

# QUALITY COST IN BANKING INDUSTRY

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## Abstract

The cost of quality is dynamic. The theoretical study results showed that the banking industry is closely related to the service, and the service is closely related to the physical facilities of the bank, employee competence, and service policies. The largest component of the cost of quality in the banking industry is included in operating expenses (i.e. Salaries and administrative expenses). In addition to these two components there are other quality costs, among other bonuses for outstanding employees, compensation for customers who experienced a service error, because the opportunity cost of lost customers, etc.

So when the company decided to improve the quality through high technology implementation program, initially this will raise the cost of quality. But when the program has been executed in full, and evidence has shown that the cost of quality failure decreased (reduced customer complaints, reduced processing time cash deposit at the teller), the bank can reduce the kind of quality costs, e.g., compensation for customer complaints, reduce the level of activity unannounced inspections, etc. The effect is a reduction in all categories of quality costs and increase productivity. Six sigma concept can be applied to the banking industry to perform continuous quality improvement.

**Keywords:** quality cost, six sigma, banking

## **1. Introduction**

The Bank is a very strict financial institution and is governed by its nature as a trust institution, intermediary between parties experiencing a surplus of funds to be channeled to sectors that have lack of fund. As a financial institution that relies heavily on public trust, banks are required to provide optimal service by always prioritizing the quality of service, so that customers will feel satisfied and secure in the transaction in the banking world. Customer satisfaction is one of the keys to the success of a business.

Quality of service is one of the key factors of bank success as a service company in finance, because the quality closely related to profitability. While profitability becomes one of the factors that determine the viability (going concern) of a company, in this case the bank. Improved quality can increase profitability in two ways: increasing customer demand and reducing costs. In this era of increasingly fierce global market competition, increasing demand and cost savings become the determinant of whether a company (bank) can thrive or simply survive (Hansen and Mowen, 2009).

Improving quality is certainly closely related to cost, because enhancement of quality requires various strategic planning steps and its implementation that will require certain costs, such as information technology investments, latest machinery, research and development, employee training, and so on.

The cost of quality can be substantial, and can be a significant source of significant savings, which in turn will affect productivity and profitability. This article will discuss about the cost of quality in the banking industry through literature review, with the systematic discussion as follows: introduction, discussion, and conclusion.

## **2. Discussion**

### **2.1 Definition and Characteristics of Banking Industry**

Banks are businesses that offer deposits, which can execute withdrawal requests (by checks or make electronic funds transfers) and distribute them in commercial loans (Rose and Hudgins, 2010). Apostolic et.al (2009) divides the core activities of the bank into 3 core activities namely (1) deposit

collection, which is the process of collecting funds from the community in the form of demand deposits, savings and time deposits (2) payment services, providing financial services i.e. payment traffic, Money transfers (3) underwriting loans, channeling funds to the community in the form of credit.

Meanwhile, according to Law No.10 / 1998 explains the definition of a bank is a business entity that collects funds from the community in the form of savings and channeled to the community in the form of credit and other forms in order to improve the standard of living of many people. The main function of banking is financial intermediation, i.e. the process of purchasing a surplus of funds from the business sector, government and households, to be channeled to the deficit economic unit. The function of financial intermediation arises as a result of the high cost of monitoring, liquidity cost and price risk due to the information asymmetry between the household / net savers and the corporations / net borrowers so that intermediary parties are required, Which is able to accommodate the needs of both parties (Saunders, 2008). Furthermore, Saunders (2008) argues that the function and role of financial intermediation are: (1) function as broker, (2) function as asset transformers, (3) role as delegated monitor, (4) role as information producer.

## **2.2 Definition and Dimensions of Quality**

Hansen and Mowen (2009) define quality as customer satisfaction. Customer satisfaction is the result of customer's assessment of what is expected by buying and consuming a product / service. Then the expectation is compared with the performance it receives by consuming the product / service. If the desire is greater (at least the same) than the expectation, then the customer is satisfied, otherwise if the performance given from the use of the product / service is smaller than expected then the customer is not satisfied.

Further Hansen and Mowen (2009), said that customer expectations can be described through the attributes of quality or often called "quality dimension". Thus a quality product / service meet or exceed customer expectations in the following eight dimensions:

### 1. Performance (performance);

In the service sector, performance dimensions can be further defined as attributes of responsiveness, certainty, and empathy.

A. Responsiveness is the desire to help the customer and provide a consistent and immediate service.

In the banking industry responsiveness means the willingness of employees and employers to help customers and provide services quickly as well as hear and resolve complaints from consumers. Any complaints from consumers should be directly given feedback, to prevent consumer dissatisfaction. For example, there are customers who have difficulty in writing transaction slips, so the service officers should be directly responsive and assist in writing the slip (Al Arif, 2010).

B. Assurance refers to the knowledge, friendliness, and ability of employees to build customer trust and confidence. Employees must be able to show consumers that the bank is able to realize every promise that has been offered to consumers (Al Arif, 2010).

C. Empathy (means caring and giving individual attention to the customer.

The willingness of employers to care more about giving personal attention to subscriptions. Each layer of employees from the top management level to the bottom (staff) must provide the best service to the customer. Every element in the company has the obligation to provide the best service to the consumer (Al Arif, 2010).

### 2. Aesthetics;

In the service sector, aesthetics is the appearance of facilities, equipment, employees, and communication materials related to the services provided.

### 3. Ease of maintenance and repair (serviceability);

Relates to the level of ease to maintain and improve the product.

### 4. Features (features);

Features are different product characteristics of similar products whose functions are the same.

#### 5. Reliability (reliability);

Reliability is the probability of a product or service performing a function such as its intended within a given period of time. Reliability relates to the ability of banks to provide services in accordance with the promised, reliable, accurate, and consistent. Banks capable of providing services in accordance with what has been promised through the promotion will give its own satisfaction to consumers (Al Arif, 2010).

#### 6. Durability;

Durability is the length of time the product can function.

#### 7. Quality of conformance;

Quality of conformance is a measure of whether a product meets its specifications or not.

#### 8. Fitness for use.

Fitness for use is the suitability of a product performing functions as advertised.

Meanwhile, according to Parasuraman, Zeithalm and Berry (1988) based on the results of his research, service quality dimensions there are 10 items, which abbreviated SERVQUAL (SERVice QUALity), namely:

##### 1. Tangibles (Seen / Sensed)

The appearance of physical facilities, equipment, persons, and materials or documents; Both printed and visually.

##### 2. Reliability

Ability to provide accurate service, as promised.

##### 3. Responsiveness

Responsiveness and sincerity in helping to provide fast service.

##### 4. Competence (Ability)

Knowledge, skills and attitudes that are owned and required in providing effective services.

##### 5. Courtesy (Polite Santun)

The courtesy, respect, and manners held in the interaction of the ministry.

#### 6. Credibility (Trust / Honesty)

Trustworthiness and honesty are owned and undoubtedly in service.

#### 7. Security (Security)

Security Guarantees in the service process, which frees itself from a sense of doubt /

Concerns about the risk of material loss / immaterial.

#### 8. Accessibility

Ease to be found / contacted / contacted at the time of service process took place.

#### 9. Communication

Listening and understanding customers by promoting mutual agreement, in solving a service problem.

#### 10. Understanding the Customer

Understanding what customers need and desire in the service.

### **2.3 Quality Costs**

Hansen and Mowen (2009: 272), define the cost of quality as costs arising because there may or may not be products of poor quality. "Four categories of quality cost according to Hansen and Mowen (2009)

#### 1. Prevention Costs (Prevention Costs)

Prevention costs occur to prevent poor quality of products / services produced. If the cost of prevention increases, then the cost of the failed product can be expected to fall. Examples of preventive costs are costs for quality experts, quality training programs, quality planning, quality reporting, supplier selection and evaluation, quality audits, quality cycles, field testing, and design review.

Prevention costs described by Garrison (2006: 83), which is the most effective way to minimize or reduce the cost of quality but still maintain a high quality in the resulting product is to avoid problems related to quality as early as possible.

## 2. Appraisal Costs

Assessment costs occur to determine whether the products and services are in compliance with customer requirements and requirements. The purpose of the appraisal cost is to avoid errors during the service delivery process.

The assessment fee described by Garrison (2006: 85), occurs to identify defective products before the product is delivered to the consumer. The unfortunate thing in doing this assessment activity does not guarantee that defective products will not happen again, and most managers feel that this inspection is too costly to control quality.

## 3. Cost of internal failure

The cost of internal failure occurs because the products and services produced are not in accordance with the specifications, desires, and needs of customers or consumers. Services provided to customers within the company must be adjusted to customer criteria.

The cost of internal failure described by Garrison (2006: 85), was caused in identifying defective products during the appraisal process. For example, in the banking industry, internal failure costs can be due to the mistaken application of client or client account codes, resulting in a fund transfer error.

## 4. Cost of external failure

The cost of external failure occurs because the products and services produced fail to meet the requirements or do not satisfy the needs of the customer after the product reaches the customer. Of all the quality costs, these cost categories can be the most disadvantageous.

The cost of external failure described by Garrison (2006: 85), occurs when the defective product has reached the hands of the consumer is not to order and keingingan. Includes warranty repair and replacement, product withdrawal, possible legal liability, and loss of sale due to low quality reputation.

For example, an incorrect bank account has already been sent to bank customers.

## **2.4 Cost of Quality in the Banking Industry**

Broadly speaking the cost due to poor quality in the banking industry there are 2, namely:

1. Visible cost of poor quality

- Costs to serve customer complaints. Customer complaints will cost time and money.
- Costs incurred due to loss of customers. Existing customers will automatically drive the business of the company. Can be imagined if there are customers lost due to poor service quality and service.
- The cost of reworking. In the event of service breakdown due to poor service quality and service it will cost more to fix it.

2. Invisible cost of poor quality

- Costs to deal with negative publicity. Dissatisfied customers will notify others of their dissatisfaction. This can give a bad image for the company. And the cost to grow trust and attract new customers will be higher.
- Cost to replace lost customers. From a survey conducted by the Technical Assistance Research Program (TARP) shows that getting new customers will cost up to five times higher than maintaining existing customers.
- Higher marketing costs. Poor quality will not get free marketing that is recommendation from mouth to satisfied customers.

## **2.5 Real Example of Quality Costs in the Banking Industry**

The banking industry is closely related to services, and services are closely related to the bank's physical facilities, employee competencies, and service policies. According to BRI's 2014 Staff Development Program (PPS) module, the service policy covers 3 (three) things:

1. People (security guard, customer service, teller, telephone operator)

- Mindset Training Service and Service Standards Program for all employees.
- Standing-Smile Policy-Greetings-work procedures for tellers.
- Policy standing and shaking hands when welcoming customers to customer service.

- Policy minimum number of security guard 2 people (1 person in parking lot, and 1 person in the banking hall).
2. Process (customer service process),
- Policies are not allowed to serve more than 2 customers at a time.
  - A time target policy for each type of transaction.
  - Handling queues, handling customer complaints, advanced services.
  - include rolling break times for frontliners (so customers can get service at any time during business hours)
3. Premises (equipment support services, toilets, and ATMs).
- Quality premises of UKO and ATM and the convenience and completeness of service support aspects.
  - Standard indoor equipment, including digital rate boards, garbage cans, ticket tables and brochures, queuing machines, plant types, air conditioners, etc.).

Examples of quality cost cases in BNI Syariah in 2013 include:

1. The cost of education and training to improve the competence of employees at various levels, from the manager level to the level of the security guard and cleaning service. An example of the BNI Syariah annual report of 2013, the cost of education and training is included in the components of salary and allowances.

### 36. BEBAN GAJI DAN TUNJANGAN

	<b>2013</b>
Gaji dan upah	3,366,494
Tunjangan	2,500,884
Pendidikan dan pelatihan	216,498
<b>Total</b>	<b>6,083,876</b>

2. Communication costs, information technology, professional services, research and development.

- ♣ The cost of communication, related to the smooth communication to support the smooth service, such

as the cost of credit and phone charges.

♣ The cost of information technology, closely related to the facilities supporting services through internet banking, ATM machines, cash deposit independent, and others.

♣ Professional services are also closely linked to quality improvement, as within the professional services component can include the cost of IT consulting services (Information Technology).

♣ The cost of research and development is closely linked to the goal of "endless innovation" which will ultimately improve the quality of banking services.

Here is another real example of our quality cost from BNI Syariah's annual report of 2013.

37. BEBAN UMUM DAN ADMINISTRASI	2013	2012	
Biaya sewa	717,315	604,332	<i>Rental expenses</i>
Beban tenaga kerja	715,832	610,254	<i>Personnel expenses</i>
Perlengkapan kantor	592,034	526,765	<i>Office supplies</i>
Penyusutan	552,990	518,329	<i>Depreciation</i>
Perbaikan dan pemeliharaan	507,621	528,095	<i>Repairs and maintenance</i>
Komunikasi	398,323	319,497	<i>Communications</i>
Teknologi informasi	340,474	231,626	<i>Information technology</i>
Listrik dan air	238,708	186,178	<i>Electricity and water</i>
Transportasi	210,031	182,825	<i>Transportation</i>
Jasa profesional	68,112	48,735	<i>Professional services</i>
Penelitian dan pengembangan	60,566	52,303	<i>Research and development</i>
Beban lain-lain	137,693	111,632	<i>Other expenses</i>
<b>Jumlah</b>	<b>4,539,699</b>	<b>3,920,571</b>	<b>Total</b>

From the above example it can be concluded that the largest component of quality cost in the banking industry is covered in operational expenses (ie salary and allowances expenses, general and administrative expenses). In addition to these two components there are other quality costs, including bonuses for outstanding employees, compensation for customers who experience service errors, opportunity cost due to lost customers, and sebaynya.

## 2.7 Effect of Quality Cost on Productivity

Improved quality can increase productivity and vice versa (Hansen and Mowen, 2009). For example in the banking industry, if the number of client complaints decreases as customers are satisfied with the quality

of bank services, less time and employee allocations will be used to handle customer complaints. Furthermore, a satisfied customer will be a promotional media person to person that will ultimately increase the number of bank customers. Increasing the number of customers will increase productivity, which will ultimately increase the profitability and value of the company.

The cost of quality is dynamic, so when companies decide to improve quality through high-tech implementation programs (ATM machines and cash deposit machines), this will initially raise the cost of quality. However, when the program has been fully implemented, and evidence has shown that the cost of quality failures decreases (reduced customer complaints, reduced cash-off time at the teller), the bank can reduce other types of quality costs, eg compensation for customer complaints, , etc. The effect is a reduction in all categories of quality costs and productivity improvements. The dynamic nature of the cost of quality can be described as follows:

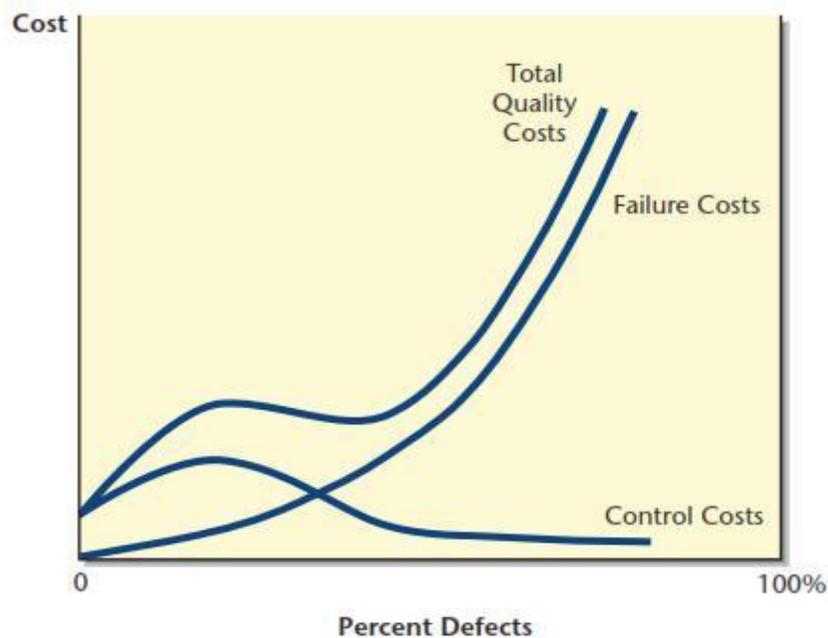


Figure 1. The dynamic nature of the cost of quality

Source: *Manajerial Accounting*, Hansen dan Mowen (2009)

### 3. SIX SIGMA TO INCREASE THE QUALITY OF SERVICES IN BANKING INDUSTRY

### **3.1 Definition of Six Sigma**

Hayler and Nichols (2007) explain that Six Sigma is a chain process in meeting consumer demand. Six Sigma's focus is to understand customer demand in detail presented in the form of data to reduce processes that are not in accordance with consumer demand, so the company can present a quality service to consumers. The application of Six Sigma in a finance company is to create value that suits consumer demand through a chain process. Understanding consumer demand for financial firms can perform efficiencies to eliminate unsuitable work processes while creating value that suits the tastes of consumer demand.

### **3.2 Effectiveness of Six Sigma Application in Banking Industry**

Nowadays the competition in the banking industry is increasing. Newcomers in the banking industry offer services that pamper consumers both through convenience, investment security, low cost and ease and speed in transactions. This condition forced the banking industry to not only rely on efficiency, but demanded to be able to create value in accordance with demand, then do the efficiency and effectiveness of work so that it can medongkrak company performance.

Banking companies are required to satisfy consumers on an ongoing basis. The application of Six Sigma to financial companies such as banks focuses on the following:

1. Translating the voice of the consumer by analyzing, conducting tests or measurements of an information that consumers actually want (business process documentation), and
2. Then the information is used as a basis for improving customer service process or customer (performance measurement and control).

Six Sigma offers tools or techniques that can identify inefficiencies. Under Six Sigma methods inefficiency can be avoided when companies understand the value that consumers need. Through learning gained from workplace cases, the Six Sigma method offers improvements by improving work processes, analyzing, and reviewing each work process.

Financial firms or banks will face the complexities of transactions, business models and service processes as business advances and technological developments. The process of transactions or services will involve third parties as supporting technology and international banking transactions will be more complicated. The application of Six Sigma will help solve the problem, as Six Sigma focuses on customer or customer service, as well as on data processing to create value and minimalization of inefficiency.

Financial companies or banks are also required to be able to utilize technology as an accelerator. The use of technology in transactions of financial or banking companies continues to increase. The use of technology not only speeds up transaction processing and cut costs but also increases customer experience. Utilization of technology in a financial or banking company requires a large investment. The finance company or the bank must anticipate new technological developments and earn a return on the technology investment. At this point the Six Sigma method is needed because Six Sigma offers operational strategies and business processes as well as uniting between people, applications, methods and infrastructure and technology so that the use of technology can be used optimally.

The application of Six Sigma to a finance company can be said to be more difficult than the application of Six Sigma to a manufacturing company. In a finance company that is a product defect tracking service and work inefficiency is difficult to do because the product is intangible. The series of operational processes in financial companies such as banks do not produce physical goods, but a process of service that can only be perceived by consumers or customers.

Improvement efforts towards the six sigma target can be done with the DMAIC methodology, with the following stages:

1. Define

Formally define targeted process improvement that is consistent with the customer's demand or needs and company strategy.

2. Measure

Measures the performance of the process at the present time so it can be compared against the specified target. Perform process mapping and collect data related to key performance indicators (key performance indices).

### 3. Analyze

Analyze the causal relationships of various factors studied to determine the dominant factors that need to be controlled.

### 4. Improve

Optimizing the process using analysis such as Design of Experiment (DOE), to know and control the optimum conditions of the process.

### 5. Control

Controlling the process continuously to improve process capability toward six sigma target.

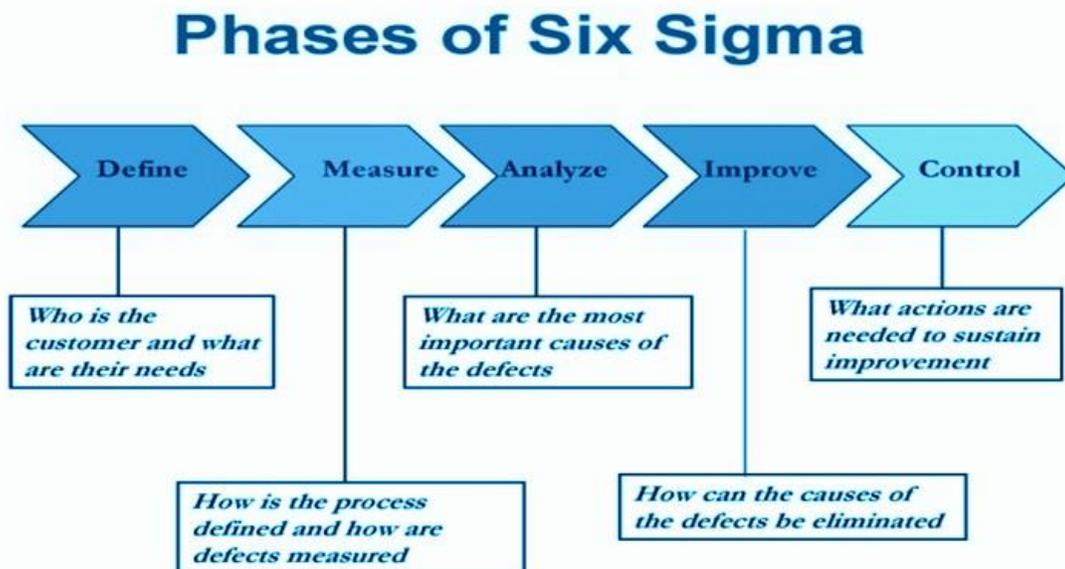


Diagram 1. Process of Six Sigma

## 4. Conclusion

The unique characteristics of the banking industry that focus on quality of service cause cost

control is crucial to note, because the quality is closely related to customer satisfaction, which will ultimately improve productivity, profitability, and corporate value. Quality cost control can be done on various quality dimensions in accordance with special programs implemented by banks (people, process, premises). The biggest component of quality cost in the banking industry is the cost of education and training, the cost of information technology, as well as the cost of research and development. Six sigma concept can be applied to banking industry to make continuous quality improvement.

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