

# IMPROVEMENT IN PERFORMANCE OF PUBLIC SECTOR BANKS WITH THE HELP OF QUALITY FUNCTION DEPLOYMENT

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## ABSTRACT

The Indian public sector banks have continuous expanding; still it has facing tough competition with private sector banks. In current scenario the performance of public sector banks is poor as compare to private sector banks in number of activities. So the public sector banks need improvement in service quality. In public sector banks increased more waiting time while providing services to customer. Behaviors of staff member and more time taking in sanctioning of loan, increases customer dissatisfaction. This is adversely impacting our quality of life and increasing the problem for long delays. To fight and mitigate delays in banking the professionals are working in all over world towards increasing the productivity of existing bank sector through the use of advanced technologies such as Quality Function Deployment (QFD). The QFD is a method for developing a design quality. It aims at satisfying the consumer and then translating the consumer's demand into design the targets and major quality assurance points that has to be used throughout the service. Hence an attempt has been made to meet the customers demand in banking services by applying the quality concept such as QFD in Indore-city for the present research has been reviewed. A comprehensive perspective of QFD and its potential parameter for improvement has been provided for public sector banks.

**Keywords:** *Quality function deployment, Voice of customer, Technical requirement*

## [1] INTRODUCTION

The Indian banks could grow in a closed economy but the public sector opened up for private competition. It is possible that private banks could become dominant players within India. It has been recorded a rapid rise of the new private sector banks and it has tracked the transformation of the public sector banks as they grapple with the changes of financial deregulation. Use of ATM cards, Internet Banking, and Mobile Banking are the new

innovative channels of banking which are being widely used as they result in saving the time and money, Moreover private sector banks are aligning its infrastructures, marketing quality and technology to build deep commitment in building consumer and retail banking. The main focus of these banks is on innovative range of services, there are two essential things that identifying customer needs and transferring this information along to the product design phase is essential for any business to be able to stay in competition to the market. This study describes the following two issues as the two goals that bank must accomplish to be competitive: {1} Accurate identification of customer requirements and {2} simultaneous design of multiple products/services. But translation of identified customer requirements into simultaneous design of products/services is not easy task, why because there is a gap between customer requirements and transfer of these requirements in product design. The quality function deployment (QFD) is a methodology to aid the planning and realization of quality products/services to meet customer expectations by bridging the communication gap between customer requirements and technical requirements and help to translate customer (*what's*) to designers (*how's*).

### **1.1 Quality Function Deployment (QFD)**

Quality Function Deployment is a customer-oriented approach to product and service innovation. It guides managers through the conceptualization, creation, and realization of new products and services. The QFD process encourages you to gain an in-depth understanding of the requirements of your customer needs and expectations thus enabling you to prioritize the features/benefits of your product/service to these requirements.

## **[2] QFD METHODOLOGY**

The QFD methodology provides a structured framework for concurrent engineering that propagates the “voice of the customers” through all phases of product development QFD utilizes a progression of matrices to link operational processes and decisions to customer needs,

### **2.1 VOICE OF CUSTOMER DEPLOYMENT (phase-1)**

often referred to as the House of Quality in this phase Qualitative customer requirements are translated into design independent, measurable quality characteristics of the product. The quality characteristics are prioritized from the customer's perspective and target values for desired level of performance are selected based on competitive benchmarking.

## **2.2. PARTS DEPLOYMENT (phase-2)**

After the selection of a design concept or alternative Phase 2 examines the relationship between the quality characteristics and the various components or parts of the design. The result of Phase 2 is a prioritization of the component parts of the design in terms of their ability to meet the desired quality characteristic performance level. The important few components or parts are then deployed to Phase 3.

**2.3. PROCES DEPLOYMENT (phase-3):** This explores the relationship between the part and the manufacturing processes utilized in the production of the part. The goal of Phase 3 is to identify the manufacturing operations that control the component target value and variation and correlate component specifications with process target values and specifications. The Phase 3 is a prioritization of manufacturing processes and specifications for key process parameters that are deployed to the fourth phase.

**2.4. TASK DEPLOYMENT (Phase-4):** In this phase the key manufacturing processes and associated parameters are translated into work instructions control and reaction plans, and training requirements necessary to ensure that the quality of key parts and processes is maintained. Ideally these four phases combined provide a traceable link from the shop floor back to customer requirements that provides workers insight into how their job function impacts customer satisfaction.

## **[3] CASE STUDY**

The survey have done at Indore in public sector banks and in private sector banks to compare the performance of public sector and private sector banks with the help of questionnaires, the result has been abstained as shown in the chart given bellow as chart shows The performance of public sector banks is poor as compare to private sector banks so there is need to improve the performance of public sector banks. in this case study the author have to identified potential parameter that will improve the service level of public sector banks and also create a proper sequence for implementation of technical requirements. The questionnaires are designed for urban areas to capture the voice of customer and indentify more appropriate parameter that will improve the service quality of public sector banks.

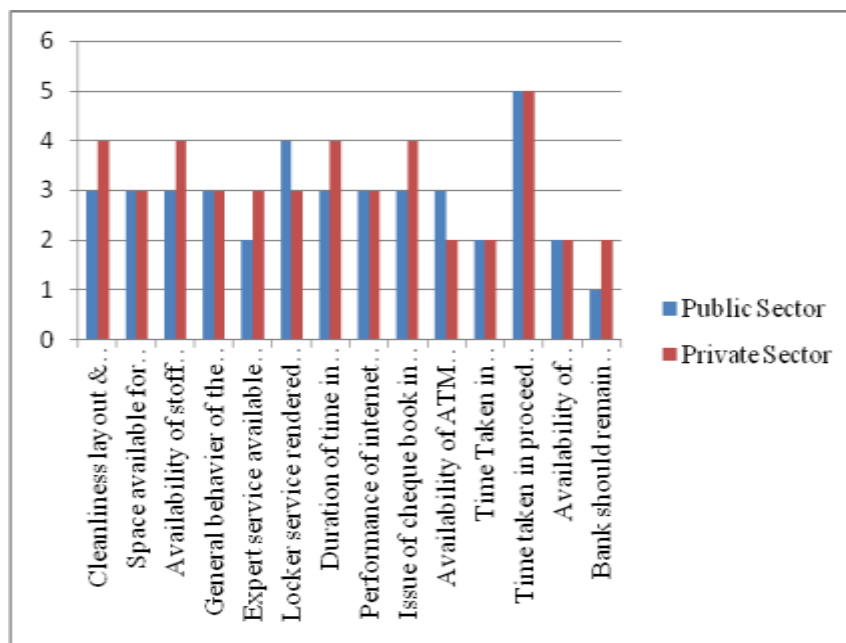


Fig 1 Comparative chart of current performance between public sector & private sector banks

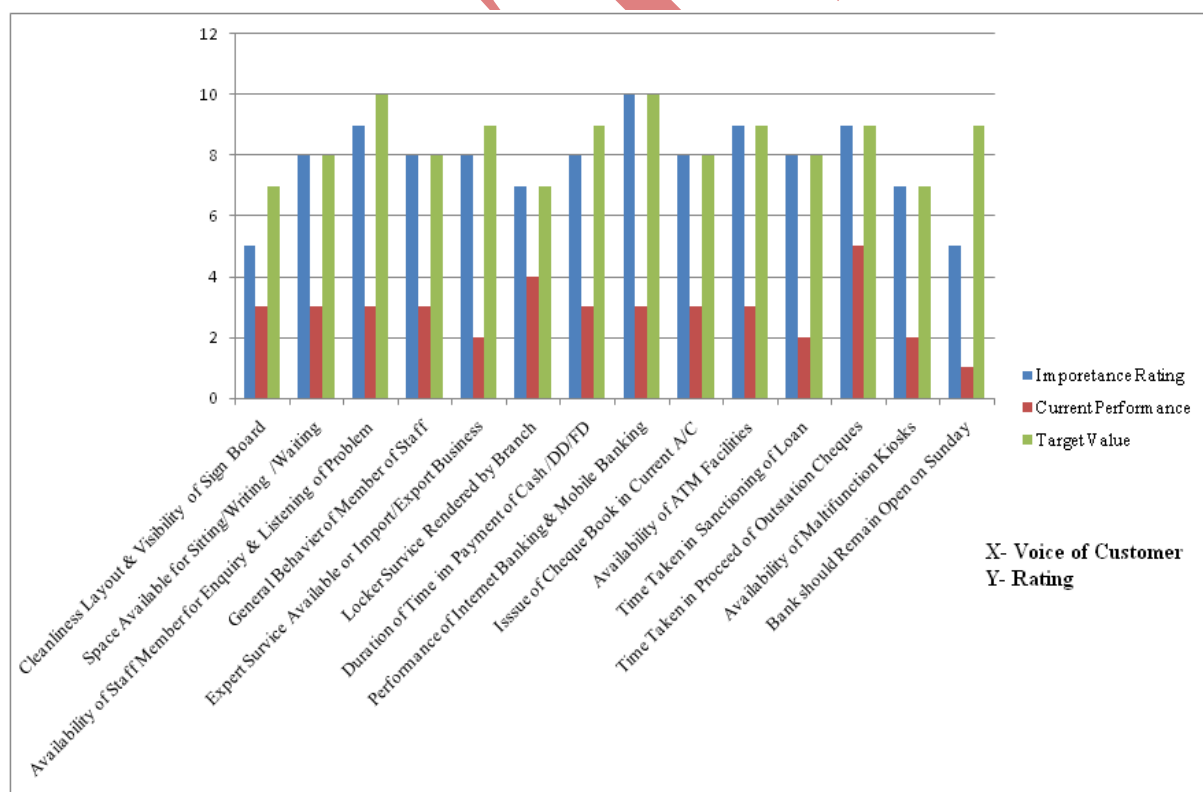


Fig 2: Comparisons between IR, CP & TV for Public Sector Banks

Fig 2 shows the importance rating [IR], target value [TV] and current performance [CP] against the voice of customer. Higher importance rating [IR], higher target value [TV] and poor current performance [CP] shows the primary requirement of customer and Low [IR], low [TV] and higher [CP] is considered as secondary requirement. From the above figures the primary requirement of customer like efficient service of retail banking. Banks should remain open on Sunday; expert services should be available for import/export business as per the requirement. Public sector banks should hold their main focus in service and availability of resources.

**Table.1 Voice of Customer for Public Sector Banks**

S.No.	Voice of Customer for Public Sector Banks	IR	CP	TV
1	Cleanliness layout & visibility of sign board	5	3	7
2	Space available for sitting/writing /waiting	8	3	8
3	Availability of staff member for enquiry & listening of problem	9	3	10
4	General behavior of member of staff	8	3	8
5	Expert service available for import/export business	8	2	9
6	Locker service rendered by branch	7	4	7
7	Duration of time in payment of cash /DD/FD	8	3	9
8	Performance of internet banking & mobile banking	10	3	10
9	Issue of cheque book in current a/c	8	3	8
10	Availability of ATM facilities	9	3	9
11	Time taken in sanctioning of loan	8	2	8
12	Time taken in proceed of outstation cheques	9	5	9
13	Availability of multifunction kiosks	7	2	7
14	Banks should remain open on Sunday	5	1	9

The voice of customer for public sector banks collected from two cities (Satna and Indore) is shown in Table.1 and their current performance (CP) and importance rating (IR) are obtained from the customers by filling questionnaires. As per the higher importance rating and poor current performance, target value for improvement is selected with the help of brainstorming session.

### 3.1 VOICE OF CUSTOMER DEPLOYMENT (FIRST STAGE DEPLOYMENT OF QFD)

Relation Rating	Symbol		Importance rating	improving housekeeping & use of digital	customer friendly layout	attentiveness towards customer problem	Friendly behavior of staff towards	Separate Exchange & separate loan	Separate locker facilities	efficient service for retail banking	Performance of technology driven services	Self currier & FAX facilities for quick cheque	Easy availability of service dispensers	Unique cheque ID for clearance of	Service facilities beyond normal working time	Current performance	Target rating	Scale up factor	Absolute Importance rating
Strong 9	●																		
Medium 3	Ω																		
weak 1	Δ																		
cleanliness layout & visibility of sign board		5	●	Ω												3	7	2.3	11
space available for sitting/writing /waiting		8		●				Ω	Δ							3	8	2.6	20
availability of staff member for enquiry & listening of problem		9			●	Ω										3	10	3.3	29
general behavior of member of staff		8				●										3	8	2.6	20
expert service available for port/export business		8						●				Ω		Ω	Ω	2	9	4.5	36
locker service rendered by branch		7							●						Ω	4	7	1.8	12
duration of time in payment of cash DD /FD		8								●	Ω					3	9	3	24
performance of internet banking & mobile banking		10								Ω	●					3	10	3.3	33
issue of cheque book in current a/c		8					Ω					●			Δ	3	8	2.6	20
availability of ATM facilities		9		Δ							●		●		Ω	3	9	3	27
time taken in sanctioning of loan		8			Δ	Ω	●									2	8	4	32
time taken in proceed of outstation cheques		9				Δ					Ω			●		5	9	1.8	16
availability of multifunction kiosks		7								Δ	Ω		●			2	7	3.5	24

Bank should remain open on Sunday	5						Δ				Ω		●	1	9	9	45
<b>Absolute weight</b>		45	96	89	156	168	76	109	243	96	159	105	125				
<b>relative weight</b>		99	240	293	439	672	173	240	732	286	594	252	650				

**Fig 3 Deployment of voc for public sector banks**

#### [4] Results and Discussion

- 1) The table 2 depicts the various technical descriptors and their corresponding relative weights which were obtained from deployment of Voice of customer.

**Table 2 Results of Deployment of VOC for Public Sector Banks**

Sr.No.	Technical Descriptor for Public Sector Banks	Relative Weight
1	Improving housekeeping & use of digital display	99
2	Customer friendly layout	240
3	Attentiveness towards customer problem	293
4	Friendly behavior of staff towards customer	439
5	Separate Exchange & separate loan department for improved responsiveness	672
6	Separate locker facilities	173
7	Efficient service of retail banking	240
8	Performance of Technology driven services	732
9	Self currier & FAX facilities for quick cheque book availability	286
10	Easy availability of service Dispensers	594
11	Unique cheque ID for clearance of outstation cheque	252
12	Service facilities beyond normal working time	650

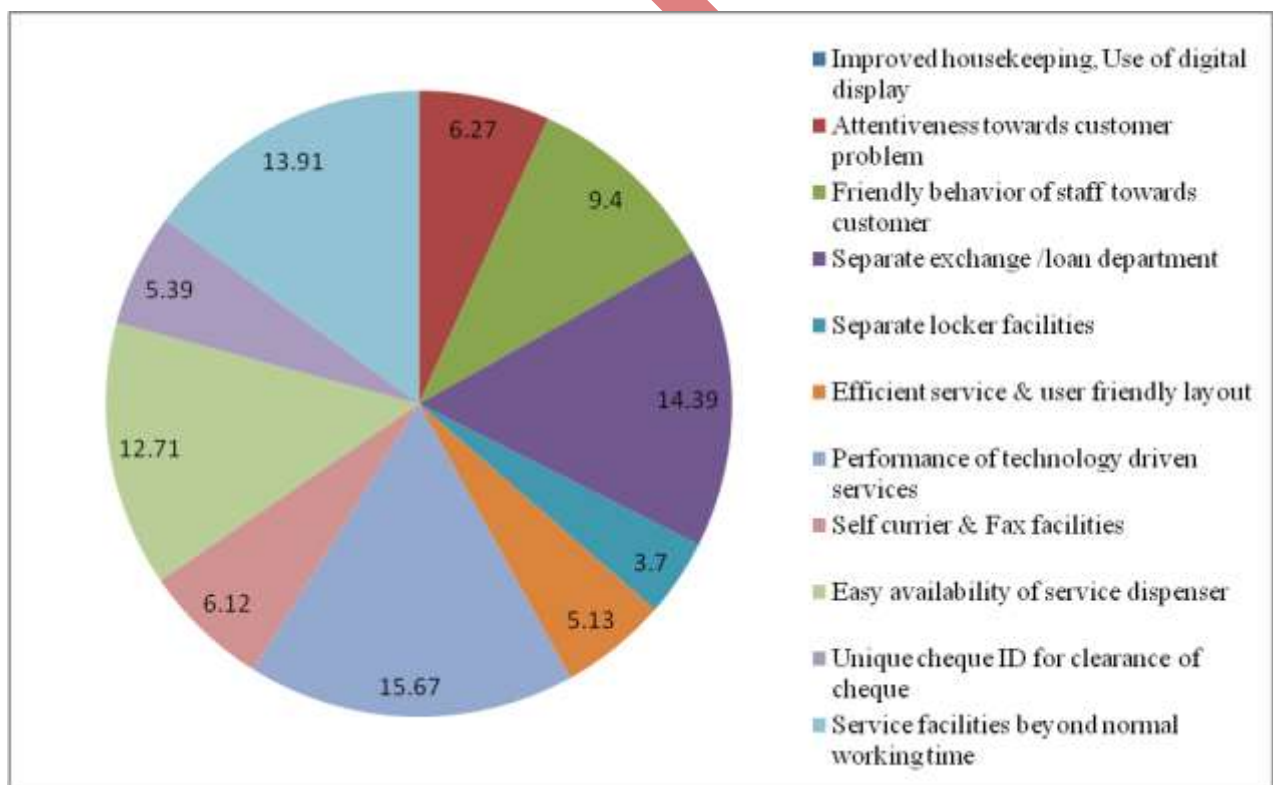


2) The aspect of ‘performance of technology driven services has maximum relative weight [732] and improved housekeeping and use of digital display has minimum relative weight [99] among all technical descriptors.

3) Due importance is to be given in next stage of QFD process for the parameters that are having high relative weights like ‘most important factor for public sector banks is service facilities beyond a normal working time having a relative weight [650] and separate exchange and separate loan department have maximum relative weight[672].

4) Other important parameter as per there maximum relative weight as shown in figure 2. As like easy availability of service dispensers relative weight [594] and friendly behavior of staff towards customer relative weight [439]

5) Due importance is to be given in the next stage of QFD process for the parameters that are having high relative weights most important factor for public sector bank is service facilities beyond a normal working time having a relative weight (650) and separate exchange and separate loan department maximum relative weight (672).





#### **Fig 4 Technical Descriptor vs. Relative Weight for Public Sector Banks**

5) These results were depicted in 'Pie-diagram' as shown in Fig 4 for better understanding.

#### **[5] Suggestion and Recommendation**

As per result obtained from the deployment of voice of the customer, it has been identified that the most important parameter has higher relative weight than the less important parameter that has lower relative weight comparatively. So it is recommended that the bank should give first preference to the parameter which has higher relative weight as compared to the other parameter for the improvement of service quality of banks in less quality improvement cost. The bank should first focus in improving the parameter which has higher relative weight, after that the preference should be given as per the weight of the parameter obtained from the result of deployment of voice of customer. As per the importance the proper parameter sequence is given below:

1. As per the survey result the first preference should be given to the performance of technology driven services because it has highest relative weight of {732} and weightage of {15.67%}. Therefore it is recommended that the public sector bank should first improve the performance of technology driven services.
2. Second priority is given for the parameter separate exchange and separate loan department that have maximum relative weight of {672} and weightage of {14.39%}. Therefore bank should provide separate facilities for foreign exchange and separate loan department for efficient service and customer satisfaction.
3. In public sector banks one of most important customer requirement is to provide service facilities beyond normal working time which have maximum relative weight of {650} and weightage of {13.91%}. Therefore it is recommended that public sector bank should provide service facilities over normal working time or some branches should be open in shifts or on Sunday.
4. The aspect easy availability of service dispensers is given fourth level of priority having maximum relative weight of {590} and weightage of {12.71%}.
5. The friendly behavior of staff is put in the fifth level having maximum relative weight of {439} and weightage of {9.40%},
6. Attentiveness towards customer problem is put in the sixth level of priorities having maximum relative weight of {293} and weightage of {6.37%},

7. Self currier and FAX facilities for quick cheque book availability are put in the seventh level of priorities. It has maximum relative weight of {286} and weightage of {6.12%}.
- 8 Unique cheque ID for clearance of outstation cheques is given eight level of priorities having maximum relative weight of {252} and weightage of {5.39%}.
9. Efficient service of retail banking and customer friendly layout is given ninth level of priorities having a relative weight of {240} and weightage of {5.13%}.
10. The parameters like separate locker facilities are put in tenth level of priorities having relative weight of {173} and weightage of {3.70%},
11. Improved housekeeping and use of digital display is put in the last level of priorities of importance factors having a maximum relative weight of {99} and weightage of {2.11%}.

## **[6] Conclusion**

With the result obtained from deployment of voice of customer it is concluded that performance of technology driven services and. The Separate exchange and separate loan department having higher relative weight must be given first priority for improvement and Little focus is to be given on cleanliness layout, visibility of signboard and customer friendly layout for increasing the market size in order to fulfill the need of the customer and to create a high level service, there is need to improve the service quality according to following parameters:

1. To increase the performance of technology driven services
2. To do separate exchange and separate loan department
3. Providing service facilities beyond a normal working time
4. Improvement in easy availability of service dispensers
5. Co-operative and friendly behavior of staff, customer friendly layout and efficient service of retail banking

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