Shorey Consulting, Inc.

Creating Value by Eliminating Retailers: An Industry Example

PC Industry Value Creation Through Sales and Distribution

The choice of a sales and distribution approach is a critical element in any company's business model, defining the activities that must be performed not only by the manufacturer itself but also by the other participants in the channel. The activities then determine the cost structure of the channel.[1] In a typical industry, most manufacturers make similar selections of a sales and distribution approach and, thus, perform similar activities and have comparable cost structures. An early entrant typically both builds relationships with effective channel partners and gains scale advantages in costs which help that early entrant establish a strong competitive position and create shareholder value. Occasionally, another company finds a path to circumvent the accepted channel structure through an alternative approach to sales and distribution. When the new path corresponds to customer needs, it can create value rapidly for the new company and can force traditional competitors to modify their standard practices.

In a span of just over ten years, the personal computer (PC) industry illustrates both the evolution of a "standard" sales and distribution structure and the success of a maverick. The early leaders in personal computers, such as IBM and Apple with Compaq just behind them, built strong positions through a tightly controlled but expensive multi-step sales and distribution process. This approach met the needs of early PC buyers who needed and valued significant support during the product selection process. The maverick, Dell, in contrast, targeted a more seasoned buyer and built a direct-to-the-customer sales and distribution structure meeting that customer's needs with much lower selling costs. Dell has been creating shareholder value extremely rapidly and now enjoys earnings and revenue multiples which exceed those of the more traditional industry leaders. Furthermore, the power of the Dell model is driving other manufacturers to respond and modify their own business approaches. The evolution of the PC industry illustrates the implications of sales and distribution channel choice in a business model and the potential for creating shareholder value through successful exploitation of alternative approaches.

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[1]The previous two articles in this series (*Achieving Competitive Advantage Through Sales and Distribution Strategy* and *Cost and Value in Sales and Distribution Channels*) describe the importance of sales and distribution channel choices and the relationships between those choices and the activities and economic consequences in the total channel.

Development of Sales and Distribution in the Personal Computer Industry

The PC industry began in the mid-1980's with the introduction of the early Apples and the first IBM personal computers. Prior to that time, computer were purchased by technical staffs with training in hardware and software: either operators of central computer systems or technical groups (such as engineering) purchasing application specific systems from value added resellers (VARs). These computer systems were expensive, complicated and risky purchases. Even technically trained customers demanded significant support during the purchasing process and were willing to pay prices which compensated manufacturers for that service and support.

Early purchasers of PCs also required support during the purchasing process, but established computer channels were not suited for the PC. First, the customer was different, often someone in an operating group without computer knowledge. Second, the average purchase was in thousands of dollars, not tens or hundreds of thousands. Therefore, suppliers of personal computers needed a sales and distribution channel which could provide support but which could operate at a much lower cost per transaction and per customer than the traditional channel.

The leading personal computer manufacturers arrived at similar solutions. They created a multi-step sales and distribution channel where they sold to distributors which, in turn, sold to authorized retailers (known as 'resellers'). By using independent distributors and resellers, the PC companies gained broad geographic coverage quickly, encouraged the development of new, entrepreneurial management talent throughout the emerging PC industry, and shared the costs and working capital investments required to build a distribution system. This structure met the needs of the manufacturers, most of which of which were relatively small companies with limited balance sheets and management infrastructures. They were not in positions to develop or finance their own captive sales and distribution channels. Even IBM, with virtually limitless investment capacity, sought to distance itself from its traditional, mainframe oriented channel and to develop innovative, more nimble paths to the customer.

New resellers and distributors emerged in parallel with the PC manufacturers to create this sales and distribution channel. Early resellers were specialists in computers and provided significant, personalized customer service. They had responsibility for all of the activities inherent in the sales and distribution process (Table 1).[2] The reseller found customers (*Customer Identification and Acquisition*) through a combination of advertising and direct sales activities. It helped both corporate and individual customers select appropriate computer systems (*Product/Customer Matching* and *Financing*), often spending considerable amounts of time in the specification and selection of hardware and software. The reseller managed the order, took payment and arranged financing.

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[2] For a description of activities in the sales and distribution process, see the second article in this series: *Cost and Value in Sales and Distribution Channels*

Crucially, the reseller had responsibility for after-sales support, service, and often, training (*Support*). These support activities were significant sources of revenue and profits for many resellers.

Table 1: Activity Performance by PC Resellers - Late 1980's

Activity	**Description**	**Responsibility to End Customer**
Customer Identification and Acquisition	Finding new customers and then generating interest and inquiries	Reseller
Product/Customer Matching	Determining which products are most appropriate for the customer and explaining the unique benefits of the manufacturer's products	Reseller
Closing	Actually making a sale	Reseller
Order Acceptance and Processing	Managing the paperwork involved in entering, shipping and billing for an order	Reseller
Finances	Determining whether and under what circumstances to grant credit and collecting payment	Reseller or Third-Party Financing Company
Logistics	Assuring timely delivery of the product including any necessary inventory management and shipping	Reseller and Distributor
Support	After sales, warranty and other customer support	Reseller or Third Party Sub-Contractor

The broad support provided by resellers to customers during the purchasing cycle met the needs of many PC customers who were relatively unsophisticated in the use of computers and who required assistance in selecting the appropriate PC and associated software. The resellers explained the use of the PC, demonstrated software and had product available for customer inspection and trial prior to purchase. Distributors supported both the reseller and the manufacturer by qualifying the resellers and by providing some of the working capital investment necessary for the sales and distribution channel.

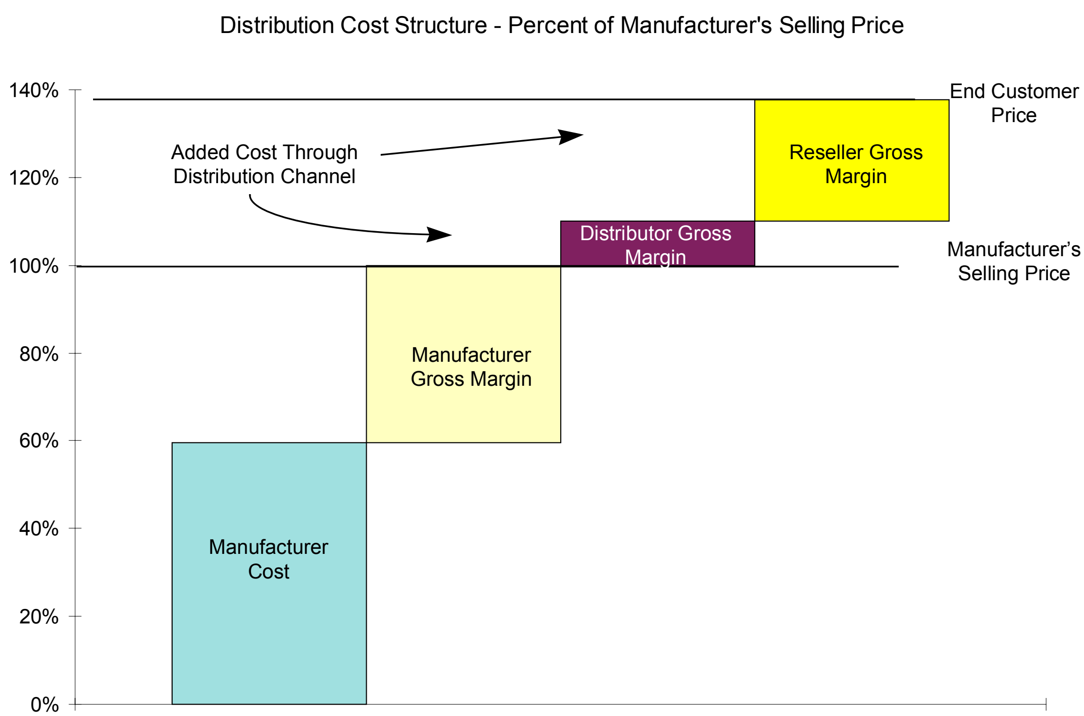
Manufacturers had little or no direct involvement in the sales and distribution process. Although they often advertised to build brand awareness, they were separated from the end customer. Manufacturers concentrated on advancing the technology to introduce new products; they then manufactured and shipped finished product to their authorized distributors. The distributors, in turn, managed the supply chain logistics of inventory management, shipping (often to the end customer) and reseller credit. The manufacturer and the distributor worked together to identify and qualify the necessary network of resellers.

Each part of this multi-step sales and distribution channel had reciprocal relationships with the other members based around the customer need for support. As long as the situation remained stable, all of the participants from the manufacturer to the end customer prospered.

Demise of Early Resellers

The success of this channel approach depended upon the customer's willingness to pay a premium for the reseller's service and support. Until the late 1980's, PC resellers were able to achieve gross margins of 20%+, which were sufficient to compensate the reseller for the range of services they offered to their customers. Manufacturers attempted to help both the resellers and the distributors protect those margins by "authorizing" the resellers and by restricting them to purchasing from only one distributor. The goal was to reduce the intra-brand price competition - to limit the number of resellers bidding for the same end customer order. However, the margins at the reseller and distributor level added significantly to the end customer cost for a computer system, increasing the price from the manufacturer to the end customer by 35-40% (Figure 1).

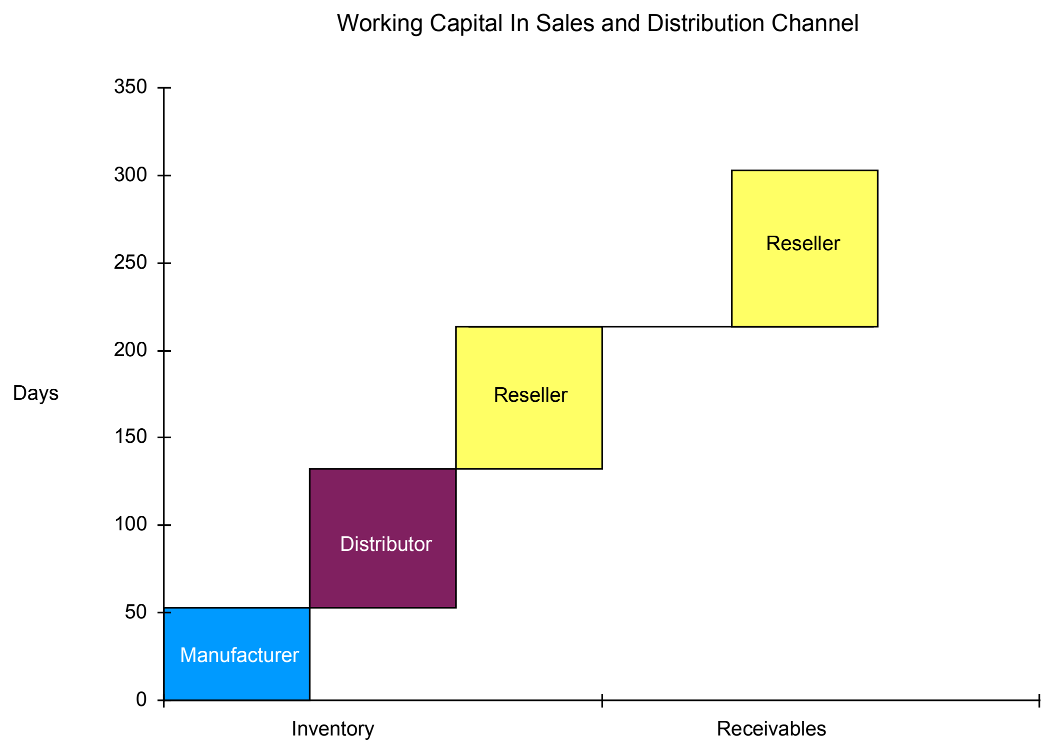
Figure 1: Added Costs Through Multi-Step Distribution - Late 1980s



Source: Company Annual Reports and Shorey Consulting estimates

The multi-step sales and distribution approach also required large investments in working capital, especially inventory (Figure 2). First, each participant in the distribution channel maintained inventory accumulating to 220 days throughout the total channel. The industry was new enough and the tools had not yet evolved to allow careful control of inventory levels across the total channel rather than at each individual level. Second, in addition to inventory, reseller financing of end customer receivables averaged over 80 days.[3] The combined working capital investment for the channel exceeded 300 days.

Figure 2: Working Capital Investment in Sales and Distribution Channel - Late 1980s



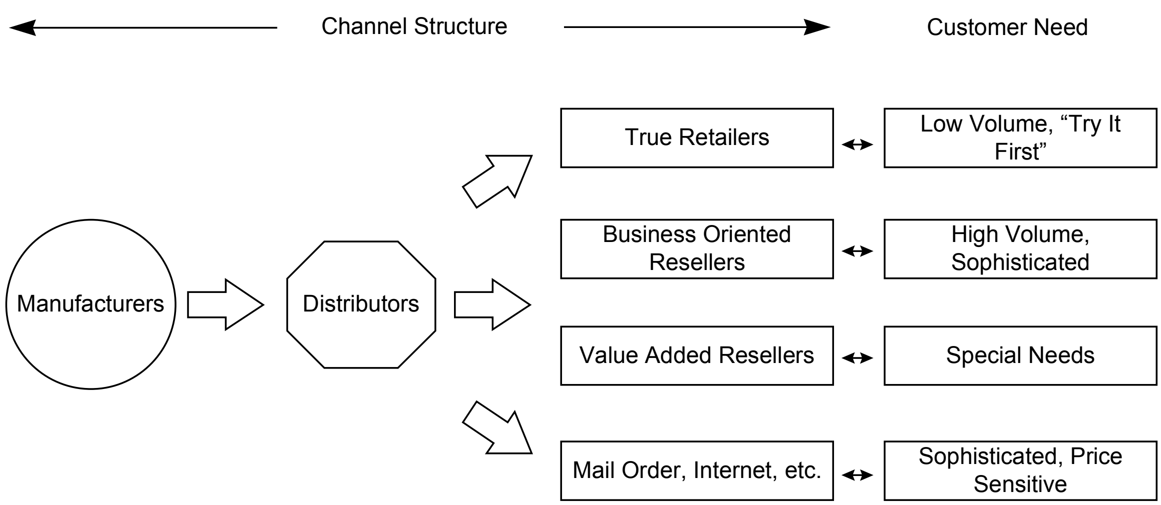
Source: Company Annual Reports and Shorey Consulting estimates

As customer needs and priorities evolved, the perceived value of reseller services began to decline for large segments of the marketplace. Many buyers ceased to be willing to pay premiums to resellers for assistance and training. This emerging customer segment created opportunities for lower cost, lower support resellers and placed significant pressure on margins throughout the reseller channel. By the mid-1990's, the reseller's gross margin had declined from 20% to 8% and the distributor's gross margin had fallen from 7.4% to 6.2% of the end customer price.

[3] While the manufacturer and the distributor have receivables which they must finance, from the perspective of the total channel inter-level receivables are offset by the corresponding payables.

The consequence was that most of the early PC resellers, such as Computerland and other no longer recognized names, failed. The result has been a fragmentation (Figure 3) of the reseller industry into sales and distribution channels oriented to specific customer segments, such as true retailers (e.g. CompUSA), business oriented resellers (e.g. MicroAge), value added resellers (i.e. network developers and installers) and mail order suppliers (e.g. 42nd Street Photo, MacMall, etc.). Each of these resellers serves a different set of customer needs and has its own business model and cost structure. The underlying process of sales from manufacturers through distributors to these various forms of resellers has remained intact. The multi-step system is still the core of the sales and distribution process for the bulk of the PC manufacturers (i.e. Compaq, IBM, HP, Apple, etc.).

Figure 3: Fragmentation of PC Distribution in 1990's



Successful Participants Have Created Value

During the past decade, participants in the PC industry who have adapted their business approaches to the changing needs and priorities of customers have been most successful. Most of the leading PC suppliers continue to use the multi-step distribution approach which characterized their original way of doing business. While the early, high cost and high service resellers did not adapt to the more competitive marketplace, other firms in the sales and distribution channel have emerged with successful business models. In the process, channel participants who have adapted their approaches are creating shareholder value.

CompUSA, a major true retailer of PCs and related products, is one example of a successful new participant in the multi-step sales and distribution process. Founded in 1984 as the software retailer Software Warehouse, CompUSA evolved its business design during the late 1980s to become a broader line mass merchandiser of PCs and related supplies, changing its name to CompUSA in 1991. It adapted the "big box" retailing model of Home Depot in building materials and Circuit City in consumer electronics to PCs. It serves consumers and businesses who require hands-on introduction to products before they purchase or who value the ability to receive a product immediately from store inventory. CompUSA meets many of the needs served by the earlier resellers but at a lower total cost structure. It has grown to $4.6 billion in revenues and to shareholder value of over $2 billion.

The approach to sales and distribution through the multi-step channel remains predominant in the PC industry and has been used to create shareholder value at all steps in the sales and distribution channel.

Dell Builds an Alternative Business Model Based on a Different Sales and Distribution Approach

Dell Computer Corporation began in 1984 in the infancy of the PC industry. From its inception, Dell has operated with a business model distinct from the norm practiced by the industry leaders. Instead of selling through multi-step distribution, Dell sells custom built computers directly to end customers. In the early development of the PC industry, the Dell business approach appealed to only a small segment of customers. With the evolution of customer needs and Dell's continuing refinement of its operations, it has grown to become the third largest PC vendor and has created $45 billion in shareholder value. Dell's market valuation is now greater than Compaq's even though Compaq is the largest supplier in the PC industry, with twice Dell's revenues.

Dell's business model is built around a sales and distribution channel approach completely different from the major competitors which use multi-step sales and distribution. (Table 2). Instead of building machines to forecast and selling them through

Table 2: Dell Sales and Distribution Activities

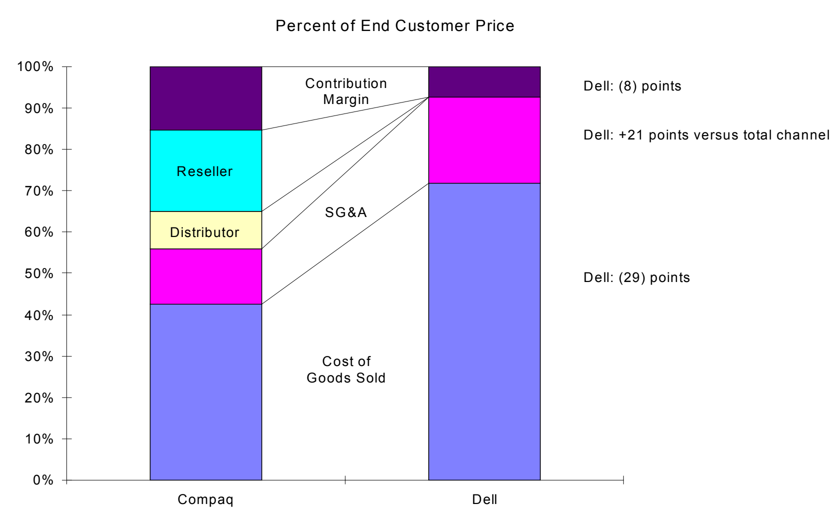
Activity	Large Businesses and Government	Individuals, Home Offices and Small Businesses
Customer Identification and Acquisition	Telesales supported by direct sales force in local offices	Advertising and direct mail
Product/Customer Matching	Local account executives with telesupport	Telephone and Internet configuration and ordering
Closing	Telesales and direct sales force	Telephone configuration and order process
Order Acceptance and Processing	Telesupport organization	Telephone configuration and order process
Finances	Open accounts and third-party leasing	Credit cards and third-party leasing
Logistics	Manufacturing to order and shipment via third party carriers	Manufacturing to order and shipment via third party carriers
Support	Customized support programs Telephone and subcontracted in-field support	Support options over telephone and sub-contracted on-site activities

distributors and resellers, Dell assembles PCs for each individual customer order. Dell receives its orders over the telephone or electronically, lets customers select from a menu of components, assembles the PC from standard parts and ships in 3-5 days. It provides after-sales support either over the telephone (which is now standard practice among PC companies) or sub-contracts on-site support to third-party vendors.

In the early period of the PC industry, the Dell business model did not meet the needs of most first time buyers (either corporations or individuals). First, Dell was not well known. Without a broad network of resellers, it was not visible to most potential customers - the business model did not perform the *Customer Identification and Acquisition* activity well. Second, Dell could customize a product, but its ordering system required that a customer know which components of a PC it needed for its specific application - Dell was limited in its ability to perform the *Product/Customer Matching* activity. As long as both of these activities were critical, and valued highly by customers, Dell was constrained to a niche position in the PC industry. However, as the PC market matured, more and more customers became knowledgeable about PCs, their components, and the requirements for specific applications. The weaknesses of the Dell business model became less and less important to a growing segment of customers. Customers came to value the enormous ability to customize PCs embodied in the Dell approach and the superior, consistent service and support provided by Dell.

When Dell began, and throughout the late 1980s, its direct sales/custom build business model had noticeably higher costs than those of its major competitors using the multi-step distribution approach of products made to inventory[4]. While Dell received the total price from the end user, this was not sufficient to compensate for the extra selling, assembly and other costs Dell incurred (Figure 4). Thus, at equivalent end customer prices, Dell

Figure 4: Compaq Versus Dell Channel Cost Structure- Late 1980’s



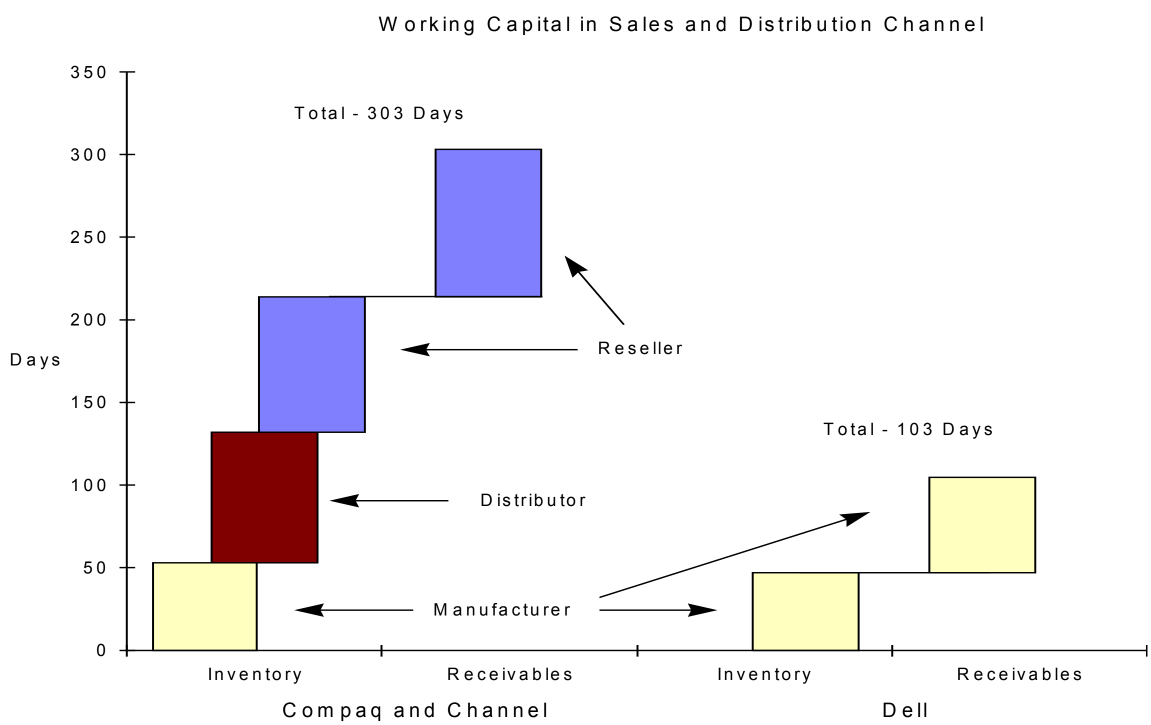
Source: Company Annual Reports and Shorey Consulting estimates. Values as a percent of End Customer Prices.

[4] For the purpose of this article, Compaq’s financial results serve as a proxy for Dell’s multi-step competitors. Compaq is a relatively ‘pure” company from a financial reporting standpoint and is now the leading PC supplier.

had 7 percentage points more in *SG&A* than Compaq to cover the sales and distribution activities it managed itself. While greater than Compaq's own costs, Dell's total *SG&A* cost was 11 percentage points lower than the combined costs of Compaq and its distributors and resellers. The short production runs in the made to order approach caused Dell to have *Costs Of Goods Sold* which were 28 percentage points higher than Compaq's, for a difference in *Contribution Before R&D* of 8.5 percentage points in favor of Compaq.

The economic advantage of Dell's direct selling business model in the late 1980's appears in Dell's utilization of assets, both its own and those of the total channel. Dell had approximately 100 days in inventory and receivables - the total channel investment. The multi-step channel used by Compaq had 300 days in gross channel working capital (Figure 5). Thus, Dell had 200 days less working capital to finance and less approximately one-third the total working capital throughout the distribution channel.

Figure 5: Compaq Versus Dell Working Capital In PC Retailing Channel - Late 1980's



Source: Company Annual Reports and Shorey Consulting Estimates, Values as Percent of End Customer Revenues.

As Dell has increased its volume and improved its business processes, its cost disadvantages have declined. Dell has improved its own manufacturing processes so that its extra costs in custom assembly are offset by its savings in total channel sales and distribution costs. By manufacturing to order, Dell has reduced inventory levels to 10 days (little more than raw materials). Furthermore, the absence of inventory in the system lowers Dell's exposure to obsolete or overpriced components and finished products when prices decline or technology shifts. As a percentage of customer selling price, Dell and Compaq earn the same amount of contribution margin per dollar of revenue.

At the same time as Dell refined its low inventory business model, the participants in the conventional multi-step reseller channel have made dramatic reductions in their own working capital. The working capital in the multi-step channel has declined by 170 days (or over 50%) from the late 1980's to 1996, freeing up billions of dollars in investment. As impressive as these gains are, Dell has kept the pressure on its competitors. Over the same period, it also reduced its gross working capital requirements by 55 days, or 55%. While the pressure of the Dell business model is not the sole reason for the reductions in the multi-step channel, the combination of Dell as an example and as a competitive threat has helped spur systematic changes in business practices at resellers, distributors and manufacturers.

Results for Dell

Dell has been one of the great success stories in the PC industry. It has grown at over 55% per year in revenues and nearly 60% per year in net income from 1987 to 1997. In the process it has created nearly $50 billion in shareholder value. Part of this growth is, of course, being in the right industry at the right time. Over approximately the same period, Compaq's revenues grew at 30% per year and net income at 22% while creating $45 billion of shareholder value, an impressive record in itself. Interestingly, however, the stock market now puts a higher premium on the Dell business model and Dell trades at twice Compaq's multiple of earnings.

However, not all companies in the PC industry have been successful. Apple, most notably, has floundered. In the IBM compatible arena, IBM itself, Packard Bell, NEC and others have all lost market position. Dell has used its direct sales/customization business model to become the most visible success. It took a different path in distribution and succeeded brilliantly.

Dell's success is attributable to a combination of enhanced customer benefits and improved economics in the total system. Customers benefit from the customization and the service packages offered by Dell. They gain flexibility in computer configuration at competitive prices. Dell makes the economics work by eliminating two layers of distribution and removing costs from the system, costs which were no longer providing value to Dell's target customers.

The direct sale business model does, however, have its limitations. Dell still does not serve the first-time consumer well. Most of these customers wish to see and touch a product before buying it and they do not value the product flexibility of the Dell approach. Therefore, Dell has missed out on the recent growth of the sub-$1000 computer market, along with other retail opportunities.

No business model can serve all customers equally well. It is a credit to Dell that it has recognized its own strengths and continued to build upon them. It retreated rapidly from a momentary diversion into an unfamiliar program of selling through retailers, which would have strained its management capabilities and forced it to compete against its competitors' strengths. The clear question for Dell is what to do next. Its recent answer has been to transport its current approach outside the US. While there is always a danger in not re-examining a business model periodically, most companies would be satisfied with a model which still has the potential to generate 20+% annual increases in revenues and profits.

Lessons for Other Companies

Successful companies in the PC industry created value through business models which met the needs of customers within cost structures allowed by the competitive situation. As in most industries, the major competitors gravitated to a similar approach because that approach met customer needs with the most favorable economics. Early successful entrants to the PC industry built the sales and distribution aspects of their business models around a multi-step distribution approach - one which could provide the support valued by early PC customers.

The PC industry also demonstrates the threats and opportunities from changing customer priorities. First, companies in any industry which can not adapt their business models to changing customer priorities are at severe risk. The first evolution of the PC customers into multiple, distinct segments each with its own set of needs upset the emerging structure of the PC industry. High cost/high service resellers became obsolete. Their business models had costs misaligned with features valued by customers; a situation which can not survive long in the face of more effective competitors.

On the other side, the flourishing of Dell demonstrates the power of an innovative business model which meets emerging customer needs and improves the overall economics for the customer. Dell built such a business model by offering radically different sales, distribution and manufacturing processes as a means to provide superior service and value to its target customers. Without customization, there are no benefits to Dell's customers. Without eliminating distributors and resellers, Dell can not make the economics of custom assembly competitive. The combination of the two underpins a powerful business model.

Other companies will also be successful by following an approach analogous to Dell's. They will learn what features an identifiable customer segment values highly and then deliver those services within competitive cost structures. For many manufacturers, rethinking their sales and distribution channel can provide economic savings and support to customers which will allow the manufacturer to make a major step forward in its industry.

Shorey Consulting, Inc., is a strategy consulting practice dedicated to working interactively with clients in order to develop approaches for profitable growth in the face of change. It encourages thoughts, comments and additional examples of sales and distribution approaches as key elements in successful business models.
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