

# The significance of internal customer satisfaction in a standardized quality management system in the context of a Polish higher education institution

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## Abstract

The article is an empirical design driven study of quality management system in a chosen institution of higher education. Its aim is to measure the satisfaction of internal customer of a higher education institution which implemented a standardized quality management system. For that purpose, a diagnostic survey method (CAWI) was used. The empirical study was conducted in October 2014 among the employees of teaching and administrative departments (a total of 158 people) from Wrocław School of Banking (WSB University in Wrocław). For data analysis, factor analysis was used.

The results of the satisfaction survey were presented in five areas: (1) satisfaction, opinion about the higher education institution, identification with the university; (2) relationship with a supervisor; (3) motivating, including compensation; (4) evaluation of work and professional development; (5) working conditions and information flow.

In the summary, apart from the general conclusions of the study, some guidelines to improve the presented measuring tool, towards the assessment of internal suppliers, were given.

**Paper type:** research article

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## Introduction

Majority of Polish higher education institutions will have to face a dilemma in the next few years, a consequence of which will be either leaving or remaining on the higher education market. The reason for such a situation is the population decline. In recent years non-public universities have been competing with each other, and since the mid-nineties, also with public universities. In the years to come, non-public colleges will be forced out of the higher education market along with some public schools, as a cause of a decline is demand for higher education. Only certain universities will be capable of staying on the market. These institutions will have to offer high quality education products with distinguishing features such as: additional qualifications to be obtained in the course of studies, teaching in a modern style, importantly, with emphasis on practice, so that the graduates can be absorbed by the employment market and will be able to find employment relatively fast. Therefore, it is justified to use the concept of internal marketing in higher education (see Tareef & Balas, 2012). This shall result in a possibility to achieve a high level of satisfaction from the provided services of both students and graduates. In addition, such an approach will allow to develop appropriate reputation and brand name. High level of quality is possible to be obtained if there is wide awareness of the role and significance of a student as a client. Furthermore, it is achievable when employees comprehend the need for a continuous improvement in order to enhance the processes linked with providing educational services (see Goranczewski & Puciato, 2008). High awareness of significance of external customer is based on appropriate cooperation within a university. Such cooperation should be based on coordination, organization and a transposition of relationship with an external customer onto the grounds of an organization. This way, co-workers in an organization become a customer and/or an external supplier.

The purpose of the study was to measure the satisfaction of internal customer at WSB University in Wrocław. The empirical survey was conducted from 1<sup>st</sup> to 10<sup>th</sup> of October 2014. The study population comprised academic staff, 153 people and administrative staff, 108 people. As a result of the study, the research sample involving 67 lecturers (effectiveness of the research: 44%) and 91 administrative workers (the effectiveness of the research: 84%) was obtained. The method of diagnostic survey using the questionnaire technique (the questionnaire available on the Internet) was used. The obtained results were analyzed using factor analysis (preceded scale reliability analysis).

# 1. Internal customer significance

The client lies in the heart of each standardized quality management system (see Chaston, 1994; Kaur, Sharma, & Seli, 2010; Goranczewski & Szeliga-Kowalczyk, 2015). In default, it is the external customer who purchases products or services, and for whom the organization exists (see Piercy, 1998; Mohrw-Jackson, 1991; Goldstein, 2003; Jun & Cai, 2010; Steward, Wu, & Hartley, 2010). In accordance with the process approach, client is an input and output data within the system (PN-EN ISO 9001:2009). Each organization should be aware of the customer's needs and expectations at the beginning of the process. These are defined in the requirements specification.

On the other hand, when a service and/or product is delivered, an organization with a qualitative approach should measure the level of satisfaction (customer satisfaction index) at the end of the process, for example, through surveys (see Williams & Cappuccini-Ansfield, 2007; Addey, 1999).

Modification of the input data into the output data takes place inside a mega process of quality management, according to the classical Deming's PDCA cycle Plan-Do-Check-Act (see Bugdol & Goranczewski, 2011). In standardized management systems satisfaction should be measured also in relation to other stakeholders, among which there is an internal customer. He is defined as "an organization or a person who receives a product," whereas, "the customer can be internal or external in the context of organization" (PN-EN ISO 9000:2006, p. 33). An internal client can be:

- an employee,
- department in the organizational structures with functional linkages,
- internal entity with equity links.

The nature of an internal customer differs from an external customer mainly due to the following aspects (see Ullah, 2013; Batt, 2002; Chang & Huang, 2010; Harnesk, 2004; Marshall, Baker, & Finn, 1998).

The needs and expectations of an external customer develop and become more flexible than internal customer's, whose major expectation is, depending on a situation, job satisfaction or to ensure his or her family survival (see Kilburn, 2009; Addey, 1999; Grigoroudis, Tsitsiridi, & Zopounidis, 2013). Therefore, learning about the needs of internal customer pertains to an assessment whether or not there are satisfying organizational conditions or if there are appropriate work tools available, etc. The underlying reason for it is one of the basic elements that condition customer satisfaction, namely motivation. Contrary to the external customer whose needs are anticipated and whose expectations are exceeded, internal customer's needs are only fulfilled. Internal customers are recipients of a product or service, which is, for instance, an outcome of a process and activities regulated by internal rules and re-

quirements. Internal customers' needs, as opposed to external customers, can be only fulfilled by suppliers, either a unit or an entire department in an organization. With respect to an external customer, there is a possibility to make decisions regarding the supplier. Internal customers do not have such a possibility. Meeting the needs of internal customers is conditioned by the following factors:

- supplier's obligation to provide work,
- necessity arising from the layout of work and activities in a process and other actions,
- current possibilities as skills or competencies of a supplier.

Every employee or an organizational unit can act as an internal customer and supplier. Dualism of these roles, as well as the dynamics of transformation (conversion from an internal client into a supplier and vice versa) depends on the complexity of job, internal connections, organizational culture, etc.

Measurement of satisfaction related to "customer perception regarding the extent to which his requirements have been met" is a basic requirement in any organization with an implemented quality management system (PN-ISO 10002:2006, p. 2), therefore it also applies to the internal customer. In contrast with an external customer, the primary determinant of satisfaction is motivation in this case. It is a building block of lasting relationships between internal customers and suppliers, based on trust and loyalty.

It can be assumed that there is a positive correlation between external customer satisfaction with the received product or service and internal customer satisfaction.

## 2. Internal customer in the quality management system at WSB University in Wrocław

There is a diversity in sources of financing higher education institutions in Poland. The major source of income in non-public colleges is tuition, thus they focus on educational products to ensure profitability. This is reflected in the planning procedures and supervision of educational services. Most of the private higher education is based on teaching. Scientific activity is at the minimum level required by the laws and regulations, also to guarantee the development of the academic staff. Public institutions on the other hand, can afford much more, as they are financed by Ministerial subsidies. They put their key focus into science and development, as well as investment.

Standardized quality management system at WSB University in Wrocław in accordance with the requirements of international standards comprises four components (PN-EN ISO 9000:2006). These include: planning, quality control, quality assurance and quality improvement.

Planning – setting the policy and quality objectives, identifying all the processes necessary for teaching, standardization of processes (procedures, instructions, etc.), as well as providing resources needed to achieve the quality goals.

Quality control – designed to meet the quality requirements defined in specifications for the customer. Supervising educational processes with the use of procedures, instructions and manuals.<sup>3</sup>

Quality assurance – a task intended to ensure that quality requirements defined in specification will be met. With respect to educational services it is particularly applicable to:

- recruitment of faculty, academic and administrative personnel with appropriate skills and qualifications,
- providing adequate infrastructure and technical equipment for execution of processes.

Quality improvement perceived as organizational capacity to meet the specified requirements. Improvement in standardized management systems is carried out through the implementation of corrective and preventive actions. They are a result of the internal and external audits, customer complaints, etc.

The quality management system established at the WSB University in Wrocław has been designed in accordance with the Deming PDCA (Plan-Do-Check-Act) cycle. The system, on the basis of normative guidance, splits into (ISO/TR 10013:2001):

- main processes,
- supporting processes,
- system processes.

Planning embraces processes that initiate and prepare for execution of educational services. Implementation area includes the main processes linked with the delivery of services. Testing area fundamentally comprises verification of teaching processes and learning outcomes as well as student satisfaction surveys. The last area in the PDCA cycle is related to the improvement of the system.

Each of the procedures within the documentation of the quality management system structure describes the steps that must be taken to execute a process in accordance with the established requirements (input data transformed into output data according to the PDCA cycle). The scope of responsibility in a particular process was defined in the procedure. The code of conduct clearly states which position or department is currently an internal client of a process or action, and which is an

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<sup>3</sup> Manual – instruction for teaching, which comprises: a subject card, description of the didactical content which can also be material for students available online, a list of assignments, quizzes, case studies and many more. Efforts to improve the quality of academic programs in the United Kingdom, the United States and the Netherlands are described by Dill (1995).

internal supplier. As part of the same process, the roles of a customer and supplier are exchanged. Procedures include requirements specification regarding a process, namely: who, whom, what, on what basis, what information is passed, and which actions shall therefore be taken.

In addition to the internal customer and supplier, there is an object of their actions, and consequently, there is also the internal product (see Bugdol, 2011; Tutuncu & Kucukusta, 2008). The product is a defined work outcome that is formed as a result of:

- individual activities in the process,
- the process as a whole.

Table 1 presents a set of internal customers and suppliers in the quality management system established at WSB University in Wrocław. This summary may be subject to further clarifications (disaggregation) in the following perspectives:

- suppliers → internal clients within the same organizational unit,
- operations, actions performed on a single workstation (see Durlík, 1998).

Table 1 *Summary of internal customers and suppliers in the quality management system at WSB University in Wrocław*

Process	Internal customers	Internal suppliers
designing educational products and services	authorities of the university	department of research and analysis of the founder team preparing applications for the ministry the manager
recruitment	faculties	recruitment office employees
preparation and planning of educational process	university management board lecturers faculties	planning division teams modifying existing courses of study and/or curricula (teaching teams)
preparation of e-learning materials	lecturers faculties	multimedia department lecturers cooperating on preparation of materials department of computer science
creation, verification, confirmation and update of manuals	lecturers faculties	lecturers creating and verifying manuals the educational teams fields of study managers
execution of didactical services in graduate and undergraduate programs	university authorities	lecturers administrative division dean's offices fields of study managers
execution of didactical services at postgraduate studies	university authorities	lecturers/teaching instructors, coaches postgraduate programs and trainings division
execution of didactical services at MBA studies	university authorities	lecturers/teaching instructors, coaches department of MBA studies

Process	Internal customers	Internal suppliers
conducting trainings	university authorities	teaching instructors, coaches postgraduate programs and trainings division
administrative services for students	university authorities	dean's offices office of didactics management office of financial affairs
human resource management	university authorities lecturers administrative employees	HR officer (employee assessment) vice-rector (teaching and scientific staff evaluation) HR and payroll department trainers, instructors
verification of teaching processes and learning outcomes	university authorities	lecturers department of education departmental teams for internal system of education quality assurance senate team for internal system of education quality assurance
student satisfaction survey	university authorities	department coordinators for WSB University in Wrocław brand attributes testing (quality characteristics) deans for evaluation of teaching and learning processes vice chancellors for assessment of administrative processes
system improvement	university authorities quality manager departmental teams for quality assurance senate team for	internal auditors external auditors (certification company) quality office supervisors of organizational units where non-compliance is detected
supervision of documentation and records	university authorities	organizational units supervisors quality office multimedia department (for manuals)
quality manual (including a revision of top management)	university authorities	quality manager quality office university board for quality policy and quality aims and processes measurement

From the management point of view, it is important to measure processes and to establish their method of measurement, in order to make an assessment on the basis of the control parameters whether a process is efficient and effective. It can be presumed that the process that is both effective and efficient, will be implemented by satisfied internal customers and suppliers, who in turn will provide the internal product (a product of an action, or process) with relevant quality parameters. This is not the only determinant of effective and efficient internal processes but has a crucial impact on their course. According to Khan and Matlay (2009) strong institutional culture that appreciates internal customers can help to motivate employ-

ees, strengthen loyalty, and maintain high productivity, innovation and a competitive advantage.

The basic element which a quality management system focuses on is the external customer. In addition, the Norm emphasizes that a quality management system is supposed to be a useful tool to achieve satisfaction of other stakeholders. Among them the external customer plays a major role. From the perspective of a non-public higher education institution and its needs and expectations, the following classification of stakeholders can be defined (PN-EN ISO 9004:2010):<sup>4</sup>

1. Students/participants (external customers) expect:
  - practical approach/friendliness while studying,
  - low level of tuition fees,
  - favorable studying conditions.
2. The founders want:
  - sustainable operation,
  - conducting activities in a profitable way,
  - long-term development,
  - concern for reputation.
3. Internal customers – scientific, academic and administrative staff demonstrating certain attitudes toward higher education, such as satisfaction, declared opinions about the school, loyalty, identification with the institution. They expect:
  - recognition for a well performed work, assessed by the supervisor (proper relations with supervisors),
  - motivating payment system,
  - appropriate conditions for professional development and scientific advancement (all forms of support),
  - appropriate conditions and working environment,
  - adequate flow of information and well-organized communication.
4. Suppliers and partners (including internal suppliers) want:
  - mutual benefits from cooperation with the organization or internal customers,
  - continuity of cooperation.
5. Community (local community, employers, etc.) need:
  - an offer for educational product useful on the labor market,
  - ethics and code of conduct (integrity and educational professionalism, transparency),
  - compliance with laws and regulations,
  - cooperation in solving local social problems (social responsibility of an enterprise).

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<sup>4</sup> Different classification is done by Raharjo, Xie, Goh, & Brombacher (2007), internal customers in his opinion are lecturers and students, while external customers are employers that hire alumni.

### 3. Research methodology

The scope of research encompassed issues that would meet the needs and expectations of internal customers. These were:

- satisfaction, opinion about the university, identification with the organization,
- relationship with a supervisor,
- motivating, including compensation,
- evaluation of work and professional development,
- working conditions,
- flow of information and communication.

Factor analysis allowed the study of internal dependencies structure. The analysis of main components was used to extract the main factors.

Each of the main components is a linear function of the input variables. The variances of the main components are a measure of their information resources on the examined phenomenon. The first few main components include the majority of information on the examined phenomenon, provided by the input variables, allowing to reduce the number of main components with the least possible loss of input information. Factor loadings made it possible to name new variables (factors).

The number of factors was determined by the screen test. In order to assess the reliability of the scale Cronbach's alpha coefficient was used. It was assumed that values of Cronbach's alpha coefficient higher than 0.7 indicate the reliability of the scale.

The research tool used in the study was a questionnaire available through an online website. A survey on internal customers' opinion (academic and administrative division) was conducted in the period from 1 to 10 October 2014. It reflected opinions about people's jobs at WSB University in Wrocław. In the group of employees from research and teaching departments, the survey was conducted only among those, whose primary employer was the WSB University in Wrocław.

All scientific-teaching staff whose primary employer was WSB University in Wrocław and all the administrative staff were asked to take part in the survey. The study population comprised 153 employees from academic staff and 108 administrative workers. The conducted study allowed to select the research group of 67 lecturers (effectiveness of the research: 44%) and 91 administrative workers (effectiveness of the research: 84%) (Table 2).

Table 2 Study sample

Academic division	Organizational performance		
	Total	Managerial positions	Non-managerial positions
67 people (42%)	91 people (58%)	35 people (38%)	56 people (62%)

## 4. Results

With respect to satisfaction and identification with the WSB University in Wrocław the vast majority of personnel declared that they like their job. Approximately 60% of employees identified with the organization, whereas in the case of administrative staff such attitude is reflected among 30% more employees in managerial positions compared to non-managerial positions. Only 6% of employees would not be willing to put extra effort to ensure the proper running of WSB when necessary. Worthy of note, the employees point to work atmosphere as the major determinant of job satisfaction. Although the major source of dissatisfaction is unsatisfactory compensation, good interpersonal relationships compensate for this issue. In the section of the study analyzing relations with supervisors about 74% of employees declare that their duties are clearly defined by the supervisor; 18% of employees do not receive relevant information on their performance, approximately 2/3 of the staff is of the opinion that the supervisor supports their ideas and suggestions, around 3/4 of employees think that their supervisor cares about the atmosphere at the workplace, the vast majority of employees perceives their supervisor as a polite and friendly person who handles well problem prevention and resolution; employees typically trust their supervisor; only every 2nd employee received training from their supervisor at the beginning of work at WSB.

Specificity of work, namely, working hours, constitutionalism, hiring conduct or evaluation methods differ greatly for administrative and didactics employees. As a result of that, there is a discrepancy in the level of commitment and attitude toward the supervisors between these two groups of employees.

Employees at WSB think that the motivating factor that the organization does not meet is recognition of achievements by a supervisor, training and courses, flexible working hours and social events. More than half of the employees are not motivated to work better.

Every fifth employee feels that their compensation is relevant to their work and education, qualifications and experience. In Polish realms, the key motivational factor is compensation. On the other hand, the level of compensation, especially in the sector of higher education is considered unsatisfactory. It has been reflected in the obtained results. In both groups of employees the level of compensation determines lowering level of motivation.

Regarding work evaluation, most of the staff have assessment meetings with their supervisor at least once a year. More than half of the employees had such a discussion in the last 6 months. Professional development was well assessed by the academic staff – at the level of 72%, yet the administrative staff turned out much worse in this evaluation: only 48% thought it was good. There is also a significant discrepancy between the managerial and non-managerial staff, 61% and 41%, respectively. Employees have a rather poor knowledge on how to use the forms of professional development and are not convinced that the possibility of promotion is dependent on the actual expertise of an employee.

Furthermore, the study results revealed that approximately 60% of workers declared satisfaction with work conditions and quality of the equipment and 1 out of 10 employees was not satisfied with the conditions at the workplace.

Finally, the results obtained in the study showed that about 60% of employees are of the opinion that the communication between employees is at a good level. 46% of employees declared that they have access to information on what happens in the organization, maximum 1 out of 3 employees claimed to have issues with receiving even important information, more than half of the employees know precisely the scope of their duties. In 22% of cases it happens that the employees do not know in whose competence specific issues are, every 3rd person says that the same task is done twice (unnecessarily) and every 4th employee observed the occurrence of pointless conflicts in the company.

Tables 3–8 show the results of factor analyzes.

In the case of input variables relating to satisfaction two factors were singled out (Table 3). The first one (Factor 1) focuses those aspects which refer to job satisfaction of WSB University in Wrocław employees (perception of work in the context of individual benefits). The Factor 2 brings together aspects of good reputation of the university, care for employees and students. These two dimensions explain 85% of the total variability of the variances, which is sufficient to identify the hidden construct.

Table 3 *Satisfaction, opinion about the university – factor loadings*

Satisfaction – items	Factor 1	Factor 2
On the whole, I am satisfied with my work	<b>.853</b>	.254
WSB cares about its customers (students)	.514	<b>.619</b>
When I think of myself in terms of my professional life, I think of myself as a WSB employee	<b>.712</b>	.316
If necessary, I would be willing to take extra effort to ensure a proper running of the university	<b>.452</b>	.421
I like this job	<b>.651</b>	.352
I am an employee of a good college	.514	<b>.719</b>
WSB offers professional educational services	.346	<b>.596</b>
WSB has a good reputation among the community of students	.258	<b>.788</b>
WSB has a good reputation among its employees	.362	<b>.509</b>
I'm proud to work in this college	<b>.569</b>	.421

In the case of input variables relating to relationship with the supervisor two factors, which explain 73% of the total variability of the variances, were singled out (Table 4). The first factor carries information related to self-development, while the other – information about general relations between the supervisor and the employees.

Table 4 *Relationship with the supervisor – factor loadings*

Relationship with the supervisor – items	Factor 1	Factor 2
My supervisor clearly defined the scope of my responsibilities	.625	.201
I receive relevant information on how to perform my duties at work	<b>.598</b>	.324
The supervisor encourages my professional development	.301	<b>.521</b>
The supervisor discusses with me my work outcomes on regular basis	.448	<b>.536</b>
The supervisor supports my ideas and proposals	.205	<b>.621</b>
The supervisor cares about the atmosphere at the workplace	<b>.702</b>	.258
My supervisor is nice and kind to other employees	<b>.558</b>	.294
My supervisor handles well conflict prevention and resolution	<b>.563</b>	.296
I trust my supervisor	<b>.541</b>	.296
I always have the opportunity to talk with my supervisor about work-related issues	.128	<b>.724</b>
My supervisor is willing to share with others his knowledge and information	<b>.558</b>	.384
I feel that my supervisor appreciates my work	.198	<b>.705</b>

In the case of input variables relating to motivating two factors, which explain 78% of the total variability of the variances, were singled out (Table 5). The first factor carries information related to motivation in relation to the surveyed employee, while the other – information related to general principles.

Table 5 *Motivating including compensation – factor loadings*

Motivation – items	Factor 1	Factor 2
I know the principles of the compensation system at WSB	.193	.758
Payroll is clear and easy to understand	.211	.698
I know the rules of the bonus system at WSB	.301	.655
I know the current incentive system, I think the salary that I receive is adequate to my work	.691	.354
The pay I get is relevant to my education, skills and experience	.655	.215
My salary is similar to what I could earn at other universities	.451	.337
I feel that I am motivated to work better	.624	.125
The bonus system motivates me to perform better at work, I am satisfied with the benefits available at WSB (cash benefits, grants, loans)	.624	.189

In the case of input variables relating to work evaluation and professional development two factors, which explain 65% of the total variability of the variances, were

singled out (Table 6). The first factor carries information related to a particular employee's development possibilities, while the other – information related to general principles of functioning of WSB evaluation system.

Table 6 *Work evaluation and professional development – factor loadings*

Work evaluation and professional development – items	Factor 1	Factor 2
I know the principles of the WSB evaluation system	.251	<b>.852</b>
Career development: training, courses, conferences are offered by WSB and are available to me	<b>.514</b>	.254
I have sufficient opportunities for career development at WSB: promotions, training, research projects, scholarships, conferences, fellowships, sabbaticals)	<b>.560</b>	.381
On the whole, I am satisfied with opportunities for professional development	<b>.847</b>	.158
I have an influence on what I do at my workplace	<b>.627</b>	.486

In the case of input variables relating to working conditions also two factors, which explain 59% of the total variability of the variances, were singled out (Table 7). The first factor is related to a physical adaptation of the workplace to employees' needs, while the other factor consolidates other working conditions.

Table 7 *Working conditions – factor loadings*

Working conditions – items	Factor 1	Factor 2
WSB in Wrocław offers an ergonomic workplace	<b>.562</b>	.258
It guarantees proper, modern workplace equipment	<b>.498</b>	.321
It helps employees with financial issues through the properly running system of social benefits	.351	<b>.452</b>
WSB offers flexible working hours to help employees with their daily work	.382	<b>.514</b>
It introduces team working methods in order to avoid monotony and repetitive tasks	.369	<b>.552</b>

In the case of input variables relating to the flow of information and communication two factors, which explain 73% of the total variability of the variances, were singled out (Table 8). The first factor is related to a general flow of information within a company, while the other carries information on the flow of information particularly to a person examined.

Table 8 *The flow of information and communication – factor loadings*

The flow of information and communication – items	Factor 1	Factor 2
Communication between coworkers is at a very good level	.721	.128
Cooperation among departments and faculties, where I work is appropriate	.624	.189
Information about what happens at the workplace is passed quickly	.538	.254
I have access to information about what happens at WSB	.254	.845
It happens that there are miscommunication issues even with regard to important information	-.544	.328
It is often unclear in whose competence certain issues are	-.628	.227
I know exactly the scope of my duties	.283	.689
It happens that a task done by one person is unnecessarily repeated by someone else	-.566	.411
There are many pointless conflicts	-.428	.236

## Conclusions

In order to achieve sustainable success of the organization it is necessary to build its future with a focus on external customer satisfaction. It may only be accomplished through satisfaction of stakeholders, among which include the internal customer. The concept of internal customer shows that satisfied, motivated and not manipulated employees promote quality approach in the organization. Practical use of the notion of internal customer requires creation of organizational environment, work environment and organizational culture supporting partnership and respect among internal clients. Above all, it is important to prevent any pathologies and dysfunctions within the organization, and promote a pro-active and pro-quality management approach.

In standardized management systems it is possible to implement the idea of internal customer thanks to the process approach. Is then required to: specify internal customers and suppliers, identify the interrelationships between them and consider the role changeability in the course of tasks implementation.

The described in this article, case of internal customers and suppliers, their interrelationships and interactions, as well as the variability of roles in the quality management system, points to the need to include the measurement of key characteristics that describe particular internal relations. Satisfied internal customer determines the success of an organization, therefore the level of satisfaction should continuously be measured. It has been shown that there can be multiple measurement areas. In order to obtain an effective measurement model it is essential to focus on relevant integrated general indicators, so that the improvement actions are feasible. It is also important that their implementation and execution significantly affects the level of internal customer satisfaction in a relatively short time.

The conducted research allowed to acquire opinions of the vast majority of the respondents from WSB University in Wrocław on job satisfaction, attitudes towards the school, relationship with a supervisor, identification with the organization, and flow of information. These turned out positive. Dissatisfaction regarded solely working conditions. The measuring model of internal customer satisfaction should have attributes of repeatability and improvement because of the below mentioned reasons.

First of all, any deviation in employees' satisfaction, their opinion on higher education institution in real time can affect its image in the environment. That translates into adverse external customer (potential candidates and current students) decisions. What is more, appropriate relationships with supervisors are in accordance with the PN-EN ISO 9001:2009 Norm. Their aim is to ensure that employees focus on a well-done job without fear of losing the job or being exposed to unethical behavior (PN-EN ISO 9001:2009). Furthermore, motivation is crucial for quality, because it should trigger an initiative to make improvement. Maintaining high quality of educational services is not possible without continuous improvement of activities, processes, and the whole organization. Fair, transparent and pro-efficient principles of compensation play a significant role in motivating. They also guarantee that employees do not have existential problems that are counterproductive for a quality-focused work. What is also important, evaluation of work should be reflected in the level of compensation, promotion opportunities, and professional development. The rules of this evaluation must be clear and transparent. It should be noted that the assessment itself can cause employee dissatisfaction when an assessment system does not have the above mentioned features. Then, as a source of frustration brings about lack of commitment. Another important factor are ergonomic and hygienic working conditions which are the basis for the quality-aimed work. Teamwork inspires creative activities and counteracts negative work occurrences such as monotony and stress. Finally, the flow of information is essential for the employee to comprehend the context of his work, and it is essential to understand the role and importance of the external customer. If an employee finds that his work is not respected, or will not know view the sense in doing it, he will not perform at an appropriate level of quality.

The measurement model presented in this article, and the obtained evaluation results indicate the need to enhance the tool. The measurement should be improved by providing a precise description of criteria for assessing the internal supplier. The aforementioned duality of roles and their permanent interchangeability cause the evaluation and satisfaction criteria to occur alternately. The assessment of the cooperative position in the context of organization will be performed either from the perspective of the internal customer or from the perspective of the supplier. Internal product, namely, the means to carry out tasks or do work, may be of both tangible and non-tangible nature (see Łobos & Pyłacz, 2015).

The factor analysis used leads to the conclusion that employees assess the higher education institution first in the context of benefits to an individual (self-

centeredness), and secondly in the context of benefits for the group. This applies to satisfaction as well as relationship with supervisor, motivation or the flow of information.

On the whole, quality is a compliance with expectations and its measure may be the degree of their fulfilment, and thus effectiveness. These are mainly the expectations of customers who want to get education and consciously agree to engage in educational and learning processes. In the case of an educational service, some complication emerges due to the fact that the expectations are on the side of the recipient (a student an auditor) and service suppliers (schools, scientific and academic staff). This is reflected in the requirements enclosed in the education agreement which stem from specific laws and regulations. Educational services cannot be provided with lack of work commitment and without a recipient (see Goranczewski & Puciato, 2008). For this reason, the proper relationship between the organization and the external customer can definitely be transferred into an organization. Such relations allow for a better understanding of needs and expectations of the external customer.

On the other hand, the internal customer satisfaction should be measured in order to respond to any deviations in real time. This is because any deviation will result in a decrease in external customer satisfaction in a very short period. That in turn, may cause irreversible negative effects on brand image, which in the case of a higher education institution is fundamental.

## References

- Addey, J. (1999). Internal customer satisfaction through involvement. *Total Quality Management*, 10(4–5), 421–425.
- Batt, R. (2002). Managing customer services: Human resource practices, quit rates and sales growth. *Academy of Management Journal*, 45(3), 587–597.
- Bugdol, M. (2011). *Zarządzanie pracownikami – klientami wewnętrznymi w organizacjach projakościowych*. Warszawa: Difin.
- Bugdol, M., & Goranczewski, B. (2011). *Projakościowe usprawnianie organizacji oparte na procesach. Koncepcje, metody, narzędzia*. Oświęcim: PWSZ.
- Chang, W.J.A., & Huang, T.C. (2010). The impact of human resource capabilities on internal customer and organizational effectiveness. *Total Quality Management*, 21(6), 633–648.
- Chaston, I. (1994). A comparative study of internal customer management practices within service sector firms and the National Health Service. *Journal of Advanced Nursing*, 19(2), 299–308.
- Dill, D.D. (1995). Through Deming's eyes: a cross-national analysis of quality assurance policies in higher education. *Quality in Higher Education*, 1(2), 95–110.
- Durlik, I. (1998). *Inżynieria zarządzania*. Warszawa: Placet.
- Goldstein, S.M. (2003). Employee development: an examination of service strategy in a high-contact service environment. *Production and Operations Management*, 12(2), 186–203.
- Goranczewski, B., & Puciato, D. (2008). Znaczenie świadomości pracowników w normatywnych systemach zarządzania. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, (31, Zarządzanie personelem jako kryterium doskonałości), 413–424.

- Goranczewski, B., & Szeliga-Kowalczyk, A. (2015). *Jakość usług turystycznych i rekreacyjnych. Ujęcie holistyczne*. Warszawa: CeDeWu.
- Grigoroudis, E., Tsitsiridi, E., & Zopounidis, C. (2013). Linking customer satisfaction, employee appraisal, and business performance: an evaluation methodology in the banking sector. *Annals of Operations Research*, 205(1), 5–27.
- Harnesk, R. (2004). Partnership with internal customers – a way to achieve increased commitment. *The TQM Magazine*, 16(1), 26–32.
- ISO/TR 10013:2001. *Raport techniczny – dokumentacja systemu zarządzania jakością*. Warszawa: PKN.
- Jun, M., & Cai, S. (2010). Examining the relationships between internal service quality and its dimensions, and internal customer satisfaction. *Total Quality Management*, 21(2), 205–223.
- Kaur, G., Sharma, R.D., & Seli, N. (2010). An assessment of internal market orientation in Jammu and Kashmir Bank through internal suppliers' perspective. *Journal of Services Research*, 10(2), 117–141.
- Khan, H., & Matlay, H. (2009). Implementing service excellence in higher education. *Education & Training*, 51(8/9), 769–780.
- Kilburn, A.J. (2009). Building quality internal exchange: The role of the organization and the individual in internal customer orientation. *Academy of Marketing Studies Journal*, 13(1), 79–87.
- Lobos, K., & Pyplacz, P. (2015). *Funkcje i narzędzia zarządzania dla małych i średnich przedsiębiorstw*. Warszawa: CeDeWu.
- Marshall, G.W., Baker, J., & Finn, D.W. (1998). Exploring internal customer service quality. *Journal of Business & Industrial Marketing*, 13(4/5), 381–392.
- Mohr-Jackson, I. (1991). Broadening the market orientation: An added focus on internal customers. *Human Resource Management*, 30(4), 455–467.
- Piercy, N.F. (1998). Barriers to implementing relationship marketing: Analysing the internal market-place. *Journal of Strategic Marketing*, 6(3), 209–222.
- PN-EN ISO 9000:2006. *Systemy zarządzania jakością. Podstawy i terminologia*. Warszawa: PKN.
- PN-EN ISO 9001:2009. *Systemy zarządzania jakością. Wymagania*. Warszawa: PKN.
- PN-EN ISO 9004:2010. *Zarządzanie ukierunkowane na trwały sukces organizacji*. Warszawa: PKN.
- PN-ISO 10002:2006. *Zarządzanie jakością – Zadowolenie klienta – Wytyczne dotyczące postępowania z reklamacjami w organizacjach*. Warszawa: PKN.
- Raharjo, H., Xie, M., Goh, T.N., & Brombacher, A.C. (2007). A methodology to improve higher education quality using the quality function deployment and analytic hierarchy process. *Total Quality Management & Business Excellence*, 18(10), 1097–1115.
- Steward, M.D., Wu, Z., & Hartley, J.L. (2010). Exploring supply managers' intrapreneurial ability and relationship quality. *Journal of Business-to-Business Marketing*, 17(2), 127–148.
- Tareef, F., & Balas, A. (2012). Marketing in higher education institutes: Using an internal marketing strategy and innovation models. *Managerial Challenges of the Contemporary Society. Proceedings*, 3, 163–169.
- Tutuncu, O., & Kucukusta, D. (2008). The role of supply chain management integration in quality management system for hospitals. *International Journal of Management Perspectives*, 1(1), 31–39.
- Ullah, I. (2013). The influence of human resource practices on internal customer satisfaction and organizational effectiveness. *Acta Universitatis Danubius. Administratio*, 5(1), 5–38.
- Williams, J., & Cappuccini-Ansfield, G. (2007). Fitness for purpose? National and institutional approaches to publicising the student voice. *Quality in Higher Education*, 13(2), 159–172.

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**Attachment – Results of the study**

Scale Reliability	Assessment criteria	Results	
		Didactics Division	Administrative Division
<p><b>Satisfaction .77, opinion about the university .85</b></p>	<p>On the whole, I am satisfied with my work; WSB cares about its customers (students); when I think of myself in terms of my professional life, I think of myself as a WSB employee; if necessary, I would be willing to take extra effort to ensure a proper running of the university; I like this job, I am an employee of a good college; WSB offers professional educational services; WSB has a good reputation among the community of students in; WSB has a good reputation among its employees; I'm proud to work in this college.</p>	<p>3/4 of lecturers were satisfied with their work at WSB; the employees believe that WSB cares about its students; less than half of employees feel that they have a significant influence on WSB activity; 1/3 of employees was thinking about leaving WSB during the last 6 months (the main reason being insufficient compensation).</p>	<p>2/3 of the staff were satisfied with work at WSB; 15% more employees at senior positions were satisfied compared to those with non-senior jobs; 2/3 of employees declare that the school cares about its students; 39% of employees do not feel they have a significant influence on running of the university; nearly every 2nd employee thought of leaving WSB within the last 6 months. Half of employees at non-senior positions considered changing the job (the major reason being insufficient compensation and for 24% overload of duties). The reason for which the employees do not change their job is pleasant work atmosphere.</p>

Scale Reliability	Assessment criteria	Results	
		Didactics Division	Administrative Division
<p><b>Relationship with the supervisor .94</b></p> <p>My supervisor clearly defined the scope of my responsibilities; I receive relevant information on how to perform my duties at work; the supervisor encourages my professional development; the supervisor discusses with me my work outcomes on regular basis; the supervisor supports my ideas and proposals; the supervisor cares about the atmosphere at the workplace; my supervisor is nice and kind to other employees; my supervisor handles well conflict prevention and resolution; I trust my supervisor; I always have the opportunity to talk with my supervisor about work-related issues; my supervisor is willing to share with others his knowledge and information; I feel that my supervisor appreciates my work</p>	<p>3/4 of employees feel the supervisor encourages their professional development; 44% of employees discuss outcomes of their work with the supervisor on regular basis; 85% of employees have the opportunity to talk with the supervisor about work-related issues; 69% think that the supervisor is willing to share his knowledge and information; 3/4 of employees feel that their supervisor appreciates their work; 79% declare that the work in their department is well-organized.</p>	<p>44% of employees feel the supervisor encourages their professional development; every 3rd employee discusses outcomes of their work with the supervisor on regular basis; 78% have the opportunity to talk with the supervisor about work-related issues; 76% of employees think that the supervisor is willing to share his knowledge and information, whereas 21% more in non-managerial positions think that way; 2/3 of the employees feel the supervisor appreciates their work; those at non-managerial positions are in 89% cases informed about goals and duties of a unit compared with staff at managerial positions (71%); nearly 2/3 of employees is of the opinion that their co-workers have an adequate scope of duties; 3/4 state that their supervisor delegates his responsibilities and authority; 78% of employees in managerial positions declare that the work they do, matches the description of the position to which they were assigned, among non-managerial staff 18% think otherwise; 90% declare that the work in their department is well organized.</p>	

Scale Reliability	Assessment criteria	Results	
		Didactics Division	Administrative Division
<p><b>Motivating compensation including compensation .80</b></p>	<p>I know the principles of the compensation system at WSB;  payroll is clear and easy to understand;  I know the rules of the bonus system at WSB;  I know the current incentive system, I think the salary that I receive is adequate to my work;  the pay I get is relevant to my education, skills and experience;  my salary is similar to what I could earn at other universities;  I feel that I am motivated to work better;  the bonus system motivates me to perform better at work, I am satisfied with the benefits available at WSB (cash benefits, grants, loans).</p>	<p>Motivating – the motivating factor that the organization does not meet is recognition of achievements by a supervisor.  Compensation – 67% of employees believe that their salary is similar to what they could earn at other universities;  17% declare that the bonus system motivates them to work better; 1 out of 10 employees is satisfied with the social benefits;  55% feel appreciated;  63% think that the level of salary depends mainly on one's qualifications;  48% of employees are of the opinion that the most important non-financial benefit is extra medical care.</p>	<p>Motivating – the staff believe that the motivating factors, which WSB does not provide are promotion, recognition of achievements by the supervisor, courses and training, flexible working hours and social events.  Compensation – nearly 1/2 of the staff think that their salary is similar to what they could earn at other universities;  41% of employees declare that the bonus system motivates them to carry out their work duties better;  4% are satisfied with social benefits, these are only persons in non-managerial positions;  39% of employees feel appreciated at WSB;  51% believe that the level of salary depends mainly on professional experience and performance of the entire organization (44%); more than half of the employees is of the opinion that the most important non-financial benefits are shopping vouchers for the holidays and extra medical care.</p>
<p><b>Work evaluation and professional development .91</b></p>	<p>I know the principles of the WSB evaluation system;  career development: training, courses, conferences are offered by WSB and are available to me;  I have sufficient opportunities for career development at WSB: promotions, training, research projects, scholarships, conferences, fellowships, sabbaticals;  on the whole, I am satisfied with opportunities for professional development;  I have an influence on what I do at my workplace.</p>	<p>Work evaluation – the most important assessment criteria in work evaluation is expertise (94%) and the appropriate skills to work with students (72%). These are also seen as the most important component in the current assessment system.  Professional development – 72% of employees satisfied;  courses and training are available (73%).</p>	<p>Work evaluation – only 18% of employees in a managerial position had a performance evaluation meeting with their supervisor within the past 6 months;  employees think that the most important assessment criterion should be work engagement (80%) and not, as currently practiced, the ability to work with others (50–69%).  Professional development – 48% are satisfied with professional development;  slightly more than ½ of employees declare that they have access to professional training and courses.</p>

Scale Reliability	Assessment criteria	Results	
		Didactics Division	Administrative Division
<b>Working conditions .91</b>	<p>WSB in Wroclaw offers an ergonomic workplace; it guarantees proper, modern workplace equipment; it helps employees with financial issues through the properly running system of social benefits; WSB offers flexible working hours to help employees with their daily work; it introduces team working methods in order to avoid monotony and repetitive tasks.</p>	<p>Social benefits and high wages were important for employees, yet they believed their employer does not fulfil their financial expectations.</p>	<p>Autonomy at the workplace and development opportunities, social benefits, advancement opportunities (and its criteria), flexible working hours and minimal stress level all play a significant role; the employees in managerial positions pointed to high wages, social benefits, and clear criteria of advancement and minimal stress level as important and unfulfilled expectations.</p>
<b>The flow of information and communication .90</b>	<p>Communication between coworkers is at a very good level; cooperation among departments and faculties, where I work is appropriate; information about what happens at the workplace is passed quickly; I have access to information about what happens at WSB; it happens that there are miscommunication issues even with regard to important information; it is often unclear in whose competence certain issues are; I know exactly the scope of my duties; it happens that a task done by one person is unnecessarily repeated by someone else; there are many pointless conflicts.</p>	<p>62% of employees stated that cooperation of their department with others is appropriate, almost 2/3 declared they have access to information about what happens at WSB relatively quickly; 62% said they have access to information about what happens at their workplace; maximum 1 in 10 employees has issues with receiving even important information; 85% of employees know precisely the scope of their duties; in 15% of cases it happens that the employees do not know in whose competence particular issues are.</p>	<p>87% of employees think cooperation between departments is appropriate; 43% of employees said that the information on what happens in the company is passed relatively quickly; 2 out of 3 people in managerial positions and 1 out of 3 in non-managerial positions.</p>