Employees’ emotional wellbeing – the step to successful implementation of total quality management; case study of Serbian post

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The main objective of this study was to propose a methodology for which the implementation could examine the state of business organization in some enterprise and give concrete directions for its improvement, considering the principles of total quality management. Apparently, every concept of total quality management depends on appropriate actions of people involved in the business process. Leaders usually pay attention on what should be done, ignoring how their actions or directives could affect their colleagues or their feelings. The methodology proposed in this paper puts an employee’s emotional wellbeing in the centre of attention in order to achieve efficient business organization. First of all, some parameters of business organization were defined for observed company. Existing condition of these parameters were tested through stress level of employees, regarding their level of functioning and quality of life on one hand and their symptomatology on the other hand. With further analysis, conclusions could be reached about the exact part of business process where improvement should be done. In that sense, the use of this model can help companies to develop and implement better strategy for achieving business excellence. The proposed model has been tested and verified through the research carried out in Serbian post.

Key words: Serbian post, employee’s emotional wellbeing, business organization, improvement model.

INTRODUCTION

The implementation of total quality management and continuous improvement principles are necessity for every modern organisation on today’s competitive market. Kanji (1996) points out that initial analysis of non-quality costs is usually understated and the real costs can be staggering, estimates vary but can be as high as 40 - 70% of sales turnover.

It is clear that basic element for achieving high quality standards is efficient employee behaviour and this is especially obvious in service sector. Leaders often pay attention on actions that should be done, but this is not enough for high quality product. People must posses the way of thinking that continuous improvement and customer satisfaction are some of the basic aims of work. Employees should adopt this work philosophy and implement it continuously. However this is not simple at all. One is to enforce employees to do something, the other to change their work culture and to do actions in appropriate manner because they are aware of the importance of customer satisfaction. The concept of organizational culture enters the mind whenever the issue of organizational productivity is discussed. The experts try to show its importance as one of the most influential factors in organizations (Matin et al., 2009). This means that there is a difficult assignment in front of leaders to impose a work philosophy that will designate their company in right way and provide the best position at the market. Kanji (1996) states that implementation of the total quality management (TQM) process is one of the
most complex activities that a company can attempt, because it requires cultural change for everybody. Also Vujic (2008) explains that product and service quality could not be achieved only by implementing simultaneous standards in the production or in the management field. It is necessary to develop the philosophy, supported by practice, of devotion and loyalty of entire organisation to continuous improvement in all aspects of work. And what is especially important; implementation of TQM is not some short time aim or project. As Kanji (2008) points out, organisations must develop quality culture because this is a way of life and a lifetime business commitment; it is not a pastime.

Welikala and Sohal (2008) have noted that TQM today places much emphasis on human relations despite its origins is in statistical and engineering backgrounds. In the TQM literature, this concept is known as ‘soft model’ due to qualitative rather than quantitative aspects, such as focusing on total customer satisfaction, involving employees in decision making process, working in groups and management of employees being given the highest priority (Wilkinson, 1995), cited in Welikala and Sohal, 2008). The model proposed in this paper puts an employee’s emotional wellbeing in centre of attention in order to achieve successful business organization and high productivity.

There is a question for every single leader how to investigate if his/her leadership and business organization are appropriate and if employees have adopted and implemented core principles of total quality management. The model proposed in this paper gives the answer on this question. The model also suggests what elements of business organization should be changed or improved.

The organization of this study is as follows: in the next section, review of literature about total quality management principles and employee involvement is presented. In the section after, the methodology for the model implementation is explained. Then, in order to demonstrate the model’s applicability, empirical example is given. In the section Analyses and discussion, the results are explained. Finally, in conclusion, the benefits of proposed model and directions for further research are presented.

**REVIEW OF THE LITERATURE**

Total quality management (TQM) in a broader sense refers to continuous performance improvement of individuals, groups or organisations, but the study more often talks about TQM in the sense of a business management strategy aimed at embedding awareness of quality, continuous improvement and innovations in all organizational processes. The literature on TQM suggests that increasing human resource utilisation (leadership, training, participative management, rewarding/appraisal systems, decision-making process) appears to have not been given as much emphasis as it should have been, resulting in the low success rates of many TQM programs (Welikala and Sohal, 2008). By implementing the model proposed in this paper, contribution can be made to success and sustainability of TQM activities, especially in service companies.

Therefore, there is no need to be an expert to conclude that successful business process greatly depends on leaders’ managing. According to different leadership types, specific working atmosphere and employee’s culture is created and specific results can be accomplished (Čubranić and Dobrodolac, 2008). In that sense, team management has a special role (Azeez et al., 2009). Leaders must achieve and adhere to their highest quality standards in order to motivate their workforce by example; encourage them to embrace quality culture with enthusiasm and pride (Kanji, 2008). A big challenge and also a necessity for successful management is that leaders have the right information about business process and employees’ attitudes. For this purpose, different methods are used to measure various business parameters. But, as Kaplan and Norton (1992) argue, no single measure can provide a clear performance target or focused attention on the critical areas of the business. The complexity of managing an organisation today requires managers to view performance in several areas simultaneously. Kanji and Sa (2002) remarked that managers need a real time balanced presentation of both financial and operational measures. Although, the model proposed in this paper is not a financial one, this kind of measurement is necessary for leaders to get the right information about current state of their business organization and to get directions about what should be changed or improved in order to achieve business excellence. By knowing the real path of excellence and following the systems approach of performance measurement, an organisation will be able to know where to improve and also how limited resources can be more effectively used for the improvement (Kanji, 2008).

Additionally, there is a problem how to encourage employees to contribute their knowledge for organisational gains. Because knowledge creation and good will for cooperation are primarily human brain activities, it is expected that they can neither be supervised nor forced out of people. As Hsu and Wang (2008) concluded, knowledge creation occurs only when people voluntarily cooperate and thus, it is necessary for organisations to understand the inner force that drives employees’ behaviour to contribute knowledge. Also, knowledge is a highly mobile resource, stored in the heads of individuals, which workers can easily take with them (Matzler et al., 2004). This is the reason why employees should be treated with special care and why it is necessary to implement some model for their assessment in order to achieve high productivity and profitability. Leaders should investigate employees’ attitudes, their work problems and their concept of work process organization.

In the TQM literature, it is a number of studies that
found a positive correlation between employee satisfaction, customer satisfaction and company performance. A very popular model that explains this phenomenon is the 'service-profit chain'. Explaining this model, Heskett et al. (1994) analyze the relationship between employee satisfaction, productivity, customer loyalty and profitability. But, there is a question how to get objective data about existing state and how to get the right directions for further activities that would lead the company to high productivity and the best position on the market. The purpose of this paper is exactly how to propose a model for which the implementation will give the answers on these questions.

One thing is certain, as Matzler et al. (2004) emphasized, satisfied employees are more committed to continuous improvement and quality. In contrast, unsatisfied employees often hold what they know and are unwilling to share their knowledge (Hsu and Wang, 2008) and they do not devote attention to quality improvement processes. There are numerous studies about drivers that have the largest impact on employees' satisfaction and loyalty (Esbidksen and Nussler, 2000; Esbidsensen et al., 2004). Mihajlović and Ristić (2007) present very interesting study where is shown that for employees with elementary school degree, the most important aspect is financial compensation, but for university degree employees, more important factors are interesting work, independence in conducting work actions and interpersonal relationships. Additionally, Eyupoglu and Saner (2009) showed the correlation between job satisfaction and rank in academic population. But it is important to have in mind that any changes within an organization will not affect the behavior of the employee without being processed mentally by the employee (Eskildsen et al., 2004).

METHODOLOGY

The model for assessment and improvement of business organization

The workplace has repeatedly been shown to contribute to people's feelings of well-being or conversely to symptoms and dissatisfaction in their jobs (Fisher and Gitteison, 1983; Wall and Clegg, 1981, cited in Firth-Cozens and Hardy, 1992). There are a number of literatures about work stress. (LaMontagne et al., 2007) and revolutionary changes in the modern organisation of work impose a need for employees' mental health analyses (Sauter et al., 2002). In order to create sustainable system, one of the basic rules should be that leader's expectations and demands do not cause overstressed employee. This is particularly important if the system is long time based.

This is why the proposed model analyzes employee's stress level like one of the indicators of good or bad business organization. We should know that somebody's stress level depends on many various factors; in professional literature called stressors (Stranks, 2005). On one hand, stress could be caused by factors that are independent from work and on the other hand from factors related to business organization. If work caused stress is analyzed, there are some objective stressors like work nature, position at work, responsibility and others that could not be changed. But, one of the most important elements that influence stress level is business organization and it depends on leaders capabilities. The purpose of the model proposed in this paper is to investigate relationship between employee's stress level and various elements of business organization. Parameters of business organization should be unique for each company and to each individual level of management and should be developed in proper consultation with all stakeholders. After all relevant business factors have been defined; the research could be carried out through proposed model (Figure 1).

First, it is necessary to choose one of the numerous stress tests. For example, in this paper Behavioral Health Concepts (BHC) test is used (Behavioral Health Concepts team, 2000). Then, we need employee's opinion about predefined business factors or just need to investigate state of these factors. After we calculate correlation between stress level and particular business factor, we will have information about next step that should be done to achieve business excellence. If there is a correlation between some business factor and stress level then we should improve that element of business and if there is no correlation, there is no need to change anything.

Description of model's implementation

The research was carried out in public enterprise for PTT communication “Srbija”, Belgrade, Serbia, often called Serbian post. The company represents the oldest communicational infrastructure system in Serbia and a true leader in the market of transport and delivery of written and printed documents, goods, as well as all money postal items and intermediary services. It has been functioning for over 166 years in Serbia as highly accessible public service enterprise. There are more than 1500 post offices and about 18000 employees.

In each of 1500 Post Offices there is a hall with postal clerks where customers have the first contact with the company. One of the most important factors that effect the customer quality assessment is the way postal clerks meet customers' expectations. More about marketing communication can be found in Potluri, 2008.

This is the reason why this department is interesting for analyzing and proposed business assessment and improvement model is tested right through research made with postal clerks. According to consultation and agreement with company's management, five major post offices in Belgrade were selected. There were 109 employees contacted and 100 of them have given the answers to all questions. Therefore, the response rate was 92%. Incomplete questionnaires were not analyzed because implemented software for stress test gives the results only if all answers are inserted. To ensure that workers would not hide sensitive information, all questionnaires were anonymous. Throughout the data collection process, every employee was assured that the responses would be kept confidential and that all results would be presented only on an aggregate level. No managers of the company were present during the survey.

Each employee was expected to fill two questionnaires. The first concerns the employee's stress level. For this purpose, BHC stress test (Behavioral Health Concepts team, 2000) was used. It is a standardized questionnaire that contains 27 questions. BHC stress test is based on the Treatment Outcome Profile (TOP). TOP was designed to be a self-report measure of each of the key dimensions of stress: Quality of life, level of functioning and symptomatology. Originally, TOP was designed to help counsellors to assess how well they were meeting the needs of their clients. Each of these sub-sections was scientifically developed with different populations, including clients being seen in outpatient settings, inpatient settings, residential care facilities and people living and working in the community. In this way we should get the information about somebody's feelings in difficult or stressful situations that somebody
may have experienced during the last month period. The answers are processed by software that is available on the internet to everybody for free. As a result, there are four scales that show overall score, quality of life score, symptom distress score and level of functioning score. Depending on the score value, examinee can be classified into one of the four categories for each scale mentioned above. These categories are: well adjusted, stressed, very stressed and extremely stressed.

The creators of BHC stress test proved that the test meets the necessary psychometric properties. The authors of this paper have had the opportunity to verify the conduct of various researches with teachers in elementary and secondary school, university students, nurses and also in Serbian post and in some sectors of Serbian army. In the next section of this paper, the results of the research carried out with postal clerks in Serbian post will only be presented.

The second questionnaire that employee should fill is related to business organization. It should be written specifically for each organization and it must ensure as large as possible picture about company and about employees’ attitudes related to business organization. In this research, beside the questions that provide basic information about employee like gender, age, education, marital status, the following parameters of business organisation were analyzed:

1. Transportation period (home – work),
2. Post Office counter type,
3. Employee’s counter type change,
4. Employee’s Post Office change,
5. Number of active counters,
6. The way of working in shifts.

Transportation period from home to work and back is interesting parameter in this case because, in Belgrade there is a large number of post offices and there is a possibility for the business organiser to arrange employee’s work place not too far from home, if the research shows that long transportation period has bad influence on employee’s productivity.

Based on analyses of technology process in Serbian post office, it could be distinguished seven counter types: financial service counter, collecting mail counter, telegram counter, ‘poste restante’ counter (service where the post office holds mail until the recipient calls for it), post express counter (courier service of Serbian post), post shop (selling postal and telecommunications products, office and school material, etc) and counter for telephone service. It is possible that one counter offers more than one service. This type of counter is called combined counter. Counter that offers just one of the services mentioned above is called separate counter. In this study, 77% of the counters were separate counters and 23% of the counters were combined counters. It is interesting to analyze if there is a difference in stress level between employees working on separate and combined counter. In posts, it is quite a common practice that employees change the counter type or post office they work. In this paper it is analyzed how this affects employees. In some cases, especially in big cities, it could happen that large queues are created in traffic peaks. We have investigated if there are enough active counters in employees’ opinion.

Working in shifts is a work disadvantage for almost everybody. Postal clerks in Serbian post work in two shifts, the first is from 7 a.m to 1 p.m and the second is from 1 to 7 p.m workers change their shifts every day. It is interesting to know what they think about that way of organization. The authors have made an appraisal that parameters mentioned above are important to employees for good business organization in observed sector of Serbian post. In each specific case, researchers should form new parameters that characterise their organization.

In collecting data process, two researchers have conducted the interviews with employees. One researcher is psychologist and the other one is engineer for postal and telecommunication traffic. In order to examine the correlation between stress level of employees and particular parameters of business process organisation, $\chi^2$ (hi square) test of independence is used. For this purpose, the frequencies of appearance in some of the stress groups are analyzed (well adjusted, stressed, very stressed and extremely stressed). After the conclusion about existence of mentioned kind of correlation is made, the attention should be put on parameters of business organization that are significantly correlated with employees’ stress level and with further analyses, the information could be obtained where to achieve improvement.
After the implementation of described methodology, business organization should be harmonized according to obtained directions. After some period, for example half a year or one year, research process should be repeated. In that way, the effects of new-implemented organization strategy can be seen.

RESULTS OF EMPIRICAL EXAMPLE

Postal clerks, also known as counter clerks, are postal workers that wait for customers at post offices. They sell stamps, money orders, postal stationery, and mail envelopes and boxes. They also weigh packages to determine postage and check that packages if they are in satisfactory condition for mailing. Counter clerks also help customers to file claims for damaged packages. Postal clerks usually work in the public part of post offices. They have a variety of duties and frequent contact with the public. However, they may have to deal with upset customers, stand up for long periods, and be held accountable for an assigned stock of stamps and funds. It is clear that this job is very demanding, but also involves great responsibility.

Having in mind that in most cases, customer’s first impression about postal company is exactly with postal clerks, this segment of providing service is particularly important for high quality achievements. Regarding the characteristics of the postal clerks’ job, it is very interesting to analyze employees’ work stress in correlation with appropriate parameters of business organization and this is the reason why the authors made decision to test those employees. First, in Table 1, some basic information about responders are shown. In Table 2, the results of correlation between stress level and business organization parameters, calculated according to methodology described in previous section, are presented.

ANALYSES AND DISCUSSION

As an indicator for needed improvement, we took the fact that overall stress level was in correlation with some parameter of business organization. Particular dimensions of stress (Quality of life, Symptomatology, level of functioning) could give us some further information about employees’ mental health. In this paper, only overall stress level, that sublimates all mentioned dimensions of stress, was presented like indicator of good or bad business organization.

Transportation period (from home to work)

Overall stress level was not in correlation with employees’ transportation period from home to work, so due to proposed model it is not necessary to change something in this field.

Counter type (separate / combined)

In this case, there is a correlation between overall stress and counter type. But, contrary to expectations, employees that work on separate counters show higher stress level. This could be explained in the way that monotonous work at separate counter does not stimulate employees enough and affects their higher stress. Suggestion for the company would be to organise postal clerks to provide different types of services because this way of working would not produce job saturation. In that sense, new services can also be introduced (Dobrodolac et al., 2009a,b).

Employee’s counter type change

In data analyzing process, employees were divided into four groups depending on number of counter type changes in last six month. One group did not make any changes in counter type. Second group had from one to three changes, third from four to six and the last more than six. Very interesting fact to notice here is that the highest stress level was demonstrated by the employees changing counter type from one to three times. Explanation for this phenomenon is that in case of small number of changes, employees face with new procedures and this is stressful for them, but if number of changes is greater, then employees have more experience, they improve their business knowledge and their adaptation to new job is easier. Recommendation to the company would be to create comprehensive training for postal clerks so they would be capable to work on different counter types (there are seven types) or to provide different types of services on a single counter. But, for high quality achievement, it is not only enough that employees do their job in proper way and to be informed about work procedures. It is very important that they are aware of how their actions influence the customers and this should be explained in appropriate educational programmes.

Employee’s post office change

Employees were asked if they have ever changed their post office location. Answer should be No, Once or Many times. It was noticed that employees that have had changed their post office once or many times showed higher level of overall stress. It could be also said that postal clerks make an easier adjustment to counter change, than to post office change. This conclusion is logical because post office change entails new working environment, adaptation to new business organization and new post office location. These facts obviously have
Table 1. Demographic and organizational profile of respondents.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>81</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Age</td>
<td>19 – 25</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>26 – 35</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>36 – 45</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>46 – 55</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>56 – 65</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Education</td>
<td>High School</td>
<td>79</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>College</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>University</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Marital status</td>
<td>Single</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>59</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>Divorced</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Employment period (years)</td>
<td>Up to 5</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>5 - 15</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>15 - 25</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>25 - 35</td>
<td>18</td>
<td>18</td>
</tr>
</tbody>
</table>

Table 2. Results of $\chi^2$ test of independence, significance level $\alpha = 0.05$.

<table>
<thead>
<tr>
<th>Business parameter</th>
<th>Correlation</th>
<th>Chi square</th>
<th>Degrees of freedom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation period (Home – work)</td>
<td>No</td>
<td>3.528</td>
<td>2</td>
</tr>
<tr>
<td>Counter type (separate / combined)</td>
<td>Yes</td>
<td>6.275</td>
<td>2</td>
</tr>
<tr>
<td>Employee’s counter type change</td>
<td>Yes</td>
<td>6.172</td>
<td>2</td>
</tr>
<tr>
<td>Employee’s Post Office change</td>
<td>Yes</td>
<td>8.719</td>
<td>2</td>
</tr>
<tr>
<td>Number of active counters (enough / not enough)</td>
<td>Yes</td>
<td>6.576</td>
<td>2</td>
</tr>
<tr>
<td>The way of working in shifts</td>
<td>Yes</td>
<td>7.071</td>
<td>2</td>
</tr>
</tbody>
</table>

impact on higher employee’s stress level. The company should avoid changing employees’ post office location, unless this is necessary. There are also other scientific papers that validate this conclusion like it is demonstrated by Lee and Park, 2007.

**Number of active counters (enough / not enough)**

Employees were asked about their opinion if there are enough active counters in their post office: 45% of them are satisfied with number of active counters and 55% are not. The results concerning differences in stress level between these two groups can be expected. Postal clerks who consider the organization of active counters poorly expressed higher stress level. The solution for the company could be to engage the workers, like university students, that would work occasionally, only when it is necessary. Therefore, there would be more active counters in the days with the highest traffic peaks.

**The way of working in shifts**

As it was mentioned before, postal clerks in Serbian post change their working shifts every day. As it is expected, employees that are not satisfied with existing way of working in shifts, expressed higher level of stress. Therefore, employees that would like to change their work shifts every week, and the ones that would like to work only in one shift, are exposed to higher stress then their colleagues that are satisfied with actual situation. The recommendation for the company would be to investigate the expectations of each employee about the
way of working in shifts and to organise business process in the appropriate way as much as possible. This type of research should be carried out at lower organizational level, for example at one post office, having in mind that attempting to satisfy several thousands employees at once would be too complicated process.

**Obtained recommendations**

Implementation of the proposed model gives us the recommendations about actions that should be done in order to achieve business excellence. Leaders in postal systems should organise their teller service in the way that;

1. One counter should provide more services to clients instead of only one,
2. Provision of comprehensive training for postal clerks would allow them to perform different tasks,
3. Postal clerks should not change their working Post Office location, unless this is necessary,
4. In days of peak demand, there should be more active counters and
5. The way of working in shifts should be adjusted to employees’ preferences.

This empirical example analyzes teller service organization in Serbian post. Based on above results, there are some recommendations about the future actions in order to make business process better. After some time, depending on leaders’ assessment, the same research should be carried out in order to check effects of organizational changes. The privilege of the proposed model is that it could be implemented at different levels of organization. In similar way, other departments could be analyzed, as well as managerial structures. This should be also recommendation for further research activities in observed company. And what is most important is; with some minor changes, the proposed model could be used in every other organization.

**Conclusions**

Each modern company struggling for success on the competitive market tends to make continuous improvement of its business process in order to achieve high quality of products or services. Some solutions may be good at first glance, but if they function in the way that they produce higher employee stress, those solutions are not sustainable in the future and could lead to stagnation or decline in productivity. This is the reason why, in the model proposed in this paper, stress level of employees was considered like an indicator of good or bad business organization. Stress level correlated with adequate parameters of business organization could orientate us to desired improvement. In the case of teller service in Serbian post, following parameters of business process were considered: transportation period (home – work), counter type, employee’s post office change, employee’s counter type change, number of active counters, the way of working in shifts. In order to use the proposed model in other companies, different parameters of business process, that are specific to selected organization, should be defined.

By using the proposed model, it is possible to analyse existing state of business process in the company and get clear directions in which area improvement should be done. The advantage of this model is its simplicity in implementation and the possibility of wide application. It could be applied to different types of businesses, to both manufacturing and service industries and also to various positions, from low working levels to highest management level. This is especially important for companies that do not have as good performance as they might have. One is for sure; implementation of this model can help leaders to design better plans, develop adequate business strategy or allocate business process investments in the right way. This programme should be repeated after some time, for example after a year, and the effects of committed changes and further directions could be obtained.

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