ЗАЯВЛЕНИЕ НА МЕТОДИ И ТЕХНИКИ НА КАЧЕСТВОТО ПРИ НЕПРЕКЬСНАТИ ПОДОБРЕНИЯ И РАЗВИТИЕ НА ПРОЦЕСА В РАМКИТЕ НА МАКЕДОНСКИТЕ ТУРИСТИЧКИ ФИРМИ

PhD Elizabeta Mitreva[1], PhD Zlatko Jakovlev[2], MA Vesna Prodanoska[3], PhD Cane Koteski[4]

[1]Faculty of Technology, Probishitp, Goce Delcev University, Shtip, elizabeta.mitreva@ugd.edu.mk

[2]Faculty of Tourism and Business Logistics, Gevgelija, Goce Delcev University, Shtip

[3]Faculty of Philology, Shti,p Goce Delcev University, Shtip

[4]Faculty of Tourism and Business Logistics, Gevgelija, Goce Delcev University, Shtip

APPLICATION OF METHODS AND TECHNIQUES OF QUALITY IN THE CONTINUAL IMPROVEMENTS AND DEVELOPMENT OF THE PROCESS WITHIN THE MACEDONIAN BUSINESS TRAVEL COMPANIES

Abstract

Within the companies dealing with tourism business it is necessary to respect the customers' service standards. In order to provide a successful service it is necessary to apply ISO 9000, GMP and HACCAP standards through which the system for providing quality as well as the protection of the environment and respectability of the sturdy hygiene rules would be created.

But, in order to provide successful action at the tourist companies it is not only necessary to build a system that would provide the already planned service quality but it is significant to establish an efficient control of processes to gain the defined quality even while the least working costs.

The purpose of this paper is to present the importance into the establishment of quality of the tourist services in accordance with the customers' needs and desires for which the measures in practice appear as very rare.

This paper provides an analysis for application of the quality methods and techniques within Macedonian companies. As of the results that are received from the research, the need of methodology for statistical process control as a subsystem of TQM (Total Quality Management) system is being imposed.

For that purpose, during the projection of the standard operative procedures within tourist companies, it is necessary to implement a proper methodology for application of quality methods and techniques

through which the designed quality would be provided through an efficient control and least working costs.

The assets from the implementation of such methodology goes into:

- realization of the competitive services whose quality fulfills the demands of the users;
- reducing of costs;
- improvement of the capabilities and knowledge of the employees;
- ability to transfer competences and experience of the cooperatives/ delivers of the quality tools in the application;
- increase of the process efficiency.

Keywords: system for quality providing, efficient control, methodology, quality methods and techniques, TQM system, least working costs.

INTRODUCTION

During designing the strategy development within a tourist company, the starting base is the contentment of the clients' demands, employees, achieving the planned profit and optimization of working costs [1]. Global market imposes sturdy rules especially regarding quality. Through designing of the quality system within hospitality, the management needs to consider the teamwork into the realization of the standard operative procedures, apply the quality methods and techniques for flawless performance and use all the disposable resources in the company in order to achieve the defined quality service with least costs.

WHAT'S THE ROLE OF THE QUALITY METHODS AND TECHNIQUES IN THE IMPROVEMENT OF THE BUSINESS PROCESSES IN TOURIST COMPANIES

The quality methods and techniques are instruments for providing activities in order to achieve a service quality improvement and represent an integral part of the quality management according a defined policy, aims and responsibilities of the company as well as creating comparative advantages on the market. As with their usage an efficient control of the processes could be established, by achieving the already defined service quality through least working expenses.

In order to accomplish a business success and contentment of the users, employees and the rest of the interested parties, the managers ought

to choose a methodology that is supported by different methods and techniques such as:

- improvement methods – self - assessment, Benchmarking, Brainstorming, Six sigma…..
- diagrams - Flowchart, GANT, Ishikawa...
- statistical methods – SPC, SQC, ABC, FMEA, QFD, SWOT...

In order to get a total overall effect of the quality methods and techniques it is necessary to make a right choice and mutual coordination.

Quality improvement methods are: concepts, techniques, methods, studies, means and all of the efforts that are directed towards improvement of quality (Pareto diagram, regressive analysis, control cards, methods of causes and consequences, study for preciseness, punctuality and stability of process), that are used into the quality system in terms of the activities for quality improvement as an integral part of the quality management towards a defined policy, aims and responsibilities of the company.

The role and the significance of the quality methods and techniques and the activities for improvement of quality are emphasized with the ISO 9004-4 standard with a special attention that the implementation of any quality method would give a certain improvement of quality.

According the analysis that has been made to some companies in Great Britain [2] leads to a conclusion that most of the reasons that the companies do not use quality methods and techniques are the ignorance and lack of experience. But, the most common problem is the manner of their defining and their adequate implementation.

According Stoilkovik et al [3] the advantage of those companies that implement quality methods and techniques from those that do not implement them could be seen into the following:

- *raising the level of quality to all business processes of the company;*
- *reduction to all types of costs;*
- *reducing the price of the services;*
- *creating a confidence among users;*
- *rise of the competences among the employees.*

According to those authors, with the usage of the quality methods and techniques the increase of the motivation, productivity and expansion on the market could be achieved.

Jayaram at al [4] have done a research in Brocka and Brocka with about 50 quality methods and techniques and gave a proposal for

applying in 26 of them. Under relevant is considered their availability to literature. They list the attitudes of Modaress and Ansari derived according the empirical study for error causers, negligence and defects in the American companies so the usage of the methods and techniques of quality have set as a necessity to every business process in the quality system. Certainly, there are differences in the choice of them depending of the system of the enterprise.

Hence, the question is raised: what is the condition of Macedonian hospitality companies regarding the usage of the quality methods and techniques and how useful they are towards the promotion of the business processes that would lead to an outcome and increase of the users' contentment.

APPLICATION OF QUALITY METHODS AND TECHNIQUES WITHIN MACEDONIAN TOURIST COMPANIES

There has been an analysis done among Macedonian companies [5] regarding the quality methods and techniques through a questionnaire and a detailed analysis of the condition and the results received has been statistically processed. In order to identify which methods and techniques are used among those companies the question arises: ***how do they measure the quality of their services?***

As of the research here are the received data:

- 37,5% of them perform the measuring through *the service that deals with measuring, examining and assessing the service quality;*
- 25% of them perform it through *anonymous questionnaire for consumers* that evaluate the quality;
- 15,6% of them perform it through the *realized profit;*
- 12,5% of them do it *through comparison with other companies from same branch,* and
- 9,4% of them perform it otherwise (*direct contacts with consumers, free hotlines etc).*

In order to get an effect from the implementation of the quality methods and techniques, it is necessary to do the right choice and have a mutual coordination. Within the choice and the implementation of those, there are plenty of factors of an organizational and technical character, and the application and the choice depend from the designing i.e. the organizational structuring of the quality system.

In order to see what kind of an effect do the companies get by the implementation of those methods and techniques, the question arises: ***how do the companies find out that their services are not fulfilling the customers' expectations?***

As of the research, here is the data:

- 35,7% of the examined have claimed that the non-quality of their services is being revealed *by complaints and claims from the customers;*
- 23,8% of them receive is *by the accomplished sale (whether it is increased or not);*
- 16,7% of them through analysis from *a questionnaire among customers;*
- 14% of them from reports done at the service for quality control;
- 4,7% of them *from following the competition;*
- 4,7% of them claimed otherwise (*direct contacts with the customers* that help them to detect whether their services fulfill their expectations).

As from the inquiry it is clear that the companies do not receive the information on their non-quality services through the department for quality control but from the claims, complaints etc that appoints to that that the non-quality has passed each control instances and reached the customer. Those facts lead us to the fact that many companies deal with inefficient quality control department because the non-quality reaches the customer.

In order to discover whether Macedonian companies have established an efficient process control with the achievement of the defined quality with the least working costs, the question is raised: ***what kind of service quality control do they practice?***

Macedonian tourist companies have their quality set on an insufficient level because of the bad managing of their business processes, inefficient control and huge percentage of complaints that reaches out the limits.

Regarding this issue, here is the data:

- 43,1%, *conduct line control;*
- 31,1%, *have a final control;*
- 25,8% *u have only entering control* and

In none of the examined companies there is not integral control and self-control. The usage of the model for integral quality control does not require equipment investments, new technologies but only different approach towards business into task accomplishment, mutual communication, unity in the quality realization as well as correctness and a high level of responsibility towards the work and the customers.

The readiness of Macedonian companies is approximately to a sufficient level and somewhat fulfills the current demands of the consumers. Problems usually come from a badly organized business processes and the disability to reach the quested quality standards. In our country same technology provides lower business outcomes. The reasons

are not only the lack of modern technology but in weaker management capabilities, qualifications and accuracy of the employees, quality to lead business processes etc.

Mainly line they perform a line form of company leadership (in separate phases) that are well-known by their higher working costs.

As for the lack of statistical approach into the processing of data, the assessment of quality and the transfer of information, there are many issues by which tourist companies face before the domestic and foreign visitors. The usage of SPC (statistical process control) appears to a small number of companies. The manuals with the significance and the usage of SPC as well as the improvement of quality service needs to be set on a disposal to any of the following areas: marketing, sales, production, finance, human resources etc, but all of this seeks for a regular training and education for each employee.

The entire company needs to establish a station for identification and analyzing of the weak spots and analyze the costs for complaints, errors, and defects etc, i.e. the costs that appear because the quality demands are not fulfilled. The fail of practicing the SPC can be seen in the data received from the research: ***how much in percentage there are daily registered from claims and complaints in regard of the total daily service production?***

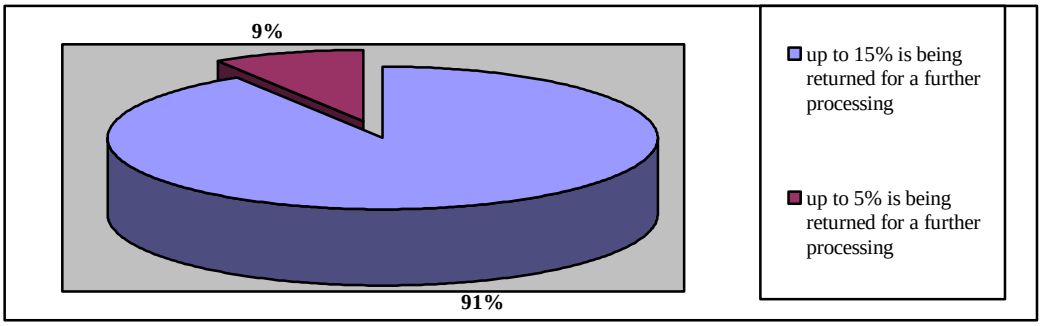

Fig.1*: Percentage of the daily production that is being returned for further processing*

- 91% of the companies *register 15% daily complaints regarding the total daily service;*
- 9% of them *register up to 5% of claims and complaints.*

Due to an optimally organized quality control there shouldn't be more that 3% of complaints and claims. The complaints, errors, defects etc should be reduced with a timely internal functional cooperation among the research, marketing, production and the information system. In case of including a new type of service, technology or working method it is necessary a full training program for each employee.

The Japanese used to "celebrate the error" because it presented "fuse" for detection of the weakness into the business process. After mending

the error by undertaking proper corrective measures, the causers of it occurrences are being eliminated. Therefore, there is a detailed analysis done to the business process in order to improve it. The error for the

Japanese is a cheap method for detection of the weakness and it enables an improvement of the process itself.

Apart from the Japanese, *here the errors are always being kept hidden out of fear. So, each one that discover an error ignores it and sends further along the business process*. This is an issue that out business culture deals with within the building of the creative climate in the company.

Et al [1-4] and by plenty of experiences from many world-known companies [6-9] it is certain that *the advantage of the usage of quality methods and techniques* as a main poll in the "house of quality" *would cause: raise of the quality level within each business process of the organization, reducing of all types of costs, reducing of the service price, creating a confidence among the customers and improvement of the employees competences. This is not the case with the Macedonian companies*. The experiences worldwide lead towards that with the implementation of the quality methods and techniques an *increased motivation of the employees; increased productivity and expansion on the market could be certainly achieved.*

During the designing of the standard operative procedures there must be a certain methodology implemented regarding the methods and techniques of statistical process control for flawless production and methodology for optimization of costs. This paper includes a proposal for methodology for statistical process control as a subsystem of TQM system that would assist the Macedonian managers into designing a solid quality system within hospitality sector.

As with this methodology there is a support that is being offered to the top management gained in order to present the outcomes from the implementation to a certain part of the methods and techniques to some Macedonian companies and involvement and dedication of each employee because nevertheless the executors of processes are the ones that improve them in general.

METHODOLOGY FOR STATISTIC PROCESS CONTROL

Those companies that have designed a well filed quality system that includes every business process within the company, own the base for successful implementation of SPC (statistic process control) and a teamwork that otherwise wouldn't be set in case of a not well-established quality system.

Defining the obligations and responsibilities of the employees through SOP (standard operative procedures) gives an opportunity to

each employee to participate in the problem solving that are visible after measuring certain traits with a successful usage for statistical process control (SPC).

Thus, the ability of the employees to solve problems increases. Each employee is trained to apply methods and techniques for flawless work performance which appears as essential for the companies because the everyday workload is full of issues for each one of us that needs to be immediately and effectively solved and with that the possibility for improvement of the company as a whole. The outcomes from the implementation into practice implies that the involvement of the quality system needs to help companies to overcome their issues in terms of defining, design, control and improvement of processes.

According the received results from the research [5] it is confirmed that Macedonian companies do not care about quality enough and there is no much of an attention put on the continuous education, bad or no investment into innovativeness, minor number of companies that have built the quality system, not enough concern towards the employees, consumers, deliverers and community, weak implementation of SPC and lastly the attitude that the teamwork is considered as regressive action.

In one word, the methodology for technical development is not common on this territory, ***i.e. the methodology for designing and implementation of EPC as well as the subsystem of TQM system are both lacking.***

The flow of building subsystem for statistical process control as a subsystem of the TQM system is done through the following activities:

(Plan) 1 step: Plan for designing and implementing a subsystem for statistical process control

2 step: Election of the team members

The team is responsible for designing and implementation of the subsystem for flawless work performance. Within the election of the team members, it is necessary to appoint professionals and competent individuals that with their experience, knowledge and skills would enable solid design of the subsystem for assessment of the stability and process capability in order to rule with them and be rationally used.

3 step: Training for all the team members for all the methods and techniques for flawless production

The methods and techniques for flawless work performance are used to all levels of management because of: the assessment of business results, optimization, assessment of stability and process ability, the discovering and precluding the work defects etc, therefore it follows that all of those levels needs to be set and trained in order to receive an efficient usage.

- **At a strategic level** it is necessary an education and training for implementation of the complex methods and techniques for quality

management such as: FMEA analysis, QFD method, electronic data management, internal audit, technical network planning, experiment planning, quality costs analysis etc.

- **At a tactical level** it is necessary to receive an education and training for implementation of the statistical methods for optimization of costs, methods for quality anticipation, methods for determination of the vision in a developing company, planned experiment etc.
- **At an operative level** it is necessary to implement an education and training for usage of statistical methods for assessment of the capability and stability of processes, correlation, regression, dispersion, control cards, dependence of the quality indicators from the factors for production etc.
- **At a routine level** it is necessary to implement an education and training of the employees for usage of the basic tools for quality providing such as: Pareto diagram, Ishikawa diagram, Poka - Yoka method, trend card and all the rest of the methods that could be easily understood and implemented by the employees during the work performance.

(Do) 4 step: Usage of different methods and techniques for the set tasks and the established aim of the company. The usage of the software packages as a fast and simple to be used is being emphasized even more lately.

There are different methods and techniques for flawless work performance that would be implemented:

- methods for detecting the spot where most of the claims (in percentage) are done;
- methods for detecting the causes for creating complaints;
- methods for following the process flow;
- methods for decision-making
- ммethods for assessing the stability and capability of the processes;
- of the dependence between the traits;
- methods for assessment of dispersion of traits etc.

Those methods and techniques for flawless work performance would enable accomplishment of the defined quality, to protect the consumers from bad services, and therefore would increase the competitiveness, profitability, quality improvement, reduction of complaints and working costs and will increase the contentment and participation of the employees within the decision-making.

6 step: Preparation of forms for SPC data collecting

The documents and other acts containing information on stability and capability of the processes could be written, transferred and taken by different means. Those forms should be:

- simple;
- easy for computer processing;
- understandable for the employees.

After the collection of the data, it is necessary to do a table grid with a previous settlement. The documentation from the statistical methods is valuable for forming a **quality files.**

7 step: Designing a subsystem for SPC within the company

Within the subsystem for SPC management in the company the following should me defined:

- what needs to be controlled;
- spot where the results would me gathered, filed anf analyzed;
- persons appointed to collects, filing and analyzing the results;
- mode of expressing results;
- trace of information;
- building and realization of checkup policy of the quality;
- preparing, operationalizing and accomplishing of the plan and program for quality check;
- determing and accomplishing the manner, procedure and means for quality control of the materials and products that go in and out of the company.

(Check)8 step: Checkup and evaluation of the effects from the implementation of SPC is in regard to:

- process study;
- analysis or processes, where with the help of the implementation of SPC methods and techniques for flawless production the stability of the processes is being assessed;
- quality process control;
- quality control for materials, items, subclips and clips of products.

(Act) 9 step: assessing of the necessity for a corrective measures in the designed subsystem of SPC

According to the checkup and the evaluation of the effects from the usage of SFC there are some corrective measures suggested in order to improve the subsystem and improvement of:

- norms;
- indicators;
- methods and instruments of quality control.

And the circle starts to spin again.

CONCLUSION

The assets from the proposed methodology for designing and implementing statistical process control:

- with the implementation of the statistical methods and techniques the claims, complaints etc are reducing and it is considered as a significant asset especially when an established quality with least costs of working is sought;
- with the implementation of the software packages the efficiency of the usage of the statistical methods and techniques is increased;
- through the analysis of quality costs the losses could be easily controlled and set down to minimal in terms of material and energy costs.

Besides the aforementioned it is expected to achieve other significant effects such as:

- involvement of each employee in the quality accomplishment;
- dedication of the employees towards quality improvement;
- total dedication of the top management towards the system according to TQM and its continuous improfement;
- ability to solve problems at all levels;
- small but significant improvements of processes and services;
- optimization of business processes;
- excluding of the responsibility for decision making to a lower level.

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