

Quality Management in Service Desk

How Does Service Desk Managers Define and Measure Quality

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Abstract: Many public and private sector organisations are depending on IT services provided by external service providers. The quality of the service affects the customer satisfaction and consequently the customer behaviour. The concept of quality has many meanings in the literature. In this paper, we study how service desk managers perceive the concept of quality and how to manage it in an organisation which has adopted ITIL. Our findings indicate that the quality is seen only in terms of how the agreed service levels are achieved. This view excludes the quality of the processes used to deliver IT services. Quality measurements are reflecting the perception of the concept of quality.

1 INTRODUCTION

Public and private sector organisations are currently depending more and more on information technology (IT). Currently, many IT needs are delivered and consumed in the form of services. Some of these IT services are acquired from external suppliers for various reasons, such as the lack of required IT-skills and knowledge, low-risk attitude, and costs associated with the ownership of IT service.

The traditional way to satisfy IT needs is to build or develop IT systems in-house. Building IT systems have three phases: design, implementation, and use. From the customer point-of-view, the use phase is the most important, as that is the phase where the customer actually receives value from IT. With IT services the process is similar, but if a customer subscribes to an existing service, the design and implementation phases are skipped. Also, if customers are not satisfied with the IT service, they can easily change the supplier.

For service providers, it is crucial to keep their customers satisfied. Service Desk is in a key position as it is the single-point-of-contact for the customers. Delivering a high-quality service has been found to be crucial to customer satisfaction. Thus the Service Desk ought to provide high-quality services. But what does the high-quality mean in Service Desk?

The purpose of this paper is to study how service desk managers perceive the concept of quality and how they manage it in an organisation which has adopted ITIL.

2 IT SERVICE MANAGEMENT

IT service can be defined as a means of delivering value to customers to help them to achieve their goals without ownership of IT costs and risks (Axelos, 2011). IT service management (ITSM) is a set of capabilities for providing value to customers in the form of IT services (Axelos, 2011). The most widely adopted framework used to implement ITSM is Information Technology Infrastructure Library (ITIL).

ITIL has five lifecycle phases; Service Strategy, Service Design, Service Transition, Service Operation, and Continual Service Improvement (Axelos, 2011). From a customer point-of-view, the most important lifecycle phase is the Service Operation (SO), as in that phase customer uses the service and consequently, receives the value.

ITSM terminology has been found to be confusing. For instance, according to a study conducted in the US among 300 organisation, 40% of organisations were not familiar with basic ITSM

terminology (Winniford *et al.*, 2009). Due to the de facto status of ITIL, many organisations have adopted it. However, adopting ITIL *per se* does not guarantee success. This is a common misunderstanding and has led to situations where results are uncertain and expectations are unfulfilled (Hochstein *et al.*, 2005).

In this paper we are focusing on a small part of ITIL, namely Service Desk. Therefore we will next introduce a key terminology related to Service Desk.

2.1 Service Desk

Service Desk is one of the functions of Service Operation phase of the service lifecycle. Service Desk is “the single point of contact between the service provider and the users” (Axelos, 2011, p. 53). Typically Service Desk handles incidents and service request and communicates with the users (Axelos, 2011). Incidents are unplanned interruptions to IT services or a reduction of the quality of the IT service (Axelos, 2011). Therefore, the Service Desk is crucial to the customer satisfaction.

Service Desk is managed by the Service Desk Manager (SDM). SDM is responsible for (Axelos, 2017):

- Managing daily operation of the service desk
- Monitoring response times and user satisfaction levels
- Issuing technical bulletins to inform customers of problems and instructing them in taking necessary action
- Consulting with experts to ensure integrated actions plans
- Monitoring issue resolution and liaise with stakeholders
- Improving techniques and practices for managing client queries, troubleshooting and problem resolution and prioritization.

2.2 Service Level Agreement

Service Level Agreement (SLA) is an agreement between an IT service provider and customer. It should be noted that ITIL makes a distinction between a *user* and a *customer*: the customer is the party which pays for the service, and the user is the one who consumes the service. The SLA contains at least the description of the service, service level targets, and responsibilities (Axelos, 2011).

SLA for Service Desk typically contains service targets such as response time, resolution time, and customer satisfaction.

3 QUALITY MANAGEMENT

The purpose of quality management is to increase organisation’s effectiveness and utilisation of its resources (Porter and Parker, 1993). From service provider point of view, service quality can create favourable or unfavourable behavioural intentions to customers (Zeithaml *et al.*, 1996). If a service provider wants to improve the quality of their services, the customers are likely not able to provide means how to do that (Lepmets *et al.*, 2012). Thus, the service provider can only rely on data they can gather.

The concept of quality is not clear, and it has many definitions in the literature. Reeves and Bednar (1994) identified four different definitions of quality; excellence, value, conformance to specifications, and meeting or exceeding expectations. In the following, we will walk through each of them individually and discuss how to measure quality.

3.1 Definition of Quality

Quality as *excellence* refers to the view that quality is something more than commonly defined or accepted standard (Reeves and Bednar, 1994). In other words, the quality of the product is defined by its relation to some standard or ordinal product. Hence the quality is relative and changing over time as the standards evolve.

Quality as *value* refers to the view that quality is defined by its value to the customer (Reeves and Bednar, 1994). As such, quality can mean different things to different people. Hence the quality is relative and defined individually by each customer.

Quality as *conformance to specifications* refers to the view that quality is defined by product’s ability to meet its specification (Reeves and Bednar, 1994). The logic behind this view is that products should be interchangeable. Thus, if they are not produced as specified, they are not quality products. From the design point-of-view, all customer requirements need to be translated to physical, quantitatively measurable characteristics (Reeves and Bednar, 1994). Hence, in this view, the quality is objective.

Quality as *meeting or exceeding expectations* refers to the view where quality is defined by how the product meets or exceeds customers’ expectations (Feigenbaum, 1983; Reeves and Bednar, 1994). In other words, the “quality is whatever the customers say it is, and the quality of a particular product or service is whatever the customer perceives it to be” (p. 111, Buzzell and Gale, 1987). Hence, the same way as the *quality as value*, quality is subjective.

3.2 Measuring Quality

A famous quote, often wrongly attributed to W.E. Deming, says that “If you can’t measure it, you can’t manage it”. This suggests that to manage quality one must measure it.

The easiest way to measure product quality is *quality as conformance to specifications* and most difficult *quality as excellence* (Reeves and Bednar, 1994). Service quality is even more difficult to measure because service quality is defined as *meeting or exceeding expectations*, and the measurement includes both processes and service outcomes (Parasuraman *et al.*, 1985).

In ITIL, Critical Success Factors (CSFs) are defined for each IT service. CSF is something that must be achieved for an IT service to be successful (Axelos, 2016). Key Performance Indicator (KPI) is used to measure whether the CSF is achieved or not (Axelos, 2011). Although KPIs can be used to demonstrate achievement of CSF, it does not prove it (Axelos, 2016). Each KPI should be Specific, Measurable, Achievable, Relevant, and Time-bound (commonly referred as SMART). KPIs should be defined carefully so that they will guide to intended results. When people are measured “they will always do whatever they can to ensure that the figures look good.” (Axelos, 2016, p. 54). Examples of CSFs and associated KPIs are presented in Table 1.

Table 1: Examples of CSFs and associated KPIs (Axelos, 2016, p. 53).

CSF	Associated KPIs
The new IT service enables sales people to spend more time with clients	<ul style="list-style-type: none"> • Increase in the number of customer visits per day per sales person • Sales people satisfaction survey score increased by 0.5 within 6 months
Failures of the IT service do not have a significant impact on the customer’s business process	<ul style="list-style-type: none"> • Maximum of four service outages in any year • Maximum downtime of 30 minutes for any service outage
The company website is protected from attacks by hackers	<ul style="list-style-type: none"> • Critical patches are installed on all web servers within 12 hours of notification • Website penetration testing happens every 6 months

4 METHOD

The purpose of this paper is to study how SDMs perceive the concept of quality and how they manage it. To achieve this purpose, we selected a qualitative research approach. We interviewed eight SDMs of a multinational IT service provider during the May and June 2017. The service provider has 14000 employees in 20 countries, and its annual turnover is 1.5 billion euros. Interviewed SDMs were working in the same country organisation of the service provider.

The interviews were conducted using semi-structured interview script build under five themes. The themes and questions are presented in Table 2.

Table 2: Interview script.

Question
Definition of quality <ul style="list-style-type: none"> • How is quality shown on IT-service organization’s performance? • What kind is a quality service desk in IT-service organization?
Critical success factors of quality management <ul style="list-style-type: none"> • What are the critical success factors of service desk quality management? • How do you manage service desk in order to achieve critical success factors?
Quality measurement <ul style="list-style-type: none"> • Which measurements (quality indicators) are used to measure the service desk quality? • What kind of methods/processes are used to maintain and improve the quality of a service desk?
Service desk manager core competencies <ul style="list-style-type: none"> • What skills are needed for service desk manager? • What methods/processes are used in service desk quality leadership?
Quality management challenges <ul style="list-style-type: none"> • What are the challenges of service desk quality management? • What methods/processes are used, if service desk doesn’t fill the defined quality criteria or service level agreement?

All interviews were recorded and transcribed for the analysis. Answers were analysed per theme by identifying categories.

5 RESULTS

In this section, the results are presented by themes used in interviews.

5.1 Definition of Quality

Almost all respondents defined the quality in the same way; quality equals the achievement of the agreed service levels defined in SLA.

“For me the definition of the quality is also to be able to deliver the expected or contracted service level within the agreed costs.”

The logic behind this is that if the SLA is achieved, customers are satisfied. One respondent stated that quality refers to the consistency of the service.

“So basically, quality for me is a service that is provided in a unified way. So if the customer contacts us, and he or she can talk to any of our customer service specialists, they know that they will get similar service every time.”

As a summary, respondents see the service quality as the outcome of the service. Thus they do not see that the process used to deliver the service, such as request fulfilment or incident management, contributes to quality.

5.2 Critical Success Factors of Quality Management

The critical success factors of quality management are clearly linked to how the SDMs perceive the quality. Quality management is focused on managing the service outcomes through resources.

“First you have to have ability to actually to receive the customers issue, which means that you have to have resources to answer to the phone or answer to the tickets coming in. That’s the first primal step. If you don’t have recourses, then you are not answering to customers’ requests.”

Besides the number of the resources, also their skills need to be managed.

“I would say it is also a critical factor that you have personal mentoring. So every agent is different and needs different type of coaching.”

As a summary, respondents see that critical success factors are those that help them to achieve the SLA. If compared to CSF presented in Table 1, these CSFs are very different in their nature. This suggests that the concept of CSF is not clearly understood by SDMs.

5.3 Quality Measurement

Quality measurements are linked to the definition of quality.

“We have to compensate the customer, so it is also shown on economic figures, as quality costs. But I think it is important to understand that the definition of the quality needs to be what we are also measuring.”

Because quality is seen as an achievement of the SLA, the measurements are focused on SLA.

“Resolution and response SLA and user feedback, that’s are our main tools at the moment. Of course, personal feedback and observation from my side, escalation from customer etc. Escalations and complains from customer, because normally customers don’t tell us when we do the good job, they mostly tell us when we are doing bad job.”

SLA can be seen as a collection of KPIs which can be used to demonstrate achievement of CSF. As mentioned earlier, KPIs should be developed carefully so that they will guide to the right direction. Some respondents did not see SLA as a good way of measurement.

“SLAs are a good tool to view overall, but it’s not very specific, it’s not very detailed and has nothing to do with what kind of service you deliver to customer.”

Although the measurements are performed and results collected, some respondents felt that they are not used for managing the quality.

“...I can see quality follow up but I don’t see proactive quality work to increase the quality more than just on the management level to be on the back off on the agents and motivate them and remind them etc. I don’t see any processes where we are actually taking quality issues or quality problems and putting them into corrective actions and applying new processes, I don’t see that loop.”

As a summary, quality measurement is focused only on following the SLA achievement. This suggests that quality of the processes is ignored.

5.4 Service Desk Manager Core Competencies

The respondents see that their core competencies are mainly soft-skills related to managing people.

“First of all, I think you need to be people’s person. You need to be able trust people that they are actually doing their job and without staring over their shoulders seven hours a day because that wouldn’t create very work friendly environment.”

Another core competency mentioned by many respondents was the knowledge of the used tools.

“I think second is the people management part, to have the possibility and ability to be interested the people which are individuals. And of course, understanding of the tools, tools and reporting are available.”

As a summary, core competencies are related to managing people and tools used to deliver the services. When compared to the SDM's responsibilities presented earlier, the competencies are limited. For instance, the respondents did not see the monitoring of response times or user satisfaction as their core competency.

5.5 Quality Management Challenges

Quality management challenges are reflecting how the SDMs see the quality. Therefore, the challenges are seen mainly as the question about capacity and tools.

“Finding enough people to deliver service, resources. That it absolutely a challenge. Then you have internal conflicts.”

“Tools we have, some are really good, some are really crappy. If the tool is crappy, it's a challenge, because it makes it harder to work.”

Some respondents recognised that although the measurements are collected, there is no official quality management to handle the improvements.

“There is a culture and processes for quality follow up but not for quality work or quality improvements. Where is our quality manager? Who is driving processes?”

“The biggest challenge is that lack of centralized quality management. We don't have dedicated person for quality management at all in our company. And we only have one person who is a trainer, who is doing instructor trainings and that's it. So we train our people first for two weeks, and after that service managers are on their own.”

As a summary, SDMs see that quality management challenges are related issues preventing them from achieving SLAs. The organisation is lacking the official quality management process.

6 DISCUSSION

6.1 Conclusions

In this paper, we studied how service desk managers (SDMs) see the concept of quality, and how they manage it. As the results revealed, SDMs see the quality in terms of how the service outcomes relate to the agreed service levels. This limited view to quality

excludes the processes used to deliver IT services. Reasons for this were not discovered during the research. One candidate could be how the organisation understands ITIL. Is it misunderstood or only partially adopted? This may have an effect on the quality and consequently to customer behaviour.

The limited perception of quality also drives the measurements to focus plainly on service levels. As mentioned earlier, people have a tendency to focus on to those things they are measured of. This takes the focus away from KSFs and may lead to sub-optimisation as the quality improvements focus only on capacity and people skills. Although this may improve the outcomes of the service, the consistency of services may be lacking.

6.2 Limitations

This study is conducted by interviewing SDMs of one a country organisation of a multinational service provider. As such, the results may not be generalizable to other contexts. However, as the organisation is one of the leading organisations in the industry, its practices can be assumed to represent the status of the industry.

6.3 Directions for Future Research

As the data for this study is collected from a single organisation, a survey for multiple IT service providers could help to draw a better picture of quality management in service desks.

Another interesting research area would be to study which kind of organisational culture strengthens the quality management, or are they related at all.

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