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Quality Management Systems as a Link between Management and Employees

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This paper analyzes interactions between two parties (management and employees) with regards to the question of how to successfully manage and implement a QMS. It also introduces practical possibilities for improving the employees' understanding of why a QMS must be applied and how management should behave to make it possible. The paper also introduces a third party role (a quality representative) who must carefully choose his actions and must, above all else, be aware of the importance of open communication channels among the first two parties. Data were obtained from a research study using a survey among employees of a Slovenian information and communication technology company over a two-year period. We found that communication between employees and management has significant importance on employee satisfaction. Therefore, communication is the essential element of successful and continuous improvement of the quality management system, in which management must be the first to show the awareness of the real purpose of the QMS, and must attract their employees' attention as well as acknowledge their expectations. However, it should be noted that this factor can be stronger in a high technology company with a higher level of employee education. Conclusions are offered to improve the relationship among all parties through an improved status of the quality representative position over employees, his formal direct access to the management and the right to exercise and manage internal auditing of the system. Nevertheless, informally his role is far greater and consists once again of the crucial element of successfully and continuously improving of the QMS: communication.

Keywords: quality; quality management system; leadership; employee satisfaction; quality management system representative

Introduction

In order for companies to compete effectively in the global business world, better business performance is needed. The importance of using quality management standards such as ISO 9000, therefore, cannot be ignored (Najmi & Kehoe, 2001; Zhang, 2000, Gotzamani et al., 2007; Magd, 2008). If the QMS is understood and implemented correctly, it can offer significant benefits for organizations (Sampaio et al., 2009).

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One positive aspect of the formalization of procedures, an aspect of a QMS that still prevails, is that it makes what is expected of workers very clear to them. The negative side is that formalization may simultaneously fail to motivate these workers to live up to the company's expectations, as embedded in the QMS (Turusbekova et al., 2007). Despite the inclusion of motivational and social elements in the QMS, employees do not always appreciate these systems and sometimes fail to comply with their rules. In the literature, many reasons are discussed that explain why this is so (Reason et al., 1998). Dahlgaard, Kristensen & Kanji (2002) also highlighted the importance of employee satisfaction and proposed a way in which satisfaction can be measured as well as how these measurements may be used as a tool for continuous improvements. Moreover, employee surveys, used effectively, can be catalysts for improving employee attitudes and producing organizational change (Saari & Judge, 2004).

The study presented in this paper focuses on satisfaction and attitude among employees with regards to the QMS. In this paper, the term QMS is used within the context of the ISO 9001. In order to successfully explain the lack of success in the operation of the QMS in the relationship between management and employees, we highlight two structured theses; based on them, we present possible reasons for the lack of success of the QMS.

- 1) The main element that determines the level of utility of the established QMS is top management and its attitude towards quality. However, in order to succeed, top management has to be able to recognize the employees as equal partners in maintaining the QMS, which can be measured with employee satisfaction – an indicator of the attitude that top management displays towards the QMS.
- 2) A representative of management or a QMS administrator can contribute to continuous improvement of the existing quality management system and significantly contribute to improved communication among top management and employees.

With regard to the theoretical starting points, we would like to show that managing a QMS is actually a type of management in which relations and relationships between the management, QMS administrator and process administrators (i.e. representatives from the Department for Quality) and employees within the company prevail. Employees of the company who have implemented and managed a QMS in accordance with the decision of management are brought to the fore. However, practice has shown that obtaining the certificate does not serve its own purpose; it merely sets the foundation for further development of the QMS. The employees must become aware of it when performing their work; if not, the QMS often serves its own purpose and becomes a burden to both management and employees. As Poksinska, Eklund & Dahlgard (2006) showed in their case studies, there are still many organizations that started their ISO certification merely as a response to the request of their major customers and thus overlook many opportunities for improvements that might be derived from QMS.

The main purpose of this paper is to discover where and who is the most responsible, who can contribute the most and which mistakes have to be avoided for the benefit of maintaining good relations, culture and manners of work, which guarantee successful monitoring of changes in customer demands and their fulfilment. In other words, by studying the relationship between the top management, the employees and the quality representative (i.e. a representative of top management in charge of quality who represents the link between top management and employees and could be considered as an essential element for maintaining and continuous improvement of the QMS), we can explain the reasons for the different levels of utility when managing the established quality management system.

Introduction and implementation of quality management system – relationship between management and employees

To achieve organizational performance through ISO 9000 implementation, organizations should fully understand their motivations in adopting ISO 9000 and establish implementation objectives and plans (Kim et al., 2011). However, it is clear that the commitment of top management is one of the most important and vital factors in quality management, as it is directly responsible for determining an appropriate vision, quality policy as well as the organization culture (Demirbag & Sahadev, 2008). Moreover, the impact of top management's commitment to the success of ISO 9001 implementation has been repeatedly documented in the literature (Sampaio et al., 2009; Yeung et al., 2003; Poksinska et al. 2002). The authors state that beside the involvement of top management, the involvement of all the employees in the organization is essential.

Nevertheless, employees at all levels in an organization should be involved in establishing, implementing and maintaining a documented ISO 9000-based quality management system. In fact, the ISO 9001 system imposes some reorganization of the company and encourages managers to involve employees in the decisions that affect them (Lambert & Ouedraogo, 2008).

However, once the implementation is completed and the QMS certification achieved, the risk of failure is very high. If this is the case, there has not been proper involvement from all parties considering the QMS (Prado et al., 2004).

In order to manage quality, it is important to know the relationship between management and employees within the company; it has to be mutual. This means that management must know how to motivate employees so that they become aware of the importance of their contribution to quality management. The employees are to accept

the offered stimulation, which would then (through the QMS) be reflected in the satisfaction of the customer.

A company can always improve its QMS, but only if it decides for a complete transformation and not just partial improvements (Krüger, 2001).

Weaknesses of management's attitude towards quality management system

Beer (2003) states that the introduction and implementation of a QMS is always conditioned by the readiness of management, who usually provide the initiative. Furthermore, he provides four pieces of advice which management should take into consideration when implementing a QMS:

- Management must establish an efficient dialogue following a top-down hierarchy, as well as horizontally between the business processes.
- Management must encourage employees to become aware of quality with their own initiative, improvements and adjustments.
- Management must ensure a business climate in which the employees can openly discuss the challenges of improving quality.
- Management must actively participate in the implementation of a team-based organization.

Beer (2003) also presented the obstacles that can, within the QMS, lead to a split between the goals of management and the actual direction of actions within the organization. The essence of the answers regarding these issues can thus be discovered in the dynamics of management's attitude towards quality (Figure 1).

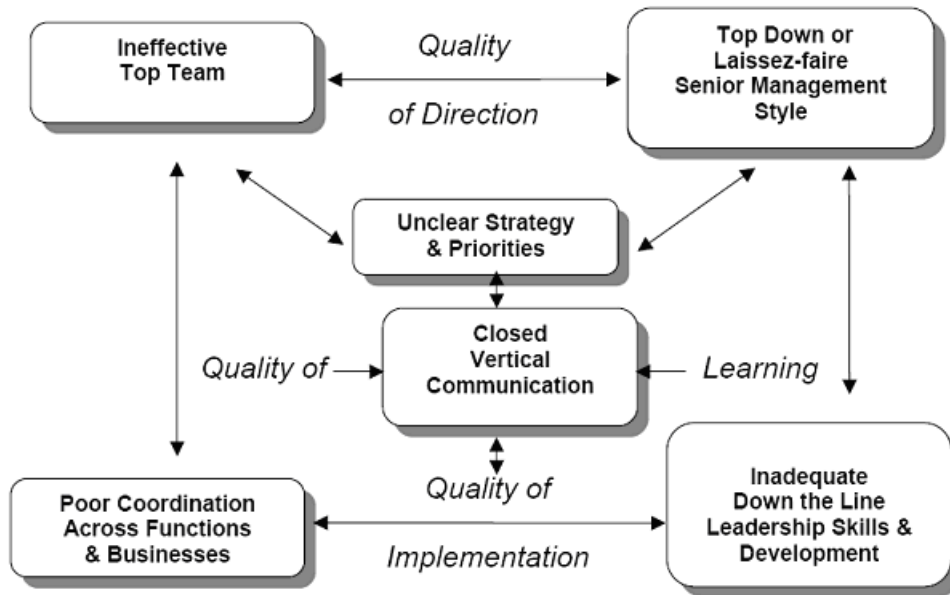


Figure 1. The dynamic of bad relations in QMS with regard to management (Beer, 2003)

Satisfaction of employees and managing quality

Quality also requires observing the employees and getting to know their knowledge, attitude to work and organization of company operations. This cannot be bought, but has to be created within the company; this is what the entire QMS is based on.

When employees have a better understanding of the standard, it can be easy for them to be motivated and involved in the organizational efforts (Park et al., 2007). Stimulating adherence to QMS can also be achieved by encouraging informal reflection on their own work, and fostering an atmosphere in which people feel free to discuss problems and (near) accidents (Turusbekova et al., 2007). Organizations can provide various communication channels to encourage employee communication and knowledge sharing (Balzarova et al., 2004). In order to enhance the commitment to quality, managers must convey their priorities and expectations to their employees with well-designed communication (Demirbag & Sahadev, 2008). In addition, more

attention has been paid to social issues, such as the empowerment of workers (Dewettinck & van Ameijde, 2011; Jackson, 2004).

Therefore, the notion that employees are the real source of an organization's competitive advantage reveals the importance of intangible organizational assets. As indicated by Carmeli and Tischler (2004), intangible organizational elements like managerial capabilities, human capital, internal auditing, labour relations, organizational culture, and perceived organizational reputation can each positively influence organizational financial performance. Likewise, Fulmer et al. (2003) found that positive employee relations were powerful predictors of financial performance.

Therefore, we can state that “a company can only be successful with successful employees.” The success of the employees – with the given technology and organization of work – depends on their qualifications (knowledge, skills and responsibilities) and motivation for work. Therefore, we can say that an employee is successful in performing his tasks when he can (qualifications) and will (motivation) perform them.

The quality representative – the link between management and employees

The tool that top management should use to establish and maintain an efficient QMS is the management review (ISO 9001:2000, item 5.6.); its task is to help remedy possible non-compliances and implement corrective measures, including communication with the employees. Although it is true that the management can establish a broader view of the situation with this review, based on which it can adopt development guidelines, in practice, the review is usually performed too seldom for management to be able to actively participate in the continuous improvement of the business processes. In this context, ISO 9001:2000, item 5.5.2 prescribes a quality

representative; this person is an extension of the top management for the operation of the QMS.

The quality representative is at the intersection of the information and processes of administrators managing their own fields, top management receiving reports on the situation and the necessary improvements, as well as employees receiving information in a top-down manner. With regard to the established organizational structure, the quality representative is a sort of a channel for vertical communication, who (in practice) has to deal with raising the awareness of management and employees regarding quality in general.

It is important that the representative is aware of how important it is for top management to enter into monitoring of the QMS and to define – in cooperation with the management – the culture of managing the QMS. In this manner, and because the representative is connected with the authority of the top management, it is important for the representative to attract the attention of top management and use their devotion to constantly improving the business process and to motivating employees. Once he has attracted the attention of the top management, the quality representative is well on his way to raising their awareness of quality. It is important to ensure the cooperation of the employees who will implement and improve the QMS. One of the ways for the administrator to do so is to include the satisfaction of employees in his communication with the management. As previously shown, this would substantially influence the managing of the QMS. In doing so, the traditional obstacles to communication between the management and the employees would be overcome.

It is sensible for the quality representative to implement a way of measuring the satisfaction of employees, thus establishing two-way communication.

What the quality representative usually cannot do is to delegate tasks to the employees within the business process; these tasks would include key elements of the QMS (reports on quality, improving own process, etc.). This is usually the greatest obstacle to the competences of the representative. A partial solution could be using elements of information standards, including implement regular risk assessments and their reduction into the communication between the management and the employees (within the whole business process).

Case study – employee satisfaction in Perftech, d.o.o. in Bled, Slovenia

Company profile

In its first phase, Perftech, d.o.o., from Bled, Slovenia, was a development-oriented company, developing its own business software for building integrated internet services *and integrated IT systems*. From the beginning, the employees set themselves a very clear objective: to enable their customers to build high quality, user-friendly and efficient information and communication solutions that would help them to achieve a competitive advantage on the market. Over the last 18 years, Perftech, d.o.o. has developed into a modern, well-organized company; it is regarded as one of the leading Slovenian IT companies. Their main product, Perftech.Largo ERP, is a software system for managing Enterprise Resource Planning.

The objective of implementing a QMS in the company was primarily to introduce a process approach towards the development, implementation and improvement in the efficiency of the work process. By meeting the demands of their customers, their satisfaction would increase (SIST ISO 9001:2000, 6). In its development of IT solutions, the company primarily depends on an integrated perception of the needs of the customer. However, shortly after certification, the

company was observing disturbances in customer relations, incorrect perceptions of customer needs and (as a result) lowered efficiency. In addition to product reorganization and considering the future business directions of the company, the scope of the organization indicated the need for an integrated, but more customer-oriented approach. This required a redefinition of business processes and different roles for the employees who performed them. In doing so, a need for faster and broader communication arose among the employees, as well as the question of how to create synergies that would be useful to the end user, the company itself and the entire organization. The question of employee satisfaction, therefore, became more prominent. After having raised the management's awareness regarding the QMS as a useful tool to manage and improve their resources, the situation substantially improved over the following year and the company continues to grow successfully.

By comparing the obtained results with the theoretical starting points of the previous chapters, we searched for an answer to the last statement, i.e. that employee satisfaction is an indicator of the management's attitude towards the quality management system.

Research methodology

Based on a case study of the employee satisfaction of Perftech, d.o.o., Bled, Slovenia, the research shows how satisfaction and relations between the employees can influence managing QMSs. Therefore, the study sought to evaluate employees' perceptions of job satisfaction and attitude among employee, to explain the lack of success in the operation of the QMS based on ISO 9001. Furthermore, this study is substantiated by introducing the quality representative as the link between management and employees which is essential in order to ensure successful implementation and maintenance of the QMS.

The questionnaire was designed in order to conduct an employee satisfaction survey. The full questionnaire is in the appendix. The survey was performed in May 2006 and December 2007, which enabled a comparison of the influence of development of QMS on the employees with regard to the preceding year. The survey and survey preparation by means of SPSS were based on a questionnaire that was sent anonymously to the employees in the company. The questionnaire consisted of:

- Dependent variable – General satisfaction:
- Five sets of questions related to:
 - Organizational climate (Set 1)
 - Communication in the company (Set 2)
 - Motivation of the employees (Set 3)
 - Conflicts in the company (Set 4)
 - Questions about the survey (Set 5)

The dependent variable – the question “Please, assess your general satisfaction with your employer, Perftech, d.o.o., Bled” – consists of a Likert scale from 1 to 7, in which 1 represents the most negative answer and 7 the most positive one. The dependent variable was measured on a scale from 1 to 7 primarily because of the scope of the respondents’ replies and achieving a wider spectre of possible interpretations; satisfaction is a variable related to subjective assessment.

Independent variables are the above-listed sets of independent variables that were measured with the same methodology, on a scale from 1 to 7. Descriptive statistics including frequency distributions, means and standard deviations are used to analyze the data. Furthermore, the correlation analysis (Pearson’s correlation coefficient) is used in order to measure the strength of the linear association between two variables, wherein the questions of individual sets were merged into a new variable and then compared with regard to the strength of influence on the dependent variable. New variables were calculated using averages of items pertaining to each individual set.

Analysis of the results

The analysis comprises the results obtained by surveying the employees in 2006 and 2007; it presents the most important influences on employee satisfaction in segments.

Table 1. The basic assessment of employee satisfaction in 2006 and 2007

		2006	2007
N	Valid	31	52
	Missing	5	5
Average		4.45	4.58
Standard deviation		0.995	0.611
Min.		3	1
Max.		6	6

The achieved average grade of satisfaction in Perftech, d.o.o. from Bled for 2006 is **4.45**. In accordance with the definition of employee satisfaction, we can classify this as below the acceptable level to meet our expectations (Table 1). The general employee satisfaction in 2007 is higher (**4.58**) and the standard deviation (0.6) is lower than in the previous year. Although we cannot say this result is good, as it is a social variable it is encouraging to see the trend improving (Table 2) and the standard deviation lowering. Please note that the replies from management were removed from the analysis.

Table 2. Replies regarding the general satisfaction of company employees in 2006 and 2007

Grade	2006		2007	
	rf (%)	crf (%)	rf (%)	crf (%)
1			1.9	1.9
2			1.9	3.8
3	22.6	22.6	7.7	11.5
4	22.6	45.2	25	36.5
5	41.9	87.1	51.9	88.5
6	12.9	100.0	11.5	100.0
Total	100.0		100.0	

rf = relative frequency, crf = cumulative relative frequency

The trend of distributions within the replies is growing, so we can say that only **11.5%** of the employees (crf for third class) are explicitly unsatisfied in 2007, which can be compared with 22.6% in 2006. We found that the employee satisfaction in 2006 was substantially correlated with the years of their employment, as the Pearson coefficient correlation of the relationship between the years of employment and employee satisfaction was negative – with the minimal level of significance of approximately 6% – with a correlation coefficient value of **-0.19**. It seems that the increase in years of employment could be related to the decrease in employee satisfaction; however, results did not support this at 5% level of significance.

In 2007, this indicator was positive, which is encouraging, showing that the employees were content with the changes. Although correlation is not strong ($r=0.261$) on the scale from **-1 to 1**, it is positive. The level of significance for this statement is close to **5% (6.7%)**. In this case, however, the significance level implies that the correlation reported may be due to chance in the form of random sampling error.

Analysis by sets

The averages of sets of questions serve to assess satisfaction and its influences in both the years (Table 3).

Table 3. The averages by sets of analysis in 2006 and 2007

	2006			2007		
	Average	Standard deviation	N (06)	Average	Standard deviation	N (07)
General satisfaction	4.45	0.995	31	4.58	0.3111	
Organizational climate	5.6796	1.08541	36	5.6763	0.98431	52
Communication	4.6194	0.67988	36	4.7654	0.64592	52
Motivation	4.0804	0.73601	36	4.0619	0.68791	52
Conflicts	5.2532	0.75142	36	5.2302	0.59981	52
Regarding the survey	4.6167	0.45638	36	4.6019	0.48608	52

The comparison of the averages of sets and the dependent variable “General satisfaction” shows improvement in general satisfaction (from 4.45 to 4.58) and a significantly lower standard deviation. Therefore, satisfaction improved, although the averages remained comparable by sets. The following more detailed analysis will find the actual reasons or, as the case may be, explain the strongest influences on the dependent variable.

In Table 4, the statistical correlation between an individual set with the variable “General satisfaction” of the employees in Perftech, d.o.o., Bled is shown, for the years 2006 and 2007. Statistically relevant data are marked with (**), and the level of significance for making a correlation between the variables is less than 5%.

Table 4. The correlation between sets and general employee satisfaction in the years 2006 and 2007

		Set 1	Set 2	Set 3	Set 4	Set 5
General satisfaction (2006)	Pearson Correlation	0.092	0.244(*)	0.491(**)	0.355	0.134
	Sig. (2-tailed)	0.622	0.007	0.005	0.050	0.471
	N	31	31	31	31	31
General satisfaction (2007)	Pearson Correlation	0.104	0.379(**)	0.583(**)	0.596(**)	-0.067
	Sig. (2-tailed)	0.463	0.006	0.000	0.008	0.637
	N	52	52	52	52	52

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

We see (level of significance <5%) that the general employee satisfaction was influenced by Set 2 – “Communication within the company,” wherein the correlation coefficient tends to show a moderate positive relationship ($r=0.244$, $p=0.007$) in 2006. The set “Motivation” is also important in the company, since it is positively correlated with the set “General satisfaction” ($r=0.491$, $p=0.005$).

In 2007, after a repeated measurement of the sets, the analysis showed that a statistically significant ($p < 0.01$) correlation occurred between the set “General satisfaction” and the sets “Communication in the company”, “Motivation of the

employees“ and “Conflicts in the company”. Compared with the results obtained in 2006, we can see that the linear relations between these sets and “General satisfaction” are stronger ($r = 0.379$, $p = 0.006$, $r = 0.583$, $p = 0.000$ and $r = 0.596$, $r = 0.008$, respectively).

Apart from the above-presented findings (Table 4), the results also revealed a positive correlation between the set “Motivation of the employees” and the set “Communication within the company” ($r=0.621$, $p=0.000$) as well as between the set “Motivation of the employees” and the set “Conflicts within the company” ($r=0.473$, $p=0.004$).

Organizational climate as perceived by the employees

Despite the fact that organizational climate is not significantly related to the general satisfaction, there is evidence to support positive relationships between a part of variables (level of knowledge and experience) included in this set and general satisfaction. The results suggest that increase in employee satisfaction tends to be related to increase in the levels of knowledge and experience. The correlation between general satisfaction and knowledge is 0.37 (level of significance $<5\%$) in a positive direction, whereas the importance of experiences seems even more important at 0.42 (level of significance $<5\%$). In general, this result suggests that the correlation coefficients show similar values in 2006 and 2007.

In addition to the relationship between the level of knowledge and general satisfaction, the results of frequency analysis show that in 2006 50% of the respondents are satisfied with their level of knowledge; employees seem to believe in the company and the ability to work successfully in Perftech. Furthermore, there is also strong support for this statement in 2007. Cumulatively, 59.6% either agree or strongly agree, which shows slight improvement throughout 2007.

Furthermore, the results for 2006 show that 22.2% of respondents agreed regarding the importance of gathering experiences and their wish to share their experiences. A slight decrease of the percentage was observed in 2007 (cumulative = 19.2%). Therefore, it is the responsibility of management to enable the gathering of experiences and knowledge in order to raise the satisfaction of employees, which confirms our previous findings.

Motivation

The strength of the correlation of motivation with employee satisfaction has been increasing; in 2006 it was 0.491, while in 2007 it was no less than 0.596 (Table 4). This suggests that the employees have become more aware of the importance of the results of their work, making them strive for both soft and hard rewards, and motivation. Generally speaking, the importance of motivation has strengthened. Analysing this segment, we can emphasize that the increase in employees' levels of competence tends to be associated with an increase in employee satisfaction.

Table 5. The relation between the level of competence, salary and general satisfaction in 2006 and 2007

		General satisfaction	
		2006	2007
Motivated by the level of competence	Pearson Correlation	0.227(**)	0.442(**)
	Sig. (2-tailed)	0.005	0.005
Motivated by salary	Pearson Correlation	0.112(*)	0.210(**)
	Sig. (2-tailed)	0.049	0.007
N		36	52

*Correlation is significant at the 0.05 level (two-tailed).

**Correlation is significant at the 0.01 level (two-tailed).

In relation to this, we can emphasize the correlation between salary, the level of competence and general satisfaction (Table 5). The level of competence is, in relation to general satisfaction, a substantially greater motivator ($r=0.442$, $p=0.005$)

than the salary. Further analysis showed a very weak or negligible correlation between the salary and the level of competence ($r=0.006$, $p=0.008$). The employees, therefore, wish for more competences, which shows their desire for promotion; a higher salary is merely a consequence of the latter. In comparison to 2006, the relations strengthened. The fact that salary is not the main motivator is shown by the attitude the employees have towards reduced salaries.

The results obtained in this part of the study suggest some differences between 2006 and 2007 as far as negative stimulation is concerned. The results of frequency analysis show that in 2006 the majority of respondents agreed or strongly agreed that the negative stimulation is an important factor of dissatisfaction (cumulative = 66.6%), which is mainly due to the fact that stimulation was not based on individual performance. In 2007, the situation improved, as more than 32.6% of the employees agreed with the policy of rewarding/sanctioning, which means that management would implement the policy on a more individual manner. Only 8.4% of employees agreed with this in 2006.

Communication within the company

The analysis of the results shows that trust in the management increased over the two-year period, which is positive, since trust represents the basis of transparent communication. Based on the frequency distribution, around 25% of the employees show weak trust into the management, while approximately the same percentage of employees show apathy regarding the issue (22.9% of the respondents expressed neutral opinion), while 51% of employees display agreement or strong agreement upon the trust in top management. In 2007, trust in management seems to be more evenly distributed, but 26.9% of the employees obviously continue distrust their management.

Furthermore, the results show that, in general, employees' attitudes seem to decline over the study period in terms of the perception of top management's trust in employees. Cumulatively, 50% either agree or strongly agree that top management trusts them (in 2006). In 2007, this percentage decreased by 17% in comparison with previous year.

The survey data show a tendency to moderate disagreement of employees concerning the top management's communication. The results show that there is a little support for the statement "the top management communicates with the employees in an appropriate manner". Cumulatively, 16.7% of employees slightly agree or moderately agreed with this statement in 2006, while in 2007 this value was 21.4%. A relatively high percentage of employees also expressed a neutral opinion in 2006 as well as in 2007 (38.9% and 34.6%, respectively). In 2007, the communication of top management with the employees appeared to be better, but there was still room for improvement.

Moreover, employees also expressed a disagreement with the level of communication between the top management and employees. Cumulatively, 48.6% of employees strongly disagreed or disagreed with the level of communication in 2006, while in 2007, disagreement seems to be even stronger (cumulative = 65.4%).

Discussion

The results of this study provide support to the theses presented in this paper in the sense that measures of employee satisfaction are important information in understanding the top management's attitude toward QMS, as well as supporting the positive argument for the introducing a third party role (the quality representative). Overall, the results are consistent with the literature stream suggesting that without management's involvement, it is also difficult to overcome the resistance to change,

which is a major barrier to successful organizational development intervention (Poksinska, Dahlgaard, & Antoni, 2002).

Based on the correlation analysis presented in Table 4, the sets on communication in the company and on motivation of the employees seem to have a significant and positive relationship with the general satisfaction. However, the findings do not indicate a positive relationship between organizational climate and general satisfaction. We strongly suggest taking care when drawing implications of this result. We believe that it will certainly contradict theoretical views if one simply concludes that organizations can ignore organizational climate and concentrate only on other aspects for pursuing employee satisfaction. Therefore, this insignificant relationship is of particular interest because a certain degree of support for this relationship has been identified in the literature. Many studies have shown that organizational climate is a major predictor of employee job satisfaction, and so climate can be seen as an important precursor to employee behaviour and job satisfaction (Clark, 2002). Moreover, increasing knowledge and gaining experience substantially contribute to company loyalty and, consequently, to employee satisfaction, because an individual feels useful and needed at his work place. Employees need to perceive that their organization values them by providing suitable work conditions that allow them to progress, both personally and professionally; they also need to feel satisfied and a sense of well-being with the activities performed (Martín-Cruz et al., 2009). A possible explanation for this insignificant relationship is that the relationship between organizational climate and general satisfaction may not take place as a simple linear relationship (used in this study); rather, it could work in more complex constructs, such as used in several studies (Patterson et al., 2005; Koene et al., 2002). Therefore, rather than measuring organizational climate at a more

general level, this study measured specific items related to the cooperation, learning, etc. (see Appendix for details). By analysing the organizational climate, one may find positive and significant relationship between general satisfaction and knowledge, as well as with experiences. Nonetheless, it is also important that employees are committed to learning, as this leads to a higher level of job satisfaction with a positive effect on their performance (Tsai et al., 2007).

The analysis of the research showed the importance and the patterns in relations between the management towards the quality management system, mostly in terms of lack of communication, as expressed by 65.4% of the employees. Furthermore, employees' perception that top management trusts them seemed to decrease in 2007. It appears that top management's ability to gain employee trust decreased, which can be explained due to the lack of vertical communication between the management and the employees. In contrast, employees' trust in the top management increased over the two year period, although not substantially. Therefore, one can conclude that by improving communication, the trust of employees towards their management would improve, thus helping to increase employee satisfaction. In fact, Matzler and Renzl (2006) argue that interpersonal trust is a strong driver of employee satisfaction.

Furthermore, the results show the importance of communication within the company (i.e. the quality of directives provided by the management), while a lack of information negatively influences the quality of learning and, consequently, contributes to lesser motivation. According to Osman et al. (2011), employee relations and communication are positively related to organizational performance. With regard to these findings, this is the area that shows the greatest potential for the improvement of general satisfaction within the company.

Better communication means better motivation, which is an equally important factor for achieving employee satisfaction, as the results have shown. According to the results of this study, employee motivation is significantly and positively related to employee satisfaction. Other studies (e.g. Eskildsen & Dahlgaard, 2000) confirm this by showing that satisfied employees are highly motivated, have good morale at work, and work more effectively and efficiently. Furthermore, motivated workers have higher organizational commitment, they are more likely to remain with an organization, and experience higher levels of job satisfaction (Eby et al., 1999). They are also more committed to continuous improvement and to quality. Employee satisfaction, therefore, directly influences process quality (Matzler & Renzl, 2006).

Another key study finding related to motivation is that level of competence is shown to have a significant and positive relationship with general satisfaction. The company apparently started providing additional training and introduced clearer rules regarding the stimulation payments included in the salaries of employees during 2007. The salary is therefore not the main driver of motivation; a reward system is urgently necessary and should be implemented in a manner that would distinguish those employees who do not perform their work at the same level of responsibility as others. A system of destimulation should be implemented, but in a manner that would not destimulate the good workers. When managing human resources, it is vital to ensure a clear system of promotion for employees taking on new responsibilities. Therefore, one should not neglect the importance of job rewarding, as it is positively related to job satisfaction (Rehman et al., 2010).

From a managerial perspective, the study emphasizes the need to recognize the importance of understanding how to motivate employees with competences that are set in a clear organizational structure and encourage team work. Firstly, management

must know how to manage employees. Secondly, they must know how to motivate them. Both can only be achieved through communication. Finally, we have tried to build a link between the two parties (management and employees) that are the essential part of this study by introducing the third party role – the quality representative. On this point, the management can efficiently make use of the quality representative who must both ensure the implementation of QMS and ensure that the employees have access to the management. In this regard, management must be aware how important it is to approach the employees through the quality management system.

On the operational level of implementation of the QMS and through the management, the quality representative can substantially contribute to the continuous improvement of the existing QMS. This person can use all the available institutes (internal auditing, external auditing, management reviews); he serves as a formal connection with the management, which must adopt a decision based on such reports. The owners of business processes can be influenced by including the decisions of the management into system auditing. Fundamentally, the institute of the management review is available, as well as internal auditing. The management review itself usually does not provide the management with sufficiently detailed insight into problems; therefore, it contributes less to the improvements. In contrast, internal and external auditing of the QMS may overly expose the employees to cases of established irregularities, which the management then seems to enjoy sanctioning. In this manner, the employees lose the awareness of the fundamental driver of quality – striving for improvement. These arguments can be somewhat substantiated by the work of Prajogo (2011) who suggests that the implementation of the QMS (in accordance with

ISO 9001) conducted in the context of “improvement” motives results in improved operational performance.

The quality representative must, therefore, skilfully combine both formal tools, so as to prepare as well as possible for external auditing. Informally speaking, it is advisable that he becomes proactive by striving for improvement of the QMS. In doing so, he can then – with smaller, but interconnected decisions – strive to influence the formal decisions of the management when performing internal auditing and management reviews, which contribute to raising awareness on the importance of continuous improvement. External auditing can then only confirm his or her vision of system development.

Surely the role of the quality representative is most important when it comes to the communication between the management and the employees; in this way, he substantially influences the maintenance of QMS. With the help of modern technology, it is advisable to implement a circle of continuous information flow between the management and the quality representatives. The process of informing can take place in such manner that all the work meetings (carried out on the level of top and middle management and in which decisions are adopted) are publicly announced with the decisions submitted directly to the quality representative. Simultaneously, the employees have (through the quality representative) the possibility of forwarding their ideas for improving the processes that apply to their work responsibilities. After having received the information on adopting the management’s decision, the quality representative can immediately envisage the necessary changes to the system and present them to the process owners. Timely corrections of the communication process are usually necessary, but in this manner the awareness of the manner of work and the importance of QMS within an

organization increases over the time. The quality representative can thus be more than “an extension”, which often causes the quality system management to stall; through this person, a vehicle can be established to achieve common benefit for the management, the employees and – last but not least – the organization itself.

Conclusion

This paper examines three major facets (top management, employees and quality representative) of the question of how to successfully implement and manage a QMS. In response to the two research theses, the results have verified the proposition that top management’s attitude toward the QMS can be reflected through employee satisfaction. In terms of employee satisfaction, the study showed clear relationships between general satisfaction and the two sets: “Communication in the company” and “Motivation of the employees”.

As a link between top management and employees, this paper introduces a quality representative who can substantially contribute to the continuous improvement of the QMS. The quality representative is, therefore, responsible for the QMS and other activities within his sphere of influence. For example, measuring satisfaction of employees is considered as important activity in order to establish a link between the top management and employees, and consequently for improving vertical communication.

This research has its limitations, as research of a wider population would require research in more than one company over a longer period of time. Nevertheless, the research has shown that such an understanding of QMS leads to positive results both for the end user and the organization itself. At this point, it is also necessary to emphasize that the results are more likely a reflection of the organization dominated by highly technological processes carried out by highly educated and

skilled employees. The results of this study clearly indicate that even more investigation should be done in this field.

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Appendix: Questionnaire

Respondents were asked to indicate the extent to which they agree or disagree with each of the following statements about employee satisfaction in the company with: 1: Strongly disagree, 4: Neutral, 7: Strongly agree. Negatively worded scale items were reversed.



Perftech d.o.o., Pot na Lisice 4, SI - 4260 Bled
tel.: 04 579 00 00, faks: 04 579 02 00
www.perftech.si, info@perftech.si

Dear colleague! You are kindly addressed to fill out the questionnaire below. Your completely anonymous answers will contribute to a better understanding of employees' satisfaction in our company.

Please rate on a scale of 1 to 7 where 1 = strongly disagree and 7 = strongly agree.

Please rate your satisfaction with Perftech d.o.o., Bled as your employer!

1 2 3 4 5 6 7

Please rate the following statements:

1. My satisfaction with my employer Perftech, d.o.o., Bled would grow when :

Statement	Response
Employees and management work together towards preventing conflicts among each other	1 2 3 4 5 6 7
Organizational structure becomes more transparent and I would more clearly understand my responsibilities for achieving better result	1 2 3 4 5 6 7
The level of trust among employees would be higher	1 2 3 4 5 6 7
Payment stimulation policy is straight forward defined and respected	1 2 3 4 5 6 7
Communication between top management and employees is improved	1 2 3 4 5 6 7
Overall working atmosphere is improved	1 2 3 4 5 6 7

2. Your general assessments/thoughts about your work

Statement	Response
In my department we help each other constantly	1 2 3 4 5 6 7
Company helps me with constant progress of my education	1 2 3 4 5 6 7
It's important to constantly look for new ways of professional development by yourself	1 2 3 4 5 6 7

The level of knowledge in the company is at a satisfactory level	1	2	3	4	5	6	7
I believe that working experiences are of greater importance than education	1	2	3	4	5	6	7
In comparison with my colleagues I feel more pressure at work	1	2	3	4	5	6	7
My work is well planned	1	2	3	4	5	6	7
My work is stressful	1	2	3	4	5	6	7
Teamwork is our common practice	1	2	3	4	5	6	7
Working in teams is very important	1	2	3	4	5	6	7

3. Level of communication and attitude towards the management

Statement	Response						
I believe that management expects too much from the employees	1	2	3	4	5	6	7
I feel trusted by the management	1	2	3	4	5	6	7
I trust the management	1	2	3	4	5	6	7
I carry out my work with joy	1	2	3	4	5	6	7
Top management retains too much control over the work of employees	1	2	3	4	5	6	7
I've never been criticized	1	2	3	4	5	6	7
I believe that critical thinking is good	1	2	3	4	5	6	7
I am aware of the management's goals	1	2	3	4	5	6	7
I agree with the management's goals	1	2	3	4	5	6	7
I often get approval from my colleagues	1	2	3	4	5	6	7
I often receive praise from the top management	1	2	3	4	5	6	7
Communication within the department is good	1	2	3	4	5	6	7
Communication between departments is good	1	2	3	4	5	6	7
Communication with the top management is good	1	2	3	4	5	6	7
Top management frequently communicates with employees	1	2	3	4	5	6	7
Top management communicates with employees in a proper manner	1	2	3	4	5	6	7
We have enough responsibilities at work	1	2	3	4	5	6	7

4. Motivation of employees

Statement	Response						
Salary motivates me	1	2	3	4	5	6	7
Greater responsibility motivates me	1	2	3	4	5	6	7
Promotion motivates me	1	2	3	4	5	6	7
Possible further education motivates me	1	2	3	4	5	6	7
New interesting working requests motivate me	1	2	3	4	5	6	7
Being informed of general business results motivates me	1	2	3	4	5	6	7
Working independence motivates me	1	2	3	4	5	6	7
Success at work motivates me	1	2	3	4	5	6	7

Customer's approval of my work motivates me	1	2	3	4	5	6	7
Colleagues' approval of my work motivates me	1	2	3	4	5	6	7
Good relationships among colleagues motivate me	1	2	3	4	5	6	7
Salary cuts are demotivating	1	2	3	4	5	6	7

5. Conflicts in the company

Statement	Response						
In my opinion, there are no conflicts in the company	1	2	3	4	5	6	7
I believe that all conflicts can be avoided through a clearer organization and better communication	1	2	3	4	5	6	7
Top management is responsible for conflicts	1	2	3	4	5	6	7
Each employee is responsible for conflicts	1	2	3	4	5	6	7
It seems to me that interpersonal contradictions are considered to be the causes of conflicts	1	2	3	4	5	6	7
In my opinion, conflicts arise due to professional disagreements	1	2	3	4	5	6	7
I think that conflicts affect work performance	1	2	3	4	5	6	7
I believe that conflicts affect individual's dissatisfaction	1	2	3	4	5	6	7
We solve the conflicts in time, but they could be avoided by preventive activities	1	2	3	4	5	6	7
I believe that the conflicts are consequences of a bad company performance	1	2	3	4	5	6	7

6. Questions about the survey

Statement	Response						
Top management considers results of performed surveys	1	2	3	4	5	6	7
Measuring satisfaction of employees is appropriate and important	1	2	3	4	5	6	7

Things we didn't ask you, but you want to communicate to us:

How long have you been working in the company?

- Less than a year
- Less than three years
- From three to five years
- More than five years

We would kindly ask you to return the questionnaire regardless whether you have completed all of the sections.

Kindest regards for your cooperation.

The survey results will be published on our website (portal Ciklon).