

Disruptive Technology Equals Empowered Buyers



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To suggest that the Internet is “Disruptive Technology” understates its true impact. As a tool of commerce, the Internet has created the greatest change in the buyer-seller relationship since bartering was replaced by money as a means of trade. In the electronic component industry, the Internet has resulted in a significant change in the “balance of power” between the buyer and the seller. The power of the Internet has resulted in significant empowerment of the buyer.

No longer is the buyer forced to rely on one or two suppliers to provide the product data, pricing and availability information required for him or her to make a purchase. Today the buyer can quickly access this information from dozens of suppliers. In a matter of minutes, a buyer can parametrically search and find numerous product choices from many manufacturers that would meet the specifications, quantities, pricing and availability needs for production.

While the “Disruptive Technology” of the Internet has occurred so quickly that the changes it has driven might be viewed as “revolutionary,” the strength it gives to the buyer is enhanced by a number of other changes that have quietly occurred over the last few years including cost effective expedited shipment of components worldwide.

A few years ago Digi-Key shipped a few thousand orders to Europe and Asia. In 2008 Digi-Key shipped more than half-a-million orders to Europe and Asia. Buyers once forced to source product locally can now source product cost effectively worldwide. United Parcel Service (UPS), Federal Express (FedEx) and other major freight carriers have developed international networks that routinely move product from the United States to Europe or Asia in 36 to 48 hours. The light weight and relatively high value of electronic components coupled with highly competitive freight rates have made worldwide sourcing of components readily available.

Historically, protective tariffs have limited world trade. Today, the importance and necessity of international commerce is recognized universally. Economic interdependence is contributing to international political stability as well as global economic efficiencies. International sourcing greatly broadens the buyer’s choice of product offerings and inventory availability since it gives access to worldwide, local and regional inventory. Worldwide sourcing is not only cost effective; it has become an

economic necessity. It gives the buyer access to broader product offerings, immediate inventory availability, better pricing, better service and improved technical support.

The logical question is how can a distributor on another continent bring any type of advantage to a buyer? The answer consists of two parts.

In the order fulfillment process of electronic distribution, technology advances have created significant economies of scale. In a leading edge Product Distribution Center (PDC) that leverages technology, many of the major costs are fixed as opposed to variable. Several years ago Digi-Key's PDC processed 5,000,000 order requests. By 2008, this had increased to well over 10,000,000 order requests. As Digi-Key's output more than doubled, the cost to process each request decreased. In other words, greater volume translated into improved efficiency.

The Digi-Key model of a single worldwide PDC is a contrarian approach to serving the market, but it offers a strong advantage to the buyer over our competitors that have elected to have multiple distribution centers. Digi-Key ships all orders worldwide from a single distribution center. This means that the product carried is not limited by the fact that a distribution center in a particular country or region does not economically justify inventorying a product. Digi-Key inventories product based on aggregated worldwide demand and on that basis can offer the broadest range of board level electronic components for immediate shipment in the industry.

The most significant "evolutionary" change is the mindset or perspective of the buyer in sourcing product. In the past the buyer often had to rely on a personal relationship with a distributor to gain improved service and easier accessibility to product data, pricing and availability information. However, this dependency has greatly diminished. The requirements of speed to market, the unyielding pressure to reduce time in sourcing product, and increasing workloads with less manpower have meant that developing and relying on personal relationships with a supplier have become less practical. The buyer, whether a design engineer or a purchaser for production, has turned to evaluating and choosing to purchase from distributors on the basis of their performance rather than relationship. The ability to get product off-the-shelf, shipped immediately at a fair price and have any issues or questions resolved immediately is rapidly replacing relationship based purchases.

Digi-Key is the most convincing proof of the advantages of the Internet. In the past few years Digi-Key has become a dominant player in the Internet marketing of electronic components worldwide. Seventy-five percent of Digi-Key's business is derived from the Internet. Digi-Key has grown from low sales of electronic components just a few years ago to become one of the Top 10 distributors in the world with millions of orders shipped to thousands of customers worldwide every year. Digi-Key's success is clear proof of the "disruptive" nature of the Internet and how the Internet "revolution" coupled with several critical and complementary "evolutionary" factors have caused a radical change in the "balance of power" between the buyer and seller resulting in significant empowerment of the buyer.