



Implementation of Total Quality Management at Electrolux 2011-2014

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I. Statement of objectives

This paper presents an analysis of Electrolux Corporation for the purpose of mapping implementation plan

Total Quality Management Programme

The first objective analysis of situation is to examine the cost of cheap quality and negatively impact on corporate finance that produces cheap quality. Organizational structure, philosophy and culture of Elektroluks then be analyzed, so that the areas that need improvement can be isolated. A presentation of the philosophy of Total Quality Management (TQM) will follow, which will include analysis of the management commitment, tools and culture needed for successful implementation of **TQM** program. The next goal is a comparison of organizational philosophies and operations of Electrolux with those required in a successful **TQM** environment. Current operating procedures will also be contrasted with other organizations that have implemented **TQM**.

Conclusions will be drawn from this analysis of the effectiveness and efficiency of the current system of organization. Finally, recommendations for improvement will be presented, followed by an implementation plan. Implementation plan will include both short and long range goals for senior management in Electrolux.

II. INTRODUCTION

A. The cost of poor quality

The cost of poor quality is a Euro figure represents the cost of errors in product and process variations. Often the first step justifies the implementation of quality improvement system is an evaluation of these expenses. Core strengths of the business segments is also subject to costly inefficiencies, often overlooked by management. Many benefits are realized through quality improvements are unexpected. However, lowering the cost of inexpensive quality can be a material benefit that can be measured as it improves the company's quality processes. The reduction or elimination of these costs can provide justification for company-wide quality improvement program. The cost of poor quality costs include inspection, servicing

defective parts, unnecessary inventory costs, lost sales, scrap costs, machine down time and other costs associated with quality, or lack thereof, in a product or process. Many times these costs are simply written off as operating expenses or overhead, and are not examined as a cost that can be removed. In an ideal situation, these costs can be reduced significantly. When businesses start calculating the cost of quality, they are often staggered by the amount wasted. The cost of quality is often 10-30 percent of the gross income of the company [1].

Inspection costs are often used by companies as a final check and balance to dry processes out of control. Employees learn to rely on control inspections to find errors in the actual needs, rather than trying to fix it right the first time looking at the problem. Most of your product inspection stations do not work one hundred percent inspection procedures. This fact makes it statistically possible to allow defective products to be transferred to the client. The cost of poor quality rises quickly when we left the defective



product in the hands of the supplier. Doing perceiving the error for the first time is very efficient way of working, and every person in the organization is "doing things", be it internal or external customers.

B. History of the Organization Electrolux

First History

Electrolux is a privately owned manufacturer of industrial and domestic electrical heating appliances, and other equipment including heating and cooling. These products are widely sold and selling door to door with a large multinational sales force. Products are sold appliances are highly differentiated by their high price dictated by the long life, high quality and good reputation (ie, "my grandmother has one camera and it still works!"). The primary manufacturing plant is located in Bitola, Macedonia. This facility underwent a major revitalization, reorganization in 1985, 1995.2004 and included in the state of the art automation equipment that makes it one of the most automated facilities in the appliance industry. The company has recently gone through a leveraged buyout by senior management. Much of the focus was shifted from strictly differentiated high floor care products, to diversify through acquisition, particularly brand Klimaluks (poterba real customers and the protection of the individual) and Pure Water Technology (for purification of air and water). Recent senior management, installed by donakinstava commercial structures, showed a desire to Return to the main activity of the protection appliances.

2. Second Quality of Electrolux

The structure of Elktroluks «the Quality Department is typical among appliance industry (see Fig. L). The department is headed by the director of quality and field service reports that deputy

President Director General of production.

Reporting to the Director three quality control managers (one on the branches)

Two quality engineers, two branches of quality coordinators

National Financial Services Administrator

Product Service Supervisor.

Quality Control Inspector - Controller.

The audit, which are used as evaluation of the final product quality. The needs and demands of customers are key elements for consideration in this proceeding. Copies of the final product are chosen at random at any time during the production shift. Samples are selected from fully packaged and serialized units. The number of samples selected in accordance with the following tables

Daily production-

-Quantity

The sample-size-products

0-150 4 / day

151-500 7 / day

501-850 10 / day

851 - 1200 13 / day

1201 - 1700 17 / day

1701 - 2000 20 / day

2001 - 2500 23 / day

2501 - over 25 / day

Are the selected products are inspected, disassembled, and then sub-assemblies are checked.

Defects are classified in classes 1-4 based on the percentage chance of a service call from a vendor, Ili the unit back to branch by customers.

Map classifies all possible defects in the appropriate class.

A class 1 defect has 75% to 100% chance 2 has 26% to 74% chance, 3 has 10% to 25% chance of 1 and 4% to 9% chance. If any defects are found, 100% inspection of successive units is required. Depending on the class and the defect production rate, the number to be 100% tested ranged from 67% to 4% of the daily production quantity. Inspector included studies in a separate process from time to time. All inspectors are working with production personnel in defect prevention, defect cause determination and problem tracking. Placement assistance is provided when needed.



2c. Quality Assurance

Quality assurance inspectors in central Bristol are responsible for monitoring the quality of the product out audit basis. In particular, they are responsible for monitoring the quality of Tests Performed (Lab), Statistical Process Control (SPC), customer acceptance index (Cai) audits, and process capability testing.

The primary goal of providing quality Lab is to collect safety data on all Electrolux products produced in Bitola. Data are updated semi-annually

SPC methods are implemented in all areas of fabrication. Some statistical control is also used in the assembly area. The primary tools of SPC are used in X-bar, range, and the percentage of defects (P) charts. Program lists are monitored by the Quality Department, and eventually they make their decisions about whether or not the process is in control. Unfortunately, often operating on the basis of statistical deviation, as many of the measures in question. Production constraints insist that control many of the measures are too close or inadequate, insist that standards are not realistic. Operators are trained in the preparation of control charts, but they do not analyze the charts or make adjustments to bring the process in control, without direction from three departments:

- Procurement
- Production and quality
- Control.

Seller is rated at 0.5 to 1.0 from 1.0 is the highest rating.

The overall score comes from the following formulas

$$V_r = M_r * Q_r * P_r$$

where V_r = Vendor rating

M_r = Manufacturing Department rating

Q_r = Q.C. Department rating

P_r = Purchasing Department rating

With this formula the best overall assessment of the seller can achieve is 1.0 if each unit rated them 1.0.

Conversely, the lowest possible overall rating will be 0.125 If any section rated 0,5.

Any vendor with a rating below 0.5 will be considered a useful Vendor status.

Any vendor with a rating under 0250 will receive written notice of termination of business that requires a written response to the seller.

Quality Control

Bitola Department inspectors are responsible for monitoring product quality in all production areas. The first part / Last piece, patrol inspection, and audit sampling is used to ensure that parts, assemblies and finished products in accordance with the electrical plans, engineering specifications and quality standards.

The basic task of all inspectors are very similar.

Some variations of the department of department is required for product flow, the product, and machinery department.

Each inspector Logbooks maintained their areas of responsibility.

Every electrical appliance has 2ao Sellers Preferred Vendor program that selected vendor can bypass incoming inspection.

Certification Preferred vendors is made by the Quality Control Department.

The choice of potential suppliers for this program are made by procurement, production, or quality control departments.

In general, the vendor must demonstrate six months of delivery of acceptable products as agreed to by all departments (purchasing, quality and output.) A signed sheet is then initiated by the Supplier Quality Engineer and signed by each department is required before initial contact with the seller is made. Once all the signatures have been obtained the seller is required to submit a document package that contains a description of quality systems in use by the seller. Dobavuvachkiot Quality Engineer visits to Preferred potential sellers to check their facility. If the vendor passes this inspection, it becomes Preferred Supplier.

The preferred vendor is then invited to meet the plant V / here he gets a Preferred Supplier seal, certificate, then a training and Sitematizacijata Usovrvshuvanjeta. And receives a plaque engraved with the sellers name is added to the Preferred Supplier plaque to display in the lobby Electrolux. Supplier audit of



priority areas can be conducted at any time. If preferred Supplier audit inspection, recertification process must occur.

There is also a supplier quality rating system used to establish ratings of different suppliers are used in Bitola and Skopje office blocks. Each vendor is evaluated on a quarterly basis. Other Related Topics quality appliances, a toll free customer complaint department is available to all customers who purchased product from Electrolux. Complaints are kept in a permanent database, and answer the complaint is guaranteed to be given within twenty-four during a call, if not immediately. In September 1995, the Director of Quality has launched a program that is very similar to the quality circle. Designated as the Quality Improvement Team (QIT), this group of seven people on the team goal of improving quality. Improving the quality objectives are products, processes, procedures, or work environment. Team membership is voluntary and currently consists of members related quality of workers (director of quality inspectors, and metrology personnel). The meetings are held on company time and members can opt out of the program at any time. Tao in all the time working on the factory sales managers throughout the United States and Canada have been conducted recently, giving managers a better understanding of the product. For sampling of the quality engineering and sales affiliates routine visits in this area, providing invaluable insight to the "real world" for the worker. Unfortunately, line workers are not given this opportunity.

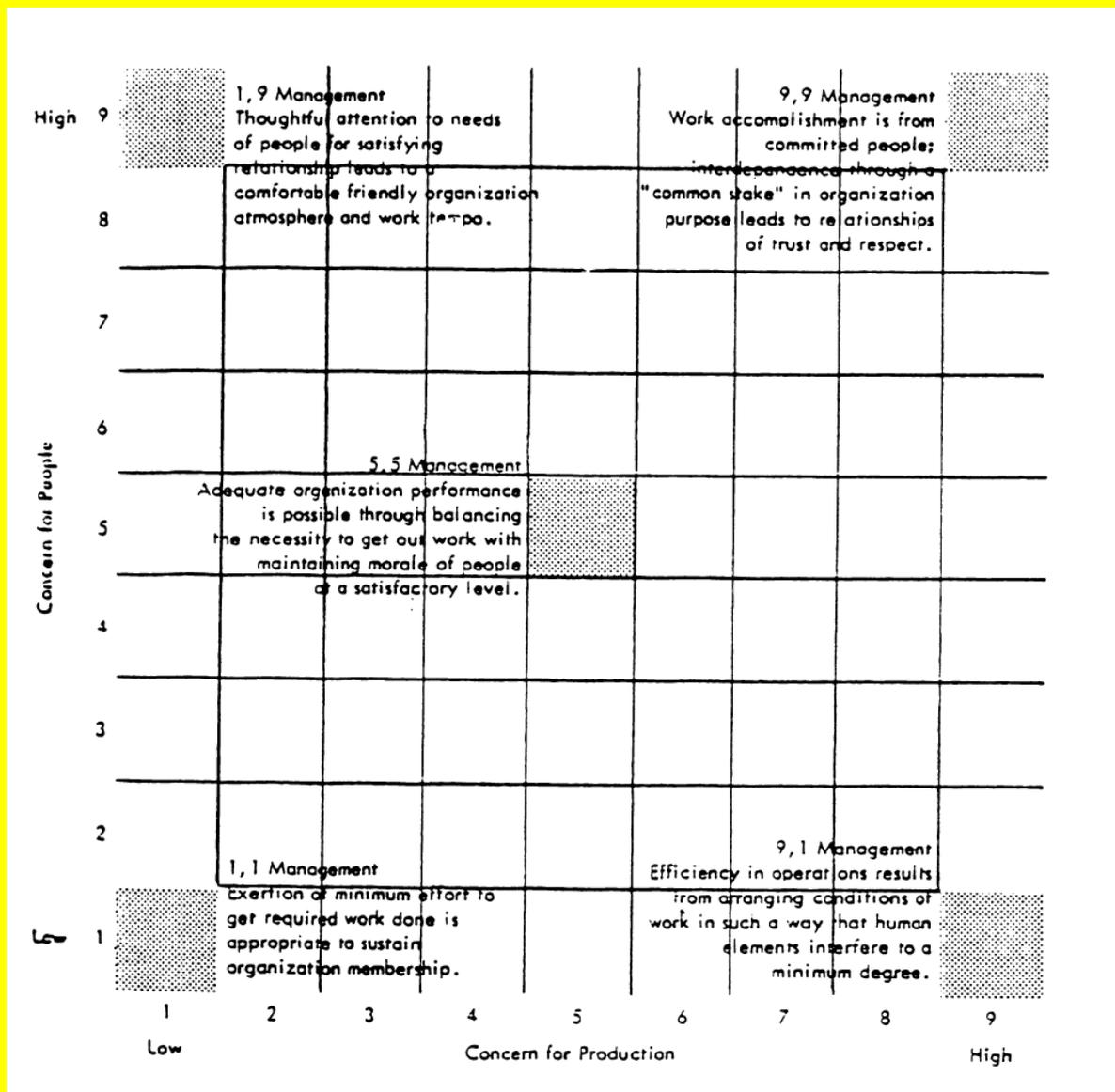
3 * business culture of Electrolux

Management of Electrolux is constantly striving to maintain good employee relations. For example, all employees and their families are invited to an annual company picnic in which many esteemed awards for staff in the Development and human resources etc.. There is also an annual Christmas party, which in the past was only paid staff and their spouses, who will now be held for all employees earlier this year. There is a charge (less than 20 euros) for the presence of this party was free from Holding. Recently the department's staff meeting, consisting of a random sample of hourly and salary staff, in order to collect opinions on ways to recognize and reward outstanding contractors. The initiative for the meeting is provided by the Vice President of production and servsiot One team member, hourly employee, voiced after the meeting that he felt that even if management failed to act on any of the proposals, the fact that the meeting took place at all was very positive indication of the concern of management. Electrolux management has an open door policy and encourages anyone who has a work related problem to come at any time to discuss this offer * Although this is rarely used, it shows concern for employees welfare. Each plant has only one cafeteria for all employees. This fact allows all employees, regardless of status, to "Cleaning Kolegialno" v / O management. Within the last eight months, Electrolux launched the publication of quarterly company newsletter that is distributed to all employees. This Newsletter, e-mail service includes upbeat news about the organization, information about successful improvements in company and personal profiles of selected employees.

3a. Managerial grid

The management network and service network is a concept developed by Palenzo Dimce Slobodan Ivanovski Valimir Petkov, Natasha Nikolovska Theodor Palenzo Banushev Erhan and service, Andrew Nikolovski different types of leadership styles and managerial orientations. Network consists of two factors: zaproizvodstvo care and concern for people (Figure 2) [2]. Measure the organizations core focus is organizational tool that can be used to identify the culture of an organization. Network management research is a method by which the organizational style can be identified. This survey (Appendix B) assesses the organizational culture, by defining the management strategy of the Interior. The combination of two strategies help define organizational culture as perceived by the employee.

The way these two problems are associated with specific manager defines his use of force. Moreover, the character of "concern" in different network positions differ, even though the "degree" can be the same. For example, when a high concern for people is combined with a low concern for production, people expressed concern that people are "happy" is far different than when a high concern for people is combined with high interest in production, that people are involved in the work enthusiastically and strive to contribute to the organization goal. Each theory can be seen as a set of assumptions about energy usage to connect people in production. Each of the theories is found,



some extent, in every kind of organization. Different types of assumptions are universal and common across different cultures [3] survey results fall into five categories:

5-5 The organization typically uses techniques compromise in solving problems. Not separately wins with this type of organization style, but each department is giving enough so that an acceptable solution is made.

1-9 This type of organization tends to make the workplace a happy and fun place. Mention of conflicts is obeshrabren. A appropriate atmosphere is the goal of this organization.

9-9 The organization strives to get the best possible solution to the problem. The conflict is confronted in a constructive way to bring people unificiranodluka.

9-1 The organization manages the numbers. Statistics, financial reports, and production quotas are driving force in this organization.

1-1 The organization rarely achieves anything. Decisions be postponed for further study and time is spent assessing blame rather than solving problem. This survey was completed by a random sample of Electrolux employees in Bitola and Skopje business facilities. The total number of respondents was twenty-one. All employees were surveyed debate on workers at different levels in the organization (9.5% senior management, middle management 38.1% and 52.4% of lower level) and several departments (Academy, accounting, and quality control). Survey results are as follows:

33,3% = 5-5

28,6% = 9-1

19,0% = 1-1

14,3% = 9-9

4,8% = 1-9



The results were determined by calculating the percentage of respondents with dominant (lowest total) organizational styles. There is a single dominant organizational style considered by the respondents. A relatively large percentage of respondents who chose 1-1 as the dominant organizational style (19%) shows that there are inefficiencies in the current system. The results also indicate a lack of care for people in the organization because of the low ranking given to the 1-9 and 9-9 organizational style - and counting to care for people in the network. Each of the top three organizational styles can be primary culture of the organization, or perhaps a mixture of three different functional exists between sub-cultures department. In any case, Electrolux has the opportunity to build on this foundation to enhance employee morale and productivity.

Additional information can be gained from the survey results by tabulating the results and the average of columns, as shown in

Table 1. On average each column provide weighted score on five types of organizational styles. The research work in such a way that lower scores represent the dominant organizational styles.

**Employee Management Project GRID
SURVEY SUMMARY**

EMPLOYEE MANAGERIAL GRID SURVEY SUMMARY						
DOMINANT CULTURE	CULTURE					Total
	5-5	9-1	1-1	9-9	1-9	
5-5	47	53	57	68	75	300
5-5	50	57	69	58	66	300
5-5	46	55	66	69	64	300
5-5	49	58	53	66	74	300
5-5	50	54	59	69	68	300
5-5	47	49	57	78	69	300
5-5	50	55	54	73	68	300
9-1	65	44	63	66	62	300
9-1	71	51	53	71	54	300
9-1	71	36	46	77	70	300
9-1	52	48	56	73	71	300
9-1	49	42	59	68	82	300
9-1	55	46	64	57	78	300
1-1	68	48	44	78	62	300
1-1	50	49	47	74	80	300
1-1	57	66	46	66	65	300
1-1	61	58	47	65	69	300
9-9	54	65	73	50	58	300
9-9	53	58	66	51	72	300
9-9	53	55	64	48	80	300
1-9	58	68	72	53	49	300
Average	55.05	53.10	57.86	65.62	68.38	
Range	25	32	29	30	33	

Table 1. TABLE OF MANAGEMENT RESEARCH Electrolux

again, the same three dominant organizational styles (5-5, 9-1 and 1-1) are evident in Electrolux. The range of scores for each column at least twenty-five and a maximum of thirty-three. Organizational style 9-1 has the lowest average of all organizational styles, which is indicative of management focus on maximizing production by exercising power and authority, and achieve control over dictating what people should do and how they should do it [4]. To gain a better understanding of the organizational culture of a company survey should be performed. Sampling conducted in this exercise was too small to



base management decisions, but it was useful for identifying the organizational focus. This research can be used in future as a measuring tool to measure improvement efforts.

4. External Environment - Competitors

Vacuum industry is stagnant market with relatively few newcomers to compete for market share. Electrolux sells primarily by direct sales. Dominates the electric door to door segment of the market, only significant candidate Other Companies in the Balkans and the world.

Most of the product "innovation" in the form of Frinko such as headlights, peak power ratings, and self-propelled transmission. The products will almost become commodities and competitive advantages are often gained at opening price points. Electrolux successfully compete at a higher price point for quality and long life of their products.

In the last entry of the retail electric market has elevated the importance of competitive strategy for the organization. The level of competition at the retail level is very higher than door to door level. Recently there were advertisements by competitors using electric models as compared to performance requirements. To maintain a competitive advantage that is necessary for survival, Electrolux must develop long-term competitive strategy.

III. WHAT IS TQM?

A. What is Total Quality Management?

Total quality management (TQM or) is a systematic management philosophy, with emphasis on: design and process simplification, satisfaction of "customer" needs, process orientation, continuous improvement, total involvement and integration company, prevention versus detection errors, long-term orientation, and discipliniranupotreba of proven tools and techniques. The total commitment of senior management, and visibility of this support is necessary for the implementation of TQM to be successful. Unlike many quality programs, TQM is not only new statistical process that can be installed quickly in an organization. Instead, TQM is a long term program that requires many years of training, planning, improvement and adaptation to be implemented [5]. A comparison of traditional TQM philosophy is shown in Table 2. TQM is a process-oriented program that emphasizes doing things right the first time. Many incentives for installing such a program is amazing price of lack of quality. It is estimated that a typical plant invests 20-25% of its operating budget finding and fixing errors [6]. Typical management practices in terms of quality focuses on the identification and rejection of defective products and services the project. Although this approach can be reasonably successful in preventing unsatisfactory products from reaching the customer, does little to change the process that is responsible for defects. Moreover, this process contributes to production costs.



CHANGING VIEWS

	TRADITIONAL	TQM
Corporate Focus:	Current Year ROI	Customer Satisfaction
Customer Req.:	Ambiguous	Clearly Prioritized
Quality:	High Quality = High Cost	High Quality = Low Cost
Quality Control:	AQL – Acceptable Quality Level OK	Zero Defects, Minimize Variation
Processes:	Optimize Subsystems	Optimize Total System
Improvement:	Innovation / Breakthrough	Incremental / Innovation
Problem Solving:	Detection	Prevention
Labor:	Specialized, Crafts -- Thought Seperate from Labor	Flexible, Multi-skilled Workers Valuable Source
Incentives:	Merit / Piecework	Gain Sharing
Measurement:	Measure Budget Variances Efficiency	Functional Standards Measure Process Variation
Supplier Relations:	Fragile / Arms Length	Cooperative / Teaming

through inspection effort and costs of servisiranje [7]. Satisfaction of customer needs is one of the important concepts of TQM-Customers usually considered to be the one who bought a product or service, but TQM definition brings back more through the organization. The user is defined as anyone who receives a product or service from any group or person.

Therefore, users are internal (inter-department and functions) as well as outside the organization. This mindset is actually committed to doing quality work on everyone. Virtually every employee provides products or services to customers, be it internal or external. Much of the success of Japan in it's quality transformation can be attributed to learning Tues Edwards Deming. As many of us remember, Japan was once known as a supplier of low quality products. Dr. Deming began his teaching quality improvement methods, characterized by his "fourteen points", the Japanese in 1940 [8]. TQM philosophy includes Dr. Deming's points, as well as many other systems and methodologies.

However, TQM is not just a collection of philosophies. A proper foundation work and company culture must be in place for the philosophies at work. Application of TQM is an appropriate organizational structure for the free flowing communication. TQM will increase only if the communication infrastructure is developed to allow free flow of information cross-functionally within the organization, as well as up and down the chain of command. Traditional bureaucracy is not suitable for such communication [9].

Deming's fourteen rules

1. Create constancy of purpose toward improvement of products and services in order to become competitive, stay in business and provide jobs.
2. Adopt the new philosophy. We are a new economic era, created by Japan. Western management must awaken to the challenge, must learn their responsibilities and take on leadership for change.
3. Cease dependence on inspection to achieve quality. Eliminates the need for inspection of the table on building a quality product in the first place.
4. Improve constantly and forever the system of production and services to improve quality and productivity and thus constantly decrease costs.
5. Remove barriers that rob the hourly worker of his right to pride of workmanship. The responsibility of supervisors must be changed from stressing sheer numbers of quality. Remove barriers that rob people in management and engineering their right to pride of workmanship. This means, among other things, the abolition of annual merit rating and management purpose.
6. Drive out fear so that everyone may work effectively for the company.



7. Break down barriers between departments. People in research, design, sales, and production must work as a team to foresee problems of production and use that may be encountered with a product or service.
8. Eliminate slogans, exhortations and targets for work force that ask for zero defects and new levels of productivity.
9. Eliminate work standards (quotas) on the factory floor. Deputy leadership. Eliminate management by objective. Eliminate management by numbers, numerical goals. Deputy leadership.
10. Institute leadership. The aim of leadership should be to help people, machines and gadgets to do a better job. Supervision of management needs overhaul, as well as supervision of production workers.
11. Institute training on the job.
12. Institute a vigorous program of education and self-improvement.
13. End the practice of awarding business based on price. Instead, the minimize the total cost of moving towards a single supplier for each point long-term relationship of loyalty and trust. Put everyone in the organization of work to achieve transformation.

The transformation is everybody's job.

Another foundation that must be in place appropriate training and tools. Every employee in the organization should participate in TQM training. The basic philosophies of TQM must be shared and discussed with all members of the organization if a common understanding of TQM goals and means of achieving them to achieve. Training should not be viewed as "one shot" effort. As TQM itself, training in the form of refresher and advanced courses must be seen as an extension of the improvement process. Just doing one's best is not good enough. One must first know what to do, then the best [10]. Everyone must participate in the improvement efforts. The person in any organization that best understands his or her work, and how it can be improved is one execution of it.

B. culture needed in TQM organization

A support organization culture is a key element in the successful transformation of TQM. TQM requires the participation Organization workforce that is only reinforced by incentives. Only motivation is generated by direct involvement in decision making. Participation should not be mandated by management, but required by employees. When given the authority and responsibility to make changes, most people will develop a sense of ownership and belonging to the organization. But this authority and responsibility must not only be thrown to the employee. An extensive training program must precede the transmission of power down the chain of command [11]. Changing the company culture nedostikot not an easy task, and is absolutely the first condition to ensure that TQM program will survive.

The company culture is composed of:

- (1) behavior,
- (2) language
- (3) artifacts and symbols
- (4) beliefs and values, and
- (5) subcultures [12]. The managerial grid presented in

Part II provides a quantitative view of these factors as they relate namenadzherski care of production and people. Employees are customized to work within the expected range of behavior or norms of a given company. To be outside the norms invites punishment. Typical company norms unconsciously tend to reward apathy, limiting the chain of command, noninvolvement, and minimum acceptable levels of operation, as characterized by a 1-1 style of organizational management network. TQM requires a company to tailor regulations to create an initiative, commitment, intensity, and quality. Includes language as we speak - it. special lingo we use every day. It includes jargon and communication and charisma he defends and defines culture, it shows how we feel about us, our customers and worko our artifacts and symbols can be positive or negative. They make a statement on the management attitude towards workers. They can create barriers by defining the difference in the value of a class of worker over another. Negative examples include uniforms, communications, security systems, time clocks, limited parking, and plush offices. Positive examples are communication systems, security and convenience features added to the workers, clean facilities and recognition displays.



Beliefs and values are reflected in policies and procedures that exist within the company. The number, type and nature of reports, meetings, documents, rules and restrictions, approval signatures, and budgeting controls are a measure of values. There also the general atmosphere of morality, ethics, and business philosophy that can be defined, although difficult to quantify. The existing culture will be supported by a number of traditionalists. Human beings are by nature resistant to change, because change creates uncertainty. Sub cultures may be useful in helping to create change within the overall culture sub

* Some cultures are more supportive of change and will easily support the attempts by external forces to bring about change. Anti-culture groups are usually negative in all cultures. These groups can help change, but eventually this group will have a negative impact on the culture without behavior modification [13]. The organizational culture necessary for successful TQM implementation is created by the management that deals with both staff and production.

C. employee involvement

Employee involvement (ei) is a management system that TQM must be built.

Table 4 characterizes the philosophies of employee participation in TQM and traditional environments. Genuine Electrolux exists when every employee is motivated and empowered to effect changes to support the strategic needs of the organization. One aspect, however, is clear. An organization can take advantage of employee involvement.

Table 4. Traditional VS TQM E.I.

EMPLOYEE INVOLVEMENT		
	TRADITIONAL	TQM
Reporting Structures:	Hierarchial	Cross-functional
Decision Making:	Autocratic	Participatory
Motivation:	Fear (external)	Contribution (internal)
Management Style:	Supervise, Control	Support, Delegate
Improvement Efforts:	Sporadic (by Management)	Continual (by employee)
Compensation:	Per Job Classification	Performance
Job Responsibilities:	Specialized	Flexible

power inherent in (AI) if its infrastructure supports the concept [14]. Therefore, it is the responsibility of senior management to see that adequate communication infrastructure is in place before beginning the program al. There are ten major infrastructure requirements an organization must be evaluated - and adjust as necessary - if (AI) is to become part of daily routine. Each of the ten parameters play an important role in creating a management system based on (AI) system rather than simply used [15].

The parameters are as follows:

- a) The management involvement - Senior management must be involved in the process and incorporate the language of inclusion in his vocabulary. In addition, senior management control of other parameters.
- b) focus on strategic operational issues - focusing on the participation of strategic operational business issues makes valuable input and participation through strengthening progress. This focus also provides an effective way for all employees to prioritize decision making.
- c) strengthening - Delegation does not mean that every decision must go to the lowest level in the organization. But employees below the level of decision-making must be opportunity to influence decision making.



- d) People - First, while not every employee wants to participate in decision making, it is a mistake to simply assume your employees do not care. Second, there are managers who simply will not listen, they must be given every opportunity to learn new ways of management.
- e) Reward systems - Human Resource professionals to ensure that organizational structures supporting the participation prize. Employees should be rewarded for suggesting changes, managers should be rewarded implementing change and encourage team building.
- f) Motion handling - some aspects of participation in a process of grinding halt faster than the poor handling of the proposal. You have created a good way to accept suggestions, direct them to the lowest possible level, priority and act on them, and communicate decisions quickly back to the employee.
- d) Training - management must understand that commitment to training is essential to success. In addition to technical skills, employees must have training in "soft skills" decision making.
- h) communication of business information - managers are rarely asked to make decisions without the necessary information. Senior managers must recognize that information once it is believed that the world now will be distributed throughout the organization.
- i) Time commitment - Training, solve problems and proposed operation requires time. It is unreasonable to expect employees to perform their time on these activities.
- j) Other human resource management practices - including the staff revolves around human resources company, all HR practices should be designed to support participation. They include: choice of employment, compensation, promotion, job security, orientation, career development, and benefits.

D. TQM successes and failures

Quality is an easy thing to preach, but it is much more difficult to achieve. Many organizations have good intentions when it comes to building quality products, but quality always seems to take a backseat to profits or meeting deadlines. Efforts to improve quality will be wasted without mercy, commitment and leadership from management. American Electronics Association found that although 85 percent of respondents undertaken efforts to improve quality, less than a third can document significant improvements in quality and productivity [16].

TQM is more difficult to implement successfully, requires a company-wide culture change and employee training program. But there are many successes. Elektroluksovata and Company, recently received the Award of Macedonia Maikrosoft control and IT Marketing and Strategy of quality and first non-Japanese company to do so, has implemented TQM program with very positive results. They have reduced service downtime by 52 percent, customers saved \$ 500,000 in avoided costs and reduce customer complaints at least ten years [17]. Other work Holdings began its total quality program in 1983 and showed a positive impact on decision making, business strategy, corrective actions, interpersonal relationships, and provider behavior [18]. Alkaloid also implemented TQM program and is only now realizing the cost of quality and they eliminate chronic problems and identify areas for improvement [19].

E. TQM Review

Many Macedonian and Balkan companies come to realize the need for aggressive total quality management process to compete with the ever increasing number of offshore manufacturers [20]. All highlights the need for quality, but few can articulate what is, and few companies are able to consistently deliver. However, to ostanezh competitive in the market today, all agree that quality orientation is of primary importance. Europe, in relatively few years, have taken the concept - Kaizen, as they call it - and completely changed the image of many of their products. They have demonstrated a strong need for wisdom and obsession with quality. TQM is, as its name implies, the whole, companywide commitment to quality. For each company, it means traveling with sweeping changes in management style in a way. Perhaps the best definition of the objective of TQM is "Do the job right the first time, on time, all the time, always strive for improvement and always satisfy customers." The underlying philosophy of TQM is "If it is not perfect made better "as opposed to" If it is not broke do not fix it. " To achieve the TQM goal - to master quality - must recognize some basic concepts. First, the quality of customer perception. It is satisfying customer needs and / or desires for a product - a feature, features, reliability, availability and price. Failure to meet the full range of customer requirements results in some level of dissatisfaction, and therefore, loss of quality [21] <>

On the other hand, providing features and services beyond the customer's needs or desires to improve perceived quality of the product, but only waste resources. To gain an understanding of external customer needs, it is important to recognize that there different classes of customers. An organization, then you need to identify those classes that are most crucial to their business and it sure is satisfying these key customers. Never forget that "customers" are internal and external. TQM recognizes that for any value-added work within the process, there will be a customer for every product produced in each individual



step. Focusing on the needs and requirements of these internal customers - that is, their quality requirements - places continuous spotlight on ways to improve the process flow.

However, customer needs and desires change. Thus, the second concept of quality: Quality is dynamic. It is a set of impressions made on customers which affect their opinions, decisions and the use of a product or service. Factors such as product consistency, method of delivery, competitive products, modified product use, or changing values cause these impressions change. It is considered to be of high quality at a time can be seen as a bad quality in a different time or context. TQM means staying aligned with the voice of customer and competitor movements, factoring these elements in the quality effort. The third concept is that quality is a process oriented. For a long time, the U.S. management practices in terms of quality focused on identifying and rejecting defective products and services on the project. Although this approach can be reasonably successful in preventing nanezadovolitelno products from reaching the customer, does little to change the process that is responsible for defects. Moreover, this practice contributes to the cost of production through inspection effort and cost of rework. By using the internal customer concept, the result of each process step is seen as a product, any product suitability and immediately evaluated by his client. Management system then becomes the center, actively working to improve the process of delivering a product or service. By satisfying internal customers at every step of the process, inspection, rework, and other related costs will be reduced and superior product will result.

The fourth concept:

Quality requires total commitment. TQM is not created by management decisions or a few select individuals providing training and awareness. This is a program that will fully develop only after a period of several years. It requires careful planning and communication and must be supported by management commitment, dedicated resources in order, and the application of different analysis techniques. Management must allow and promote the involvement of all employees. Managers became a coach and cheerleader, providing leadership and resources to the effort needs. A successful program can not be rushed. It must be systematically constructed. TQM can, in summary, be characterized as a philosophy of emphasizing leadership and management: customer satisfaction requirements, process orientation, continuous improvement, total involvement and integration company, prevention versus detection, long-term orientation, design and process simplification and disciplined use of proven tools and techniques [22]. F. TQM is needed? Database constructed by the company (PIMS), an independent research firm, found interesting and unexpected relationship between quality and market share. About a decade after the establishment of a database, PIMS Researchers argue that market share is the primary begetter of profit. But re-analysis of data led to more robust and surprising conclusion: a high market share really bring profits, however, sustainable market share comes primarily in the PIMS what researchers call "considered in relation to product quality or service quality" - "relationship" that means vis-a-vis competitors, and "realistic" means as seen through the customer than the provider's eyes. PIMS researchers now call in terms of quality, "one of the most important factor affecting long-term performance of business unit", and PIMS recent newsletter to members concluded: "When you examine options to maintain leadership in value, we believe that changes in the quality have far more powerful impact on market share than do changes in price" [23]. More and more the question of TQM for organizational managers is not "can we afford to do that?" But "not to do?". global market has shifted from competition based on price only on price and quality • Electrolux enjoys a good reputation as a manufacturer of superior quality products, but to maintain the IT management must be "active" as opposed to "reactive".

IV. ANALYSIS

A. Cost of poor quality

The cost of poor quality are one of the main reasons for embarking on a revolution TQM • Some of these costs are identified for Electrolux. Greatest impact on cost of poor quality appliances are warranty costs, which account for more than 50% of costs. One reason for the high percentage Electrolux is a year warranty on their products. However, improving the quality of products going out the door must be maximized to reduce the cost of poor quality. There are three manufacturing facilities in the Electrolux Corporation: Frinko.Mariovo.Radio Bitola and Palenzo. The internal costs (waste and service) the poor quality of these productivity is about one-third of the total cost of poor quality.



B. culture

Senior management of Electrolux expressed verbal support for the program TQM. Several meetings over the past 18 months hit the corporate level for consideration of TQM program in Electrolux. However, such, however, needed a leader, or champion of such a system does not come out of the woodwork. The organization can not successfully embark on the TQM revolution, without the high visibility of senior management support and action.

C. Cost of poor quality Elektroluks

But once decided TQM, several questions must be answered such as: What kind of training programs should be used - a third party in the house, or both? What methods of communication quality are most effective? How should workers who show quality behavior to be rewarded for their efforts [24]? These types of questions we need to address after executing company wide program with the knowledge that all aspects of the plan are part of continuous process improvement and refinement. Milestones to be achieved, but the road will never end. The work of management will be supervision, but leadership. TQM requires organizational culture that supports the system. A support culture is built in an organization by managing, through mutual trust and respect. The need to carry out total quality management to be kept clear when we recognize that we must change the way we do things - we must change our work culture [25].

Management control systems of rewards that affect how we think and behave and what we value. Because of its unique position, management, and only management can bring about a cultural change. There are a variety of organizational development techniques available to management to help change the culture. A key fact keep in mind is that it takes persistence, patience and practice to bring about successful change.

1. Managerial grid

The managerial grid survey (Chapter II) the results are indicative Electrolux opportunities to improve cultural cooperation. The organizational culture of Elektroluks at the present time, as identified in the Management Network Chapter II, is able to produce a champion of TQM staff level. As management work to change policies and procedures that affect employee involvement, support and leadership to follow. Electrolux can improve many systems that are in place, and to provide new systems to improve employee perceptions and / or relationships. Only 14.3% of respondents in a survey network managers believe that management was very concerned with people and production (9-9).

Management must strive for this type of organizational culture on the implementation of TQM. The primary focus of management should be directed to increasing concern for people. This goal can be achieved through: a revised system of conflict resolution, creating awards ceremonies for outstanding employees in quality and team building efforts, removal of negative symbols where possible - shirt ties, pens, time clocks, etc.; revisal and company standards and values.

The most effective organizational style is efficient and fair when resolving conflicts. Conflict must be resolved in a constructive way to bring people together. Once everyone realizes that they play the same team, coordination of efforts to bring effective and efficient operation. Many of the negative symbols that are in place can easily be removed or hidden, and replaced with positive symbols. Other cultural aspects such as beliefs and values, behavior and language, will only develop with continued support and training. Areas in which electrical must concentrate on improving the organizational culture: open communication systems, the use of ceremonies and celebrations, a higher degree of customer orientation (internal and external), production of excitement and pride through awards and participation, removal of negative symbols and visible senior management support and participation in the implementation of TQM, management option is to concentrate on key sub-culture in the organization for improvement. Support development of key sub-culture often can "snowball" through organizing, facilitating company-wide cultural change.

B. tools and methods

Many of the necessary systems for successful TQM transition take place in Electrolux. The plant is highly automated with a high degree of (CIM) storage and retrieval systems in placement products. The manufacturing operations are controlled by the factory wide SPC program, implemented in 1990. Control charts are kept for key operations, as determined by the quality control department. More hands-on training in this area will improve the efficiency of operations, allowing operators to analyze autonomy and accurate process variations in their classes.



1. Improving the process

Quality Assurance department, and management must concentrate on improving the processes responsible for changes and 39 defects. Relying on large inspection routines is costly and inefficient. If quality is built into products preproduction processes, heavy inspection audit plan will be required • Required training for all staff. There are many more tools that will be of immediate benefit for the corporation as Electrolux Design Lab Palenzo design of experiments, cause and effect diagrams, Pareto analysis, and others. Training must be permanent and be an immediate use of the employee. If the employee is unable to effectively apply his new found knowledge, skills learned will begin to wane. Management must lead this crusade training, and in fact, becomes a student as well.

The preferred vendor program Electrolux is a positive step in developing a quality vendor relationships. However, more emphasis should be placed on moving towards a single supplier for parts. The development and nurturing of suppliers is important for process control management. By using one supplier will enable Electrolux opportunity to develop synergistic connection with mutual benefits for both sides. Electrolux benefits will include: reliable parts from a known supplier, elimination of incoming inspection, development of a reliable (JIT) scheduling, and a team effort in future product design requirements. Vendor will obtain useful and reliable customer advisor in manufacturing and quality programs.

D. employee involvement

Involving employees in Electrolux is very untapped resource. Many decisions are now made by management can filter down through the system once the worker is adequately trained and properly delegated authority.

Effective TQM must begin by examining the current system. Electrolux has many opportunities to improve employee participation using this subsystem to empower employees. When the infrastructure is created by defining the appropriate parameters, including employees do not just happen, it is driven into the organization.

There are several electrical infrastructure requirements that must be customized management system based on employee involvement.

First, senior management must be involved. Visible and active support will show that management is serious about the transition. Next, inclusion of employees must focus on strategic operational issues. Making the staff valuable inputs from operations will lead to strengthening of participation. Examples would include: use of employees for market research on future product requirements, calling line workers to join the branch visits customer interaction, and creating multi-functional teams for quality improvement efforts. Communication of business information should be disseminated throughout the organization through memos (newsbriefs) and meetings. Strengthening of staff must also be incorporated to allow influence in decision making. This strengthening should follow training program in technical and "soft" skills. Supervisors also should be included in the planning process and training program, so you do not feel neutered of their power. There is no suggestion program in electrical operation. Management should carefully implement an appropriate system for handling proposals. This system should direct responses to the proposals quickly back to the worker. Inactivity proposals will grind the system to stop quickly. Remuneration implemented suggestions will encourage activity in the process. Visitors can take the form of recognition, increase relaxation, or monetary. Initially, the number of proposals should be increased to encourage employee involvement.

E. Customer Focus

Electrolux is something unique position when considering customers. Most of the external electric customers are composed of two tiered system of traders and consumers. The sales branches and staff from door to door electrical business is to provide opportunity for direct access to the ultimate consumer product.

The merchants have the opportunity to deal with all customers / deals with product and offer demonstrations of the effectiveness of the product.

In addition, once the sale is made, a clear opportunity for feedback, positive or negative, is in place through the sale of branches.

Electrolux and should not exercise its various advantages over major competitors in the personal service. The customer complaint database is another good example of customer service. Adding free line encourages customer feedback and improving personal contact. Management focus of the database history is an invaluable tool for product quality concerns. This information should be analyzed



thoroughly and passed through the organization of key personnel. Communication barriers between multi-national sales force and production slowly descended. Visits by sales managers of manufacturing facilities provide many surprising questions that would never be discovered. Unfiltered information is always better when possible. Electrolux to improve communication by connecting pin staff, providing a steady source of such information. The sales branch visits by the production staff is also favorable, but all employees should be given the opportunity to participate. Internal customers of the organization are inter-departmental, subject to all the communication barriers that are in place. Communication barriers are composed of bureaucratic procedures that overcome up and down the chain of command. Removing these barriers will be the revisal of the senior management of infrastructure and support cross-functional teams.

V. Conclusion

A. TQM and Electrolux

The successful implementation of TQM program at Electrolux is recommended. Electrolux does not have to continue to rely on it's "Quality of pain" philosophy. The cost of poor quality is just one of the reasons for implementing a company wide program: employee involvement, training in quality tools and use them to improve processes, and an obsession for customer satisfaction - both internal and external. Having recently entered the competitive retail market, Electrolux must incorporate competitive strategy to ensure success in this market. The inclusion of TQM will be a great foundation and support for such a strategy. There are no standardized methods for implementing TQM. Each organization must tailor its approach to exploit its unique strengths and concentrate on their particular weaknesses.

The first key to a successful transition to TQM is a management commitment. Without top management commitment and involvement, TQM initiatives are designed for failure. A high level manager, the ideal CEO, the organization must become "TQM evangelist." He or she must be the central point that provides a broad perspective and vision improvement activities, and must provide incentives, recognition and rewards for individual and team efforts [26]. Once management is committed and actively involved in TQM transition plan of attack can be formulated. This plan will include training schedules, growing company culture, defektotna communication barriers, employee involvement, identification of quality measures, and others. This plan must be formulated with long-term perspective, with the understanding that the results will take some time to appear. The quality training given workforce is a critical variable in the success or failure of programs TQM / SPC. While many companies make large investments in quality training, only between a quarter and a third of them are able to significantly reduce the cost of nonconformance. The reason for the large number of errors that made the initial commitment to quality and TQM / SPC training, but a bridge between the classroom and functional area is never completed. As a result, provided excitement, enthusiasm and salary turned into failure, disappointment and bitterness. Another failure mode is that training in the tools and techniques of TQM / SPC is provided for the workers, but management is not exposed to the same training to understand. The end result of these two scenarios is the emergence of mascarade TQM / SPC. There are control charts in place, but most of the workers fail to internalize the value of TQM / SPC, ignoring the process of insight provided by the control charts, and in some cases, taking a pro forma approach to data collection, providing leadership wants numbers [27].

VI. Recommendations

A. Summary of activities

The following list is a summary of specific actions needed for appliances for successful implementation of TQM:

- 1) carry out internal and external assessment of the current situation. An external consultant with experience in TQM would be ideal instigator of this assessment.
- 2) Purchase of training for top management TQM. Form Steering Committees for TQM implementation.
- 3) issue a statement of the business policy of TQM. The policy should make it clear that commitment is real.
- 4) to make quality the first item on the agenda of management staff meetings. Reports on quality improvement process, quality and cost of compliance should be brought to the meeting.
- 5) Form Quality Council [30]. Training for this team TQM / SPC methods is necessary. This team should be composed of individuals who can clear roadblocks for those who want to improve. Team members also need to represent all functions of operation and they must have the same educational base.



President of the team must be someone in close contact with the CEO. It should also be the coordinator of an effort lead by making things happen. The primary responsibility of this council will be to guide the implementation process and become in-house TQM / SPC facilitators.

- 6) Remove all negative symbols are identified in the self-assessment process,
- 7) implementation of the proposed system employees Initial emphasis should be placed on the quantity of proposals. All proposals must be immediately acted on, and those approved carried out.
- 8) Develop a reward system that recognizes the contributions of quality improvement. Recognition should be personal and honest.
- 9) Establish measures of poor quality of the organization, implementation of a system for monitoring of these measures, and display the results visible. Measures should be in every office.
- 10) nurture and develop supplier relationships. Entrust your plans to use only suppliers in the future.

B. Self Assessment (Action 1)

The first step in implementing the TQM program is self-organization. A Board should be gathered to make an assessment of where the company is now before the change. This assessment will focus on four areas:

1) Develop a customer satisfaction profile

2) perform quality assurance

Review of the functional areas

3) Determine the utilization of resources, and

4) to assess Leadership and planning [29].

The traditional role of customer service function is simply to react: respond to customer questions, complaints box and account arrangements. This role is offering customer service, but customer satisfaction. To assess the current status of customer service operations, internal and external measures can be used to develop a composite customer satisfaction profile. This account will enumerate organization customer service strengths and weaknesses, and suggest actions to capitalize on the former and removing them.

Internal evaluation focuses on the twin goals: "Do it right the first time," and if that fails, "Providing customer service that satisfies." Qualitative approach can be used to evaluate the effectiveness of the various internal processes used to handle customer interactions. The external evaluation makes use of external measures to assess the condition of the firm's customer service operations. Quantitative approach determines the current state of customer satisfaction, from the user point of view. The measures include: the nature and extent of customer problems, customer complaint behavior and size of unarticulated dissatisfaction, customer expectations and how well they are met, customer satisfaction levels segmented by experience and problem resolution. There is a customer complaint database used by Electrolux. Many of the answers to these questions are contained in this database. Both qualitative and quantitative findings can be combined to determine customer satisfaction the main issues facing the company.

The second area to be assessed is a guarantee of quality. The quality is the product of all elements of business, Self-portrait should contain all of the major functional areas of the company. These areas include manufacturing, accounting, engineering, sales, purchasing and distribution. The following issues should be studied: how products and services are defined and introduced to meet customer requirements and processes for producing these products and services, such as manufacturing processes are controlled, optimized, and maintained as quality internal support functions and business processes is assured, as quality of materials, components, products and services purchased from or provided by other businesses is assured, as the company product and quality of services compare with the industry average.

The third area to be evaluated is the level of resource utilization. TQM places a premium on maximizing employee involvement and human resource utilization and power. Resource use image should refer to the following key questions:

funds for all employees to contribute to quality improvement, as the company encourages employee involvement; quality of types of education and training received by employees, as the company recognizes employees for contributions to quality improvement, as the company health and safety employees, provides comfort and physical security support and maintain a working environment.

Fourth, and last area to be assessed is the leadership and planning. TQM requires a change from the traditional approach to management. Image management and planning should be developed to evaluate the following: the leadership of senior management, personal involvement and visibility in the development and maintenance environment for quality excellence, quality values of the company as they are projected in a consistent manner, and as "ownership" values throughout the company are achieved and reinforced, as the company integrates quality values into day- to-day management of operations, as a



senior management creates and maintains close cooperation across functional and departmental lines in different locations to achieve quality goals, as the company uses its information systems in management, planning and evaluation of quality, and it ensures that key information is accurate, timely and available, how data is analyzed for the timely identification of problems and is used for prevention, as the overall planning process for the company's short and long term quality improvement will result in its retention or attainment of quality leadership, as the company chooses quality-related data for competitive comparison and analysis and use to plan for quality. Once these four areas are defined, management will have a better idea of what particular strengths of the organization, and what weaknesses may be removed. These areas are the baseline of what to develop realistic strategies to address the root causes of problems, improve processes and remove barriers to better corporate service. Plan for six months to a year for this evaluation.

B. Management responsibilities (Options 2,3,4)

Before the implementation of the program TQM, senior management must be asked whether or not they are willing to put quality issues at the top of every agenda. Directors must be willing to attend the necessary courses to learn the TQM concepts and skills. In addition, they must be prepared to practice TQM in their jobs. If TQM is to become a way of life in the organization, there should be changes in the work environment - in the way success is measured in the way people are rewarded. One method of introduction of quality in corporate mindset is to include as a factor in the strategic planning and competitive analysis process [28]. Commitment to quality must be translated into practical actions by management. Three steering committees should be formed to oversee the TQM objectives of each building: Bristol, Piney Flats and Lawrence.

The Bristol Board of Directors shall consist of the following persons:
Director of Quality,
Head of production
Production Engineering,
manager of production engineering,
quality manager
Control, and the director of human resources.

Business Object Management Board should consist of those persons:

general Manager
Director of Quality
Manager of Production,
Manager of Human Resources,
Manager of Quality Control,
Production Academy.
finally, the
Steering Committee Palenzo Holding will consist of:
general Manager
Director of Quality,
Finance Manager
Manager of Production,
Manager of the Academy
Rakovoditel human rights
Resources and director of quality control.

D. training (Action 5)

A quality council should be formed consisting of the Electrolux these articles:
CEO,
Vice President for Operations,
Vice President of the Academy
Vice President for Human Resources
Vice President Marketing
Vice President for Sales and
Director of Quality (also acting as coordinator).



The STAT-academia-associative transformation Transition Academy in Bitola all the following training programs for corporations interested in the program implementation. It is recommended that the organization purchase a video tape material also provided by (STAT-A)-matrix, to supplement in-house training in the future. To begin the training program, executive management is an orientation of philosophy TQM, including in-depth exploration of what is TQM, the benefits of TQM implementation, barriers to success, and use of tools TQM / SPC. Critical components of this training role and responsibilities of executive management requires long-term investment, strategic and operational planning, and the difference between management commitment or approval of TQM. Exposure during this training should be between eight and twenty-one hours. The next step in the training program will train mid-level managers and supervisors. Their training should be similar to the executive management training, but with less emphasis on strategic planning and process macromanagement TQM. More time should be spent on tools and techniques of TQM / SPC, with particular attention given to environmental and behavioral activities that facilitate TQM / SPC. This phase should be completed with 14-21 hours of training. The third step of training, technical / professional staff should be given training in problem-solving skills along with the quantitative tools and techniques - Pareto charts, frequency distributions, histograms, sampling plans, and control chart construction and interpretation. This must be supported by a comprehensive review of the philosophy of TQM. This phase will also take between fourteen and twenty-one hours. The fourth step of the training is the most extensive so far, training in-house TQM / SPC facilitators and trainers. This training includes a solid grounding in philosophy TQM, SPC use of all tools, problem solving, group leadership and communication skills. The training time for this phase will be 70-5 to one hundred hours. This group will then: ensure TQM / SPC training of workers (eight to sixteen hours) serve as facilitators of process improvement teams to ensure teams function effectively and use of TQM / SPC tools and techniques properly, serves as a permanent resource for departments and individuals who use TQM / SPC, provide refresher TQM / SPC training to individuals and teams, train new employees.

After the initial training phase, continuous process of education should be put in place. Board composed of cross-section of employees at various levels to determine the course topics. Course topics should include a balance between theoretical and practical content. Examples of topics include: introduction to Deming 14 points, practical exercises using SPC tools, customer use / pleasure grounds, "In Search of Excellence," Customer Service / satisfaction in terms of internal customers, TQM columnist, telephone techniques, group problem solving, and continuous quality improvement. The barometer for the success of the training effort is whether employees are using the TQM tools and techniques in process improvement teams and how they perform their duties. Formal follow-up evaluation should be developed and executed about sixty days, six months and one year after initial training.

E. Management action (Actions 6,7,8,9,10)

Once the assessment is made, senior management must take more concrete actions for successful implementation of TQM program. The responsibilities of senior management include: provision of adequate organizational structure, ensuring appropriate systems are in place, providing vision / strategic direction, ensuring the policies / procedures help (not hinder) the operation of the organization, and tapping the resources represented by employees . TQM is only effective when all activities and personnel in the organization are fully integrated into the TQM implementation. Traditionally, vertically integrated organizations are connecting all levels of management hierarchy to provide direction and feedback reporting. TQM requires a new, more complete understanding of how organizations work. Goods and services produced by the interaction of many departments together in an integrated process.

These processes result from interactions that occur between horizontal organizational functions. The organizational structure should be examined by the company directors, and decisions will need to make any restructuring that may need to take place. A systems view of the organization is required for adoption of TQM concepts. To improve communications structure should be as "flat" as possible. Management is also responsible for ensuring adequate systems are in place. TQM systems are suitable for just in time inventory control, statistical process control and computer integrated manufacturing. Electrolux has all of these systems in place. The self-assessment should indicate any deficiencies that exist in the system. The organization requires a vision or strategic direction, to maintain consistency of purpose. Management must provide this direction. Management must be consistent in setting organizational goals and objectives. Consulting these goals throughout the organization will produce a synergistic team spirit and output. Management is in control of policies and procedures governing the activities of employees within the organization. A careful analysis of these systems must be done. Policies and procedures that are counterproductive to the system must be removed and replaced with constructive ones. Tapping employee resources will require the support infrastructure for communication. A company can not expect



employees to actively participate in decision making, if necessary information is unavailable. Management must break communication barriers that exist in the company, and build infrastructure that is based on employee involvement. Managing Network survey completed in

Chapter II was helpful in identifying the current state of organizational culture in Electrolux. The results show an organizational style that inhibit employee involvement. How to manage change its policies and procedures, the culture of the organization will be more supportive of employee involvement. With this change, the need for revolution TQM champions will appear and the implementation of TQM will be accelerated.

VII. IMPLEMENTATION

"That's how Boll weevil, not a bulldozer, that leads to the best servicing [31]

The transformation of the quality organization is complex, difficult undertaking. "It has" suddenly tempting, but not very practical. Authorities warn that the distinctive quality gains often up to five years of implementation naTQM surface [32]. Electrolux does not need to "re-invent the wheel" In dealing with TQM implementation. Many organizations, such as Milliken, Tennant, and IBM, have implemented TQM successfully. Although all TQM programs are different, studying the history of these systems will be useful. The natural progression of TQM implementation in these companies are very similar.

The progression is:

- 1) quality within the natural work group;
- 2) quality, together with suppliers;
- 3) quality in the area of sales;
- 4) improving the quality preukros-functional teams and systems to improve and finally
- 5) change of emphasis on customer [33].

Following this progression of the first steps in implementing

(Current to two years) should be: assessing the current situation;

Press the implementation of TQM, continuous training employees



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