

QUALITY MANAGEMENT SYSTEM IN SERVICE ACTIVITIES OF AUTOMOTIVE INDUSTRY

Jaroslav JAMBOR^{1,*}, Jozef MAJERIK²

¹⁾ PhD, Eng, Lecturer, Department of Management, College of Management in Trenčín, Slovakia

²⁾ PhD, Eng, Univ. Lecturer, Special subject department, Dubnica Institute of Technology, Dubnica nad Vahom, Slovakia

Abstract: *The authors deal with the analysis of providing services by means of service points for various car makes. The service points for various car makes have to comply with the criteria of the ISO 9001:2008 standard and with special requests of producers each car make. This should lead to a higher competitiveness among different service points of different car makes. As a result, the customer should be satisfied with provided services. Quality Management System have implemented in dealers of SEAT cars from 2004. All company Contract Partners – that are Service Outlets with a Service Partner contract or with a Service Center contract – are obliged to introduce and maintain the SEAT Service Quality Management System (SSQMS).*

Key words: *quality management system, production process, customer, service, automotive industry.*

1. INTRODUCTION

One of the management strategies is a strategy of continuous improvement of quality production through the implementation of quality management system. The organization shall Establish, document, implement and maintain a quality management system and continually improve its effectiveness in accordance with the requirements of International Standard.

The organization shall:

- a. identify the processes and application throughout the organization,
- b. Determine the sequence and interaction of these processes,
- c. Determine criteria and methods needed to Ensure that both the operation and control of these processes are effective,
- d. Ensure availability of the resources and information to support the operation and monitoring of these processes,
- e. monitor, measure and analyze these processes,
- f. implement actions necessary to achieve planned results and continual improvement of these processes.

These processes shall be managed by the organization in accordance with the requirements of this International Standard. Where an organization chooses to outsource any process that affects product conformity with requirements, Ensure the organization shall control over such processes. Control of Outsourced such processes shall be identified within the quality management system [5].

This paper is the desirability of introducing a system of quality management. This is documented in the

analysis and results for a particular sample car dealer network SEAT brand for four years of the existence of the system.

2. QUALITY MANAGEMENT PRINCIPLES

2.1. Quality management principles in SEAT dealers

Eight management principles have been identified that can be used by top management of SEAT import in order to lead the SEAT dealers towards improved performance:

- customer focus,
- leadership,
- involvement of people,
- process approach,
- system approach to management,
- continual improvement,
- factual approach to decision making,
- mutually beneficial supplier relationship [5].

Improving product quality then affects not only the production processes, but also post-production activities such as selling and servicing vehicles. The new EU regulation on the common exemptions (BER, Block Exemption Regulation) and strategic considerations developed in the company SEAT has resulted in the implementation of new quality management system on the market service (after sales) services (Seat Service Quality Management System, SSQMS). In this system, they also include qualitative criteria for partners in SEAT-sales business. In practice this means that these quality criteria are required to comply with all authorized service automotive providers.

These criteria are also minimum standards to be met by any new candidate (applicant is a contract service partner SEAT) having the objective of integration into the automotive network of authorized partners. Compliance with the requirements of the automobile dealer

* Jaroslav Jambor: Bezrucova 64, 911 01 Trenčín,
Tel.: 00421908728229;
Fax: 00421 (0) 32 6529 337;
E-mail addresses: jambor.jaroslav@gmail.com (J. Jambor),
jozefmajerik@yahoo.com (J. Majerik)

and service ensure continuous improvement of automobile dealers, thereby ensuring a better position on the sales market. This system was put into operation in May 2004 for the Slovak Republic and Czech Republic.

2.2. The quality criteria in the car dealers

The quality criteria defined in the SSQMS include requirements for two areas:

- a. SEAT Service Standards and Norms for Genuine Parts SEAT.
- b. Criteria for ISO 9001.

To measure the efficiency and effectiveness of the implemented quality management system called SSQMS were between 2004 and 2008 successfully used for audits by third parties (external audits SSQMS) through certification company TÜV SÜD Automotive GmbH, Munich. This paper is the desirability of introducing a system of quality management. This is documented in the analysis and results for a particular sample car dealer network SEAT brand for four years of the existence of the system.

One of the management strategies for business success in the market is a strategy of continuous improvement of production quality through the implementation of quality management and continuous improvement. Improving product quality then affects not only the production processes, but also post-production activities such as selling and servicing vehicles. The new EU regulation is on the common exemptions (BER, Block Exemption Regulation).

Strategic considerations made in the company SEAT has resulted in the implementation of new quality management system on the market service (after sales) services (system Service Quality Management System SEAT, SSQMS). In this system, they also include qualitative criteria for partners in SEAT-sales business. In practice this means that these quality criteria are required to comply with all authorized service providers SEAT. These criteria are also minimum standards to be met by any new candidate (applicant is a contract service partner SEAT) having the objective of integration into the SEAT network of authorized partners.

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3. CONDUCTS AUDITS SSQMS

Implementation of the standards shall be verified annually SSQMS audit. To standardize SSQMS audits and to ensure objectivity and unlimited non-discriminatory treatment to all partners SEAT (and all applicants for the

contract service partner SEAT), the manufacturer decided to leave the implementation of audit procedures independent service provider. The selected company is TÜV SÜD Automotive GmbH, Munich. The audit carried out by three auditors for the Slovak Republic and the Czech Republic. The advantage was that it came from Slovakia, and audits are carried out in Slovak or Czech language. It was dismantled language barrier between the auditors and verification service partners SEAT.

Previously, auditors passed the selection procedure in order to represent the company TÜV SÜD Automotive GmbH Munich. Auditors training course SSQMS standards and testing took place in the English language in two phases. Initial training was carried out in IVG Prague s.r.o. and other training took place in the parent company in Germany.

Audit activities and the sequence of steps carried out in accordance with ISO 19011. After a successful audit service partner obtained the certificate of QMS (Quality Management System) according to ISO 9001 and certified as required by the manufacturer, so called SSQMS certificate. SSQMS main tool was a checklist of questions. This list contained all the standards for service partner SEAT and work to simplify these standards as defined by issues.

The checklist is divided into individual processes that are defined by an authorized service center for SEAT and is divided into the following five areas:

- facilities,
- management, organization, processes and personnel,
- customer contact area,
- spare parts,
- workshop (see on Fig. 1).

This division greatly facilitates the work of service, particularly in introducing SSQMS in practice and in defining the various remedial measures in improving quality. A checklist of questions is also a self-assessment tool for our service partners, as it will allow any time to check compliance with the requirements of quality management system.

SSQMS system but serves only check compliance with prescribed standards, which are given by the manufacturer. It is intended to improve the quality of service provision and therefore are also part SSQMS Phantom tests (tests of quality), which are carried out in individual service partners. As mentioned above from the view of these tests are performed by an independent service pro-



Fig. 1. Mechanical and electrical workshop [1].

vider – TÜV SÜD Automotive GmbH. It also contains a checklist of criteria (questions) are not defined as a manufacturer of quality (standards), that service partner in the audit does not meet these criteria. These criteria call or optional recommended. Failure criteria, optional service partner partially lost competitive advantage in servicing the market [1].

4. CHECKLIST OF AUDIT

All SEAT Contracts Partners have to use the International SSQMS Evaluation Guide. The checklist is the main element of the SSQMS:

- SEAT requirements (Contract and Standards).
In this group there are:
 - I) Mandatory criteria for Service Center and Service Partner.
 - II) Mandatory criteria for Service Center but complementary for Service Partner.
 - III) Complementary criteria for Service Center and Service Partner.
 - IV) Mandatory for dealer (*in separate file*).

- ISO 9001:2000 requirements:
Defining actions for not completely fulfilled criteria
Non-conformities:
For criteria written in bold font with 0 points
Recommendations:
For criteria written in bold font with half points, non-bold criteria either with half or with 0 points and for any other improvement/recommendation the auditor consider.
Requirement for SEAT Service Contracts
SEAT Service Center:

The Service Center has to reach more than 0 points of Service Center standards (I, II). Additionally, the sum of all points has to reach a minimum of 1200 points (sum of criteria I, II, III).

SEAT Service Partner:

Service Partners has to reach more than 0 points of the Service Partner standards (I). Additionally, the sum of all points has to reach a minimum of 1 100 points (sum of criteria I, II, III).

All current Service Center/Partners or future applicants for a car Service contract must approve the first and following yearly audits of the SSQMS [1].

The SSQMS Evaluation Guide details the SSQMS Standards by:

- Explaining each standard (*Evaluation*).
- Giving further explanation for each standard (*Description*).
- Referring to specific master sheets in the Guide and other data sources (Besides the requirements defined by SEAT S.A., country’s specific requirements need to be taken in consideration).

The following overview (see on Fig. 2) explains how to understand the SSQMS Evaluation Guide:

Audits are divided into two types: Certification audit, Inspection audit (Surveillance audit). SSQMS main tool is a checklist of questions. This list contained all the standards for service partner for SEAT and simplification of work are defined by standards issues. This checklist is divided into two types: Certification audit, Inspection audit (Surveillance audit). SSQMS main tool is a checklist of questions. This list contained all the standards for

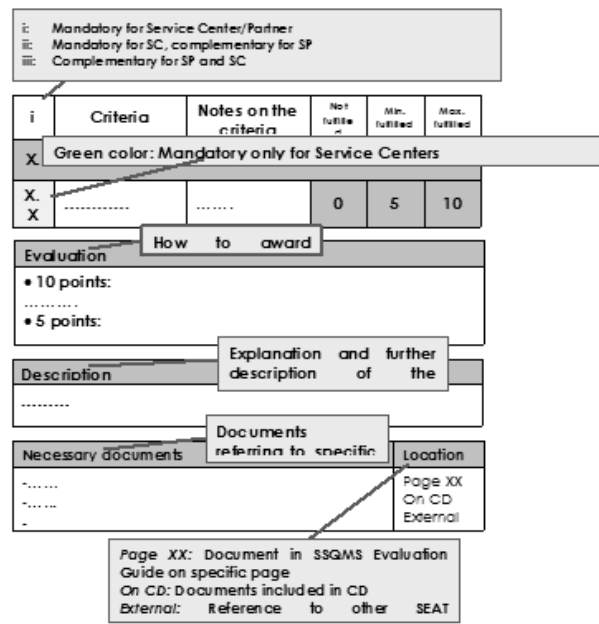


Fig. 2. Table of SSQMS Evaluation [1].

service partner for SEAT and simplification of work are defined by standards issues. This checklist is based on individual processes is called the checklist of audit. The entire certification process is included in the three-year cycle. At the beginning of the cycle is performed the certification audit, whose validity is one year. Within one year (+ / - 9 weeks) must be executed first control audit, whose validity is again one year. In the next year following the first audit of the control (+ / - 9 weeks) must be conducted the second inspection audit. After this second inspection audit is not yet determined the validity of the audit for one year and the year cycle is closed. After this three-year cycle must be carried out and the new certification audit, the new three-year cycle.

In the event of failure of an audit or inspection or certification, the trader has to take three months to remedy audit-post audit. If at this post audit failed and could not fulfill the conditions of certification, getting one more chance and the next three months must be made post audit second. In case of failure of the second post audit is terminated with the dealer service contract and cease to be authorized service SEAT. If you wanted to reconnect to a three-year certification cycle must have a compulsory two-year break [2].

5. COST AUDIT

Payment of the audit process is a specific price for a three-year audit period in the company TÜV SÜD Automotive GmbH. The resulting amount is divided into three partial payments. The advantage is that the service is charged at the same time a great partner funding, but the payment is divided into three installments, with no increase. Price for the audit includes the cost of an audit, the costs associated with the release of the ISO 9001 certificate issued by TÜV Management Service GmbH and the cost of the certificate SSQMS.

Workshop equipment and service literature: For each service partners require workshop equipment, including special equipment, special tools and service literature.

These obligations are included in SSQMS standards and are reviewed in the audit. The financial burden of this equipment is not a high amount.

Programs and Systems: SEAT SA Importer and develop programs and systems for communication with service partners to support the of all business activities. These programs and systems require standardized data availability within a service organization SEAT. Also in this case is controlled access to system audit program SSQMS.

6. PERFORMANCE EVALUATION AUDITS SSQMS AND RESULTS

The first positive results to improve the quality of production have already been two years since the operation SSQMS with service partners. Significant improvement in the quality of sales-service posts were seen after four SSQMS existence, which was documented in the results of the evaluation of customer satisfaction CSS (Customer Satisfaction Survey) and the results of the evaluation of satisfaction dealers DSS (Dealer Satisfaction Survey). CSS and DSS are directly linked and related analysis of customer satisfaction and dealers, as if it is satisfied then the ultimate customer satisfaction and dealer of vehicles of a particular brand because it has provided increased sales of its products.

The results show that customer satisfaction grow in the last analyzed in 2007 (results have been comprehensively evaluated in 2008 for the previous year 2007) of 2.7 percent compared with 2006. Overall, the reference years from 2004 to 2007 were to increase customer satisfaction by 12.8 percent, a substantial improvement in the quality of products. Reduction in customer complaints:

- Increase in the number of passage guides through service;
- Increase in the number of vehicle sales, or retaining the original volume of sales in the sharp increase in competition from other brands (Suzuki, Hyundai, Kia, etc.).
- Transparency of the accountability of staff engaged in various activities;
- The clarity of documentation and records the execution of all activities;

For those service partners, who have not been consistent in implementing SSQMS experienced the following shortcomings:

- Well-documented records of staff training;
- Differences in education planning staff to the standards and importer of SEAT;
- Lack of special tools, fixtures and equipment workshop;
- Not fully implemented activities related to convening and service actions;
- Lack of special preparation and calibration tools.

Some service partners have tried to introduce SSQMS only paper – certificate. They understand the system and there has been no improvement in them after four years. Losing customers and got into financial problems. Service partners who have implemented SSQMS not only for its issue, but also to streamline, simplify and streamline the system had the advantage of maintaining the

market share or market share, expansion of sales and service vehicles.

The primary task and the goal quality management is the determination and practical fulfillment of such specification of final quality values of products (services) that comply with the requirements specified for quality characteristics of final products and take into account the potential of processes capabilities of co-operating organizations [4].

7. CONCLUSIONS

Based on the experience of the audit shows that the quality management system is beneficial only if it is

- a. practical – it is tailored and appropriate for business managers achieve the intended results (all activities are facilitated, all materials and information can be found immediately, each employee knows what to do, how to do, is clearly defined competencies and interchangeable);
- b. economic – the ultimate aim of introducing a system of quality management and business is to achieve a positive profit (reduce costs, increase sales, increase profitability);
- c. documented – is dealt with quality policy, quality objectives, quality manual, card processes, documented procedures records (each action is recorded and described, signed by the responsible person making the actual performance);
- d. continuous improvement – the improvement of all activities and everything in the company can improve the ever-changing needs and customer requirements (continuous collection of views of customers regarding their satisfaction and ideas for process improvement).

To understand the management car dealers, and service partners, and the link between a set of facts, they will be motivated to implement quality management systems not only technically but also from the pragmatic.

In conclusion, SSQMS that is practical, economical, documented, continuous improvement and brings many advantages to a service partner who can correctly understand and implement [3].

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