IDENTIFICATION AND RANKING OF COMPETENCIES THAT POSITIVELY INFLUENCE CUSTOMER SERVICE: AN INDIAN CASE STUDY

Shanujas V
Research Scholar
National Institute of Technology
Calicut - 673601, India
shanujas.v@gmail.com

Thiyagarajan Radha Ramanan[1]
radha_ramanan@nitc.ac.in

ABSTRACT

This study identifies and ranks the competencies that positively influence customer service and are therefore helpful in creating customer satisfaction. The study is conducted in a cooperative bank in a district of south India. The competencies were identified after direct observation of the employee's jobs, interviews with the employees, a review of the job descriptions and specifications, a review of the literature, the checklist method, and administration of a questionnaire. Using the Delphi method, a consensus was achieved. The Analytic Hierarchy Process was used to rank the competencies. There were five job competencies that were identified and were then ranked. Three distinct groups of employees that included managers, accountants, and clerical staff were identified, and their responses were collected using a 1 to 9 pairwise comparison scale. Normalization of the data was achieved by computing the geometric mean of the responses. The ranking revealed that the relationship management competency had the top priority, and the teambuilding and technical competencies had the least priority in providing customer service. The major finding of the study was the identification of the cognitive competency as the most important for managers and accountants and the relationship management competency for the clerical staff to achieve customer satisfaction. These findings will be helpful in identifying the training needs of these three categories of employees to help improve their customer service performance through the job competencies.

Keywords: customer service performance; employee competencies; cooperative banks; AHP approach

1. Introduction

At the heart of any successful business is a group of competent employees. Ever since the dawn of liberalization, privatization and globalization, the world has become very competitive. It has become particularly important to manage and retain the competency level and performance of a business' human resources in order to gain a competitive advantage in the market. This competition is present in the financial

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services sector, and banks have searched for ways to attract more customers and increase the volume of business. Even though product differentiation is not possible in the banking sector, organizations should focus on improving the quality of services that are delivered to customers. Modern banking organizations have become aware of the role of employees in attracting, retaining and satisfying customers by providing superior customer service. Indian banks have secured a better position in the world because of their remarkable performance with assets and return on assets. The banking and financial sector plays a significant role in the economic progression of India. The Indian banking sector comprises scheduled banks (commercial banks and cooperative banks) and non-scheduled banks. Cooperative banks have attained many landmarks since their formation and play a crucial role in the life of ordinary Indians. Ordinary people are the primary customers of cooperative banks, and they seek the support of employees for the completion of banking transactions. Even though the cooperative banks have widespread branches and a good number of employees, they are far behind many nationalized and private banks with regard to their functioning and other innovative employee related customer service operations. Modern banking organizations are more concerned with the customer service domain and have initiated separate wings and programs to improve employee competencies and the quality of customer service, and therefore increase customer satisfaction and profit. Cooperative banks must also emphasize finding competent employees and initiate programs to improve the competencies of their current employee's abilities to provide superior services to customers. The development of an employee competency framework would enable the cooperative banks to identify the critical competencies that would enhance the customer service performance of their employees. This would allow the cooperative banks to make strategic decisions on technological applications, recruitment and selection, and training and development programs based on the identified critical employee competencies.

The present study aims to identify the job competencies needed to improve the quality of customer service, ascertain their relative weights and rank the competencies. In order to identify different job competencies, the study adopted methods such as direct observation of employee activities, a semi-structured interview with the employees, scrutiny of the job description and specifications of the managers, accountants and clerical staff, a literature review, the checklist method, a questionnaire survey and the Delphi method. Further, the Analytic Hierarchy Process (AHP) method was applied to understand the priority and rank of the job competencies in enhancing customer service performance from the managers, accountants and the clerical staff separately. The AHP is a multi-criteria decision-making technique that was developed by Saaty (1980) to understand the priority of things based on pairwise comparison. The study employed a 1 to 9 pairwise comparison scale proposed by Saaty to understand the priority of each job competency over the others in providing excellent customer services. The geometric mean method was used to aggregate the individual judgments of the sample into a single representative judgment of the sample group. The AHP method is the most efficient tool for ranking the alternatives when decisions are made based on several criteria and sub-criteria (Mardani et al. 2015; Tahriri et al., 2008).

The paper is further organized as follows: the second section is devoted to a literature review of job competencies and AHP approaches employed in previous studies. The third part includes the research methodology with variables identification phases including observation, checklist, Delphi method and questionnaire survey, sample characteristics, and description of the AHP method. The fourth section is devoted to the results and discussions, and the final sectiondiscusses the conclusions and managerial implications of the study.

2. Literature review

Customer service has been defined as the firm's ability to perform all of the necessary tasks for understanding the customer needs, meeting customer demands, solving problems and providing excellent service (Kotler, 2000). Customer service is an important topic becasuse of it's strong linkage to customer satisfaction and customer loyalty which then leads to the financial performance of the firms (Duncan & Elliott, 2002, 2004; Abu-ElSamen et al., 2011). All of the employees who have direct contact with customers are responsible for satisfying them. Drucker (1968) claimed that customer service is not an assigned or specified job, and that every employee in the organization should take the initiative to satisfy the customer. Employee competencies play a crucial role in the delivery of superior service to customers (Abu-ElSamen et al., 2011). Competencies enable the employees to perform better when compared with an intelligence quotient and personality tests (McClelland, 1973). Spencer and Spencer (1993) described competencies as the fundamental characteristics or traits of an individual which enable him to display superior performance in his job.

There have been widespread studies on the identification of employee competencies in different work contexts (Jena & Sahoo, 2014; Lakshminarayanan et al., 2016; Trivellas et al., 2015 etc.). Kunnanatt (2008) found that achievement orientation is essential for bank managers to perform well at work. The survey conducted by Hopkins and Bilimoria (2008) among top-level executives of financial institutions in the United States concluded that competencies such as change catalyst, self-confidence, inspirational leadership and achievement orientation are the four social and emotional competencies that distinguish the most successful managers. Sharma (2012) investigated the level of social and emotional competencies of employees in India and North America. Competencies such as emotional self-control, self-management, emotional awareness, self-confidence, accurate self-assessment, trustworthiness, initiative, conscientiousness, achievement orientation, empathy, adaptability, organizational knowledge, social awareness, service orientation, inspirational leadership, relationship management, change catalyst, developing others, influence, conflict management, and teamwork and collaboration were identified as critical for employees of banking and financial sectors in the Indian context. Similar competencies were identified for bank managers in the kingdom of Saudi Arabia (Alferaih, 2017).

Multiple-criteria decision-making (MCDM) or multiple-criteria decision analysis (MCDA) is a sub-discipline of operations research that clearly assesses the multiple complex criteria in decision making in both quantitative and qualitative factors. Numerous MCDM methods have been proposed by many researchers in different periods for making ideal decisions. Most of the prominent studies on operations research adopted the recently developed hybrid and modular techniques such as TOPSIS (Hwang & Yoon, 1981), SAW (MacCrimmon & Rand, 1968), AHP (Saaty, 1980), ANP (Saaty, 1996), VIKOR (Opricovic, 1998), DEMATEL (Fontela & Gabus, 1976), DEA (Charnes, Cooper, & Rhodes, 1978), PROMETHEE (Mareschal, Brans, & Vincke, 1984), ELECTRE (Roy, 1971) and their modification of fuzzy and grey number theory. In addition to this, GRIP, COPRAS, ARAS, RUTA, MOORA, UTADISGMS, SWARA, and WASPAS have also been recently developed for solving decision problems. Numerous decision-making tools are available for an operations researcher, however, choosing the best technique remains a challenge. Mardani et al. (2015) systematically studied the methodologies of the MCDM tools by reviewing 393 research articles published from 2000 to 2014 in more than 120 prominent journals, and investigated which method is used most by researchers. The

results indicated that the AHP method was ranked first. Tahriri et al. (2008) also found that the AHP method is the most efficient tool for ranking the alternatives when decisions are made based on several criteria and sub-criteria.

Although Nursikuwagus, Melian and Permatasari (2018) employed the fuzzy TOPSIS approach to predict the level of student competence, and Sekhar, Patwardhan and Vyas (2015) adopted the Delphi-AHP-TOPSIS method to rank the indicators of intellectual capital including employee competencies, most of the prominent studies in the literature employed the Analytic Hierarchy Process (AHP) technique to explore and rank competencies in many domains. Islam and bin MohdRasad (2006) applied the AHP approach to evaluate employee performance. Hafeez and Essmail (2007) developed an integrated framework to define the association between organizational core competencies and related employee competencies using the AHP approach. Fang, Chang and Chen (2010) used the AHP method to develop a competency framework for middle managers in Taiwan. Liu, Lin & Chen (2011) conducted a study to explore and rank the professional competencies needed for marketing managers in Taiwanese banks using the AHP. The results found that the professional attitude competency which includes observing marketing ethics and law, initiative, responsibility, tolerance, and teamwork are ranked respectively. Demirtas et al. (2015) employed the Analytic Network Process to determine the weight and ranks of job competencies for a state bank in Turkey. Wang et al. (2016) developed a competency evaluation index system for operating room nurses (ORN) in China using the AHP approach. Chao, Chou and Lai (2017) also applied the AHP method to identify competencies for service sector managers using three factors and fifteen sub-factors.

The present study aims to understand the priority or ranks of the main criteria and sub-criteria only; there is no dependence among sub-criteria. Therefore, application of the ANP and TOPSIS is not required and the AHP is considered the appropriate tool for the present study. Even though various competency studies are available with the AHP approach, studies that aim to identify and understand the priority of job competencies in improving customer service performance of employees are rare, and cooperative banks are still an untouched area of research. Against this backdrop, the present study aims to identify and rank the job competencies that help improve customer service performance of cooperative bank employees using the AHP and has enormous relevance.

3. Research methodology

3.1 Design

Multiple methods were used for the study. The model was developed using a literature review, direct observation, a semi-structured interview, the checklist method, a questionnaire survey and the Delphi technique. The AHP method was also employed to understand the priority and relative weights of the competencies.

3.2 Sample

The first level data regarding employee competencies that are required for superior customer service was collected from fifty employees in different job positions including managers, accountants and clerks at the headquarters of a prominent district cooperative bank in Kerala, South India. The expert opinions and variable confirmations were collected from three academic experts and two professional experts. AHP data was collected separately from three different groups of employees which included ten managers, ten accountants and five clerical staff working in the

fifty-three branches of the same district cooperative bank in Kerala, South India to understand the differences in their priorities.

3.3 Variable identification: procedure and measures

3.3.1 Stage I: Direct observation, interview, job description and specification, literature review, and checklist method

The variable identification was conducted in three stages. Initially, the activities of the employees who have direct customer contact in the headquarters of one of the district cooperative banks were observed directly and the competency requirements were noted. A semi-structured interview was conducted with fifty employees and they were asked to list the competencies they thought were needed to better serve customers. Qualitative data analysis techniques such as transcribing, reading, categorizing, and extracting themes were used with the interview data. The job description and specification of the managers, accountants and clerks were reviewd and the common competencies that were required for the role were determined. Based on the observation, interview and job description, a long list of matching job competencies was identified from the McBer competency dictionary (Spencer & Spencer, 1993) and the literature (Boyatzis & Ratti, 2009; Sharma, 2012). The list of competencies was abridged by eliminating the competencies that had similar meanings, and this helped avoid duplication. Then, a checklist of 21 competencies was prepared and provided to the fifty employees of the bank. They were asked to identify the competencies which they thought were indispensable in the provision of quality customer service, and also asked to suggest any important competencies that were not included in the checklist. Based on the feedback from the employees, four more competencies related to the technical aspect of the jobs such as computer proficiency, accounting knowledge, inspection skills, and use of technology were added to the checklist. The identified competencies and their sources are given in Table 1.

Table 1
Details of variables identified and their origin

Competencies	**Source**
Negotiation	Spencer and Spencer (1993)
Problem solving	Spencer and Spencer (1993)
Decision making	Spencer and Spencer (1993)
Influence	Spencer and Spencer (1993)
Change catalyst	Spencer and Spencer (1993)
Communication	Spencer and Spencer (1993)
Efficiency orientation	Boyatzis and Ratti (2009)
Planning	Boyatzis and Ratti (2009)
Empathy	Boyatzis and Ratti (2009)
Social objectivity	Boyatzis and Ratti (2009)
Use of concepts	Boyatzis and Ratti (2009)
Emotional self-control	Spencer and Spencer (1993)
Self confidence	Spencer and Spencer (1993)
Assertiveness	Spencer and Spencer (1993)
Initiative	Spencer and Spencer (1993)
Attention to detail	Spencer and Spencer (1993)
Adaptability	Sharma (2012)
Team work and collaboration	Sharma (2012)
Committed to responsibilities	Sharma (2012)
Conflict management	Sharma (2012)
Trustworthiness	Sharma (2012)
Computer proficiency	Suggested by employees and experts
Accounting knowledge	Suggested by employees and experts
Inspection skill	Suggested by employees and experts
Use of technology	Suggested by employees and experts

3.3.2 Stage II: Questionnaire survey

After identifying the important competencies that aid in customer service from the employees, a five-point Likert-type scale was prepared with response values ranging from 5 (very important) to 1 (not important) and used to measure the extent to which the competencies are important in better serving the customer (see questionnaire in Appendix I). The questionnaire was distributed to the same fifty employees of the headquarters who had answered the checklist. All of the competencies scored more than 3.5, and had less than 20% in the coefficient of variation and were therefore in consensus with the literature (Wang et al., 2016; Williams & Webb, 1994). The profile of the employees is given in Table 2.

Table 2
Profile of the fifty employees

	Summary
Designation	
Manager	14
Accountant	17
Clerk	19
Gender	
Male employees	27
Female employees	23
Age group	
Male employees	28 to 50 years
Female employees	29 to 52 years
Education qualification	
Graduated employees	31
Post graduated employees	19
Work experience	6 months to 30 years

Source: Primary data

3.3.3 Stage III: Delphi method

The Delphi method was used in the next stage of the study. The Delphi method is interactive and consists of a panel of independent experts, which allows a consensus to be reached with the expert's opinions on a specified topic following the questionnaire and feedback. In the Delphi method, experts are allowed to keep their anonymity because it is not necessary for them to interact with each other (Okoli & Pawlowski, 2004). The Delphi method is a useful tool when the knowledge about a topic is incomplete (Skulmoski, Hartman & Krahn, 2007). This method is very prevalent for forecasting, prioritizing, decision making etc. Linstone and Turoff (2002) defined the Delphi method as a "method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem."

There are four phases involved in the Delphi process (Hsu & Sandford, 2007). In the first phase, the researcher or investigator prepares an open-ended questionnaire and distributes it to the experts. The open-ended questionnaire is about the content area from the Delphi subject. After receiving the completed responses from the expert, a researcher prepares a survey questionnaire based on the responses of experts. In the second phase, a survey questionnaire is distributed to the experts who are asked to rate the items or rank the order of priority of the items as per the Delphi subject. The agreement or disagreement of the experts on the topic is identified in round two. The experts are also asked to state the reason for their answers in this phase. In the third round, the researcher gives a questionnaire to each expert. The questionnaire includes the items and ratings assigned by the experts in the previous stage and they are asked to specify the reason for the dissimilarity in the consensus. The fourth round begins after further clarification from the experts and achieving consensus. The items are distributed to the experts and they are given a final chance to review their judgements. The number of rounds in the Delphi method depends on the degree of consensus achieved.

The Delphi method was used in this study for two purposes. The first was to confirm the importance rating given by the fifty employees in the second stage of variable identification concerning the importance of each competency in providing better

customer service. For that purpose, the interview results, checklist, questionnaire and the results were cross-checked with three academic experts whose specializations were in the areas of human resource management, marketing management, and operations management, and two professional experts including the human resource manager and general manager of the bank. The profile of the experts is given in Table 3. A questionnaire with the same five-point Likert-type scale (see in Appendix I) was given to the five experts and they were asked to rate the importance of each competency. In this second round of the questionnaire survey, the result was almost the same and they reached a consensus.

The second purpose of the Delphi method was to classify the identified job competencies into criteria and to develop the AHP model. The twenty-five competencies were classified into five criteria based on suggestions from the five experts. The five criteria of the job competencies are the relationship management competency, the cognitive competency, the self-management competency, the teambuilding competency, and the technical competency. The relationship management competency has six sub-criteria that include negotiation, problem-solving, decision making, influence, change catalyst, and communication. The cognitive competency has five sub-criteria, namely, efficiency orientation, planning, empathy, social objectivity, and the use of concepts. The self-management competency has six sub-criteria that include emotional self-control, self-confidence, assertiveness, initiative, attention to detail and adaptability. The teambuilding competency has four sub-criteria, namely, teamwork and collaboration, commitment to responsibilities, conflict management, and trustworthiness. The technical competency has four sub-criteria that include computer proficiency, accounting knowledge, inspection skill, and use of technology. The definition of each competency is given in the questionnaire in Appendix I. An AHP model was developed based on the opinions of the experts. The conceptual framework of the study is given in Figure 1.

Table 3
Profile of the experts

	Summary
Professional position (n)	
Human resource manager of bank	1
General Manager of bank	1
Academician – HRM	1
Academician – Marketing Management	1
Academician – Operations Management	1
Average working experience (year)	More than 10 years
Average age	42
Education level (n)	
Master's degree	5
Doctoral degree	3

Source: Primary data

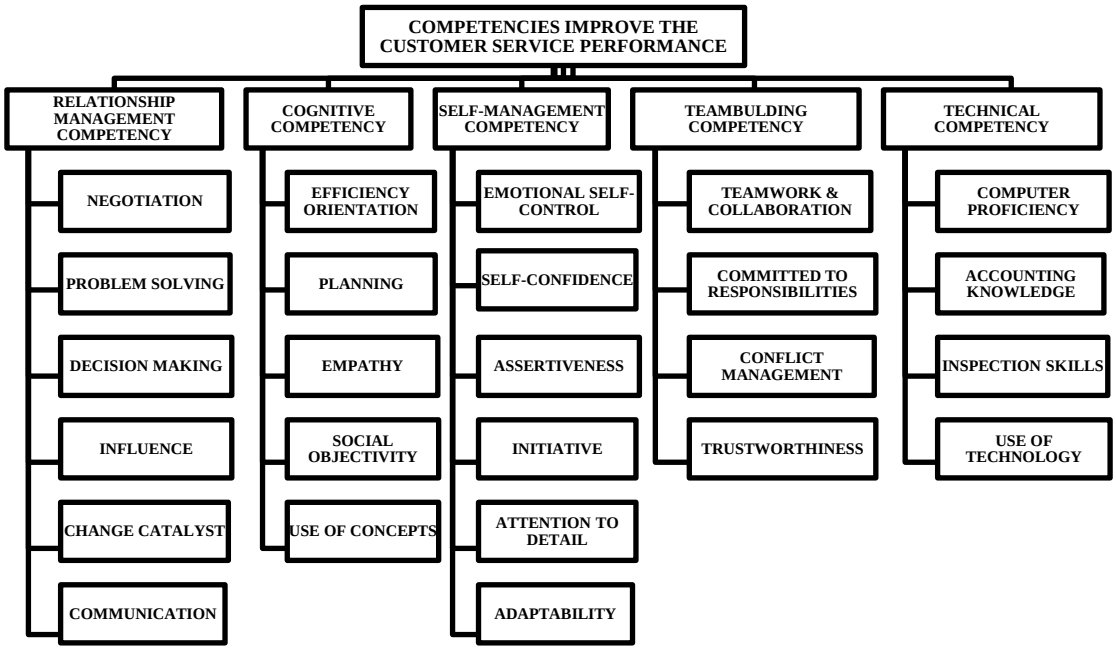

Figure 1 Conceptual framework of the study

3.4 Pairwise comparison questionnaire and data collection

After receiving approval from the experts, a new questionnaire was prepared to understand the rank or priority of each competency needed for better customer service from the employees. A scale of 1-9 as proposed by Saaty (2008) measured the perception of how many times more important or dominant one competency is over another competency to serve customers well. Table 4 shows the details of the pairwise comparison scale used for the study.

The data collection began with the distribution of the pairwise comparison questionnaire to three different groups of employees that included ten managers, ten accountants and five clerks in the fifty-three branches of the district cooperative bank

in the state of Kerala, South India. The study adopted a convenience sampling method for data collection. Based on the responses from the separate samples, a pairwise comparison of each competency was made.The questionnaire is given in Appendix II.

Table 4
Fundamental scale for pairwise comparison or ranking

Intensity of importance of scale	Definition	Explanation
1	Equally important	Two measures contribute equally to the problem
3	Moderately important	Experience and judgement slightly favor one measure over another
5	Strongly important	Experience and judgement strongly favor one measure over another
7	Very strongly important	A measure is favored very strongly over another; its dominance demonstrated in practice
9	Extremely important	The evidence favoring one measure over another is of the highest order
2, 4, 6, 8	Intermediate values	Intermediate values between two adjacent judgements

Source: Saaty (2008)

3.5 Group decision aggregation

The data was collected separately from three different groups of employees that included ten managers, ten accountants and five clerks, and different judgements were obtained. In order to aggregate the individual judgements into a single representative judgement for the three separate groups, the geometric mean method (GMM) was used. The GMM is considered the best method when compared with the arithmetic mean method (Aczel & Saaty,1983; Saaty & Kearns, 1985; Saaty, 2008; Willet & Sharda, 1991; Benjamin et al., 1992). Krejci and Stoklasa (2018) revealed the advantage of the weighted geometric mean aggregation over the weighted arithmetic mean aggregation in AHP to develop global priorities of alternatives. Most of the other newest prominent studies employed the GMM for aggregation of individual judgements (Anish, Dhanish & Sridharan, 2017; de Luca, 2014; Srdjevic, Lakicevic & Srdjevic, 2013). Ramanathan and Ganesh (1994) found that Pareto optimality is not satisfied with the GMM and suggested the Eigen vector-based method for group aggregation. Similarly, Amenta et al. (2019) advised the use of the Common Priority Vector Procedure for group aggregation instead of the GMM. On the other hand, Van Den Honert and Lootsma (1997) argued that violations that result from the GMM are typical in pairwise calculations and that the results can be compromised. Nevertheless, the present study adopted the GMM for group aggregation for appropriateness. Microsoft Excel was used to compute the geometric mean of the judgements.

The geometric mean is defined as "the n[th] root of the product of n numbers." For a set of numbers {xi}Ni=1, the geometric mean is:

$$\left(\prod_{i=1}^{N} xi\right)^{1/N} = \sqrt[n]{a_1 a_2 .....a_n} \quad (1)$$

where,
n represents number of items
a represents individual judgments

3.6 AHP method

The Analytic Hierarchy Process (AHP), developed by Thomas L. Saaty (1980) is one of the tools for multi-criteria decision-making based on the pairwise comparison of factors using a nine-point scale. Complex multi-criteria problems can be solved using the AHP. The AHP involves developing a graphical representation of the problem in a hierarchical structure in terms of goal, main criteria, sub-criteria and decision alternatives. The judgments of experts or decision-makers about the relative importance or preference for each criterion are collected. The output of the AHP provides the priorities or ranks of the criterion based on the overall preferences expressed by the expert or decision-maker.

The phases of the AHP method are as follows:

1. Development of the hierarchical structure
The first step of the AHP is to develop a graphical representation of the problem in terms of goal, main-criteria, sub-criteria, and the decision alternatives in the hierarchical structure. Figure 1 shows the conceptual framework of the study as discussed above with the Delphi method showing the hierarchical structure of the problem of the present study.

2. Designing the pairwise comparison scale
The second phase begins with the preparation of the pairwise comparison questionnaire with a nine-point scale developed by Saaty (1980). The scale measures the perception of how many times more important or dominant one criteria is over another. Table 4 given above in section 3.4 shows the fundamental scale for pairwise comparison. The experts or decision-makers are required to express their priority or preference for the criteria.

3. Construction of the pairwise comparison matrix
The third step is concerned with the construction of a matrix of the pairwise comparison ratings. The pairwise comparison matrix will consist of rows and columns as below.

$$A_{[i,j]} \begin{bmatrix} a_1 & a_{12} & & a_{1n} \\ a_{21} & a_{22} & \dots & a_{2n} \\ \dots & \dots & \dots & \dots \\ a_{n1} & a_{n2} & \dots & a_{nn} \end{bmatrix} \dots$$

The matrix indicates the relative importance of the i[th] element over the j[th] element (Saaty, 1980).

1. Synthesization

This phase includes calculating the priority of each criterion in terms of its overall goal, which is referred to as synthesization. The following steps are required.

i. Calculate the sum of each column of the pairwise comparison matrix.
ii. Divide each element in the pairwise comparison matrix by its column total and the resulting matrix is called the normalized pairwise comparison matrix.
iii. Calculate the average of the elements in each row of the normalized pairwise comparison matrix and these averages are the priorities for the criteria.

2. Consistency

The present phase provides a measure of consistency for the pairwise comparisons by calculating a consistency ratio. If the ratio is 0.10 or less, the inconsistency of the pairwise comparisons is considered rational. If the value is higher than the acceptable value of 0.10, this indicates an inconsistency in the judgment and the decision-maker needs to revise the pairwise comparisons.

In order to understand the consistency of the matrices, the sum of the normalized values and the weighted sum must be found. To do this, one must multiply each value in the first column of the pairwise comparison matrix by the priority of the first item; then, multiply each value in the second column of the pairwise comparison matrix by the priority of the second item; this process is continued for all columns of the pairwise comparison matrix. The weighted sum can be found by dividing each sum value by its normalized average weight. Then, find the average value of weighted sum (Aw), and this average is denoted as λmax.

$Aw = \lambda_{max} w$

λ_{max} is the largest eigen value of matrix A

w is the related eigen vector or vector of weight of the comparison matrix.

Consistency Index, $CI = \frac{\lambda max - n}{n - 1}$

where n is the number of items being compared.

Inconsistency ratio, $CR = \frac{\text{Consistency Index value (CI)}}{\text{Random Imdex number (RI)}}$

The random index (RI) is the consistency index of a randomly generated pairwise comparison matrix (Alonso & Lamata, 2006). The value of RI depends on the number of items being compared and the random indices employed by Saaty (1977) is given as follows:

Number of factors, n	1	2	3	4	5	6	7	8	9	10
Random Index, RI	0.00	0.00	0.58	0.90	1.12	1.24	1.32	1.41	1.45	1.49

Source: Saaty(1977)

3.6.1. Calculation of weights or priority using the AHP method

The Analytic Hierarchy Process (AHP) is applied to rank the job competencies that improve the customer service performance of employees. The study used Microsoft Excel instead of Expert Choice for the AHP calculations because of convenience.

a) Ranking the job competencies (main criteria)

There are five main criteria related to job competencies that help determine which competency is most important in customer service. The rows and columns 1, 2, 3, 4, 5 of the pairwise comparison matrix denote the options; relationship management competency (RMC), cognitive competency (CC), self-management competency (SMC), teambuilding competency (TBC) and technical competency (TC), respectively. The values obtained from the managersare given below.

Pairwise comparison matrix for managersX_1

$$X_1 = \begin{array}{c} \\ RMC \\ CC \\ SMC \\ TBC \\ TC \\ \textbf{Column sum} \end{array} \begin{array}{c} \begin{array}{ccccc} RMC & CC & SMC & TBC & TC \end{array} \\ \begin{bmatrix} 1 & 1/2 & 2 & 2 & 2 \\ 2 & 1 & 1 & 1 & 1 \\ 1/2 & 1 & 1 & 2 & 1 \\ 1/2 & 1 & 1/2 & 1 & 2 \\ 1/2 & 1 & 2 & 1/2 & 1 \\ \mathbf{9/2} & \mathbf{9/2} & \mathbf{11/2} & \mathbf{13/2} & \mathbf{7} \end{bmatrix} \end{array}$$

The normalized matrix (N_1) that corresponds to the pairwise comparison matrix X_1 is given below.

$$N_1 = \begin{array}{c} \\ RMC \\ CC \\ SMC \\ TBC \\ TC \end{array} \begin{array}{c} \begin{array}{ccccc} RMC & CC & SMC & TBC & TC \end{array} \\ \begin{bmatrix} 2/9 & 1/9 & 1/3 & 1/3 & 2/7 \\ 4/9 & 2/9 & 1/5 & 1/6 & 1/7 \\ 1/9 & 2/9 & 1/5 & 1/3 & 1/7 \\ 1/9 & 2/9 & 0 & 1/6 & 2/7 \\ 1/9 & 2/9 & 1/5 & 0 & 1/7 \end{bmatrix} \end{array}$$

The normalized average weights (priority) are calculated as follows:

W_1 / n = (2/9 + 1/9 + 1/3 + 1/4 + 1/3) / 5 = 0.26
W_2 / n = (4/9 + 2/9 + 1/5 + 1/8 + 1/5) / 5 = 0.23
W_3 / n = (1/9 + 2/9 + 1/5 + 1/4 + 1/5) / 5 = 0.19
W_4 / n = (1/9 + 2/9 + 0 + 1/6 + 2/7) / 5 = 0.17
W_5 / n = (1/9 + 2/9 + 1/5 + 0 + 1/7) / 5 = 0.15

The weighted average matrix $\overline{W1}$,

$$\overline{W1} = \begin{pmatrix} 0.26 \\ 0.23 \\ 0.19 \\ 0.17 \\ 0.15 \end{pmatrix}$$

sum can be found by

$$Sw_1 = 0.26\begin{bmatrix}1\\2\\1/2\\1/2\\1/2\end{bmatrix} + 0.23\begin{bmatrix}1/2\\1\\1\\1\\1\end{bmatrix} + 0.19\begin{bmatrix}2\\1\\1\\1/2\\2\end{bmatrix} + 0.17\begin{bmatrix}2\\1\\2\\1\\1/2\end{bmatrix} + 0.15\begin{bmatrix}2\\1\\1\\2\\1\end{bmatrix} = \begin{bmatrix}1.40\\1.26\\1.04\\0.92\\0.78\end{bmatrix}$$

The weighted sum can be found by $S\overline{W1}$,

$$\frac{1.40}{0.26} = 5.4$$

$$\frac{1.26}{0.23} = 5.5$$

$$\frac{1.04}{0.19} = 5.4$$

$$\frac{0.92}{0.17} = 5.3$$

$$\frac{0.78}{0.15} = 5.3$$

λ_{max} = (5.4 + 5.5+ 5.4 + 5.3 + 5.3) / 5 = 5.4

$$CI = \frac{\lambda max - n}{n-1} = \frac{5.4-5}{5-1} = 0.10$$

Inconsistency ratio, $CR = \frac{CI}{RI} = \frac{0.10}{1.12} = 0.089$

Because the inconsistency ratio is less than the threshold value of 0.1, the pairwise comparison matrix is considered to be consistent (Saaty, 1980).

b) Ranking the relationship management competencies

There are six options for the relationship management competency, namely, negotiation (N), problem-solving (PS), decision making (DM), influence (IN), change catalyst (CC), and communication (C). The calculations are given below.

Pairwise comparison matrix for managers X_2

$$X_2 = \begin{array}{c} \\ N \\ PS \\ DM \\ IN \\ CC \\ C \\ \textbf{Column sum} \end{array} \begin{array}{c} \begin{array}{cccccc} N & PS & DM & IN & CC & C \end{array} \\ \begin{bmatrix} 1 & 1/3 & 1/4 & 1 & 1 & 1/3 \\ 3 & 1 & 2 & 2 & 2 & 2 \\ 4 & 1/2 & 1 & 1 & 1 & 2 \\ 1 & 1/2 & 1 & 1 & 1 & 1 \\ 1 & 1/2 & 1 & 1 & 1 & 1 \\ 3 & 1/2 & 1/2 & 1 & 1 & 1 \\ \mathbf{13} & \mathbf{10/3} & \mathbf{23/4} & \mathbf{7} & \mathbf{7} & \mathbf{22/3} \end{bmatrix} \end{array}$$

The normalized matrix (N_2) that corresponds to the pairwise comparison matrix $X_2$is given below.

$$N_2 = \begin{array}{c} \\ N \\ PS \\ DM \\ IN \\ CC \\ C \end{array} \begin{array}{c} \begin{array}{cccccc} N & PS & DM & IN & CC & C \end{array} \\ \begin{bmatrix} 0 & 0 & 0 & 1/7 & 1/7 & 0 \\ 1/4 & 1/3 & 1/3 & 2/7 & 2/7 & 1/4 \\ 1/3 & 1/7 & 1/6 & 1/7 & 1/7 & 1/4 \\ 0 & 1/7 & 1/6 & 1/7 & 1/7 & 1/7 \\ 0 & 1/7 & 1/6 & 1/7 & 1/7 & 1/7 \\ 1/4 & 1/7 & 0 & 1/7 & 1/7 & 1/7 \end{bmatrix} \end{array}$$

Table 5
Priority calculations of matrix two

Factors	Average weight	Sum	Weighted sum	
N	0.09	0.56	6.10	
PS	0.29	1.80	6.29	
DM	0.20	1.28	6.46	λ_{max}= 6.28
IN	0.14	0.86	6.24	CI = 0.06
CC	0.14	0.86	6.24	CR = 0.05
C	0.15	0.94	6.35	

Source: Primary data

The CR value for the groups of managers is 0.05, which is less than 0.1, and therefore matrix two is considered to be consistent. The managers suggested that problem-solving skills are the most important for serving customers better when compared with the other five relationship management competencies.

c) Ranking the cognitive competencies

The options for the cognitive competencies are efficiency orientation (EO), planning (P), empathy (E), social objectivity (SO), and use of concepts (UC). The calculations are given below**.**

Pairwise comparison matrix for managers X_3

$$X_3 = \begin{array}{c} \\ EO \\ P \\ E \\ SO \\ UC \\ \textbf{Column sum} \end{array} \begin{array}{c} \begin{array}{ccccc} EO & P & E & SO & UC \end{array} \\ \begin{bmatrix} 1 & 1 & 1/2 & 1 & 2 \\ 1 & 1 & 1/2 & 1/2 & 1 \\ 2 & 2 & 1 & 2 & 2 \\ 1 & 2 & 1/2 & 1 & 1 \\ 1/2 & 1 & 1/2 & 1 & 1 \\ \mathbf{11/2} & \mathbf{7} & \mathbf{3} & \mathbf{11/2} & \mathbf{7} \end{bmatrix} \end{array}$$

The normalized matrix (N_3) that corresponds to the pairwise comparison matrix X_3 is given below.

$$N_3 = \begin{array}{c} \\ EO \\ P \\ E \\ SO \\ UC \end{array} \begin{array}{c} \begin{array}{ccccc} EO & P & E & SO & UC \end{array} \\ \begin{bmatrix} 1/5 & 1/7 & 1/6 & 1/5 & 2/7 \\ 1/5 & 1/7 & 1/6 & 0 & 1/7 \\ 1/3 & 2/7 & 1/3 & 1/3 & 2/7 \\ 1/5 & 2/7 & 1/6 & 1/5 & 1/7 \\ 0 & 1/7 & 1/6 & 1/5 & 1/7 \end{bmatrix} \end{array}$$

Table 6
Priority calculations of matrix three

Factors	Average weight	Sum	Weighted sum	
EO	0.19	0.98	5.12	λmax = 5.12 CI = 0.03 CR = 0.03
P	0.15	0.74	5.11	
E	0.33	1.67	5.13	
SO	0.19	0.98	5.12	
UC	0.15	0.74	5.11	

Source: Primary data

The consistency of matrix three is confirmed since the CR value is 0.03. The option 'empathy' is determined to be the most important competency for customer service.

d) Ranking the self-management competency

The self-management competency has six sub-criteria including emotional self-control (EMC), self-confidence (SC), assertiveness (A), initiative (I), attention to detail (AD), and adaptability (ADP).

Pairwise comparison matrix for managers X_4

$$X_4 = \begin{array}{c} \\ EMC \\ SC \\ A \\ I \\ AD \\ ADP \\ \textbf{Column sum} \end{array} \begin{array}{c} \begin{array}{cccccc} EMC & SC & A & I & AD & ADP \end{array} \\ \begin{bmatrix} 1 & 2 & 3 & 1/2 & 1 & 1 \\ 1/2 & 1 & 1 & 1/2 & 1 & 1 \\ 1/3 & 1 & 1 & 1/2 & 1/3 & 1/4 \\ 2 & 2 & 2 & 1 & 3 & 1 \\ 1 & 1 & 3 & 1/3 & 1 & 1 \\ 1 & 1 & 4 & 1 & 1 & 1 \\ \mathbf{35/6} & \mathbf{8} & \mathbf{14} & \mathbf{23/6} & \mathbf{22/3} & \mathbf{21/4} \end{bmatrix} \end{array}$$

The normalized matrix (N_4) that corresponds to the pairwise comparison matrix X_4 is given below.

$$N_4 = \begin{array}{c} \\ EMC \\ SC \\ A \\ I \\ AD \\ ADP \end{array} \begin{array}{c} \begin{array}{cccccc} EMC & SC & A & I & AD & ADP \end{array} \\ \begin{bmatrix} 1/6 & 1/4 & 1/5 & 1/8 & 1/7 & 1/5 \\ 0 & 1/8 & 0 & 1/8 & 1/7 & 1/5 \\ 0 & 1/8 & 0 & 1/8 & 0 & 0 \\ 1/3 & 1/4 & 1/7 & 1/4 & 2/5 & 1/5 \\ 1/6 & 1/8 & 1/5 & 0 & 1/7 & 1/5 \\ 1/6 & 1/8 & 2/7 & 1/4 & 1/7 & 1/5 \end{bmatrix} \end{array}$$

Table 7
Priority calculations of matrix four

Factors	Average weight	Sum	Weighted sum	
EMC	0.18	1.15	6.31	λ_{max} = 6.3 CI = 0.06 CR = 0.05
SC	0.12	0.78	6.30	
A	0.08	0.50	6.25	
I	0.27	1.69	6.36	
AD	0.15	0.98	6.37	
ADP	0.19	1.24	6.35	

Source: Primary data

The CR value (0.05) of matrix four shows its consistency. The 'initiative' compentency is found to be the most important for serving customers better.

e) **Ranking the teambuilding competencies**

The priority options for the teambuilding competency are teamwork and collaboration (TC), committed to responsibilities (CR), conflict management (CM), and trustworthiness (TR).

Pairwise comparison matrix for managers X_5

$$X_5 = \begin{array}{c} \\ TC \\ CR \\ CM \\ TR \\ Column\ sum \end{array} \begin{array}{c} \begin{array}{cccc} TC & CR & CM & TR \end{array} \\ \begin{bmatrix} 1 & 1 & 1 & 1/3 \\ 1 & 1 & 2 & 1/3 \\ 1 & 1/2 & 1 & 1/4 \\ 3 & 3 & 4 & 1 \\ \mathbf{6} & \mathbf{11/2} & \mathbf{8} & \mathbf{2} \end{bmatrix} \end{array}$$

The normalized matrix (N_5) that corresponds to the pairwise comparison matrix X_5 is given below.

$$N_5 = \begin{array}{c} \\ TC \\ CR \\ CM \\ TR \end{array} \begin{array}{c} \begin{array}{cccc} TC & CR & CM & TR \end{array} \\ \begin{bmatrix} 1/6 & 1/5 & 1/8 & 1/6 \\ 1/6 & 1/5 & 1/4 & 1/6 \\ 1/6 & 0 & 1/8 & 1/8 \\ 1/2 & 1/2 & 1/2 & 1/2 \end{bmatrix} \end{array}$$

Table 8
Priority calculations of matrix five

Factors	Average weight	Sum	Weighted sum	
TC	0.16	0.66	4.05	λmax = 4.1
CR	0.19	0.78	4.06	CI = 0.02
CM	0.13	0.52	4.02	CR = 0.02
TR	0.52	2.09	4.05	

Source: Primary data

Matrix five is considered to be consistent with a CR value of 0.02. 'Trustworthiness' is the most important factor for serving customers better when compared with the other three teambuilding competencies.

f) **Ranking the technical competencies**

The technical competency consists of computer proficiency (CP), accounting knowledge (AK), inspection skills (IS), and use of technology (UT).

Pairwise comparison matrix for managers X_6

$$X_6 = \begin{array}{c} \\ CP \\ AK \\ IS \\ UT \\ Column\ sum \end{array} \begin{array}{c} \begin{array}{cccc} CP & AK & IS & UT \end{array} \\ \begin{bmatrix} 1 & 2 & 1 & 2 \\ 1/2 & 1 & 1 & 2 \\ 1 & 1 & 1 & 2 \\ 1/2 & 1/2 & 1/2 & 1 \\ \mathbf{3} & \mathbf{9/2} & \mathbf{7/2} & \mathbf{7} \end{bmatrix} \end{array}$$

The normalized matrix (N5) that corresponds to the pairwise comparison matrix X5 is given below.

$$N_6 = \begin{array}{c} \\ CP \\ AK \\ IS \\ UT \end{array} \begin{array}{c} \begin{array}{cccc} CP & AK & IS & UT \end{array} \\ \begin{bmatrix} 1/3 & 4/9 & 2/7 & 2/7 \\ 1/6 & 2/9 & 2/7 & 2/7 \\ 1/3 & 2/9 & 2/7 & 2/7 \\ 1/6 & 1/9 & 1/7 & 1/7 \end{bmatrix} \end{array}$$

Table 9
Priority calculations of matrix six

Factors	Average weight	Sum	Weighted sum	$\lambda_{max} = 4.1$ CI = 0.02 CR = 0.02
CP	0.34	1.38	4.09	
AK	0.24	0.97	4.05	
IS	0.28	1.14	4.05	
UT	0.14	0.57	4.05	

Source: Primary data

The results confirm the consistency of matrix six because the CR value is 0.02, which is less than 0.1. Among the other three options 'computer proficiency' is ranked first.

Using the above calculations, an AHP analysis was performed on the main criteria and each sub-criterion for the managers, accountants and clerks. The results are given in the Table 10.

Table 10
Weights of different job competencies

	Weight/ priority		
Competency	Manager	Accountant	Clerks
Relationship management competency	0.26	0.31	0.36
Cognitive competency	0.23	0.18	0.15
Self-management competency	0.19	0.25	0.19
Teambuilding competency	0.17	0.12	0.15
Technical competency	0.15	0.14	0.15
λ_{max}	*5.4*	*5.15*	*5.15*
CI	*0.10*	*0.04*	*0.04*
CR	*0.089*	*0.03*	*0.03*
Relationship management competency	**26%**	**31%**	**36%**
Negotiation	0.09	0.13	0.13
Problem solving	0.29	0.23	0.26
Decision making	0.20	0.16	0.18
Influence	0.14	0.17	0.13
Change catalyst	0.14	0.14	0.14
Communication	0.15	0.17	0.16
λ_{max}	*6.28*	*6.30*	*6.22*
CI	*0.06*	*0.06*	*0.04*
CR	*0.05*	*0.05*	*0.04*
Cognitive competency	**23%**	**18%**	**15%**
Efficiency orientation	0.19	0.21	0.20
Planning	0.15	0.14	0.13
Empathy	0.33	0.45	0.41
Social objectivity	0.19	0.11	0.16
Use of concepts	0.15	0.10	0.11
λ_{max}	*5.12*	*5.20*	*5.36*
CI	*0.03*	*0.05*	*0.09*
CR	*0.03*	*0.04*	*0.08*
Self-management competency	**19%**	**25%**	**19%**
Emotional self-control	0.18	0.20	0.16
Self confidence	0.12	0.13	0.15
Assertiveness	0.08	0.11	0.13
Initiative	0.27	0.25	0.23
Attention to detail	0.15	0.13	0.15
Adaptability	0.19	0.18	0.18
λ_{max}	*6.32*	*6.14*	*6.29*
CI	*0.06*	*0.03*	*0.06*
CR	*0.05*	*0.02*	*0.05*
Teambuilding competency	**17%**	**12%**	**15%**
Team work and collaboration	0.16	0.19	0.19
Committed to responsibilities	0.19	0.23	0.27
Conflict management	0.13	0.15	0.12
Trustworthiness	0.52	0.43	0.42
λ_{max}	*4.05*	*4.05*	*4.08*
CI	*0.02*	*0.02*	*0.03*
CR	*0.02*	*0.02*	*0.03*
Technical competency	**15%**	**14%**	**15%**
Computer proficiency	0.34	0.35	0.30
Accounting knowledge	0.24	0.20	0.21
Inspection skill	0.28	0.20	0.25

Use of technology	0.14	0.25	0.25
λ_{max}	*4.06*	*4.06*	*4.06*
CI	*0.02*	*0.02*	*0.02*
CR	*0.02*	*0.02*	*0.02*

Source: Primary data

4. Results and discussion

After considering the priorities of the three groups of employees namely, managers, accountants, and clerical staff separately, the results of the AHP indicate that of the five main criteria, relationship management competency was the most critical criteria for better customer service. The inconsistency ratio was less than 0.1, and the pairwise comparison matrixes for the three groups are considered to be consistent. The option 'relationship management competency' has the highest weight in the three groups of samples when compared with the other four competencies, and this indicates that it has the highest priority for serving customers better. The technical and teambuilding skill was determined to be a less critical skill for customer service by the three sample groups.

Table 10 clearly shows the competency requirements for employees. Figure 2 shows the graphical representation of the competency requirements of the three categories of employees. The managers need cognitive competency (23%) more than accountants (18%) and clerks (15%) for better customer service. At the same time, accountants (31%) and clerical staff (36%) require more relationship management competency to deliver superior customer service. In Figure 2, the amount of relationship management competency that is required for managers is less, and begins to increase for accountants and clerks. Similarly, the cognitive competency is highly required for managers, and starts to diminish withaccountants and clerks. The identification of the most critical competency for the three categories of employees is a significant finding of the study.

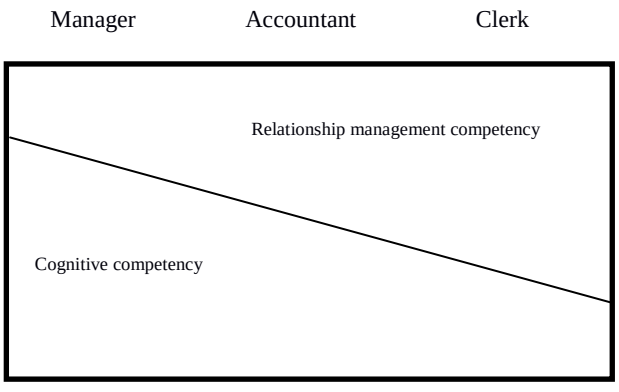

Figure 2 Competency requirements of employees

The overall priorities of the competencies are the same across all of the groups, and some differences in the rankings arise only when considering the sub-criteria. The weight of all of the classifications of employees is assumed to be the same. This result is not surprising since the present study disregarded the role-based competency level requirement and considered customer service to be the responsibility of all of the employees who have direct contact with customers in a service sector like a bank,

irrespective of their position (Drucker, 1968).

From the results, we can infer that the employees recognize the importance of establishing a relationship with the customers to ensure their satisfaction.The employees' involvement in understanding the customer's problems and helping the customers make decisions are the factors that have the most influence in customer service. Employees believe that customers always expect good behavior from the employees, desire a good welcome, expect employees to show initiative in learning their needs and fulfilling them, and need empathetic and trustworthy staff with technical knowledge to hear and resolve their problems. Customers can be satisfied and retained by maintaining a good relationship with them and providing quality customer service. The manager's job demands more cognitive skills since it involves planning, use of concepts, social consideration, empathy, and efficiency, while the accountant and clerks have technical interactions with the clients.

All three groups of employees suggested that problem-solving skills are the most critical skill in the relationship management competency cluster to serve customers better, and empathy received the highest weight in the cognitive competency criteria in the three sample groups. Initiative has the top priority among the self-management competencies. Trustworthiness has more weight in the teambuilding competency, and computer proficiency is the priority in the technical competency criteria.

All of the three sample groups suggested that the technical competency is less critical for customer service. This indicates that the employees are not aware of the importance of technological advancements in customer service. Even though the cooperative bank has the largest number of banks and customers, the bank's technical aspect needs to improve. The number of ATM counters, internet banking facilities, and mobile banking technologies can still develop. Most of the customers of the bank are ordinary people and employees could meet the demands of customers with limited facilities.
Nevertheless, the growing competition in the financial sector demands more sophisticated technologies to attract customers and a make transactions and the life of the customer hassle-free. Cooperative banks need to adopt new technological advancements to be competitive and win customers. The fact that the technical competency ranked last highlights the importance of adopting technological advancements in the bank and the need to train the employees to improve their technical competencies including computer proficiency, computerized accounting knowledge, use of office automation technologies, and inspection skills.

5. Conclusions and managerial implications

The study identified the critical job competencies which improve customer service in the cooperative banking sector using the opinions of employees. Managers and accountants ranked the relationship management competency as crucial to customer service, and the teambuilding competency as the least important. At the same time, the technical competencies ranked least for the clerical staff. Even though the three groups of employees priorities were almost identical, the difference in their priority percentage was different. Problem-solving skills, empathy, initiative and trustworthiness were found to be the most important for providing superior service to customers. These findings have significant implications for the management of the bank for different policy decisions. This could help the management of the bank modify the recruitment policy and seek to hire people with those specific skills. These competencies can also be used as performance criteria in the performance appraisal

process. The organization may also plan and design various trainings and development programs that focus on those competencies for employees. The ranking of technical skills as the lowest by the employees in this technologically advanced era indicates the need for sophisticated technologies in banking activities and indicates the importance of making employees aware of techniques and their applications. Training and development programs could be planned and designed to improve the technical skills of the employees.

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APPENDIX I

Questionnaire for measuring the importance of competencies in customer service

CRITERIA	DEFINITION	Very important	Important	Moderately important	Slight important	Not important
1. Relationship management competencies	Ability to make a relationship with others.					
Negotiation	Working with others to find a mutually agreeable outcome.					
Problem solving	Working with others to identify, define and solve problems.					
Decision Making	Exploring and analyzing options to make sound decisions.					
Influence	Ability to encourage subordinates to work toward an organizational goal.					
Change catalyst	Ability to plan, bring and implement change initiatives.					
Communication	Ability to convey information to individuals or groups to ensure that they understand the message.					
2. Cognitive competencies	Ability to think or analyze information and situations.					
Efficiency orientation	Ability to do things faster with lower resources (with less time and less materials).					
Planning	Ability to plan things properly and avoid uncertainties in the job and bank.					
Empathy	Ability to positively think from others perspective while dealing with others.					
Social objectivity	Always doing the best to help others and thinking about societal benefits and growth.					
Use of concepts	Using concepts to understand things and doing the job					

	correctly.					
3. Self-management competencies	Ability to recognize, understand, and use emotional information about oneself**.**					
Emotional self-control	Deal with emotional stress and strain that arises as a consequence of work situations of authority, leadership, power, targets and deadlines.					
Self confidence	Aware of one's own beliefs, goals, values, feeling, behavior and the part they play in influencing one's own actions.					
Assertiveness	Able to state one's opinion firmly and positively.					
Initiative	Respond to the needs of urgent situations voluntarily.					
Attention to detail	Explore the necessary details, so as to get the exact information needed.					
Adaptability	Conform and adjust to changing circumstances and work environments.					
4. Teambuilding competencies	Ability to cooperate with others and team building.					
Team work and collaboration	Enjoy working in groups and able to contribute to and learn from the group.					
Committed to responsibilities	Exercise responsibilities with trust, sincerity and commitment.					
Conflict management	Ability to manage and resolve disagreements constructively.					
Trustworthiness	Gain trust and confidence by interacting with fairness, honesty and truthfulness.					
5. Technical competencies	Knowledge in all technical and					

	procedural aspects such as knowledge of equipment and machinery, knowledge of concepts, ideas etc. required for the job.					
Computer proficiency	Have excellent computer knowledge and be able to apply this knowledge to the work for the effective performance of the job.					
Accounting knowledge	Ability to maintain and audit accounts and prepare reports on assets, liabilities etc. of a business and to analyzeits financial status and operating results.					
Inspection skill	Ability to find defects, fraud, misrepresentation, irregularities of the job.					
Use of technology	Ability to utilize equipment, office software (i.e. Word, excel, power point, internet access) and to prepare correspondence, reports, forms, mailings etc.					

APPENDIX II

Pairwise comparison questionnaire for undertsanding the importance of competencies in customer service

1. How important is the criterion A in providing superior services to customers in comparison with criterion B?

Criterion A	9	8	7	6	5	4	3	2	**1**	2	3	4	5	6	7	8	9	**Criterion B**
Relationship management competency																		Cognitive competency
Relationship management competency																		Self-management competency
Relationship management competency																		Teambuilding competency
Relationship management competency																		Technical competency
Cognitive competency																		Self-management competency
Cognitive competency																		Teambuilding competency
Cognitive competency																		Technical competency
Self-management competency																		Teambuilding competency
Self-management competency																		Technical competency
Teambuilding																		Technical competency
Negotiation																		Problem solving
Negotiation																		Decision making
Negotiation																		Influential
Negotiation																		Change catalyst
Negotiation																		Communication
Problem solving																		Decision making
Problem																		Influential

solving																	
Problem solving																	Change catalyst
Problem solving																	Communication
Decision making																	Influential
Decision making																	Change catalyst
Decision making																	Communication
Influential																	Change catalyst
Influential																	Communication
Change catalyst																	Communication
Efficiency Orientation																	Planning
Efficiency Orientation																	Empathy
Efficiency Orientation																	Social objectivity
Efficiency Orientation																	Use of concepts
Planning																	Empathy
Planning																	Social objectivity
Planning																	Use of concepts
Empathy																	Social objectivity
Empathy																	Use of concepts
Social objectivity																	Use of concepts
Emotional self-control																	Self-confidence
Emotional self-control																	Assertiveness
Emotional self-control																	Initiative
Emotional self-control																	Attention to detail
Emotional self-control																	Adaptability
Self-																	Assertiveness

confidence																
Self-confidence																Initiative
Self-confidence																Attention to detail
Self-confidence																Adaptability
Assertiveness																Initiative
Assertiveness																Attention to detail
Assertiveness																Adaptability
Initiative																Attention to detail
Initiative																Adaptability
Attention to detail																Adaptability
Teamwork and collaboration																Committed to responsibilities
Teamwork and collaboration																Conflict management
Teamwork and collaboration																Honesty
Committed to responsibilities																Conflict management
Committed to responsibilities																Honesty
Conflict management																Honesty
Computer proficiency																Accounting knowledge
Computer proficiency																Inspection skill
Computer proficiency																Use of technology
Accounting knowledge																Inspection skill
Accounting knowledge																Use of technology
Inspection skill																Use of technology