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Abstract

Cable operators need to improve productivity and service quality to compete successfully in the future. Customer focused service process improvement and reengineering have helped "breakthrough" service firms achieve both goals, as evidenced by examples in the paper.

Introduction

Cable television operators need improve productivity to to restore cash flows lost to rate regulation, which is merely a placeholder for rapidly developing competition. TO avail themselves of new opportunities i n telecommunications and fend off competitors, MSOs must improve brand images and loyalty with consumers. But brand image and loyalty must be built on a foundation of genuine service quality. Further, improvements in quality must come at a time when capital requirements are at historic highs.

How does a service business improve operating efficiencies to restore cash flows necessary for new investment, while simultaneously increasing service quality? Fortunately, a number of U.S. service firms have shown us how to achieve these goals through customer focused service process improvement and reengineering. Other firms have shown us how to fail through classical cost cutting measures which did not take customer needs into account.

If you do not accept the imperatives of increased quality, efficiency and customer responsiveness, consider the following.

Competition Brings Change

As recently as the late 1970's, Swiss watch makers controlled two-thirds of the wristwatch market. Within three years the Swiss watch making industry was devastated by the introduction the quartz (electronic) of watch. Employment fell by 75%. Yet, the Swiss Watch Federation's Research Center actually developed the quartz watch. But, it did not tick and to the product (internally) focused Swiss, it was not a watch. Had they been customer (externally) focused, the Swiss would have seen immediately the consumer benefits of precision, low cost, abundant features and freedom from rewinding. And so, old, established brands such as Bulova were replaced with new brands such as Seiko whose firms were more efficient and

customer focused.

Are there any such threats on the horizon for cable operators? Direct TV/USSB have begun filling an unserved niche for rural service, expanded programming choice and clearer pictures. What if satellite receiver costs follow the experience curves of VCRs? How will you feel about competing with Direct TV after Sony and NEC have entered the market and prices have fallen to \$399?

But, there are many other competitors who want a piece of the home entertainment and information delivery pie.

American Wireless	GTE
Ameritech	Nynex
AT&T	Pac Tel
Bell Atlantic	People's
	Choice
Bell South	SW Bell
Blockbuster	US West

The list is long and distinguished.

Cable's Current Position

At present, cable operators have very high share of the market for basic and cable programming services, which are maturing products. Normally, high share in a mature market for which demand is strong, leads to high profitability (the cash cow shown in the figure). Cash cows normally provide funds to fix problem children such as pay-per-view or provide funds for potential stars such as advertising sales broadband perhaps or telecommunications.

However, profitability of basic and cable programming services is low. The FCC's punitive rate regulation artificially pushed



these products into the "dog" quadrant. So, how do cable MSOs make their core products profitable again?

Tools Available For Productivity Improvement.

the of following Each strategies can, if properly applied, improve a firm's productivity ratio of output (\$ sales) to inputs (labor, Two of capital). the i f strategies, well implemented, can simultaneously service lead to quality improvements.

Restructuring is a euphemism often applied to the process of radically reducing an organization's operating expenses. Managers in competitive environments should always be alert for opportunities to reduce or prevent expense for projects add value which no for customers. But, cable operators have always done a credible job of expense control. As reported in a recent issue of the Wall Street Journal, IBM auctioned off valuable art works from its headquarters. This news is probably difficult to understand for most cable operators who have traditionally avoided this type of extravagance.

When is classical cost cutting counterproductive? Sears, in the late 1980s, replaced 70% of its full-time sales persons with part-timers to reduce salary and benefit expense. Customers fled, apparently frustrated by the resulting poor service, negating anv savings. Profit margins slid from 4.9% 1.2%. to Sears customers' neglected their needs in their search for cost savings.

believe that Many capital investment, e.g. in information technology, will simultaneously improve service quality and productivity. Since 1980, U.S. service firms have invested more than \$400 billion in information technology with little measurable increase in productivity. Why? According to Dartmouth College's James Bryan firms Quinn, many merelv automated inefficient processes already in place. A few firms, such as L.L. Bean, reengineered their service processes around their customer's needs before automating and reaped huge rewards in increased sales. Hopefully, cable's investments fiber in to improve reliability, capacity and picture quality will pay similar dividends by filling customer needs.

Reengineering has unfortunately become, of late, a buzzword used to cover a multitude of strategic sins. Properly done, however, service process

reengineering has yielded huge gains for firms such as Taco Bell. Taco Bell's customer surveys in the late 1980's showed that customers valued the food, the cleanliness and appearance of the restaurant, the service and nothing else. Bell redesigned Taco the service process around its customer contact persons and increased their training. They simplified back room operations by outsourcing food preparation to suppliers, freeing customer contact people to interact more with customers. By investing in customer contact persons, Taco Bell was able to eliminate two layers of middle management who added no value, reducing payroll expense by 50%, while growing sales and profits dramatically. But Taco Bell is a division of Pepsico, a firm with vast experience in process reengineering.

For most firms, continuous process improvement is the safest starting point. But what exactly is continuous process improvement? The following example from manufacturing will help explain the concept.

Nashua Corp. was a manufacturer of coated paper in the early 1980s when CEO Bill Conway invited W. Edwards Deming to teach continuous improvement principles to his managers. Because customers were dissatisfied with the marks made by writing pens if coating thickness were too thin, the company inspected coating thickness on each production run and rejected paper which did not meet minimum thickness specifications. The tendency was therefore to err on the thick side, which was also wasteful. Using process control

charts, Nashua engineers were able to identify and eliminate the causes of variation produced by the coating The machine. results are depicted in a process control chart, Figure 1, at the end of the paper.

Once the process was in control, statistical 100% inspection and rejection of defects was no longer necessary and the Nashua was actually able reduce to coating thickness, saving \$millions per year. Why not avoid a lot of trouble and buy a new coating machine, you might ask? The machine was new.

Nashua Corp. used these continuous process improvement techniques in the manufacture of computer hard disk surfaces to achieve dominant market position and drive other North American manufacturers out of the business.

Service Industry Examples

outstanding example An of continuous service process improvement was provided by Midway Airlines. Midway transformed themselves from a commodity based competitor who survived on the overflow from other airlines to a quality leader who commanded premium Midway's prices. customer research determined that ontime performance was the number on customer requirement. Midway used management led, cross functional teams of employees to identify and measure the causes of delavs in root departures. As shown in the Pareto chart (Fig. 2 following the paper), four causes were responsible for 88 % of the delays. Midway's team developed

solutions for each of the causes and improved on-time performance from 65% to 95%.

Continuous process improvement may seem like a lot of work for very little gain. However, the following example illustrates the leverage which can result from a 1% improvement in market share and expense reduction.

Before Improvements

Sales	\$1,000,000
Expenses	<650,000>
EBITDA	\$350,000
Dep. & Amort.	<150,000>
Interest expense	<150,000>

Earnings (bef./tax) \$50,000

After Improvements

Sales	\$1,010,000
Expenses	<643,500>
EBITDA	\$366,500
Dep. & Amort.	<148,500>
Interest expense	<148,500>

Earnings (bef./tax) \$69,500

The result is a 39% increase in profits for a 1% improvement in sales and expenses - talk about leverage!

Federal Express used continuous service process improvement to maintain its leadership in overnight small parcel delivery. The firm's pioneering work in developing a balanced measurement system (people service - profits) is a model for all service firms to follow. Federal Express learned that if you do not measure it, you will probably not improve it.

Cable TV Examples

Courteously

TeleCable Corporation sought to follow Federal Express' lead in developing its Service Quality Index which measured performance in five areas that customer research showed were critical.

Respond to customers	: Weight
Quickly	20%
Conveniently	20%
Competently	20%

15%

Reliable delivery: 25%

For example, TeleCable's reliability objective was 99.99% and the firm measured performance against that goal.

Following are two examples of service process improvements achieved by management sponsored employee teams in TeleCable systems.

The advertising sales staff in Arlington, Texas was concerned about wasted inventory ("make client qoods") and dissatisfaction with missed commercials. An employee team examined the entire commercial insertion process, identifying causes of failure and measuring The their frequency. first breakthrough was achieved by adjusting studio hours (no staff hours were added) to assure that a trained person attendance during was in weekends catastrophic when failures were occurring. Other improvements included sample testing schedules after downloading and the replacement of one old inserter (the only capital expenditure). Results were dramatic as shown by the run chart (Figure 3 following the paper). Clients were more satisfied and this increase ultimately led to higher sales. Wasteful "make goods" were largely eliminated.

Ron Moore, General Manager of the cable system serving Cleveland, Tennessee, was dissatisfied with the quantity trouble calls of and the quality of new installations. He formed an employee team to seek improvements. The team examined the installation process and concluded that the scheduling system was in effect serving as a quota which encouraged only quantity and not quality. The team suggested that if they were allowed to the installation perform correctly the first time, including measuring signal and leakage levels and educating customers about cable TV service, the small amount of extra time spent would be more than offset by reductions in trouble calls. They were right and the Cleveland system became a test bed for an engineering department developed concept "lifetime called the installation". Trouble calls associated with new installations fell from an average of 100 per month to 50, then 33, then 20 and finally 15 where they have remained!

These and many other process improvements throughout TeleCable combined to offset the financial effect of the FCC rate rollbacks and increased customer loyalty as evidenced by strong penetrations and improved customer survey results.

Service Breakthroughs

In their book, Service

Breakthroughs, authors Heskett, Sasser and Hart determined two things which distinguished "breakthrough" service firms from "merely good" firms. The managers of the merely good firms viewed productivity and service quality as trade-offs to managed, whereas managers of breakthrough firms viewed the two as part of a continuous, reinforcing cycle of satisfied customers and lower costs.

Managers of merely good firms valued each customer in terms of the pending transaction (e.g., a \$25 purchase), whereas breakthrough managers were mindful of the lifetime value of a satisfied, repeat customer - estimated by Club Med to be \$4,000.

Summary

focused Customer service process improvement provides a way to simultaneously improve quality and lower costs. Success requires а deep commitment from the top of an organization all the way to the front line. Once a firm has acquired skills in process improvement, that firm will be well prepared for process reengineering opportunities which may yield even larger gains. In each success story the author has discovered, the search for improvement began with the customer - the only person who can define quality.

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Fig. 2 - Midway Air Pareto Chart Reasons for Flight Departure Delays





Fig. 3 - Arlington Run Chart

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