# Getting Organizational Improvement Off the Ground: Using the Cube One Framework to Learn From the Turnaround at Continental Airlines

RICHARD E. KOPELMAN AND ANDY Y. CHIOU

Much has been written about the remarkable turnaround at Continental Airlines under Gordon Bethune and Greg Brenneman during the 1990s. But much can still be learned from the experience. This article reviews the general components of the turnaround plan at Continental Airlines; briefly describes the Cube One framework, which makes it possible to interpret and assess an organization's functioning by examining its productivity-, customer-, and employee-directed practices; describes management practices implemented at Continental; and examines evidence pertinent to their effectiveness, comparing results during the five-year period before Bethune and his team arrived (1990-1994) with the five-year period afterward (1995-1999). It concludes with a look at Continental's practices in the early twenty-first century. © 2011 Wiley Periodicals, Inc.

The remarkable turnaround at Continental Airlines under CEO Gordon Bethune has been reported in several forums, examined from multiple perspectives, including corporate finance, and used as a study in leadership as contrasted with management. Executives with the airline have already told the story of their achievements using the terms they adopted to conceptualize and guide their actions—that is, their "Go Forward" plan, which included "Fly to Win" and other components. Their intervention, however, can be more clearly interpreted through the Cube One framework, which also extends the applicability of the Continental experience to other settings.

Perhaps the best place to begin is October 24, 1994, when Gordon Bethune was appointed interim CEO—for just ten days—after which time the board of directors would meet to decide his future with the company. He and Greg Brenneman, a turnaround consultant on retainer from Bain and Company, spent those days developing a plan for presentation to the board of directors. Bethune successfully sold the plan to the board and was appointed CEO going forward; subsequently, Brenneman became president. Although convincing the board was step one in getting the improvement plan off the ground, accomplishing its objectives was the major achievement.

### The Case: Continental Airlines 1990–1999

When Gordon Bethune took command of Continental Airlines late in 1994, the company had gone through two bankruptcies (in 1983 and 1990) and had had ten chief executives in as many years. For the full year 1994, Continental lost \$613 million (versus a loss of \$199 million in 1993), and late in 1994 it appeared that the company was headed for a third bankruptcy. Continental was losing \$55 million a month, had \$40 million in cash, and would probably be unable to pay its 40,000 employees as of January 17, 1995.

These dismal financial results reflected Continental's poor service quality as measured by the US Department of Transportation. For 1994, Continental ranked lowest of ten major airlines on three

of the four key metrics: percentage of on-time arrivals, reports of mishandled baggage, and number of complaints to the US Department of Transportation (DOT)—with Continental having three times the number of complaints as the industry average. The carrier also was among the lowest on the fourth key metric, passengers with tickets who were denied boarding. As Bethune put it, "We weren't just the worst big airline. We lapped the field" (Bethune, 1998, p. 4).

Not surprisingly, employee morale was quite poor also. Employees had suffered numerous layoffs, pay cuts, and pay freezes; and the promised wage "snap backs" and profit-sharing distributions never materialized. On-the-job injuries, turnover, and sick time were also very high, and employees were not proud of where they worked. While visiting a Continental baggage ramp in Houston, Brenneman noted that almost all employees had torn the company's logo off their shirts. When one mechanic was asked why, he explained, "When I go to Wal-Mart tonight, I don't want anyone to know that I work for Continental" (Brenneman, 1998, p. 10).

Bethune and Brenneman shared their comprehensive turnaround plan with employees in January 1995. Their "Go Forward" plan comprised four components, all of which were implemented simultaneously and incorporated productivity-, customer-, and employee-directed practices:

- The "Fly to Win" facet combined actions that improved cost-effectiveness, such as closing a hub and letting 7,000 employees go, and expanded the customer base to include more first-class and business-class travelers, as opposed to the low-cost travelers known as "backpacks and flip flops." It also enhanced market presence by restoring OnePass, the popular frequent flyer plan that had been discontinued as a cost-reduction measure.
- The "Fund the Future" component also focused on improving efficiency and finances. Planes were

- sold, and airplane size was matched to market size. In addition, the number of different types of airplanes was reduced from 13 to 5.
- The "Make Reliability a Reality" portion of the turnaround focused on measuring, improving, and rewarding service in terms of DOT quality metrics. Every nonmanagerial employee received a monthly bonus if the company achieved above-average performance in on-time arrivals. Later, baggage handling was made a bonus criterion. Profit sharing was instituted as well.
- "Working Together" included expanding employee discretion, improving flight schedule reliability, improving communication with employees, and encouraging respect and trust.

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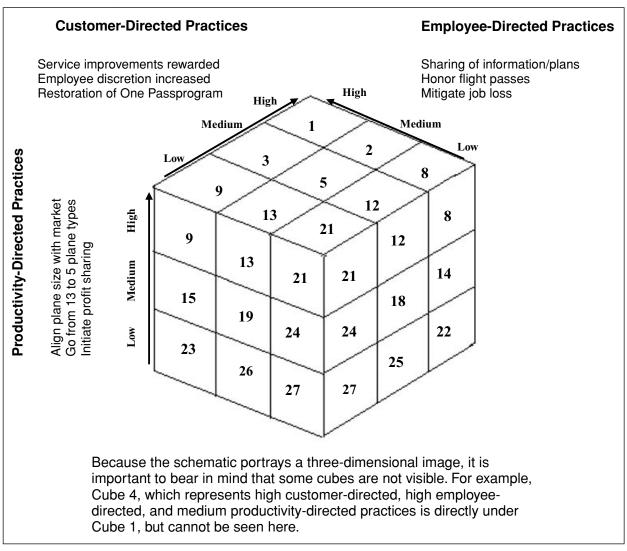
#### A Look at the Cube One Framework

The Cube One framework posits that it is essential for organizations to satisfy the goals of three key constituents:

- investors/funders, who provide the capital and seek the efficient use of all resources,
- customers, who desire quality products/services at a fair price, and
- employees, who want to be treated and paid well.

To meet the needs of these constituents, organizations enact, to varying extents, portfolios of practices that are productivity-directed, customer-directed, and employee-directed. These three sets of practices can be conceptualized in three-dimensional space so that a specific organization may be classified as High, Middle, or Low on each set. In this taxonomy, organizations low on all three sets of practices (L, L, L) are classified in Cube 27; those that are

Exhibit 1. Schematic Representation of Continental Airlines' Practices Within the Cube One Framework



high on all practices (H, H, H) are classified in Cube One. Exhibit 1 illustrates how some of the practices implemented at Continental Airlines would be incorporated within the Cube One framework.

Three types of evidence have been examined pertinent to the validity of the Cube One framework: survey data, collected in two large-scale studies; objective ("hard") market capitalization data from companies in 52 industries; and an in-depth case

study comparing the practices of two Internet search companies, Google and AltaVista.

In a survey of approximately 600 organizations, respondents reported on the frequency of enactment of customer-, employee- and productivity-directed practices, and provided ratings of organizational performance (Kopelman & Prottas, 2010). The survey included such customer-directed practices as continuously improving product/service quality and

regularly assessing customer satisfaction. Employeedirected practices included minimizing hierarchical distinctions and implementing policies to reduce work-life conflicts. Productivity-directed practices were those that improved employee work motivation and ability (and, therefore, productivity), such as the use of goal setting or systematic employee selection. Organizational performance varied as predicted—that is, in accordance with the enactment of the three sets of practices. The performance of organizations in Cube One was 14.3 standard errors higher than the performance of organizations in Cube 27, a difference that is quite large. Regarding the magnitude of this difference, it might be noted that the acclaimed Six Sigma threshold (that is, six standard errors) corresponds to 3.4 occurrences per million observations.

Examination of hard data showed a significant correlation between predicted organizational performance (based on ratings of practices pertinent to customer satisfaction, employee satisfaction, and productivity as determined by *Fortune*'s survey of America's Most Admired Companies) and the market capitalization of companies within 52 industries (Kopelman, 2010). Correlations at the same points in time were .61 in 2006 and .65 in 2008. As expected, practices enacted in 2006 were more related to subsequent market capitalizations compared to the opposite causal ordering—but there were too few cases (n = 52) to achieve statistical significance.

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## Pre-Bethune Management Practices at Continental Reveal Opportunities for Improvement

The management practices at Continental before and after the implementation of the "Go Forward" program can be easily analyzed within the Cube One framework of productivity-, customer-, and employee-directed practices.

### **Productivity-Directed Practices**

As it existed in 1994, Continental Airlines was the result of numerous mergers and acquisitions, including the original Continental Airlines, Pioneer Airlines, Texas Air, People Express, New York Air, and Eastern Airlines. As a consequence, Continental flew 13 different types of airplanes, which made maintenance quite expensive because numerous parts were required in multiple locations and mechanics had to be trained in different fleet types. There were also inefficiencies in matching aircraft to market size, with 120-seat passenger planes often flying with only 30 passengers. Indicative of the poor alignment of capacity and demand, six flights flew daily from Greensboro, North Carolina, to Greenville, South Carolina. So Brenneman dryly asked the scheduling team, "Why are we flying that route six times a day when both customers who want to fly that route are on the first flight?" (Brenneman, 1998, p. 5). All told, it was found that 18 percent of all flights were cash-negative, especially the lowpriced flights in the CALite division, the company's low-cost airline within an airline that unsuccessfully tried to mimic the economies attained at Southwest Airlines.

According to Brenneman (1998), the CALite division created several "doom loops." By focusing only on costs, Continental had created a product few

travelers wanted to buy, which created losses, which increased the costs of borrowing, which led the company to reduce wages, which reduced morale, and so forth. Further, the poor service quality that customers experienced on CALite flights spilled over, so that travelers with a choice did not pick Continental for a full-fare flight. In another example of a doom loop, Continental tried to reduce costs by rewarding pilots for saving fuel. Consequently, pilots slowed down their planes and turned off the air conditioning, "[s]o the pilots were up front thinking they were doing great, while customers in the back were hot and late—not a good combination if you want to keep your customers happy" (Nohria, Mayo, & Benson, 2006/2009, p. 12).

Beginning in 1995, Bethune implemented numerous productivity-directed practices. The company closed a major hub and maintenance facilities, and furloughed 7,000 employees. Fifty of the 61 vice presidents were replaced with about 20 individuals. The number of types of planes was reduced from 13 to five, with plans to reduce the number down to four, changes that saved millions of dollars in training and maintenance. The company also better matched aircraft with market demand and cancelled many unprofitable routes and destinations—what Bethune characterized as not flying to places people did not want to go. The phasing out of the money-losing CALite operation was begun.

In 19 cities where Continental flew only a few flights a day, it was determined that contracting out ramp work (baggage handling, plane cleaning, etc.) would save money. Employees were shown the books so they could see the costs, along with competing bids from contractors. In 17 of the 19 cities, Continental workers submitted and won competitive bids, finding creative ways to lower costs. In New Orleans, for example, workers eliminated the distinction between gate and ramp personnel, with employees working upstairs on some days and downstairs on others—but everyone kept their jobs.

A profit-sharing plan was adopted to motivate employees to help achieve improved corporate performance. The plan distributed 15 percent of all pretax profits to employees in February, around Valentine's Day. Regarding the salience of this practice, Bethune relates the following vignette: "On a recent flight I took, the cabin was full and, as usual, the passengers had plenty of questions and problems that kept the flight attendants hopping. . . . I stepped into the galley and saw one flight attendant take a breath and let out a sigh of frustration. 'It's hard work,' I said, 'but don't forget—these full flights mean more in your profit-sharing check come February.' She gave me a smile. 'I know,' she said. 'Believe me. I know" (Bethune, 1998, pp. 243–244).

#### **Customer-Directed Practices**

According to Bethune, in 1994, Continental was a company "where everything went wrong, a place investors, employees, and most of all customers agreed they wanted nothing to do with..." (Bethune, 1998, p. 9). As noted, the quality of customer service per DOT metrics was the lowest of any major airline. Exhibit 2, on the next page, provides data summarizing annual DOT metrics for Continental Airlines during the focal periods of this case study, from 1990 to 1994 and from 1995 to 1999.

Before Bethune's arrival, Continental's award-winning frequent-flyer program, OnePass, had been dismantled in another cost-saving effort, and business-class seating and food on many flights had been eliminated as well. But as Bethune noted, lowering costs and prices cannot succeed if the product is not something people want, for it would be akin to making a really inexpensive pizza by leaving off the cheese. In his words (emphasis in original), "I don't know of any successful company that doesn't have a good product" (Bethune, 1998, p. 101). Interestingly, research has found that a decrease in customer satisfaction—which is what happened at Continental in the 1990s—has a greater impact on

Exhibit 2. Service Quality at Continental Airlines: 1990–1999											
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	
On-Time	12/12	9/12	10/10	8/10	10/10	4/10	2/10	5/10	6/10	5/10	
Mishandled Baggage	N/A	N/A	N/A	9/10	10/10	2/10	2/10	2/10	2/10	3/10	
Denied Boardings	N/A	N/A	N/A	7/9	7/9	4/10	1/10	1/10	1/10	2/10	
Complaints	N/A	N/A	N/A	8/9	9/9	9/10	3/10	4/10	5/10	4/10	
Mean	12/12	9/12	10/10	8/9.5	9/9.5	4.75/10	2/10	3/10	3.5/10	3.5/10	

Five-year average ranking 1990–1994 = 9.6 out of 10.6. Five-year average ranking 1995–1999 = 3.35 out of 10.

Note: Because Continental was in bankruptcy 1990–1992, only on-time performance data could be obtained for those years.

Sources: Bureau of Transportation Statistics database. On-Time Performance Data 1990, 1991, 1992, made available online at http://www.transtats.bts.gov/Fields.asp? Table\_ID=236 by Research and Innovative Technology Administration (RITA), Washington, DC; Air Travel Consumer Report 1993, 1994, 1995, 1996, 1997, 1998, 1999, published and made available online at http://airconsumer.dot.gov/reports/index.htm by Office of Aviation Enforcement and Proceedings, Washington, DC.

profitability than an equivalent increase would (Keiningham & Vavra, 2001).

In 1995, Continental began focusing on improving service quality. Because on-time arrival had consistently been found to be the most important factor in determining customer satisfaction (per J. D. Power's surveys), this metric was monitored and rewarded. In January 1995, the company announced that all employees (except managers) would receive a \$65 monthly bonus if Continental was among the top half of large airlines in on-time arrivals. Whereas in January 1994, only 61 percent of Continental flights were on time, in January 1995, 71 percent were on time (good enough for seventh place out of ten large airlines). In February 1995, 80 percent of flights landed on time, good enough for fourth place, and bonus checks (separate from paychecks) were distributed at a cost of roughly \$2.5 million. This practice continued on a monthly basis, with the individual bonus amount later raised to \$100 if Continental was in the top three in both on-time arrivals and baggage handling.

Employees were not only rewarded on a monthly basis; they also received feedback so they could "keep score." To that end, monthly DOT metrics were posted in 600 common areas, enabling employees to track performance. As Exhibit 2 shows, Continental was able to rapidly and dramatically improve service quality.

The popular OnePass program was restored, the failed CALite "experiment" was terminated, and business-class seats and meals were restored on most flights. In a service business, attractiveness is part of the offering (Zeithaml, Parasuraman, & Berry, 1990). But because Continental was the "residue" (Bethune's term) of the merger of six airlines, its planes bore different insignias. To improve the attractiveness of Continental's appearance, all planes were freshly painted with the same logo in 1995.

Several other steps were taken to improve service quality. Before Bethune, employees had to follow detailed rules to the letter, with no exceptions permitted—even if the rules did not seem to make sense. For instance, if two passengers were flying together, one at full price but the other at a discount, and their plane was taken out of service or delayed, policy called for putting the full-fare passenger on the next competitor's flight and requiring the accompanying discounted-fare passenger to wait for the next Continental flight. This angered passengers and gate agents who felt the rule made little sense. Bethune literally burned the detailed manuals in a public ceremony, and employees were empowered to do what made the most sense for customers and the company in any given situation.

Flight attendants were also given discretion in solving problems. If, for example, the caterer brought five too few meals, it was not necessary to wait for

the caterer to return to the kitchen for five meals, causing a flight delay. Flight attendants could trade drinks for meals, and achieve on-time departure. Of course, there are countless ways in which allowing employees to use their discretion improved customer satisfaction for the 100,000 passengers on the 2,100 flights each day at the time. Not surprisingly, then, the number of complaints to the DOT declined from a monthly average of 68 in 1994 to 26 in April 1995.

#### **Employee-Directed Practices**

By 1994, after years of layoffs, wage freezes, wage cuts, and broken promises, the culture at Continental, according to Bethune, "was one of backbiting, mistrust, fear and loathing. People, to put it mildly, were not happy to come to work. They were surly to customers, surly toward each other, and ashamed of their company. And you can't have a good product without people who like coming to work. It just can't be done" (Bethune, 1998, p. 14).

Pre-Bethune, the prevailing approach to communication was to share only the information that was legally required to be shared. Employees typically learned about changes affecting the company from newspaper reports after the fact. Consequently, rumors were rampant.

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One of the employee perks for working for an airline is free passes when seats are available. But before Bethune, flight privileges generally were ignored, as they generated no cash flow. Furthermore, the poor predictability of flight arrivals increased employee stress. Even if a flight attendant's plane were scheduled to land at 3 p.m., he or she could not promise to get home in time for, say, a 7 p.m. school recital.

Improved communication was central to the turnaround, with top managers telling groups of employees in person about impending changes, and giving workers a chance to offer their opinions, which initially were quite bitter and skeptical. Bethune noted that it is more important to share bad news than good news. When wage "snap backs" were not going to occur immediately after the company became profitable—as promised in the 1993 bankruptcy resolution agreement—employees were notified in advance. The company opened its financial books and explained to employees why they would have to wait longer.

Because employees might be reluctant to voice their views in public meetings, Bethune established a toll-free telephone number that only he answered. The company also monitored on a flight-by-flight basis the number of employees who sought flight passes and the number of empty seats at takeoff. After receiving feedback regarding these data, employees discovered ways to get fellow employees on flights, and to honor this perk.

As noted earlier, Continental did furlough many employees during the first year of the turnaround. But Bethune had no choice, as inaction in reducing expenses would have cost the jobs of about 30,000 other employees. To take some of the sting out of the staff reductions, the company moved as many employees as it could to alternate locations upon closing maintenance facilities and even helped pay relocation costs after closing one facility. In other cases, employees were kept on the payroll for a month and given help in finding other work.

Their initial skepticism fading, employees at Continental began to hold positive attitudes toward the

company. Concomitantly, they also started to trust and respect one another. For six years in a row, from 1997 through 2002, Continental was listed among Fortune's top 100 places to work. Surely this helps explain examples of high commitment behavior, such as why a gate agent would board a passenger at the last minute and run down the stairs to help load bags onto the plane.

### **Changes in Management Practices Improved Organizational Performance**

There are many ways to assess the performance of Continental before and after Bethune. In terms of quality of service provided, the data in Exhibit 2 are quite compelling. During the first five-year period, the mean service ranking was 9.6 out of 10.6—that is, on average Continental was roughly intenth place out of 11 airlines; for the second five-year period, the mean ranking rose to 3.35 out of 10. In 1996 and 1997, J. D. Power and Associates rated Continental the best airline with flights of 500 miles or more in essence the best commercial airline in the United States.

Many investors at the time agreed, as the stock price soared from \$3.25 before Bethune to more than \$50 in 1997. Market capitalization data, provided in Exhibit 3, permit comparison of Continental with the other large airlines. Continental's market capitalization went up by a multiple of 5.6 from the first to the second five-year interval. In contrast, market capitalizations of the other large airlines increased by a multiple of 2.6, on average.

The turnaround at Continental is widely viewed as remarkable. It has even been described as "incredible" and as "nothing short of astronomical" (Mayo, Nohria, & Rennella, 2009, p. 173). Yet how were these results achieved? As Bethune noted, he inherited the same people (except for a few executives), the same planes, and the same routes. His explanation, of course, is his "Go Forward" plan. But as noted, the plan and its components,

Exhibit 3	. Year-End Mai	rket Capitalizat	Exhibit 3. Year-End Market Capitalizations of Major Airlines: 1990–1999	ırıınes: 1990-1	666					
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
CAL	0	0	0	512,964	247,346	1,193,342	1,579,961	2,818,929	2,008,217	3,070,124
AMR	3,014,004 4,817	4,817,053	5,088,352	5,075,250	4,040,343	5,669,136	8,013,646	11,715,473	10,826,615	9,921,561
DAL	2,362,127	3,267,434	2,528,436	2,742,448	2,555,603	3,766,434	5,292,803	8,806,933	7,425,132	6,618,387
NWAC	0	0	0	0	1,328,244	4,658,646	3,818,756	4,968,515	2,077,285	1,879,457
LUV	737,572	1,440,484	2,726,183	5,199,909	2,398,281	3,310,436	3,188,152	5,435,205	7,631,167	8,134,030
NAL	2,408,874	3,462,582	3,056,765	3,570,430	1,085,983	2,261,059	3,662,437	5,437,427	3,170,958	4,151,455
$\supset$	711,144	559,762	600,882	761,672	257,371	827,754	1,500,207	5,705,250	4,545,320	2,291,154
Note: CAL: Source: Th	: Continental Airline: e Center for Researc	s, AMR: American A	Note. CAL: Continental Airlines, AMR: American Airlines, DAL: Delta, NWAC: Northwest Airlines, LUV: Southwest Airlines, UAL: United Airlines, an Source. The Center for Research in Security Prices online database accessed via Wharton Research Data Services at http://wrds.wharton.upenn.edu/	NWAC: Northwest Ai	rlines, LUV: Southw Research Data Servi	vest Airlines, UAL: U	Inited Airlines, and Unarton.upenn.edu/.	Note: CAL: Continental Airlines, AMR: American Airlines, DAL: Delta, NWAC: Northwest Airlines, LUV: Southwest Airlines, UAL: United Airlines, and U: US Airways. TWA not listed because of bankruptcy status. Source: The Center for Research in Security Prices online database accessed via Wharton Research Data Services at http://wrds.wharton.upenn.edu/.	ot listed because of b	ankruptcy status.

including "Fly to Win," are not readily applicable to other work settings. How, for example, can a company that manufactures pillows apply the lessons of "Fly to Win"? Putting Continental's experience within the Cube One framework, however, which analyzes its improvement efforts through the lens of productivity-directed, customer-directed, and employee-directed practices, provides a more generalizable interpretation as to why the intervention was successful.

Continental before Bethune was truly (in Bethune's words) a "crummy" place to work, with "very unhappy employees, a rotten product, no money on hand (and not much coming in) and a backbreaking debt structure." Moreover, he noted, the company "flew the wrong planes to the wrong cities for the wrong prices, and they were usually late to boot" (Bethune, 1998, p. 75). With their turnaround program, Bethune and his colleagues did virtually all the right things, taking Continental from Cube 27, the lowest in Cube One's three-dimensional taxonomy, to Cube One.

With their turnaround program, Bethune and his colleagues did virtually all the right things, taking Continental from Cube 27, the lowest in Cube One's three-dimensional taxonomy, to Cube One.

Yet, Continental was far from a perfect airline even after the first five years under Bethune. According to Continental's chief technology officer, by 2002 the company still had a clunky mainframe-based IT system that was very inflexible and not designed for customer service (D'Agostino, 2006). Before Bethune retired in 2004, though, Continental launched another improvement program, "First to Favorite," which began consolidating disparate IT and customer relationship management systems to create integrated, cross-enterprise systems.

From a research perspective, there are serious scientific limitations to a before-and-after case study, a research design that is pre-experimental (Campbell & Stanley, 1963). There is insufficient evidence to confirm the validity of a theory, as there are more independent variables (practices) than data points, yielding zero degrees of freedom. Nor is it possible to establish the validity of a theory by adducing supportive evidence. Science is most successful when competing hypotheses are tested and one of the hypotheses can be falsified (Platt, 1964). Thus, finding data supportive of or consistent with a theory cannot firmly establish its validity.

Moreover, the Cube One framework entails some complexity, in that enacted practices do not lie on just one plane in the three-dimensional model shown in Exhibit 1. For instance, the measurement and rewarding of improvements in service quality also likely had effects on productivity and employee satisfaction. Yet, many practices can clearly be classified as primarily directed toward one of the three dimensions.

All in all, the Cube One framework provides a systematic way to think about the key determinants of organizational performance, and a way to interpret instances of organizational success and failure. Such a framework is especially valuable in today's increasingly competitive global environment and is consistent with the call for ways to integrate theoretical research and practical application.

# Moving On to Meet the Challenges of a New Century

How has Continental fared in the most recent decade? Two of the key practices implemented under Bethune and his team—monthly bonuses and profit sharing—continued after 2000 and even after Bethune's retirement in 2004. Evidently some of the momentum continued, as *Fortune* magazine ranked Continental the most admired airline in the United

Exhibit 4. Service Quality at Continental Airlines: 2000–2009										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
On-Time	2/11	3/12	4/10	7/19	9/19	10/21	13/21	9/20	12/19	11/19
Mishandled Baggage	4/10	4/11	3/10	2/17	4/19	7/21	5/20	5/20	5/20	4/19
Denied Boardings	8/10	10/11	7/10	10/15	15/19	18/19	16/20	14/19	12/19	11/19
Complaints	6/10	6/11	6/10	9/17	11/19	12/20	15/20	12/20	14/20	8/19
Mean	5/10.25	5.75/11.25	5/10	7/17	9.75/19	11.75/20.25	12.25/20.25	10/19.75	10.75/19.5	8.5/19

Five-year average ranking 2000-2004=6.5 out of 13.5. Five-year average ranking 2005-2009=10.65 out of 19.75. *Note*: Data for 2009 end in October.

Source: Air Travel Consumer Report 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, published and made available online at http://airconsumer.dot.gov/reports/index.htm by Office of Aviation Enforcement and Proceedings, Washington, DC.

States in 2004, 2005, 2006, 2007, and 2008. Quality of service performance did drift down, though, from the mean ranking of 3.35 out of 10 during the years 1995-1999. Between 2000 and 2004, Continental's mean service ranking was barely above average at 6.5 out of 13.5, and during the subsequent five years the ranking was essentially unchanged at 10.65 out of 19.75 (see Exhibit 4). With regard to market capitalization data, only three large airlines had shares that traded continuously during the ten-year period from 2000 to 2009: Continental, American, and Southwest. The mean market value of Continental Airlines shares increased 71 percent in the period 2005-2009 compared to 2000-2004. In contrast, the market valuation at American increased by 37 percent, and the value decreased by 27 percent at Southwest. (The valuation of Southwest was very high during the first five-year period, though, the amount being nearly twice that of Continental and American combined.)

In 2010, Continental merged with United Airlines. Continental announced the forthcoming merger by taking out full-page ads with the droll caption: "With this wing I thee wed." On January 1, 2011, the newly formed company announced that employees had the opportunity to earn an extra \$100 a month and a chance to earn a "13th month" bonus if on-time performance for the year reached 80 percent or greater. How well Continental continues to address the needs of its investors, customers, and employees will, no doubt, determine its performance in the decade ahead.

#### References

Bethune, G. (1998). From worst to first: Behind the scenes of Continental's remarkable comeback. New York: Wiley.

Brenneman, G. (1998). Right away and all at once: How we saved Continental. Harvard Business Review, 76(5), 162–179

Campbell, D. T., & Stanley, J. C. (1963). Experimental and quasi-experimental designs for research. Florence, KY: Wadsworth.

D'Agostino, D. (2006). Case study: Continental Airline's tech strategy takes off. Retrieved from http://www.cioinsight.com/c/a/CasStudies/CaseStudy-Continental-Airlines-Tech-Strategy-Takes-Off/

Keiningham, T., & Vavra, T. (2001). The customer delight principle: Exceeding customers' expectations for bottom-line success. New York: McGraw-Hill.

Kopelman, R. E. (2010). Validity evidence for the Cube One framework: Examination of objective data. Journal of Global Business Management, 6(1), 22–28.

Kopelman, R. E., & Chiou, A. Y. (2010). Examining the performance of Google and AltaVista through the lens of the Cube One framework. Global Business and Organizational Excellence, 29(6), 38–49.

Kopelman, R. E., & Prottas, D. J. (2010). Achieving organizational excellence: The importance of getting to Cube One. SAM Management in Practice, 14(1), 1–11.

Mayo, A. J., Nohria, N., & Rennella, M. (2009). Entrepreneurs, managers, and leaders: What the airline industry can teach us about leadership. New York: Palgrave Macmillan.

Nohria, N., Mayo, A. J., & Benson, M. (2006/2009). Gordon Bethune at Continental Airlines. Harvard Business School Case 406-073 (revised 6/16/09 case 9-406-073).

Platt, J. R. (1964). Strong inference. Science, 146, 348-353.

Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (1990). Delivering quality service: Balancing customer perceptions and expectations. New York: Free Press.

### **Additional Resources**

Sutherland, M. (2000). Continental Airlines. Case published by the Stanford Business School (revised 05/07).

A member of the editorial review board of Global Business and Organizational Excellence, Richard E. Kopelman is a professor of management at Baruch College in New York City and the author of Managing Productivity in Organizations (McGraw-Hill), as well as more than 100 articles. His primary areas of research are work motivation, performance management, values, and organizational performance. He can be reached at Richard.Kopelman@baruch.cuny.edu. Andy Y. Chiou is a PhD candidate in management at Baruch College in New York City. His primary areas of interest are cross-cultural management, group dynamics, bicultural psychology, and various aspects of general management. He can be reached at Andy.Chiou@baruch.cuny.edu.

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