Developed by Motorola, and popularized by Jack Welch at General Electric, Six Sigma has been, and remains today, the world’s hottest program for Zero Defect quality excellence. And now, Keki R. Bhote, one of the pioneers on the internationally renowned Motorola team that started it all, has expanded its scope and transferred the essence of this unique quality program to the written page - in his new book *The Ultimate Six Sigma: Beyond Quality Excellence to Total Business Excellence*.

For Keki Bhote, *The Ultimate Six Sigma* is the culmination of over twenty years of direct, hands-on experience in designing and implementing Six Sigma processes in real life situations. Principally, this comprehensive step-by-step guide encompasses Bhote’s eleven years of direct involvement with Six Sigma development at Motorola. In addition, following his retirement from that company, the book draws on Bhote’s consulting experience with over 400 companies on four different continents. And furthermore, it flows from Bhote’s many years of personal research into expanding the frontiers of Motorola’s Six Sigma into an emergent new system - the Ultimate Six Sigma - and its subsequent implementation in some of the world’s largest companies.

In *The Ultimate Six Sigma*, Bhote not only reaffirms the rigors and rewards of the original Six Sigma system, but also proposes a radical new expansion of Six Sigma’s potential applications. Usually implemented only in the traditional domains of quality management - engineering, manufacturing and operations - Bhote makes a compelling case that Six Sigma can become even more potent when deployed across an entire company as a vehicle to achieve total business excellence. In laying out his vision, Bhote provides all of the necessary information and tools for implementing and assessing the progress of his Ultimate Six Sigma strategy company-wide, across a number of key areas that determine big picture success in any company. The clear result he has in mind is maximum output from every division, every department and every individual in the company.
A Brief History Of Six Sigma

At its core, Six Sigma is a management performance system that uses disciplined processes with the goal of creating near perfect products and services. The word “Sigma” itself, which derives from the Greek alphabet, is an ancient term that refers to how many standard deviations (there are six statistical categories of standard deviations) lie between the “average” product or service (where a manufacturing process is centered) and the “ideal” product or service (i.e. meets the customer requirement). A process with a smaller standard deviation will have a lower sigma value than a process with a larger standard deviation. The higher the sigma value, the better the quality of the product or service. (A sigma value of “6” signifies defects of only 3.4 parts per million, whereas a sigma value of “1” means almost 700,000 units of every million produced are somehow defective.)

The origins of Six Sigma can be traced back to a quality improvement initiative at Motorola, where Keki Bhote worked for over forty-two years. The story of Motorola, the pioneer of the Six Sigma process, provides the perfect backdrop for understanding the development of the Ultimate Six Sigma methodology.

In the late 1980s and early 1990s, Motorola was one of many U.S. and European corporations whose lunch was being eaten by its Japanese competitors. Motorola’s senior management conceded that the quality of the company’s products was sub-par. The entire company was, to quote one of Keki Bhote’s former Six Sigma colleagues, “Living in a world of hurt.”

Like many other companies at the time, Motorola didn’t have one “quality” program, it had several. But in 1987, a new approach came out of Motorola’s communications division which was at the time headed by George Fisher, who later went on to become a top executive at Kodak. This innovative new approach represented the early beginnings of Six Sigma.

What that first incarnation of Six Sigma offered Motorola was a simple, consistent way to track performance against customer requirements and company targets of near-perfect quality.

As it spread throughout the company - championed by the strong support of Chairman Bob Galvin, who had by now decided to appoint Keki Bhote as the senior corporate consultant on the Six Sigma project - Six Sigma gave Motorola that extra push to achieve what must have initially seemed like impossible improvement goals: A target of ten times improvement (noted as 10X, and pronounced “ten-ex”) over five years, which soon evolved into a goal of 10X improvement every two years! While the objectives of Six Sigma were important, even more attention was paid to the rate of improvement and the pace of change, and the results at Motorola during that period speak for themselves.

Motorola’s turnaround during the mid-1990s is one of the more remarkable corporate
comebacks in modern history. Just two years after implementing Six Sigma, Motorola was honored with the Malcolm Baldrige National Quality Award. The company’s total employment has risen from just under 70,000 employees in 1980 to over 130,000 today. Meanwhile, the company has seen a five-fold growth in profits, achieved total savings of over $14 billion and seen the price of its stock grow by a compounded annual rate of over 20% since 1996!

Moreover, as Bhote points out, given that of all of these positive changes occurred in a business whose entire future was hanging by a thread, imagine what Six Sigma can do for a well-run company that’s already on solid footings, or better still, what might be possible by taking Six Sigma to the next level, as Bhote espouses in his book.

The Ultimate Six Sigma

Following his retirement from Motorola in 1992, Bhote formed his own consulting company focusing on quality and productivity improvement. In the years that followed, in the course of his contacts with other companies in the United States and internationally, he gradually began to see the need for a revamping of Motorola’s Six Sigma process.

Bhote noticed that a misguided emphasis on quality for the sake of quality alone was driving some companies away from the two fundamental obligations of a corporation - customers and profit. Many high-quality companies, he felt, were not even aware that their customer satisfaction was inadequate and that customer loyalty - and retention - was truly the name of the game. As a result, Bhote came to realize that Six Sigma could no longer be confined to simply a quality-based initiative. Its focus was desperately in need of expansion.

Bhote has taken Six Sigma to the next level by focusing not only on quality improvement initiatives, but also on the four other primary constituencies on which a business must concentrate in order to be successful: (1) customers; (2) leadership; (3) employees; and (4) financials. In addition to a focus on continuous quality improvement, these four additional business elements form the core of the Ultimate Six Sigma program.

1. Customers

“In terms of results, the customer takes the top priority,” writes Bhote. “Without good, loyal customers, there can be no company, and therefore no other results. So tracking customer loyalty is absolutely crucial.”

When they are first introduced to the concept of customer loyalty and its importance, Bhote observes that most businesspeople are readily able to grasp the basic notions, but they haven’t a clue as to how to measure it. For that reason, Bhote’s Ultimate
Six Sigma program proposes a few simple metrics such as a “Maintenance Ratio” (number of customers retained to number defected) and the “Defection Rate” (defecting customers as a percentage of the total number of customers).

And building on those measurements, Bhote also suggests tangible ways to build a company’s infrastructure in order to nurture and sustain a culture of customer loyalty. Critical elements of this infrastructure include company value and mission statements (Bhote laments that in far too many of these statements, the words “customer” and “loyalty” are conspicuously absent), the establishment and articulation of clear customer loyalty targets and even something Bhote calls a “Chief Customer Officer.”

Bhote also makes the point that not all customers are worth keeping. Some are consistently unprofitable. For that reason, you must offload these customers to the competition so you can serve your core clientele more effectively and profitably.

2. Leadership

Next only to customers, Bhote argues that leadership is the most important criterion for assessing business results. A company without true leadership, he says, is rudderless. Accordingly, the Ultimate Six Sigma program incorporates leading research into some of the most vital leadership success factors, such as behaving ethically at all times, knowing how to manage details without micro-managing, and sharing company profits and successes widely.

Bhote also warns against falling into an “ego trap,” which involves wedding your ego to the status quo, because the status quo inevitably changes. Great leaders, he says, take a deep breath and walk right up to change and shake its hand. They routinely check their egos at the door and try on a new self-image. And when it comes to people around them, they use the power of their egos to inspire and instigate change, rather than to resist it.

“Motorola has probably done the best job of any large US corporation at institutionalizing change. It became the first large company in America to enable its workers to be leaders themselves. Power is widely shared without degenerating into anarchy. … The results of Motorola’s system are well known: perhaps the highest quality products in American industry, regular introduction of innovation, and of course, high profits.”

As CEO for Motorola for almost 30 years, Bob Galvin is a role model for leaders in American industry. This is evidenced by Motorola’s nonunion status. Despite repeated attempts by unions to organize its employees, staff believe in Galvin’s conviction that: “the company can do more for its employees than any union ever can.”
3. Employees
   Behind customers and leadership, employees are next in Bhote’s list of business priorities.

“How often have you heard the slogan - employees are our greatest asset?” asks Bhote. “Yet, quite often those words ring hollow and false when push comes to shove,” he says. The Ultimate Six Sigma aims to change all that by proposing four critical success factors to employee development: (1) creating joy in the workplace; (2) empowering employees; (3) rewarding employee loyalty; and (4) flattening-out your organization.

With respect to the forth factor, Bhote draws on modern organizational theory to make the case that no company, even very large ones, should have more than five layers of bureaucracy. When upper management has a very wide span of control (i.e. hundreds of employees below them) Bhote argues that they won’t have the luxury of being able to micromanage. Instead, they’ll need to have faith in their employees and give them the necessary latitude to achieve corporate goals and objectives.

4. Financials
   Many companies tend to concentrate on their financial statements as the only tangible measure of their performance. And on a broader scale, the stock market does pretty much the same thing. Bhote sees this as a largely misguided approach.

While Bhote acknowledges that financials are extremely important, he points out that they are only lagging indicators, not leading ones. So relying strictly on financial results to make business decisions is somewhat akin to steering a car by looking into the rearview mirror. This is why financials are last among the four primary focus areas of his Ultimate Six Sigma program.

That said, Bhote does acknowledge that a number of new and forward-looking financial metrics have come to the fore in recent years, and some of these have been incorporated into the Ultimate Six Sigma program. These include new techniques for carrying out activity-based cost accounting (to better allocate your overhead and other fixed costs), examining your overall return on assets (instead of focusing exclusively on profits generated from sales) and quantifying financial risks versus actual rewards expected.

As great as some of these new metrics might be, Bhote cautions against implementing all of them at once. Workers cannot concentrate on too many measurements and too many goals at once, and neither can corporations, he says. Companies that rollout fifty new metrics in the same year “cafeteria style” are likely to find their workers harried, unfocused and demoralized. Bhote strongly advises that we take our time implementing any new measures in order to maximize results.
Lessons for the Little Guy

For huge corporations like Motorola or General Electric, the potential for realizing great savings through the establishment of a standardized process like the Ultimate Six Sigma can be tremendous. The justification for such companies investing the time and resources in a Six Sigma program is readily apparent.

But for smaller companies, Keki Bhote and other Six Sigma experts would acknowledge that the realized savings might not be quite as dramatic and therefore, the cost and effort involved in implementing a full Six Sigma-type program could be seen as prohibitive. However, learning as much as one reasonably can about the basic principles of the Ultimate Six Sigma can nevertheless get the owner or operator of a small business thinking about applying some aspects of the program on a modified basis. And certainly, many elements of the Ultimate Six Sigma - including its strong focus on employee empowerment and building customer loyalty - are always going to be highly relevant, regardless of the size of your company.

Conclusion

During the presidential campaign of 2000, the flagship journal *The Economist* asked the rhetorical question, “Will the real Al Gore please stand up? Is he the pragmatic politician, the dreamy idealist, the sour partisan, the reactionary attack dog, or is he the panicky panderer?”

The same kinds of questions might well be asked of the many faces of Six Sigma, and of other total quality initiatives like it. Six Sigma’s conceptions and misconceptions; its applications and misapplications; its claims and counterclaims have created so much confusion in corporate America that even experienced quality professionals are clamoring for the real Six Sigma to please stand up.

Today, three widely different perceptions of Six Sigma exist in the business world: the boring, statistic-focused Six Sigma; the over hyped-Six Sigma peddled by some unscrupulous consulting companies; and, increasingly, the Ultimate Six Sigma. Of all of these approaches, the Ultimate Six Sigma is the only program that goes beyond mere quality excellence to focus on total business excellence - which is ultimately about creating excellence in people.

Through his new book, and with the launch of the Ultimate Six Sigma program, it’s clear that Keki Bhote hopes to trigger a cultural revolution in our often acknowledged, but most underutilized business asset - our people. From leadership, to customer retention and employee satisfaction, Bhote’s Ultimate Six Sigma program takes the power of Six Sigma to your entire company.