Looking good on paper
A new and profitable business model for forest and paper companies

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Looking good on paper: the future of the forest and paper industry

Across the world, forest and paper companies find themselves victims of a vicious circle – a circle defined by overcapacity, low prices, and continual competition to be the lowest cost producer. The industry is faced with ever-decreasing pricing due to oversupply and the historical response has been to continually upgrade the asset base in order to become more competitive and to decrease cost. This continual process of upgrading assets and lowering prices ensures that few companies in the industry enjoy earnings that cover their cost of capital. It was argued that consolidation would break the cycle, but now that the first wave of “obvious” industry consolidation has been completed – and certain global administrative, sales, distribution and production economies of scale have been achieved – these producers are once again seeking efficiencies to the point of diminishing returns. Industry profitability goals still remain stubbornly elusive.

As the business cycle turns down, companies are back to witnessing rapidly decreasing shareholder value. This means that unless there is a fast improvement in fortunes, raising fresh capital will become increasingly difficult. The forest and paper industry now has to ask: Can we break out of this vicious circle? Can we reposition ourselves into a new profit zone? What new funding sources are available to promote growth and profitability?

There are two possible responses. Companies can:

• Continue to focus on low cost bases and become the lowest cost producer of commodity products, or
• Create perceived (and real) value through “customer ownership”, which requires innovation in customer care, the supply chain and branding.

Higher profitability

Empirical evidence has shown that “customer ownership” is a strong alternative for companies to achieve sustained higher profits. Nevertheless, many forest and paper companies are focusing almost entirely on achieving low-cost producer status and it is not hard to see why. A tradition of vertical integration has focused the industry on product quality and cost, compounded by high fixed-cost assets which “demand” to be run full time. Moreover, forest and paper companies operating under their traditional models face significant obstacles when trying to meet the individual needs of their customers without destroying the current economics of their business.
These obstacles can be overcome. There is a valuable opportunity for a company to identify a set of profitable customer segments and design offerings that will deliver increased value to both the company and its customers. This vision for the future is relatively straightforward:

- Gain a deep understanding of the customer’s business, including the customer’s customers
- Achieve a greater involvement in designing customer product, configuring applications, procuring components and creating a “fulfillment network”
- Create a high performance supply chain that delivers goods just in time with lean inventories and can deliver on promises to customers in more complex value chains.

These key elements of this approach have been proven in this industry and in others.

**A major shift in values**

Truly adopting a customer focus requires a major shift in values, investment, operating policies and process capabilities. This is not a strategy that requires some tweaking to a business model. It is almost like turning the existing business model on its head. Companies cannot become successful with this new business model while maintaining traditional investment behavior and holding traditional mindsets about what constitutes good performance. The key is delivering a comprehensive business and technical transformation, not just designing a strategy.

**The global forest and paper industry of today**

The structure of the global forest and paper industry is a direct result of the historical growth pattern of the industry. This growth pattern has led to heavy investments in the capital base. Recently, this heavy investment of capital has proved to provide poor returns and the industry has been under increasing scrutiny from the capital markets that are now demanding change. While the hope is that global consolidation will provide economies of scale and an ability to manage price volatility, consolidation requires enormous amounts of investment and presents a significant amount of risk. This requirement for further capital will also come under intense scrutiny and it is becoming increasingly clear that forest and paper companies must change.

**The most capital-intensive industry**

Forest and paper is the world’s most capital-intensive industry (see Figure 1). This is due not only to the very high capital cost of production assets (in pulp and paper mills), but also to the industry’s historical vertical integration – from the inventory carried by merchants downstream, right back to the forest lands upstream.
Looking good on paper

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Fragmented ownership of productive capacity

Combined with the capital-intensive nature of the industry is its historical growth pattern. The forest and paper industry has often been used by governments as a development medium. As a result, the industry has historically been regionally developed, resulting in the global forest and paper industry being the least consolidated of all global manufacturing industries (see Figure 2). This structural problem has exacerbated price volatility during the cycle: To maintain volume in a down cycle, companies compete on prices down to the level of variable cost while, in an up cycle, prices rise to reflect capacity shortage in the market.

Figure 1. Capital project costs to the forest and paper industry as percent of sales.

Source: American Forest and Paper Association.

Fragmented ownership of productive capacity

<table>
<thead>
<tr>
<th>Grade</th>
<th>2002 Global</th>
<th>2002 North America</th>
<th>1996 North America</th>
<th>% Change</th>
<th>Difference</th>
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<tr>
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<td>Top 5</td>
<td>Top 10</td>
<td>Top 5</td>
<td>Top 10</td>
<td>Top 5</td>
</tr>
<tr>
<td>Newsprint</td>
<td>48.0%</td>
<td>62.8%</td>
<td>71.7%</td>
<td>86.4%</td>
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<tr>
<td>Coated paper</td>
<td>40.5%</td>
<td>58.0%</td>
<td>69.9%</td>
<td>80.4%</td>
<td>1.5%</td>
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<tr>
<td>Uncoated freesheet</td>
<td>27.5%</td>
<td>40.7%</td>
<td>62.2%</td>
<td>93.0%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Containerboard</td>
<td>23.4%</td>
<td>35.5%</td>
<td>67.3%</td>
<td>80.3%</td>
<td>1.9%</td>
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<tr>
<td>Market pulp</td>
<td>22.9%</td>
<td>38.2%</td>
<td>37.2%</td>
<td>57.4%</td>
<td>-0.1%</td>
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<tr>
<td>Tissue</td>
<td>42.8%</td>
<td>49.3%</td>
<td>80.6%</td>
<td>92.1%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Paperboard</td>
<td>n/a</td>
<td>n/a</td>
<td>50.0%</td>
<td>73.9%</td>
<td>-3.5%</td>
</tr>
<tr>
<td>Uncoated groundwood</td>
<td>48.8%</td>
<td>66.8%</td>
<td>70.4%</td>
<td>88.3%</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

Poor return on capital employed
The bottom line is that the forest and paper industry has a poor relative ROCE track record that has persisted over time (see Figure 3). This impacts the availability and cost of capital.

Figure 3. Forest and paper industry: Poor return on capital.

![Graph showing industry target return of 12%](image)


In response to this poor performance, the industry has begun to consolidate by grade and decapitalize by reversing vertical integration.

The movement to consolidation by grade
Major players have moved to consolidate by grade to achieve economies of scale, counteract the power of consolidating/globalizing customers and maintain better price stability during the cycle.

In the forest and paper industry, consolidation is still in the relatively early stages. To date, this consolidation has had a limited impact on the market place. Free riders (producers not exercising production discipline) have weakened supply discipline initiatives and the focus on raising prices by consolidators has created an environment of conflict between suppliers and customers. However, the industry has gained some ground over time. Further mergers and acquisitions could lead to consolidation where the three largest companies of any given grade account for 70 to 80 percent of market share.

Yet, the challenges of volatility still remain as long as:

- The product offering and service component are more or less undifferentiated offerings
- The largest producers show poor leadership
- The power balance between producers and consolidated customers remains unbalanced and confrontational.
On a regional basis, however, very few opportunities remain for consolidation within a grade. In the future, we can expect to see a further wave of global consolidations and asset acquisitions. To gain the benefits of scale, a regional player will need either significant capital resources to acquire producers in other geographies and then rationalize global capacity or submit to a takeover.

**Vertical integration reversals/decapitalization**

In addition to consolidation by grade, forest and paper companies have begun to challenge their vertically integrated business models.

The vertically integrated business model, particularly upstream into forests, power, chemicals and pulp, has created a high cost in terms of capital employed and large fixed costs relative to a cyclical demand and price cycle. The industry is moving away from an integrated upstream model on both sides of the Atlantic as evidenced by strategic moves by, for example, Georgia-Pacific Corporation, International Paper Company and Stora Enso Oyj.

Meanwhile, International Paper Company, Boise Cascade Corporation, Domtar, Inc. and M-real Corporation have adopted a strategy of downstream integration into the distribution channels. As a result, they are enhancing customer intimacy and ownership and capturing more of the margin in the value chain.

The value of refocusing the business downstream is clear from an analysis of margins, work we have performed for several grades as part of various strategy development projects. For example, the relative margins for the various parts of directory grade value chain are shown in Figure 4.

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**Figure 4. Analysis of margins.**

Publishers such as SBC and Verizon are earning large profit margins. These superior returns will drive them to develop new markets.

The directory paper and printing components of the value chain are relatively small. Margins are tighter. A consolidated publishing sector has substantial purchase power.

**Source:** Advertising Age, SBC & Verizon Annual Reports, JPC analysis.
This strategy of reversing vertical integration is still in its early stages. Our expectation is that forest and paper companies will continue in this direction.

**Choosing the path**

Industry players have reached an important crossroad. They must decide which path will lead their organization to success. In their book “The Discipline of Market Leaders”, strategists Michael Treacy and Fred Wiersema argue there are only three core values that drive firms to succeed as indicated in Figure 5. A characteristic of successful firms is that they excel in one dimension and perform well in the other two.

**Figure 5. Core values that drive firms to succeed.**

![Diagram](image)

**Source:** Treacy, Michael and Wiersema, Fred. The Disciplines of Market Leaders, 1997, Perseus Publishing.

**Case example:**

Tetra Pak, a liquid packaging firm was one of the first to declare a “customer-centric” strategy. As a result, they have improved customer satisfaction by several percentage points.

*Product leadership* provides a first mover advantage and can be the basis for distinctive branding. It depends on innovation and quality and usually results from a step change in technology. In a commoditized market such as forest and paper, this will be a difficult positioning to achieve for any player that is not already the best in its chosen field. Today, most forest and paper companies are pursuing *operational excellence* toward a lowest-cost position, which should enable them to win market share. Achieving that depends on continuous improvement in manufacturing, quality and supply chain management. The third value, *customer intimacy*, is only starting to be a focus in the industry, but could have the greatest impact. *Customer intimacy* enables firms to be more responsive to their end customers’ needs, thereby helping firms to deliver products and services that are in sync with customer expectations and desires, for which customers often pay a premium or at least become loyal customers.

While incremental improvements in productivity and quality may enable other players to close the gap, the key to a significant increase in profitability lies in repositioning the business to “own the customer” by becoming focused on the customer, knowledge and brand. These new kinds of businesses can tap into “profit zones”
closer to the customer. The many players that are pursuing a “lowest-cost” business strategy may achieve significant cost benefits; however, this is unlikely to generate margin improvements sufficient to resurrect embattled producers.

**How success can be achieved**

Many forest and paper companies declare that customers are central to their business. Even the declaration seems related to better performance, as shown in Figure 6. But it is not a clear case of cause and effect.

**Figure 6. Forest and paper companies’ customer focus declaration and company performance.**

Industry players must decide whether to continue down the road of making incremental enhancements to their existing asset-heavy businesses; submit to acquisition; or try to reinvent themselves as a customer focused, knowledge-driven and brand-owning company.

By choosing to invest in increased customer focus and withdraw from the asset-intensive industry, companies can add considerable value to the bottom line and encourage rapid growth. But what is different about the companies who adopt a customer focused model for conducting business?
Lessons from other industry innovators
The highest consistent performance achieved in the forest and paper industry is that of tissue companies Procter & Gamble Paper Division and Kimberly-Clark. For example, compare Kimberly-Clark to International Paper on a ten-year period by the measures laid out in Figure 7. In every measure, Kimberly-Clark’s performance has been significantly better than International Paper’s especially the measures reflecting returns for shareholders. Kimberly-Clark has out delivered on an annualized basis a 23.6 percent return on the equity they have borrowed from shareholders.

Figure 7. Comparison of financial measures for Kimberly-Clark and International Paper (1991 - 2000).

<table>
<thead>
<tr>
<th></th>
<th>Kimberly-Clark</th>
<th>International Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on capital employed (1996 - 2001)</td>
<td>16.95%</td>
<td>3.47%</td>
</tr>
<tr>
<td>Return on equity</td>
<td>23.56%</td>
<td>3.40%</td>
</tr>
<tr>
<td>Operating margin</td>
<td>13.72%</td>
<td>5.35%</td>
</tr>
<tr>
<td>Annualized share price appreciation</td>
<td>12.91%</td>
<td>4.31%</td>
</tr>
<tr>
<td>Pretax return on assets</td>
<td>14.94%</td>
<td>4.11%</td>
</tr>
<tr>
<td>Return on invested capital</td>
<td>9.97%</td>
<td>2.34%</td>
</tr>
</tbody>
</table>


Kimberly-Clark and Procter & Gamble Paper have both focused on the end consumer and began operating as Consumer Packaged Goods (CPG) companies in the 1990s. Both were originally forest and paper companies, but they have steadily divested themselves of assets associated with primary manufacturing over the last 10 years. Procter & Gamble took the lead in the early 1990s and Kimberly-Clark followed. In fact, Kimberly-Clark currently has only three stand-alone pulp mills left (one of which is listed for sale). The company has stated their goal is to reduce their self-sufficiency in pulp from 40 to 20 percent1 and believes it can “buy fiber outside cheaper than it can produce it.”2

An important lesson from both of these companies is that they have effectively moved down the value chain, away from commodity products, by understanding the dynamics of the CPG industry. This includes establishing the most constructive way of working with customers further down the value chain.

As well, several key similarities in both companies’ transformation to CPG businesses serve as valuable indicators for a company that chooses a similar path:

• **Marketing and sales** – Both companies had strong marketing and sales organizations that were already focused on the consumer.
• *Research and development* – R&D and patents gave both companies competitive advantage in their chosen market.

• *Operational focus* – Once the decision to get out of forest and paper had been made, the focus was on executing that decision quickly and effectively.

• *Prior relationships* – In the past, facilities were removed from the respective companies and key relationships were maintained; however, both companies remained focused on driving value out of their core businesses, even if that meant experiencing pain in regard to assets they previously owned.

Ultimately, a customer focused strategy helps ensure that forward-thinking companies get closer to their customers’ objectives and needs while simultaneously acquiring a greater share of the larger profit pools in the value chain. If tackled effectively, companies that become more customer-focused will achieve a higher degree of customer loyalty and build more valuable customer relationships. So what might the organization, culture and processes of today’s forest and paper industry look like in the future?

**The future state: Customer-ownership business model**

In a market characterized by companies burdened by debt, rapidly falling revenues and weak profits, there is sufficient room for only a handful of lowest-cost producer organizations. And even then, major profit squeezes resulting from customer-driven commoditization will make it increasingly difficult to make a living. That is why forward-thinking organizations within the industry have realized that given today’s difficult commercial realities, business is very unlikely to improve without fundamental change. This has led them to reassess their business goals and the validity of their current business models, processes and priorities. Now is the time to act: There can be enormous potential for companies that embrace customer focus and innovation.

A well-organized and innovative company can significantly improve profits by becoming customer focused. By increasing the breadth of services offered and “owning” the customer’s total paper and related product needs, an organization can capture a higher proportion of the downstream value. Effectively, this means that in better serving a customer’s requirements from consumer packaging and design to printing, publishing and fulfillment, there are potentially highly lucrative and, as yet, untapped opportunities. As Figure 8 indicates, companies will need to develop a greater understanding of each target customer and tailor a new bundle of products and services specifically for each customer.
At the same time, it is necessary to overhaul the existing business processes and information technology (IT) systems to support a fully integrated and collaborative relationship with chosen customers, as shown in Figure 9.

**Figure 9. Keys to success in commodity product industries.**

The leading edge customer-focused company

In the customer-focused company, customer focus will define the logistical and product design services needed, the supply chain will deliver those products and services and the corporate infrastructure supports that delivery. This concept is illustrated in Figure 10.

Figure 10. Vision of the winning formula.

The goal is to “own the customer” by understanding and fulfilling the full range of their paper and related needs. This makes the following the core competencies of the company:

- Marketing & sales
- Supply chain
- Customer service
- Product development/innovation.

Achieving transformation

As discussed earlier, there are only two real future profit models for the global forest and paper industry: 1) to become a “lowest-cost” producer, or 2) a company that focuses on the customer-ownership and, by extension, de-capitalization. In the second model, the organizations most likely to succeed are closest to their customers. To achieve this, organizations have to improve customer focus, customer care and supply chain management. They will also gain advantage by outsourcing IT operations and other non-core functions. Finally, and perhaps most challenging, becoming customer focused requires fundamental changes to the people, processes and structure of the company.
A changing business model
The left side of Figure 11 best describes the current business model. This represents the model for major production-based business enterprises. Such companies have a large base of physical capital. Managing these assets effectively requires tremendous ongoing investment and efforts to build or integrate domestic and global operations, upgrade and streamline supply chains, integrate with supplier bases and distribution networks, standardize and improve business processes, install supporting technology, and generally improve operating performance and efficiency. In parallel, financial managers have focused on improving return on capital, return on investment, earnings before interest, taxes, depreciation, and amortization (EBITDA), asset turns and other measures of effective management of broad capital bases. A company that decides to continue with this model is implicitly adopting the lowest-cost producer strategy, by default.

Figure 11. Changing business model.

Traditional business | Customer-focused business
---|---
Sales “push” focus | Customer “pull” focus
Production focus | Customer focus
High (WIP, finished goods) | Low (direct delivery to customer)
High (ownership of production) | Low outsourcing
Physical capital | Outsourcing network

Knowledge-based companies will shed hard assets while production-based companies will sharpen asset utilization


Traditional companies have focused on efficiently using working capital – such as ingredients, raw materials and parts inventory, and inventory turns – and improving the efficiency of fulfillment systems. The goal of improving the efficiency of fulfillment systems is to decrease carrying costs and product obsolescence and increase customer responsiveness. Key performance indicators tend to focus on throughput, inventory turns, capital efficiency and working capital as a reflection of the growing efficiency and responsiveness of supply chains.
The right side of Figure 11 represents the comprehensive knowledge-based, customer-focused and brand-focused company. As an industrial company initiates the process of de-capitalization, it will outsource many traditional functions that formerly existed within its walls. A significant part of the supply chain may be outsourced into incremental parts. As a first step, for example, the customer-focused company may attempt to organize its existing supply chain partners into a sourcing or delivery network to improve transaction efficiency and lower costs. The alliance agreements governing the new structure will verify that a customer-focused company of sufficient capacity and performance in the outsourced supply chain delivers the required products and services to its customers.

To capitalize on these opportunities, companies need to assess their entire value chains and focus on areas where changes will deliver the greatest return and impact. The following sections provide a roadmap for customer focus, supply chain improvement and an approach to managing the change.

**Strategic customer care – transformation to a customer-focused company**

Inevitably, companies that accept the need to become customer focused must employ a strategy for optimizing customer care. The IBM model for enabling organizations to be more customer focused includes the “Five Pillars of Strategic Customer Care” shown in Figure 12. This model provides five steps to achieving customer focus.

**Figure 12. Model for enabling organizations to be more customer focused.**

![Figure 12. Model for enabling organizations to be more customer focused.](image-url)

*Source: Brown, Stanley A., PricewaterhouseCoopers Center of Excellence in Customer Care; Strategic Customer Care: An evolutionary approach to Increasing Customer Value and Profitability; John Wiley & Sons, 1999.*
The five pillars of strategic customer care are described below.

1. Profile customers.
Building a customer profile requires a commitment to objectively assessing data. A well structured, and regularly updated, customer database becomes the foundation for a full segmentation exercise because it creates a picture of the customer that goes far beyond customer size, geography and dollars spent in previous years.

2. Segment customers.
Segmentation identifies homogenous groups that can be served in a similar manner. But the end objective of any segmentation exercise is the provision of differentiated products and services valued by different customer groups.

3. Research customers.
Proactive organizations probe and test customer expectations, satisfiers (what makes the customer pleased to do business), and dissatisfiers (what may cause them to defect). They also examine the processes that affect the customer, including product development, sales, after-sales service, technical support, order processing, billing and delivery.

4. Use technology as an enabler.
Customer Relationship Management, supply chain and e-business technology underpin the business transformation and will be critical to the success of any major customer focused business transformation initiative.

5. Manage with a customer focus.
The successful transition to a customer focused organization requires appropriate management structures to make things happen. The most advanced companies create cross-functional teams dedicated to specific customers. A Strategic Account Manager, who is generally a high-profile individual, heads these teams and effectively owns the customer relationship. Some companies have a specific managing director in charge of each major account who reports to the CEO on customer performance and works closely with him or her on service strategy.

With this level of contact, major customers get their priority issues addressed and find it less frustrating to deal with the company.

Client transformation to customer focus
A leading-edge example of customer focus is evident in the transformational changes made by Tetra Pak, a major global packaging company.
It has restructured its organization, processes and rewards around a Strategic Customer Care model. Within 12 months, improvements in financial results and customer satisfaction led to the processes being adopted in over 30 countries worldwide.
Channel strategy development

Controlling the route to market is vital to success, and the principles of customer knowledge and segmentation discussed above, are equally valid in managing other members of the value chain. This is especially true where the channel to market is layered or non-exclusive.

One key objective is to influence the point in the channel where the choice of paper is made. For example, Figure 13 shows different points in the channel where paper choice, such as coated paper used in magazines and in advertising and promotional printing, is made.

Figure 13. Channel perspective to segmentation and value.

Once the decision is understood, the next step is to select criteria to segment the merchants in preparation to develop a service offering to the most valuable segments. The criteria could include:

- Volume
- Profitability (by merchant, by grade, by geography)
- Loyalty
- Reputation for quality
- Growth opportunity
The challenge is to get information that allows you to decide what service offerings will be differentiators in each segment and will still allow a profitable relationship. Both the current attractiveness and future potential should determine the level of service offered. Differentiated service offerings could include:

- Delivery time slots and accurate communication of ETA and changes
- 24-hour delivery for stock sheet sizes
- Online tracking and tracing of orders through the supply chain.

The last step in the approach is to:

- Understand the capabilities needed to deliver the service offering and do a gap analysis versus today’s capabilities
- Decide the roles to be performed by the channel (e.g., stockholding, order capture, marketing promotions, customer development) and set prices accordingly for each role
- Set performance targets for the channel and the internal supply chain
- Develop the basis of a customer services agreement
- Identify the investment needed to close the gap and develop the business case.

The benefits side of the business case is likely to include logistics cost reduction, reduced stock levels and production cost reduction.

**Enhancing the supply chain**

If an organization is to become customer focused, it must address its supply chain – transforming supply chain capabilities to make-to-order, while also enabling customers to do business simply and cost effectively. To begin this process, companies need to identify how they can better leverage the size, scale and commonality of processes to drive businesswide efficiencies and customer satisfaction. In its totality, as illustrated in Figure 14, achieving a more efficient and integrated supply chain involves reengineering order management, planning demand and supply, streamlining sourcing, optimizing production and conversion management, improving distribution/transportation management, and aligning performance measures with the organization.

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**Case Example:**
A Nordic paper producer has established a Voice of the Customer survey system. The results have been used to set priorities for supply chain redesign as part of its global logistics optimization initiatives. This knowledge can also be fed into needs-based segmentation exercises and eventually implemented into changes that lead to higher levels of customer satisfaction and loyalty.
As an example of the effort being made, a top 10 forest and paper company recognized that even with the considerable energy it was expending in dozens of fragmented mills and division specific improvement projects, they would only achieve incremental gain. The initiative started with a review of best practices outside the industry as described in Figure 14.

**Figure 14.** Vision of the supply chain: better practices.

**Order management**
- Customer service teams provide single point of customer contact
- Customer stratification used to allocate inventory
- Customer on-line self-serve
- ATP & VMI capabilities
- Perfect order execution
- One stop for pricing order entry inquiry and credit collection

**Plan demand**
- Capture all demand inputs (customer, POS, shipment)
- Incorporate market intelligence
- Visibility to all inventory (DC, store, in-transit)
- Joint-planning with customers
- Provide VMI and CPFR services
- Supply and demand planning teams

**Plan supply**
- Collaborate with suppliers (internal/external)
- Single consensus demand statement aligns supply to demand (marketing, sales, operational, financial)
- Make-to-order preferred; model stock secondary; forecast last
- Customer stratification drives prioritization
- Constrained capacity planning

**Source:** IBM Business Consulting Services, 2002.

**Suppliers**
- Rationalized strategic suppliers leverage volume into cost reductions
- Cross-functional sourcing teams
- Indirect spend enabled by e-procurement
- Leverage spend across business units
- Gain sharing with suppliers
- Supplier performance is measured and managed to agreed objectives

**Manage distribution and transportation**
- Rationalized distribution network
- Flexible delivery schedule to accommodate customer demand fluctuations
- Product tracked through distribution network
- Inventory velocity is prized
- Optimize payload, reduce cost, balance with customer service

**Aligned performance measures and organization**
- Balanced measures drive business (customer service, yield, efficiency, inventory)
- Organization structure aligned to support the process
- Customer-focused culture delivers corporate value
- Shared services leverage commonality; decentralized to recognize uniqueness

**Manage production and conversion**
- Make vs. buy drives production decision
- Products are predominately make-to-order
- Kanbans manage material flows
- Meet or exceed all customer requirements (e.g. price and quality)
- Cross-trained personnel enable flexibility
- Responsive, efficient grade changes and set-ups
- Reliability centered maintenance driven environment

**Source:** IBM Business Consulting Services, 2002.
Utilizing a core of senior personnel drawn from its various businesses, supported by IBM, this company quickly developed a business case for significant change to common processes, with supporting organizational redesign and enabling technology, which were applied to its operations worldwide. Exceeding a two percent return on gross sales, the company’s conservative business case included key supply chain facets:

- Customer segmentation
- Order management/Perfect order accomplishment
- Availability to promise (ATP)
- Supply planning
- Demand planning
- Strategic sourcing
- Procurement transaction execution ("Req-to-Check")
- Scheduling
- Warehouse rationalization
- Distribution network rationalization
- Working capital invested in Inventories
- Improved production asset utilization.

In an additional example, another company embarked on a vision to “optimize” the supply chain of the company, not increase the efficiency of the mills by moving the supply chain from a “push” strategy from the mills to a “pull” strategy from the customer. They implemented weekly forecasting and replenishment cycles for converting facilities and central scheduling for all mill production. Mill metrics were changed from traditional efficiency and gross ton measures to a “performance to schedule” metric.

As a result of this effort, the company was able to:

- Reduce WIP inventory by 45 percent
- Improve on-time and complete deliveries to converting facilities from 35 percent to 80 percent
- Replenish 120 production facilities based on scheduled forecasts without human intervention.
Companies choosing to become customer focused often find that embracing change requires them to focus entirely on their new, core-business activities. Moreover, change slows down as they are unable to fund needed systems investments or re-focus the organization to support and lead the change. Firms will need to address their delivery models and core competencies before they are able to move forward.

**A fulfillment network – serving the customer’s needs**

How a company delivers or develops their customer focus can vary. One approach to addressing the delivery model is the creation of a “fulfillment network” to serve the customer’s needs flexibly and efficiently. The “fulfillment network” is a structure of alliances and partnerships that is formed to provide a complete product and service package to a customer. Figure 15 illustrates one example of a fulfillment network model.

*Figure 15. Fulfilment network model.*

Through an alliance of companies that offer complementary production, conversion, distribution and logistics capabilities, a PFN can create a customer-centric solution that has the product breadth and scale to provide a one-stop offering to key strategic customers.

*Source: IBM Business Consulting Services, 2001.*
One-stop shop
A simple example of a fulfillment network is the action taken by a North American lumber producer as part of building its brand as a “one-stop” producer of structural wood products for the Japanese market. Faced with demands for products that would have impaired conversion efficiency in its mills, rather than turn the customers away or engage in high-cost conversion of “fringe” volumes, the producer exploited logistic network efficiencies. The producer decided to “in-source” product from the Czech Republic into Japan and market the material under its brand. This strategy has proved successful. Volume has increased because of the ease with which customers can have all of their needs satisfied with quality product from one supplier and margins have been improved by optimizing production.

A fulfillment network is an important point of differentiation in an increasingly commodity-oriented market. It enables participants to differentiate themselves by combining product offerings and utilizing an industry-specific fulfillment and logistics solution. The fulfillment network:

• Enables cost advantage through more efficient fulfillment
• Equalizes the scale and scope of large firms without the cost and pain of a large acquisition
• Begins to provide greater intimacy with the end customer
• Provides important differentiating supply chain capabilities
• Allows partner companies to leverage each other’s brands
• Provides an integrated solution to manage the information associated with delivering a bundled offering of paper-related products – providing the company with the product breadth, scale and fulfillment capabilities needed to compete.

This vision can work. Yet, being focused on the customer requires a major change in how a paper company manages capital, human resources and brand assets, including knowledge. Companies that embark upon a customer-focused transformation will need to tackle a range of fundamental business, technology and change management issues. This effectively turns the traditional organization on its head. To achieve this transformation, companies need strong partners with which to make the necessary transformation.

Partnering in the forest and paper industry
Partnering in the industry can take many different forms, from partnering on internal management processes to partnering on asset management. Choosing the right partnership option can significantly improve performance and reduce cost.
Internal management processes such as financial accounting; human resources; maintenance, repair and operations (MRO) procurement; IT operations; legal counsel and HR processes are sensitive to scale. What that means is larger operations typically have lower costs and better practices which, in turn, lead to higher effectiveness. These processes are candidates for outsourcing, provided they are not core to customer management or other strategic capabilities. Gaining scale benefit will mean either “internal outsourcing” (also known as shared services), an arrangement whereby services are supplied directly to the company by a central shared unit via a customer service agreement, or a larger external “shared services” provider designed to deliver process excellence and scale economies to more than one customer-focused company.

Through decapitalization, many traditional functions may be outsourced. For example, a major global forest and paper company recognized the high cost of maintaining mill and division-specific back-office functions (e.g., accounts payable, accounts receivable and other finance and accounting functions). Using accounts payable as an example, it consolidated operations onto a common ERP system, feeding a new cross-division shared services center. Next, it outsourced many routine processing activities to an overseas service provider, leaving only inquiry and exception handling capability in the home geography. It continues to Web-enable and automate inquiry capabilities to permit its suppliers to directly query the status of their payments and closely coordinates its A/P activities with its e-procurement and strategic sourcing programs to reduce the underlying drivers of A/P workload.

Asset management is also an area that, while important to production, takes management attention away from customer focus. Buying groups are one of the first steps in recognizing that the non-core process can be moved outside the walls of the enterprise, but asset management can go much further.

A solid wood producer recognized that their basis for competition was not the purchase of goods and services, especially where they had insufficient leverage with the supplier community. Utilizing the services of a third-party buying organization, they pooled their requirements and worked with supply agreements negotiated by the buying group. This achieved significant savings on goods ranging from steel strap to courier services.
In addition, forest and paper companies are advancing the outsourcing of their stores inventory management and associated procurement. They are utilizing the outsourcer as a storefront for their maintenance organization, where all of the material in the storeroom is owned by the outsourcer and is paid for as it is used. These outsourcers leverage both their buying capacity as procurers for multiple organizations and their relationships with machine shops, taking advantage of repairing versus replacing and of reverse engineering, and duplicating expensive OEM parts. Savings include elimination of spare parts inventory from the asset base, leveraged procurement resulting in lower item costs and reduced cost as a result of alternative sourcing of OEM parts.
Conclusion

So what would be the result if some companies in the forest and paper industry adopt the thinking and business models set out in this paper, transforming from vertically-integrated-products manufacturers to innovative customer-value-added-service providers?

Clearly some companies will still have to produce the primary products. The successful companies in this role will be the lowest – not lower – cost producers. This inevitably will require some rationalization of current production capacity – a very disruptive and difficult process.

For those companies which choose the customer-focused model, there will be substantial change as well – in culture, in processes, in human skills needed, and more – all in all another huge change to be managed. But the rewards of breaking free of the commodity price cycle are also substantial – for employees and shareholders.

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