



## URBAN WALLACE ASSOCIATES

35 Bedford St., Suite 8, Lexington, MA 02420

ph 781 862 0033 fax 781 862 1292 web [www.uwa.com](http://www.uwa.com)

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### *Turning Products into Services*

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Globalization and technology have profoundly altered customer expectations. Today, customers expect prices to go down and personal control to increase. As a result, what customers want to buy and why they want to buy has changed. This new Purchase Logic is driving the transformation of product businesses into services.

Two phenomena have come together to radically change customer behavior. First, as prices of goods have fallen, customers have come to demand even lower prices. Second, as technology has increased the ways in which products can be customized, buyers have demanded more control and personalization. These changes have increased the need for incorporating services into products or even turning products into services.

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#### LOWER PRICES

Customers of the Global Economy expect the prices of goods and services to go down. They expect to pay less than last year and are confident that next year's prices will be even lower. In the United States this change in expectations has caused customers to become bargain hunters: business people and consumers either demand a discount or wait for a sale. In Japan deflationary expectations have caused customers to "wait until next year" to buy, and thus, have created a prolonged economic slowdown.

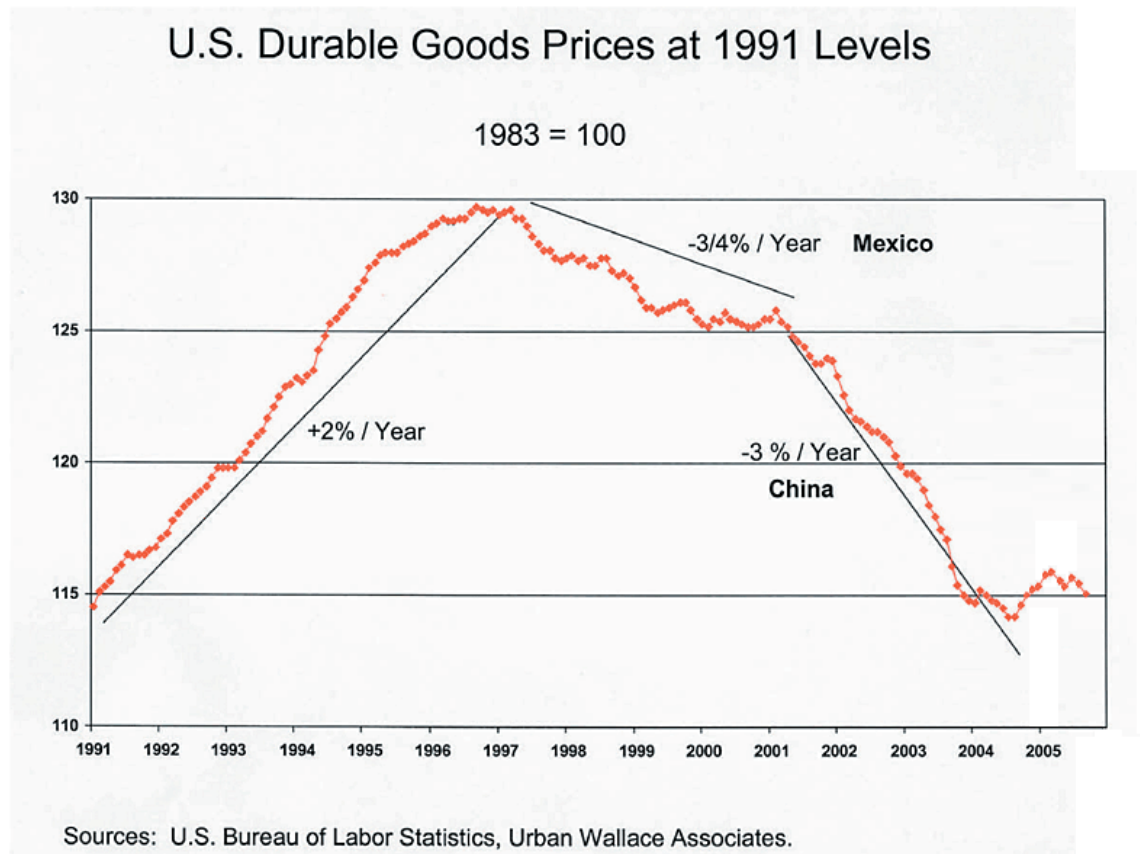
The rapidly falling prices of desktop computers have greatly changed customer expectations about price and performance. In this category, prices have declined as performance increased. Price declines of 30% per year have been commonplace for two decades. A whole generation has grown up expecting to "get more for less" when shopping for a P.C.

During this same time, Wal-Mart came to dominate retailing in the United States by stressing "Falling Prices!" across a broad range of retail items—apparel, electronics, housewares and sporting goods—Wal-Mart created and fulfilled expectations that prices will go down. This powerful promise has changed consumer expectations.

Being able to deliver lower prices consistently has enabled Wal-Mart to crush much of its competition. Today, Wal-Mart is reshaping food retailing in the U.S. Soon Wal-Mart may do the same thing to another large retail business: used cars. Just try to imagine the auto business if prices declined each year.

In China, new car prices did just that during 2003. In four separate waves of price reductions, the average price of a new car in China was cut 9%. Passenger car sales jumped 55% to 2 million units. China is now the world's fourth largest passenger car market. When "Falling Prices" become expected in the U.S. and European car markets, the automotive industry will have truly entered the Global Economy.

There are many other reasons why U.S. customers expect lower prices each year. A very broad measure of prices, the U.S. durable goods price index, fell every year from 1997 to 2004. This deflation was caused first by imports from Mexican maquiladoras and more recently by imports from China. In 2003 durable goods prices in the United States dropped 4.6%. By 2004, they had fallen to 1991 levels. Only recently have durable goods prices stabilized.



Failure to understand and to react to customer's expectations of lower prices seriously weakens a company's competitive position. For example, at the end of January 2004, Kraft Foods announced a layoff of 6,000 workers and a restructuring charge of \$1.2 billion. Kraft needs to reduce its costs in order to meet consumer expectations of lower prices. As chief executive Roger Deromedi explained to financial analysts in New York, "For both consumers and retailers, value has become the defining principle, not just in the U.S. but across the world. Consumers have clearly become more price-conscious."

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## GREATER PERSONAL CONTROL

Customers expect that technology will allow them to customize the products and services they use. This is not "mass customization" based on a combination of pre-set components. That is a manufacturing idea. Today's customers demand the opportunity to customize their actual experience with your product. By customizing their experience, buyers become co-creators of value.

The first aspect of increased personal control sought by customers is "to pay for only what is used." Several examples come to mind involving automobiles. Rather than pay an annual auto insurance premium, many drivers would prefer to "pay as you go." This would involve GPS tracking and payments based upon the time, distance and locations in which one drove. Another auto example is the annual registration fee or road tax. Here is another charge that could be metered via GPS, just as some toll road charges or London congestion charges are collected today.

However, the desire for personal control goes far beyond the reduction of unnecessary costs. Personal control allows the user to alter an experience to suit his or her own taste. In this way, the user creates additional value that is pertinent to that particular individual. It is here that technological innovations create new higher expectations.

Think of television, the nearly ubiquitous form of entertainment and information. Broadcast television offered widespread dissemination of centrally controlled, fairly homogenous programming that had to be watched as it was broadcast. Cable and satellite distribution greatly increased customer choice, while VCR's increased customer control over when something was watched.

But now TiVo (a digital video recorder) comes along and increases customer control by allowing users to select their own programming. Not only can I

choose what to watch and when I want to see it, but now I can stop the program, rewind if I choose, and even fast-forward. Besides that, TiVo will edit out advertising if I choose. Now I can control what I see, when I see it and the pace at which I view the material.

Television cable companies are now offering TiVo-style DVR services. Satellite television delivery networks are also heavily promoting DVR's. As a result, television is being transformed from a provider-defined experience into a customized experience controlled by the individual viewer.

The consumption of music has undergone a similar transformation as different forms of delivery have offered new and greater control to the listener. CD players offered random selection versus the preset linear presentation of records and tapes. MP3 players combine random song selection with a personalized play list. Why be stuck with some studio's selection of songs when you can have a file that contains only your favorites?

No longer must the customer deal with or pay for unwanted songs. For example, "Greatest Hits" albums are notoriously incomplete and interspersed with unwanted tracks. This allows record companies to offer volumes "two" and "three" of "Greatest Hits." Now a customer can record all the "top-ten" hits of a favorite artist, plus any personal favorites. Each customer can create his or her own customized play list. As customers co-produce their music, they create new value for themselves.

## PRODUCTS BECOME SERVICES

The expectation of lower prices and the desire for greater personal control has changed customer Purchase Logic. Today's customers want to buy services instead of products. They want to buy the use of a product rather than the product itself. Individual consumers, business customers, even Governments and the Military are now buying services instead of products.

The obvious advantages to customers of buying services instead of products are:

- Avoid the costs and risks of product ownership.
- Services can be customized more easily and more completely.
- Service vendors offer more precisely what customers want.

This last benefit is changing how business is conducted. By demanding services, customers are bringing the objectives of vendors in line with their own objec-

tives. If the sought-after service is the use of industrial machinery, then both vendor and customer want it to run reliably. If the machinery breaks down, it is not Somebody Else's Problem. In fact, if guaranteed levels of service are not met, the customer receives a penalty payment in lieu of complete satisfaction.

The transition from product to service is particularly evident in photography. Digital technology, lower prices and a radical change in personal control have totally altered how customers relate to photography. Old business models based on film and physical prints have given way to new services that are only taking form today.

When photography involved film and prints it was a product business. Consumers bought cameras, film and prints. Distribution was physical; pictures were stored in boxes or albums. Because picture forms were static and fixed, communication was one-way: from the picture to the viewer.

Now that photography is electronic, consumers use devices and services that allow them to edit, store, transmit and alter images. Recipients of pictures can also modify them. Communication has become two-way between the picture and the viewer. The consumer has become a co-creator of value.

Today a viewer of a photograph can have the same relationship with that image that the original artist had! As photography has become a service, i.e., the use of and interaction with an image, everyone can now become an artist. This is a level of personal control that could hardly have been imagined before computers and digital media.

By turning your product into a service, its value to customers can be greatly increased. At the same time, additional copies of that service are often sharply reduced in price. Most importantly, services can be customized by users in ways that create value that did not previously exist. This fact explains how services transform the interaction between suppliers and customers into a process of value creation.

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### *Example: Military Suppliers Become "Service" Companies*

Service contracts that purchase "hours of performance" are irrevocably changing the business of "selling equipment" to military organizations in the U.S.,

Canada and the U.K. Now, for the first time, military buyers and equipment sellers share an identical goal: battle ready performance. If the equipment fails to work neither party survives.

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## CHANGES IN MILITARY PROCUREMENT

Military procurement is now changing from the purchase of vehicles and weapons to the purchase of “guaranteed hours of performance.” Suppliers are now measured by hours of operation and percent of time available. This means that military OEM vendors are now responsible for decades of performance by their equipment.

In order to adjust, military suppliers have become service companies. Today, fighter planes, warships and tanks are all being purchased based on a desired amount of use. Anyone involved in the design, manufacturing or maintenance of such equipment is now operating in a new world.

In the past, military organizations purchased equipment and then took on the responsibility for maintaining that equipment and keeping it in operation. In addition, military supply depots purchased and held in inventory the spare parts and supplies needed for maintenance or repair. Although OEM vendors often performed equipment maintenance, military supply officers were responsible for the availability of spare parts, and thus, were ultimately responsible for equipment availability and hours of performance.

Besides changing the nature of procurement contracts, military organizations are closing supply depots that formerly stocked repair and replacement parts. The responsibilities that used to be handled by military supply officers are now being shifted to OEM vendors. For example, military OEM vendors must now themselves deal with hundreds of suppliers and subcontractors who used to sell directly to the military.

By purchasing equipment performance rather than the machinery itself, the military now forces suppliers to shoulder the responsibility for maintenance. Because the military no longer stocks spare parts, logistics decisions involving the amount, movement and location of spare parts inventory have become the responsibility of OEM vendors. These two changes are drastically altering the business of being a military OEM vendor.

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## IMPACT OF SELLING SERVICE

By selling the use of equipment as a service, the information and logistics needs OEM vendors have been redefined. In order to fulfill “guaranteed hours of performance” contracts, many functions previously handled by the military now must be carried out by OEM vendors themselves:

- Contact hundreds of subcontractors to ensure the availability, amount and location of spare parts inventory.
- Monitor equipment performance and wear in order to develop information about the demand for technical services.
- Provide high quality and timely technical service.

In addition to these traditional maintenance or support functions, vendors that sell performance have huge incentives to explore product designs that increase durability and reliability. Increasing the amount of time that equipment runs without needing service will improve the OEM’s profit. Decreasing the number of service failures is an essential part of meeting contract performance standards.

In order to forecast maintenance needs, equipment is now being designed with sensors that continuously report performance and wear data. Current and historic maintenance needs are gathered and analyzed to predict and prevent failures. OEM’s use this information to improve equipment reliability and to reduce the time and cost needed for repairs.

The switch to equipment performance service contracts changes the very nature of the OEM business by increasing the amount and kinds of risks assumed by OEM vendors. Cost plus profitability is replaced by risk management. Severe penalties are incurred if contractual performance standards are not met. The cost of failure is hugely increased.