this issue. Cost efficiency is so much easier to measure and so much more tangible in its bottom-line impact. When in doubt, why pay more?

Stockouts: Losing Customers or Creating Hoarders?

Unilever highlighted one of the major service level problems in CPG -- stockouts on store shelves. Although everyone acknowledges that stockouts lead to some level of lost sales, Unilever pointed out that stockouts also lead to customers switching brands. For brand-oriented companies, customer loyalty is their lifeblood and stockouts cause the company to bleed customers.

At the same time, some audience members mentioned the counterargument of this -- the hoarding effect at Costco. When consumers (or even buyers at companies) know that stockouts can happen, they tend to buy more when the product is available. Whether stockouts enrage or encourage customers is an open question. What is clear is that hoarding does make a mockery of the forecasting and supply chain management process -- hoarding and over-ordering amplify the bullwhip effect.

Wal-Mart: Miscreant or Misunderstood?

Although popular perception puts Wal-Mart in the 800-pound gorilla category, both Unilever and others mentioned that Wal-Mart is not the overbearing giant that it is often made out to be. Wal-Mart’s strategy of selling branded goods at everyday low prices means that it continues to want a good relationship with brand-oriented CPG companies. Wal-Mart even discussed its plans to offer private label goods with Unilever, rather than unilaterally foist new competition on the name-brand CPG companies that supply Wal-Mart. When Wal-Mart changed to a new suction technology that damaged suppliers’ cardboard cartons, Wal-Mart worked with suppliers like Unilever to find a solution. Rather than force suppliers to design and use more costly new carton designs, Wal-Mart changed its handling procedures to avoid damaging the existing cardboard cartons. Finally, Wal-Mart is not as dominant in market share as some would think, when compared to the situation in other countries. In many other countries, the local dominant retailer has a far higher market share than does Wal-Mart in the U.S.

How to Best Use POS Data?

Although many have portrayed POS data as the Holy Grail of demand signals, Gillette has found that this data is less useful than one might imagine. The problem is that demand data only tells you that a
given quantity of a given SKU was sold at a given store on a given date. It fails to tell you whether and when the retailer will want to reorder the product to replenish the sold stock or change the future stream of orders as part of a change in forecast demand. Unless the supplier intimately understands how its customer uses POS data to drive the replenishment and forecasting process, the data itself is not as useful as one might think.

**Are these Conclusions about Alliances and Outsourcing Temporary?**

Prof. Fine's statement that "all conclusions are temporary" resonated with the audience and was echoed in other speaker's presentations. Prof. Fine's double-helix of industry cycles described how industries tend to cycle between highly-integrated industry structures (with proprietary, integrated product architectures) and horizontal industry structures (with open, modular product architectures). In each loop of the cycle, companies battle for domination, while innovators arise. Big vertically integrated companies may have global power, but they also tend to be slower and more conservative. Nimble upstart providers of innovative products may grab market share from larger dinosaurs, but eventually those innovators grow up to be just like the older imperialistic companies that they replaced.

Unilever realizes that it must adapt with the ebb and flow of these trends. If the tide of retailing turns from massive suburban big-box stores to smaller local urban outlets, Unilever will change to follow consumers. Although its supply chain may change, Unilever believes that high-quality brands have the power to persist. Even if all conclusions are temporary, the power of agility to adapt to new conditions is a key skill that companies like Unilever are building.