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DEVELOPMENT OF QUALITY MANAGEMENT SYSTEM BASED ON EMPLOYEE SATISFACTION

ROZWÓJ SYSTEMU ZARZĄDZANIA JAKOŚCIĄ BAZUJĄCEGO NA SATYSFAKCJI PRACOWNIKÓW

Key words: employee satisfaction, questionnaire, individual aims, organizational aims

Słowa kluczowe: satysfakcja pracowników, kwestionariusz, cele indywidualne, cele organizacji

Abstract. Work satisfaction and commitment to corporations are one of the most significant areas of corporate psychological research of our days. The international literature has been dealing with the examination of the satisfaction of employees for decades, while in Hungary this area only has drawn attention to its importance recently. The reason of it can be found in the appearance of foreign capital and the high standard industrial production worldwide with which the human side of productivity and effectiveness came to the front. After all this the question of why employee satisfaction has to be examined can be raised. The basic aim of the measurement of employee satisfaction is the examination of the level of satisfaction amongst colleagues, of the way that employees feel; what are the most influencing factors of satisfaction, what is the adaptation of ambitions like, loyalty to workplace, career awareness, which areas need to be improved in order to raise efficiency. With the help of the survey we got a whole picture of the incomprehensible and comprehensible problems of the organization, the capacity of resources, and the suppliable defects. Employee satisfaction can be improved and after the conduction of the survey the management can work out a focused action plan. With the help of regular surveys (ideally every six month or maximum one year) the effectiveness of actions can be checked. After analyzing and interpreting the received data, the next step is working out the actions and the solution plans of problems and setting down the action plan.

Introduction

The enterprise is one kind of an organization, so in every case of examining phenomenons of an enterprise it is important to consider what we think about the individual, who is the most essential component of a corporate organization. Individuals have individual aims and they join the enterprise and take part in their activity because they reckon that it supports the achievement of their own aims [Chikán 1992].

The individual aims

The human being is constantly in the state of emergency and defines his own needs according to what he has already got: as soon as one need is satisfied there is another need appearing and this process is endless. The satisfied need does not motivate behaviour, only the unquenched need does. The human can set substitutes if an obstacle occurs regarding the satisfaction of a certain need. The needs logically precede the aims. The individual aims do not mutually and squarely equal the needs because more aim can serve for the satisfaction of a single need and vice versa [Chikán 1992].

The organizational aims

The organizational aims have got a hierarchical structure. The hierarchical structure of aims serves as the logical and consistent referral base for the organization, with which the needed actions, their practical grouping and phasing can be defined. Mutual strengthening means that both the organization and its associates help each other in the achievement of their goals: the achievement of organizational goals contributes to the achievement of individual goals and vice versa. If there is no mutual strengthening then both participant suffers damage. Under compatibility we have to understand that the individual aims have to be compatible with the effective

functioning of the organization. Thus to the effective functioning of the organization both the individual and organizational aims have to be maximally considered. The workers of an organization contribute to the organizational aims through their individual aims, so the individual satisfaction can strengthen the organization-related satisfaction. The examination of employee satisfaction within the organization has to be orientated to examine this dual aim at the same time.

Theoretical background

Before starting to examine and measure the employee satisfaction the first and most important step is to clarify the concept of satisfaction. The concept and content of employee satisfaction cannot be defined homogenously, there have several phrases been created for it, from which we would only like to highlight the ones that are important for us [Nagy 2004].

- Hoppock [1935]: „...such combination of psychological, physiological and environmental conditions, that according to the truth makes the individual state: I'm satisfied with my job”,
- Locke [1976]: „...such emotional condition that arises from the evaluation of the work and working experience of an individual”,
- Vroom [1982]: „...work satisfaction is an emotional orientation shown towards the actual working role of an individual”,
- Spector [1997]: „...work satisfaction is the degree of whether how much the individual likes or does not like his job”,
- Klein [2004]: „...work satisfaction is such a general attitude, which originates from several specific attitudes of three different areas (specific working conditions, individual characteristics and group relationships outside work)”.

Work satisfaction is such a general attitude that originates from several specific attitudes of three different areas: the specific working conditions, the individual characteristics and group relationships outside work. Satisfied condition occurs when the ideas and expectations of the employees meet with areas of work, conditions, wages and the management provided by the organization. This is a favourable condition for both parties: the employee feels well as he can do his work within convenient circumstances and conditions, so his performance is better which means benefit to the enterprise [Noé 2004]. From this we can conclude that the enterprise can achieve higher benefit if it makes its workers satisfied. Such connection between employee satisfaction and corporate performance is confirmed by other researches. Several theoretical approaches can be found in the literature about motivation and work satisfaction, such as the two-factored theory of Herzberg, the vitamin model of Warr and the need-satisfaction theory of Vroom and Porter-Lower.

Factors that influence work satisfaction

Based on what is written in theory, several aspects of work contribute to satisfaction up to different degrees. For influencing the attitude towards work breaking it to segments is needed, because only this way those objective factors can be defined with the manipulation of which significant change can be raised regarding attitude towards work too. The objective factors are the following: physical working environment, job responsibilities, creation of role, progress, improvement of labour, education, allowance, structure of organization, social environment and managerial attitude [Bruce-Pepitone 1998]. Personal factors can be: the previous expectations (regarding wages, methods of work and checking, physical environment, managerial behaviour), needs, previous work experiences, values, characteristics, norms specified by family and wider environment of employees. The different satisfaction levels are in relation with the level of status, which results in higher and higher work satisfaction of employees of higher hierarchy levels. In relation of the length of service: with the length of service the satisfaction with the enterprise grows, while satisfaction regarding wages and status decreases.

Frese assumes that the expectations and demands of an individual regarding work, as well as depending on the result of associations occurring between these and the situation, the individual develops the satisfaction or dissatisfaction of a kind in himself:

- progressive satisfaction: the dominance of expectation level, looking for new chances of improvement,
- constant/stable satisfaction: keeping expectations on the same level,

- resigned satisfaction: the individual tries to dissolve dissatisfaction with decreasing the level of his own expectations,
- pseudo-satisfaction: the individual is basically dissatisfied but activates such defensive mechanisms that create some kind of additional satisfaction,
- fixed dissatisfaction: the individual does not try to change the situation, does not experiment with new problem solving methods,
- loyal dissatisfaction: the individual keeps his own expectation level and tries to change the work situation in a way that it meets the expectations [www.hrportal.hu]

Resource and methodology

In accordance with the quality management requirements of the examined technological enterprise in order to improve the quality of work and working conditions it is important to measure the satisfaction of employees. In the interest of getting to know the opinion of employees, we think it is important to orientate comprehensively and collect written data. The data collection was conducted by a self-filling survey including nine questions, and the seventh question included twenty statements. The surveys were personally distributed to the employees. Certain statements applied to the participants according to their work role. During the composition of the survey we endeavoured to consider more aspects in order to have an accurate, effective and innovative survey, besides these we tried for making the survey transparent and simple. We mainly applied closed questions in which the choices of answers were given, so that the interpretation and processing were easier. The scale questions were looking for answers of agreeing with something, offering a 1 to 5 rating possibility in which 1 implicitly reflect that the participant does not agree at all and 5 offers the chance of a fully agreeing answer. Altogether 280 questionnaires were distributed from which 261 questionnaires got back to us and could be evaluated.

The questionnaires were processed in two phases. The first phase was taking the data into Excel sheet; the second phase was the application of SPSS 17 statistic program. Through the survey we gained information on how the employees think about their jobs, their work relationships and themselves. Furthermore we got information on how the age, qualification and insistence on workplace of participants influence their satisfaction.

Results

To find out what is the importance of certain factors according to the respondents we carried out the calculation of averages (Tab. 1). After these we determined how the respondents ranked the statements. In the case of statements the degree of deviation is different (deviation: measures the scatter around the average, the average deviation from the average).

Table 1 makes it obvious that the respondents are satisfied with their personal relationships with colleagues and out of wage allowances to the highest extent. On the other side they rated their wages and management control under. In further phases of the research we considered those who mainly chose „mostly agree” and „fully agree” being satisfied, those who chose „moderately agree” being moderately satisfied and those who chose „do not agree at all” or „mostly do not agree” being dissatisfied. In the following phases we examined question by question to what extent are the respondents satisfied, moderately satisfied or dissatisfied. After these we performed a variance analysis with 95% reliability for gender, age, qualification, time spent with company and job role. During the variance analysis it turned out that in none of the cases appeared significant difference for gender and qualification. In opposition with this there were significant difference from the point of age, time spent with company and job role. Considering all these factors we would like to highlight some interesting and surprising topics for further exposition of the research.

Personal relationship with my colleague is satisfactory

Most of the respondents, altogether 89% considers their relationships to colleagues satisfactory, 8% is being moderately satisfied and only 2% is not satisfied (Fig. 1). The reason of it can be that most respondents know each other from outside work or rather derives from for the many years shake down workplace collective. The individuals found their places in the community and have positive emotional relationships with their colleagues, furthermore the respondents not only consider the workplace community as a membership but as a reference group and are able to suit to its norms.

Table 1. Calculation of average to each statement

| List of details | Average | Deviation |
|--|---------|-----------|
| The personal relationship with my colleague is satisfactory | 4.280 | 0.746 |
| My colleagues recognize me to an appropriate extent | 3.945 | 0.705 |
| The degree of out of wage allowance is appropriate (holiday allowance, messing allowance) | 3.715 | 1.041 |
| During work I feel the motivation of working community appropriate | 3.566 | 1.135 |
| I find the tools and equipments provided to serve the working process efficiently appropriate | 3.456 | 0.930 |
| I have got enough time to perform the reparation and maintenance of the bus | 3.453 | 1.048 |
| Feedbacks received regarding my work are appropriate. (acknowledgement, row) | 3.392 | 1.062 |
| I find the workplace appropriately approachable (service lines, scheduled lines) | 3.371 | 1.401 |
| The scheduling and flexibility of shift is appropriate (overtime, home office, time spent with family) | 3.354 | 1.198 |
| The quality of the cleaning of buses is fine. | 3.274 | 1.130 |
| I find the improvement and training possibilities at my workplace satisfactory | 3.268 | 1.044 |
| I feel like the improvement chances in accordance with my performance and professional knowledge are accurately proportional | 3.188 | 1.065 |
| The flow of internal information that is needed to my work is accurate. | 3.115 | 1.055 |
| I find the possibilities for eating appropriate at my workplace. | 3.066 | 1.459 |
| The consideration and the sanction taking of inappropriate performance is correct | 2.965 | 1.190 |
| I find the quality of repair or maintenance works conducted on the buses appropriate | 2.898 | 1.112 |
| The definitiveness of management is accurate | 2.847 | 1.186 |
| I find the speed of repair or maintenance works conducted on the buses appropriate | 2.757 | 1.147 |
| The equipments needed to keep the bus clean are appropriate | 2.485 | 1.278 |
| The wage is sufficient at my workplace | 2.450 | 1.091 |

Source: own study.

The wage is sufficient at my workplace

It is an unfortunate fact that most of the respondents (46%) is not satisfied with their wages, 40% feels that they are moderately satisfied, and only 14% feels satisfied about their wages (Fig. 2). High satisfaction can only be achieved in very few workplaces; this low satisfaction is also applicable to the examined technological enterprise. The wage is not competitive in the labour market or rather does not serve the real satisfaction of employees' needs.

Analyzing the correlation between age and the satisfaction with wages (Fig. 3) it can be stated that the younger labour is more remunerated by the enterprise, furthermore closer to superannuation (with the increase of age) employees demand better wages because the amount of pension is based on the wages and with lower wages there can subsistence problems occur during the pensionary years.

I feel like the improvement chances in accordance with my performance and professional knowledge are accurately proportional.

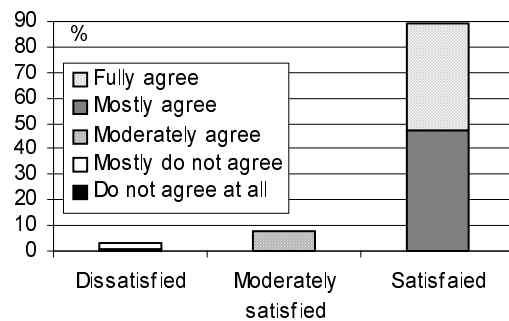


Figure 1. Personal relationship with colleagues
Source: own study.

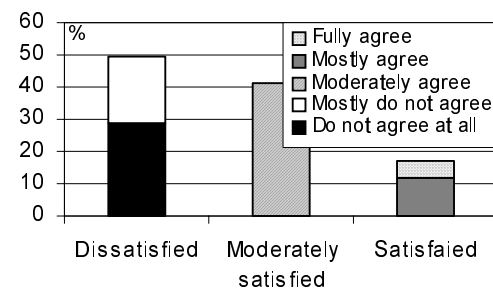


Figure 2. Wage at my workplace
Source: own study.

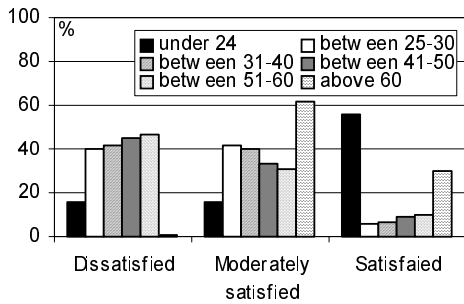


Figure 3. Wage at workplace in coherence with age
Source: own study.

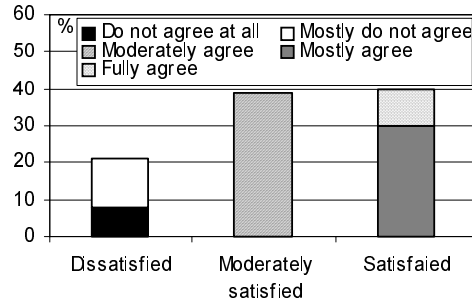


Figure 4. Performance and professional knowledge proportional improvement chances
Source: own study.

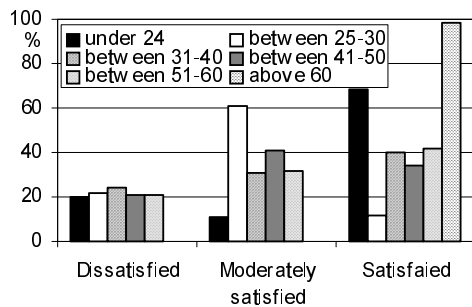


Figure 5. The correlation between improvement possibilities proportionate with professional knowledge and age
Source: own study.

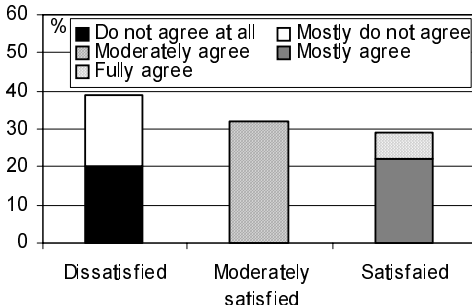


Figure 6. The definitiveness of management
Source: own study.

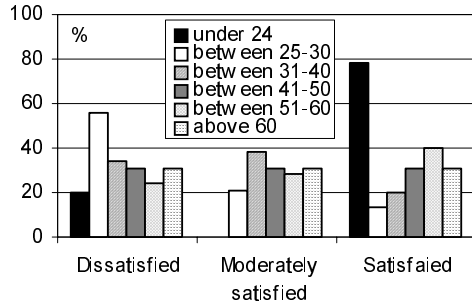


Figure 7. The definitiveness of management with the run of age
Source: own study.

According to the opinion of respondents most of them (39%) are satisfied with the performance and professional knowledge proportional improvement chances or rather moderately satisfied (39%). 22% of the employees are not satisfied (Fig. 4). Considering career planning, the demands of the enterprise are more or less in correspondence with the demands and improvement ambitions of the individuals.

The satisfaction with the improvement possibilities is determined by the age of respondents (Fig. 5). It can be stated that the older the employee is, the more likely that he will not be satisfied with the improvement chances. People generally choose occupation according to their interest and choose workplace in connection with it. Accordingly there is nothing else being more motivating than if someone can actualize himself in his job, and amongst the older age group there is less chance for self-actualization due to the advancement of age.

The definitiveness of management is accurate

36% of respondents are not satisfied with the control of management, 33% is moderately satisfied and the rate of those being satisfied is not much less, 31% finds the control of management appropriate (Fig. 6). The nearly equal rate of satisfaction and dissatisfaction arises from the current situation of the enterprise (involving subcontractors in the completion of work processes).

Analyzing the correlation between age and management control it can be stated that employees under the age of 24 are satisfied and those who prefer to be moderately satisfied are those above the age of 41. The rate of dissatisfaction is the highest amongst 25-30 and 31-40 age groups.

For the high rate of dissatisfaction amongst the age groups of 25-30 and 31-40 the explanation can be that the managers cannot provide acceptable directions and unable to appoint common aims for the longer term (Fig. 7).

Conclusion

Based on the previously introduced survey conducted at the mentioned enterprise and the comments of other companies on this topic, we made the conclusion that most of the organizations are not aware of the measurement of employee satisfaction and the possibilities residing in the questioning of employees' opinion. After processing the results often no interference or improvement occurs. The final aim of the research was that with getting to know the opinion of employees and with evaluating the filled questionnaires make a proposal for the needed interferences and changes, which possibly can increase satisfaction and the more effective functioning of the enterprise. We imagine the improvement of satisfaction in two steps: first dissatisfaction needs to be decreased and dissolved, and then with the help of motivation satisfaction has to be increased. This can make it possible for the enterprise to achieve one of its main aims: the satisfied employees. During mapping out the recommendations we considered the followings:

- the recommendation needs to be cost effective as the financial situation of the enterprise does not allow expensive solutions,
- the employees wish for rapid and perceptible changes.

We made our proposals concentrating on the individual areas, as the examination of employee satisfaction with questionnaire conducted by us does not reveal the cause of problems but identifies the problematic areas, which were the followings:

- specifications,
- acknowledgements,
- relationships,
- tasks and information,
- goals.

On the whole it can be stated that at the examined technological enterprise the results of research show that amongst employees satisfaction is dominant, it occurs more comparing to dissatisfaction. The conformation of dissatisfaction and satisfaction is dependant on the work role in most cases, which arises from the work tasks. The enhancement of satisfaction and the more exact exploration of the reasons of dissatisfaction can be achieved with filling in further more detailed questionnaires.

Bibliography

- Bruce A., Pepitone J.S.** 1998: Motivating employees. McGraw-Hill Professional.
Chikán A. 1992: Vállalatgazdaságtan. Közgazdasági és Jogi Könyvkiadó – AULA, Budapest.
Nagy Zs. 2004: A dolgozói elégedettség, mint a szervezet versenyképességének meghatározója. *Marketing és Menedzsment*, 5, szám. p. 24-35.
Noé N. 2004: A dolgozó munkával való elégedettsége. *Marketing és Menedzsment*, 5, szám, p. 13-23. [www.hrportal.hu/article_print.phtml?id=74845], 23.03.2009.

Streszczenie

W pracy dokonano analizy systemu zarządzania jakością bazującego na satysfakcji pracowników. Wskazano na rolę kompromisu między celami organizacji a celami indywidualnymi pracowników.

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