

Motorola's global strategy

[Business](#), [Strategy](#)



? Short description of the case For years Motorola and was among the world's most successful consumer electronics firms. The firm then controlled the emerging U. S. market for cellular telephones and pagers but, like many other firms at the time, was a bit complacent and not aggressively focused on competing with the Japanese. Motorola has remained the exception: Today it is one of the world leaders in mobilecommunication technology, including the manufacture of cellular telephones, paging devices, automotive semiconductors, and microchips used to operate devices other than computers.

Japanese firms began to flood the U. S. market with low-priced, high-quality telephones and pagers. Motorola was shoved into the background. Motorola then decided to fight back and regain the firm's lost market position. This fight involved a two-part strategy: First learn from the Japanese and then compete with them. To carry out these strategies, executives set a number of broad-based goals that essentially committed the firm to lowering costs, improving quality, and regaining lost market share.

Managers were sent on missions worldwide, but especially to Japan, to learn how to compete better. Motorola also try to achieve Six Sigma quality - which is become main strategy of Motorola. By using this strategy, Motorola try to achieve a perfection rate of 99. 9997%. When Motorola actually achieved this level of quality, it received the prestigious Malcolm Baldrige National Quality Award. Motorola become success on its operations abroad, especially in Japan. It also generates over 56% of its revenues abroad.

Problem identification of the case

From the case, one of Motorola's strategy in doing the business is expand its business abroad. The firm then needs to concentrate on how to do its business abroad and what kind of strategies should be taken to achieve its goal. Motorola controlled the emerging U. S. market for cellular telephones and pagers. Motorola has also won many battles around the world in order to do its business abroad. But, like many other firms at the time, was a bit complacent and not aggressively focused on competing with the Japanese. Motorola began to fall in its competition with Japanese.

For that reason, Motorola have to find new strategies to win its battles, not only the competition with Japanese but also other countries that becomes Motorola's target market. Formulation of problem solving In terms of finding the strategies to do the business, a company must first define its vision and mission. Economic success, indeed survival, is the result of identifying missions to satisfy a customer's needs and wants. The organization's mission defined as its purpose - what it will contribute to society. Mission statements provide boundaries and focus for organizations and the concept around which the firm can rally.

The mission states the rationale for organization's existence. Developing good strategy is difficult, but it is much easier if the mission has been well defined. Motorola also try to picture what their objectives to deal with the competition around Japanese and around the globe. Motorola's fundamental objective is to attain total customer satisfaction. Others Motorola specific goals are to achieve competitive advantage by becoming the best in its class in terms of people, marketing, technology, product, manufacturing, and

service, to increase global market share and to achieve superior financial results and improve shareholder value.

Before arrived in the concept of strategies, a company should make an SWOT analysis. SWOT analysis consists of: Strengths Weaknesses Opportunities Threats Motorola also build its SWOT analysis based on the market experiences. Motorola's SWOT analysis comprise of: 1. Strengths Motorola is one of the world's leading providers of wireless communications, semiconductors and advanced electronic systems, components and services. Motorola is an inventor of technology and has first-mover advantage. In the early 1980s, Motorola controlled the emerging U. S. arket for wireless communication devices such as cellular telephones, pagers and high-frequency radios. Motorola maintains sales, service and manufacturing facilities throughout the world, conducts business on six continents and employs more than 139, 000 people worldwide. Motorola is strongly committed to delivering customer satisfaction, continuous improvement, and setting new standards of quality. 2. Weaknesses Motorola maintained old strategies in doing business, was conservative and unambitious. Motorola was complacent in its leadership position in the U.

S. market, and failed to aggressively compete with the emerging Japanese firms. 3. Opportunities Motorola can compete and expand globally.

Information and communications technology is fast-paced, with new discoveries happening every minute. Motorola can match this speed of discovery with new and innovative product and technology development. 4.

Threats Japanese electronics firms are heavy competitors in terms of cost

and quality leadership. Barriers to entry, supplier power, threats of substitutes, degree of rivalry, and buyer power.

After defined its mission and made a SWOT analysis of the company, then the company can start to create its strategies to do the business. Strategy is an organization's action plan to achieve the mission. Each functional area has a strategy for achieving its mission and for helping the organization reach the overall mission. These strategies exploit opportunities and strengths, neutralize threats, and avoid weaknesses. Firms achieve missions in three conceptual ways: (1) differentiation, (2) cost leadership, and (3) response. Each of the three strategies provides an opportunity for operations managers to achieve competitive advantage.

Competitive advantage implies the creation of a system that has a unique advantage over competitors. The idea is to create customer value in an efficient and sustainable way. These conceptual ways then develop into competitive priorities. Competitive priorities consist of: Competing on Cost by lowering cost operation Competing on quality High-Performance Design Consistent Quality Competing on Speed (Time-bases Competition) Fast Delivery On-Time Delivery Development Speed for new product Competing on Flexibility Customization Volume flexibility Motorola's global strategies

The first thing that Motorola's managers want to do to conquer the competition with Japan is involved a two-part strategy: First learn from the Japanese and then compete with them. Managers were sent on missions worldwide, but especially to Japan, to learn how to compete better. The sending of the managers was divided into three categories, first, plant visit

and study of successful Japanese firms such as Toshiba and Hitachi, second, study Motorola's own Japanese operations to learn more fully how it functioned, third, plant visit and study of U. S. best-practice companies such as General Electric. The lessons that the managers took from this investigation are first, Motorola should adopt and invest in employee education and training. Motorola should not only send employees to limited quality-enhancement training, but must recognize that employees need a broader form of education to ensure that they can initiate and implement effective quality planning and design, and thereby meet company objectives. From a narrow emphasis on specific quality techniques, Motorola should focus on manufacturing-related education.

Management should consider partnering with local schools and colleges in providing courses ranging from practical technical application, to business courses, to graduate work in computer-integrated manufacturing. Second, Motorola should implement a benchmarking program using American and Japanese best-practices. Motorola must know what levels of quality its products must achieve to top its competitors. Each of the firm's business units must implement benchmarking programs that analyze all aspects of a competitor's products to assess manufacturability, reliability, manufacturing cost, and performance.

Motorola must also measure the products of other companies against its own standards to verify that whether its own products rank as best in their class. Third, Motorola should adopt the Defective-Parts-Per-Million (DPPM) approach to determine product reliability. From the lessons learned from the Japanese,

Motorola should institute the Defective-Parts-Per-Million, or DPPM product reliability standard. DPPM can be defined as the average number of defects in an average production run multiplied by one million. From these lessons, Motorola take some key initiatives to achieve its objectives and to gain the competitive advantage.

The key initiatives are: Six Sigma Quality Six sigma was pioneered by Bill Smith at Motorola in 1986; originally used as a metric for measuring defects for improving quality; a methodology to reduce defect levels ; 3. 4 Defects Per Million Opportunities (DPMO). Motorola divided six sigma into three levels, as a metric, as a methodology, and as a management system. Essentially, Six Sigma is all three at the same time. Total cycle time reduction Total cycle time is the time from when a Motorola customer places an order until it is delivered.

In fact, in the case of new products, Motorola's cycle-time reduction is even more ambitious; the clock starts ticking the moment the product is conceived. This calls for an examination of the total system, including design, manufacturing, marketing, and administration. Product, Manufacturing and Environmental Leadership Motorola try to be the leader in all segments in order to win the battles of competing with its competitors and to emerge the market around the globe. Motorola try to achieve it by doing customization and put some innovation to its product.

The flexibility in doing the business also applied in order to be the leader of the market. Profit Improvement The company has been implementing Six Sigma throughout the organization for over 15 years, extending the practice

beyond manufacturing into transactional, support, and service functions. As a result, Motorola has documented over \$16 billion in savings. Empowerment for all, in a Participative, Cooperative and Creative Workplace All levels of the company are involved in decision making process. Non-executive employees contribute directly through Motorola's Participative Management Program (PMP).

Composed of employees who work in the same area or are assigned to achieve a specific aim, PMP teams meet often to assess progress toward meeting quality goals, to identify new initiatives, and to work on problems. To reward high-quality work, savings that stem from team recommendations are shared. Motorola also do the training as critical to increasing quality and productivity. Motorola's strategy takes us to its competitive priorities. The primary business strategy of Motorola is six sigma. Motorola try to improve its product quality by reducing the defect levels of the product ; 3. Defects Per Million Opportunities (DPMO). The improvement of quality means that Motorola try to compete in quality among its competitors. Another strategy of Motorola is reducing its total cycle time. This strategy also supported by six sigma approach which is six sigma help to diminish unimportant variables in operations. By reducing its total cycle time, Motorola also try to compete on speed. Reducing its total cycle time will affect its cost to operations. Furthermore, six sigma approach means try to achieve perfection of product quality. By eliminating the mistakes, it also reduces the costs to operations.

By lowering its cost operation, Motorola also try to compete on cost.

Motorola also try to compete on flexibility by customization and able to

adapt with trends over the society. Motorola began customizing their Bandit pager in the early 1980s, to offer customers up to 29 million product combinations encompassing hardware and software configurations. Production was consolidated in one factory whereas before the project it had been divided among a number of facilities. Customers select their options and a salesperson enters the specification into a computer system.

It is then transmitted to the company systems and on to the assembly process. The facility could accept orders for single pagers in any sequence. The finished product was then shipped to the customer. Conclusions In order to expand its business, Motorola used its goal concept and SWOT analysis to define its business strategy to compete around the globe, especially Japanese. Motorola tried to learn from the Japanese and then compete with them. From the lessons over the managers' sending option, Motorola built its key initiatives in order to do its business.

The primary key initiative which is its current strategy in competition around the globe is Six Sigma. Other key initiatives are total cycle time reduction, product, manufacturing and environmental leadership, profit improvement, empowerment for all, in a participative, cooperative and creative workplace.

Answer the case problem 1. What are the components of Motorola's international strategy? Answer: 1) Learning from the Japanese 2) Competing directly with them Six Sigma Quality Total Cycle Time Reduction Product, Manufacturing and Environmental Leadership Profit Improvement

Empowerment for all, in a Participative, Cooperative and Creative Workplace
The first thing that Motorola's managers want to do to conquer the

competition with Japan is involved a two-part strategy: First learn from the Japanese and then compete with them. Managers were sent on missions worldwide, but especially to Japan, to learn how to compete better. The sending of the managers was divided into three categories, first, plant visit and study of successful Japanese firms such as Toshiba and Hitachi, second, study Motorola's own Japanese operations to learn more fully how it functioned, third, plant visit and study of U.

S. best-practice companies such as General Electric. From these lessons, Motorola take some key initiatives to achieve its objectives and to gain the competitive advantage. The key initiatives are: Six Sigma Quality Six sigma was pioneered by Bill Smith at Motorola in 1986; originally used as a metric for measuring defects for improving quality; a methodology to reduce defect levels ; 3. 4 Defects Per Million Opportunities (DPMO). Motorola divided six sigma into three levels, as a metric, as a methodology, and as a management system. Essentially, Six Sigma is all three at the same time.

Total cycle time reduction Total cycle time is the time from when a Motorola customer places an order until it is delivered. In fact, in the case of new products, Motorola's cycle-time reduction is even more ambitious; the clock starts ticking the moment the product is conceived. This calls for an examination of the total system, including design, manufacturing, marketing, and administration. Product, Manufacturing and Environmental Leadership Motorola try to be the leader in all segments in order to win the battles of competing with its competitors and to emerge the market around the globe.

Motorola try to achieve it by doing customization and put some innovation to its product. The flexibility in doing the business also applied in order to be the leader of the market. Profit Improvement The company has been implementing Six Sigma throughout the organization for over 15 years, extending the practice beyond manufacturing into transactional, support, and service functions. As a result, Motorola has documented over \$16 billion in savings. Empowerment for all, in a Participative, Cooperative and Creative Workplace All levels of the company are involved in decision making process.

Non-executive employees contribute directly through Motorola's Participative Management Program (PMP). Composed of employees who work in the same area or are assigned to achieve a specific aim, PMP teams meet often to assess progress toward meeting quality goals, to identify new initiatives, and to work on problems. To reward high-quality work, savings that stem from team recommendations are shared. Motorola also do the training as critical to increasing quality and productivity. 2. Describe how Motorola might have arrived at its current strategy as a result of a SWOT analysis! Answer:

Motorola controlled the emerging U.

S. market for cellular telephones and pagers. Motorola has also won many battles around the world in order to doing its business abroad. But, like many other firms at the time, was a bit complacent and not aggressively focused on competing with the Japanese. Motorola began to fall in its competition with Japanese. Motorola first try to picture what their objectives to deal with the competition around Japanese and around the globe. Before arrived in the concept of strategies, a company made an SWOT analysis. From this SWOT

analysis, Motorola tried to find a new way to regain the firm's lost market position.

The first thing that Motorola's managers want to do to conquer the competition with Japan is involved a two-part strategy: First learn from the Japanese and then compete with them. Managers were sent on missions worldwide, but especially to Japan, to learn how to compete better. The sending of the managers was divided into three categories, first, plant visit and study of successful Japanese firms such as Toshiba and Hitachi, second, study Motorola's own Japanese operations to learn more fully how it functioned, third, plant visit and study of U. S. best-practice companies such as General Electric.

The lessons that the managers took from this investigation are Motorola should adopt and invest in employee education and training, Motorola should implement a benchmarking program using American and Japanese best-practices, and finally Motorola should adopt the Defective-Parts-Per-Million (DPPM) approach to determine product reliability. From these lessons, Motorola take some key initiatives to achieve its objectives and to gain the competitive advantage. The primary key initiative which is its current strategy in competition around the globe is Six Sigma. 3. Discuss Motorola's primary business strategy!

Answer: Motorola's primary business strategy is Six Sigma. Six Sigma has evolved over the last two decades and so has its definition. Six Sigma has literal, conceptual, and practical definitions. Motorola think about Six Sigma at three different levels: As a metric The term " Sigma" is often used as a

scale for levels of "goodness" or quality. Using this scale, "Six Sigma" equates to 3.4 defects per one million opportunities (DPMO). Therefore, Six Sigma started as a defect reduction effort in manufacturing and was then applied to other business processes for the same purpose.

To give such numbers meaning, the engineers at Motorola set up a scale to evaluate the quality of a process based on these defect calculations. At the top of the scale is Six Sigma, which equates to 3.4 DPMO, or 99.9997% defect-free. In other words, if a company have a process running at Six Sigma, the company almost eliminated all defects, it's nearly perfect. Of course, most processes don't run at Six Sigma. They run at Five Sigma, Four Sigma or worse. Here's the table that shows full scale to get an appreciation of the numbers involved:

The process mean will vary each time a process is executed using different equipment, different personnel, different materials, etc. The observed variation in the process mean was ± 1.5 sigma. Motorola decided a design tolerance (specification width) of ± 6 sigma was needed so that there will be only 3.4 ppm defects -- measurements outside the design tolerance. This was defined as Six Sigma quality. As a methodology As Six Sigma has evolved, there has been less emphasis on the literal definition of 3.4 DPMO, or counting defects in products and processes.

Six Sigma is a business improvement methodology that focuses an organization on: Understanding and managing customer requirements
Aligning key business processes to achieve those requirements
Utilizing rigorous data analysis to minimize variation in those processes
Driving rapid

and sustainable improvement to business processes At the heart of the methodology is the DMAIC model for process improvement. DMAIC is commonly used by Six Sigma project teams and is an acronym for: Define opportunity The purpose of this step is to obtain a precise definition of a problem or issue that requires attention.

The key here is not to focus on the outcome (which is what most people generally do), but to concentrate company's attention on the process that creates that outcome. This often requires detailed process mapping to be done so that all the stages in a process, how they link together and how they interrelate, are fully understood. Define opportunity consist of try to know he customer's requirements, the team charter represents the business case for the project, define and build a process map that relates measurable internal processes to customer needs. Measure performance

Once the problem and its potential causes are understood, the company can move on to detailed measurement of all the elements in the process and what influence they have on each other. During this step it is important to focus on the parts of the process that are critical to quality - the ones that can be shown to have the greatest impact on the process outcomes. This step may also require some benchmarking to find parts of your business, or perhaps other businesses these maybe competitors or organisations in other sectors) that manage this process better.

Ideally the company will find the best there is to study and learn from.

Analyze opportunity Having gathered all the necessary measurements the company can then analyze them to establish how well or poorly the process

is working, it's full detrimental impact on the organization, the opportunities for improvement and the benefits that would result if it were improved. This analysis will show the gap between what is being achieved and what could be achieved, where improvements might be made and whether the investment needed would be justified by the return. Improve performance

The information gathered and analyzed in the previous steps will have pinpointed where the maximum returns are possible for the minimum investments. This is therefore where the efforts are focused to ensure that the process is improved in the precise areas and in the specific ways that will have the greatest impact on the outcomes. Control performance This step is needed to ensure that all gains made will remain as gains and will not be allowed to slip back. The purpose is to lock in your success through on-going monitoring and control processes that will guarantee no eversion to the previous, poor results. As a management system Through experience, Motorola has learned that disciplined use of metrics and application of the methodology is still not enough to drive desired breakthrough improvements and results that are sustainable over time. For greatest impact, Motorola ensures that process metrics and structured methodology are applied to improvement opportunities that are directly linked to the organizational strategy. When practiced as a management system, Six Sigma is a high performance system for executing business strategy.

Six Sigma is a top-down solution to help organizations: Align their business strategy to critical improvement efforts Mobilize teams to attack high impact projects Accelerate improved business results Govern efforts to ensure

improvements are sustained The Six Sigma Management System drives clarity around the business strategy and the metrics that most reflect success with that strategy. It provides the framework to prioritize resources for projects that will improve the metrics, and it leverages leaders who will manage the efforts for rapid, sustainable, and improved business results.

References Heizer, Jay & Render, Barry, Operations Management, Eight Edition, The Prentice Hall, 2006. Pande, Peter S, Neuman, Robert P, & Cavanagh, Roland R, The Six Sigma Way: How GE, Motorola, and Other Top Companies are Honing Their Performance, McGraw-Hill Companies, Inc, 2000. Pyzdek, Thomas, The Six Sigma Project Planner: A Step-by-Step Guide to Leading a Six Sigma Project Through DMAIC, McGraw-Hill Companies, Inc, 2000. <http://www.motorola.com/> <http://en.wikipedia.org/wiki/Motorola> <http://www.trizsigma.com/six.html> http://www.brecker.com/six_sigma.htm