Plain Talk Management Needs to Hear From Its Technical Support Staff

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The Internet can dramatically increase customer goodwill while simultaneously substantially reducing costs. However, the online world presents organizational and operational challenges, including availability, access, and self-control. It is easy to lose sight of the fundamental truth of business, "Payload is 'Load that Pays'".

In 1994, the US Postal Service delivered more than 69 billion pieces of third class mail, weighing nearly 9 billion pounds[1], equivalent to a chain of 180 million cartons, a chain stretching over 34,000 miles, almost 1 1/2 times around the Earth. The total cost of producing, distributing, and disposing of this literature can only be surmised. The Internet provides the potential to eliminate a large fraction of this literature and its costs. However, even if we realize the full potential of electronic commerce, it is unlikely that conventional mail will disappear completely.

In "A Passion for Excellence"[5], Tom Peters spoke of the primacy of customers. The Internet, which facilitates universal connectivity, amplifies customer interaction explosively. It is technologically possible, in a score of keystrokes, to check on the status of all of your dealings. The expectation of immediate access is the challenge of the Internet.

Customer issues are the lifeblood of business. The Internet provides unique opportunities for high quality customer interaction. These unique opportunities also present technical challenges. Management backing is crucial to meeting these challenges. Without management backing, the challenges of the Internet cannot be met.

The leading challenge is availability. There are no off-hours or idle days on the Internet. Midnight in New York is mid-day in Asia. The wee hours of the morning in Chicago are the middle of the business day in Europe. Reaction to failures must be instantaneous. Outages measured in tens of minutes must be avoided at all costs.

Service must continue despite local problems and difficulties. Keeping your organization online 24 hours a day, seven days a week means that geographically dispersed, redundant servers are a necessity, not an extravagence. Relying on a single service provider for both your primary and secondary sites is not wise. Maintaining true round-the-clock availability requires true isolation and independence. You must ensure that failures impair, but do not cripple your ability to support your customers.

Accessibility is a more complex issue than availability. The Internet provides an infrastructure for your customers to interact with you directly, without pre-arrangement or registration. When a customer contacts you to check on an order, you have less than a minute before your time

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[1]Statistical Abstract of the United States, page 583 [3]

runs out and impatience sets in. The same immediacy and impatience is present in requests for product information. Most "tabletop" users are limited to 14.4K bps (bits per second) of transmission speed. Low performance results in delays which effectively restrict access. Thus, the majority of today's users are "bandwidth challenged". This condition is likely to persist far into the future. "Desktop" users in corporate environments are often interconnected via high-speed Local Area Networks, but connections deeper in the tree may be even more limited on a per user basis than those of "tabletop" users.

Time equals access. Delays in response are often seen as insulting by customers. It should be possible to display many components of your "home page" and related materials in less than 15 seconds from the user's request to a completed response. While information delivery is often constrained by the last link in the chain, this is not always the case. Internet environments are sensitive to many influences, any one of which can limit the speed of communications. Regardless of the cause, poor performance will damage your image.

That said, the leading cause of poor responsiveness is "gilded sepulchers", web pages which contain images and ornate graphics unsuited to fast transmission using limited bandwidth. The elegance and beauty of ornate web pages, while aesthetically pleasing, produces not customer interest, but customer aggravation. This is particularly true of "home" pages. This is not to say that good graphic design is unimportant. However, responsiveness to the "tabletop" is even more important. The growth of airline travel, and its austere functionalism compared to the lavish style of luxury liners is perhaps the best recent historical precedent [4].

The Internet is constantly evolving. On the most basic level, it might seem that the choice of service provider is purely a function of cost. However, this is not the case. The most important factors in your selection of an Internet service provider should be its commitment to you.

Does your provider respond quickly to problems? How long does it take to fix a problem? Are they technologically proficient? What is their ratio of bandwidth promised to bandwidth available? All of these questions and more must be considered. Remember, a single incident can obliterate several years of accrued savings. In the past several years, switching center malfunctions and cable failures have severely impacted communications links, with the best examples being the Hinsdale fire outside Chicago, the flood in Downtown Chicago's Loop, the Mississippi floods, and the cable cuts and power failures in Metropolitan New York. All of these resulted in loss to the communications infrastructure, and millions of dollars of losses to affected businesses.

The size of your Internet Service Provider is less important. There are large organizations with poor reputations and small organizations with exemplary reputations. The size of your provider matters less than their performance record and proficiency.

The economics of Internet connections vary, depending upon the service provider and the region. In New York City, the cost of a full connection, including datasets and a router at your facility, is approximately $ 600/month for a 56Kbps connection, with a 1.5Mbps connection costing approximately $ 1,800/month. The minimum hardware and software environment to implement a web server is a small workstation or a large PC. All in all, the cost of an active electronic presence, even using a dedicated line and your own hardware is less than $ 20/hour on an annual basis, less than the cost of even a small scale round-the-clock customer service operation.

The economics of Internet services are particularly impressive. Recently, the Internal Revenue Service announced that it logged 220,000 requests to its Web server in the first 24 hours of operation [6]. Imagine the expense required to process that volume of requests with automated or human operators. On the Internet, there are no charges for 800 access, there are no difficulties with understanding accents. Federal Express registers almost 12,000 package tracking requests per day on its Web site [1]. If we optimistically presume that each call costs no more than $ 1.00 to process, use of the Web represents a cost savings of over $ 12,000 a day, over $ 2,500,000 a year.

Customer goodwill is more precious than gold. Your company's well being absolutely depends on

it. The Internet offers an inexpensive way for you to create and nurture customer goodwill, from checking on order status to getting up-to-date information about your offerings. The information which you provide over the Internet quickly builds goodwill while reducing costs. When a multimillion dollar firm tells me that they cannot afford the cost of an Internet facility, my response is "You cannot afford not to".

The experience of the Internal Revenue Service provides another important lesson: Internet services may experience dramatic surges in short time frames. The direct nature of interaction fuels expectations of immediate response. Firms developing Internet services should plan for the contingency of high demand.

Internet facilities should be designed to be expandable, with modular, pre-planned expansion. Proper planning, and careful monitoring of usage will prevent embarrassment from bad response times. Budgetarily, your Internet facility should have the authorization to expand capacity quickly, without the delays of long approval cycles. Geographically, dispersion and redundancy are your best insurance against outages. Strategically, your Internet presence is a vital part of your arsenal.

The Internet and its related technologies are positioned to obviate the need for special purpose VANs for electronic transactions. The lower costs realized by the public Internet, combined with the ease of using the same infrastructure to interact with customers and suppliers alike, makes it likely that the EDI landscape will be drastically altered in the future.

The people responsible for your Internet services are crucial. They need to be both comfortable with the technology, and familiar and at ease with the requirement to be online 24 hours a day, seven days a week. They need to be adept at learning and utilizing new technologies and techniques. Lastly, and in many respects, most importantly, the judgement needed to separate a techno-fad from an important technical direction is essential.

As we move into the 21st century, the Internet is an indespensable tool of commerce. Increasingly, routine communications and interactions will be done electronically. As has been consistently true in the past, I expect that mundane applications will be the bread and butter of commerce, rather than more exotic applications. Customer inquiries are likely to be more significant than large-scale video conferencing. Properly used, the Internet can dramatically improve your customer service, while improving profitability through reduced costs and increased efficiency.

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