# DETERMINANTS INFLUENCING CROSS SELLING IN BANKS: A FACTOR ANALYSIS APPROACH

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**ABSTRACT--** *Economical development of any country largely depends upon the prevalent banking scenarios which represent banks as a place, a medium to cater to various businesses dwelling around. To run any banking business customer is the most vital of all and hence it becomes imperatives to know and to study the perception of the customer. Banks not only are engaged in increasing the customer base year on year but also focus on the retention of the old customers. It is this customer base only which helps banks grow and to achieve the various deposit and cross sell targets. Banks often define their deposit targets as "NAV (new acquisition value) and CIB (Change in base)" which becomes a measure to bring new customers for NAV and to engage the old customer to solidify the previous FY base. This exercise is conducted both by the public as well as private sector banks and accordingly they choose to opt different strategies which further define the level of customer satisfaction. Since the strategies adopted are different at different banks hence satisfactions level of the customers tend to differ in these banks. This paper deals with identification and examining the various factors which prompt customer to get cross sold.*

*Keywords--Cross Selling, Banks, Customer Engagement, Productivity, Quality, Interpersonal Skills.*

## I. INTRODUCTION

Banks cannot just survive if they stick to the traditional ways of banking which had limited products and limited choices. The development of any banking business depends upon how effectively it ensures that its customers are engaged in the various products being offered by the bank. We have to engage and re-engage customers in such a way that they are inclined automatically to ask for the details of the products and services being offered by the banks. This engagement is often done through cross selling of multiple products to the existing as well as new customers of the bank. In other words, cross selling determines the customer engagement and proves as a vital instrument in defining the banks revenue generation which in turn leads to its profitability. Cross Selling is in fact persuading customers or sometimes pushing customers to purchase additional products and it becomes the prime objective of any banking company to achieve its cross sell numbers.

The real challenge being faced is to enhance the cross sell numbers firstly and then the repeated usage of the product being cross sold. Here the effective customer engagement tends to deliver the best cross sell. The more the

products get sold the more is the customer loyalty and also more is the cost of switching thereby leading to customer retention. This effective engagement calls for the identification of various factors

This research is based on primary information obtained from customers of Public and Private sectors banks in India. Overall, Customers of Private and Public sector banks are satisfied except some tangibles and behavioral factors of the banks employees due to the policies, strategies for tangibles and inefficiency of the employees. So, there is a great need to consider tangibles and behavioral factors of the employees to enhance the level of satisfaction in Public banks. This paper deals with the identification of the factors underlying the **cross selling** perceptions of customers through Exploratory Factor Analysis (EFA).

## II.    REVIEW OF LITERATURE

**Anis A. & Ratwani, B. (2017)** in their paper explains that in the Indian banking industry it is the employee behaviors only which differentiate the delivering of services in private as well public sector banks. **Gill H.S. & Arora S. (2013)** reveals that customers do not easily trust the services being offered in the private banks and it is the difficulty in gaining the trust of the customer they find it tough to bring more customers as compared to public sector banks. **Singh, K. & Gupta, N. (2016)** in their paper reveals Public sector banks should work to win the confidence of salaried class and lower age group customers specially students as these banks had a better image in the eyes of customers of higher age group, businessmen and self-employed people. On the contrary, private sector banks should give much attention to the lower income group customers also because the higher income group found the services provided by these banks to be more effective. **Rao & Lakew (2011**) in their study examined the service quality perceptions of customers of public and private sector banks in the city of Visakhapatnam wherein quality measuring parameters were used under the five dimensions of service quality i.e. tangibles, reliability, assurance, responsiveness and empathy. It was concluded that out of all variables reliability and assurance were rated highest while the tangibles dimension got the lowest score. Moreover, the study also revealed that there was the strong dissimilarity in service quality perceptions between customers of private sector and public sector banks. **Dharmalingam and Kannan** (2011) carried out an empirical study to evaluate the service quality of new private sector banks in Tamil Nadu and it was judged that from all selected variables of customer perception, tangibles were rated highest and product variety area was rated lowest among all. **Bilamge (2011)** in their study evaluated and compared the customer satisfaction level in ICICI bank and State Bank of India. The results of the study revealed that behavior of the ICICI Bank staff was friendlier than that of State Bank of India. As compared to SBI, token system and upholding of ATMs in ICICI Bank was highly treasured by all the customers. **Virk & Mahal (2012)** analyzed the customer satisfaction level of Public and Private Sector Banks by conducting a comparative study in Chandigarh City. The study revealed that branch facilities were positively correlated with teller services, relationship with managers, mutual fund services and telephone enquiry which contribute in large extent towards customer satisfaction. Further it was concluded that private sector banks emphasize more upon building their clients and are better equipped with modern infrastructure as compared to public sector banks. **Gupta et al. (2013)** compared the customers' perception of service quality of public and private banks of Delhi and NCR. Study revealed that private banks satisfied their customers with good services and they had successfully implemented tangible factors like modern equipments, infrastructural facilities, quality of materials used etc.

Further, it was explored that most of the respondents felt that the employees of private banks were very keen to satisfy their customers whereas on other hand customers of nationalized banks felt that the employees were least bothered about their customers.

### *Scope of the study*

The scope of the study is not just limited to the Banks in today's world. The same has been incorporated by all business houses across industries. To quote a few we see following industries indulging in high cross sell when engaging their customers and keep a strong focus on the parameters effecting the same.

a) Banking

b) Insurance

c) Consumer durables

d) Automobile Industry

e) Tour and travel

f) Hospitality

g) Footwear industry

h) Garment Industry

The list given above is not exhaustive but is ever increasing and is spread across all industries literally. Off late all these industries have well understood the significance of cross selling and have put various measures into practice to engage their customers starting from customer on boarding to the making of their preferred customer and owning their needs by understanding them better and identifying the various parameters which helps them cross sell better.

Thus we can say that cross-selling has both positive as well as negative aspects effecting consumers, employees and organisations and hence there is great need to identify various underlying factors amongst these so as to draw results which may prove beneficial to the society

## III. LIMITATIONS OF STUDY

After having reviewed the literature we may say that the underlying factor of studying the customer perception towards service quality and services leading to the customer satisfaction is cross selling which always acted as a catalyst in the growth of any organisation. The approaches and studies done were mostly from limited point of views. No study has ever got done which has reviewed the concept from multi dimensions. The present study involves customers, employees, and organisation into consideration so as to have conclusive picture on the subject .All earlier studies have been done keeping in view the theoretical aspects of cross selling wherein practical situations have not been much highlighted using empirical studies. The cross selling has only been studied in isolation to other multi facet situations and not in consolidation. In such approaches effects of the satisfied customer and the customer perception was not further explored on the effects it has across various organizations. The studies done earlier have only been towards studying the customer behavior and not its impact on the cross selling leading to revenue generation.

### 1.1 Exploratory Factor Analysis (EFA)

Factor Analysis works to reduce a large set of observed variables (OV) into a smaller set of groups that share a common variance and are unobservable i.e. latent variables (LV). In order to explore the dimensions which affects the customers' perception about cross selling, Exploratory Factor Analysis has been conducted on pilot study sample 25 statements. There are certain fundamental assumptions which need to be satisfied before applying Exploratory Factor Analysis. The distribution of 25 variables has been checked for normality with normality histograms and plots. All the 25 variables have been found to be normally distributed population.

#### 1.1.1 KMO and Bartlett's Test of Sphericity

Table 1.1 reveals that the value of KMO test is 0.881 which confirms that sample size is adequate in the current study.

Hypothesis of Bartlett's test is rejected as the p-value is 0.000 which is less than 0.05 which shows that adequate correlation exits between the 25 variables. The Correlation Matrix also shows significant correlations among the variables taken for the study. The diagonal elements of the Anti-Image Correlation Matrix symbolize the measure of sampling adequacy values and in the present study all the values are greater than the minimum acceptable level of 0.5. Further, Low partial correlations indicate that true factors do exist in the data.

**Table 1.1.1:** KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.881 |
|---|---|---|
| Bartlett's Test of Sphericity | Approx. Chi-Square | 14358.159 |
| | Df | 300 |
| | Sig. | 0.000 |

#### 1.1.2 Rotation and Extraction of Factors

Factor Analysis was run on 25 statements using Principal Component Extraction method with Varimax Rotation. The guidelines suggested by are followed for examination of factor loading values, according to which factor loading of ± 0.5 or more indicates acceptable significance of variable and a factor loading of ± 0.3 signify that the variable is very little significant. The factor loadings of all the 25 items are greater than or equal to 0.5 as shown in Table 1.1.1, thereby representing a significant correlation between the taken variables and the factors.

**Table 1.1.2:** Rotated Component Matrix

| | Component | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| Improves the overall productivity | 0.855 | 0.117 | 0.154 | 0.059 | 0.110 |
| Improves customer relationships | 0.822 | 0.148 | 0.146 | 0.145 | 0.098 |
| Improves interpersonal relationships | 0.766 | 0.199 | 0.305 | 0.196 | 0.144 |
| Reduction in wastage of time/material after training | 0.747 | 0.169 | -0.011 | 0.159 | 0.036 |
| Improves the quality of services | 0.727 | 0.101 | 0.059 | 0.396 | -0.013 |

| | | | | | |
|---|---|---|---|---|---|
| Improves problem-solving skills | 0.705 | 0.181 | 0.118 | 0.347 | 0.092 |
| Puts efforts for making training successful | 0.147 | 0.929 | 0.106 | 0.082 | 0.060 |
| Engages highly trained personnel | 0.118 | 0.907 | 0.150 | 0.084 | 0.039 |
| Takes initiatives in arranging training programs. | 0.153 | 0.896 | 0.188 | 0.168 | 0.035 |
| Allots adequate funds | 0.163 | 0.868 | 0.188 | 0.150 | 0.080 |
| Concerned for training | 0.227 | 0.851 | 0.100 | -0.016 | 0.077 |
| Fair chances of selection are given to juniors | 0.103 | 0.186 | 0.878 | 0.184 | 0.153 |
| All employees are encouraged to participate in selection | 0.213 | 0.216 | 0.821 | 0.120 | 0.185 |
| Unbiased Selection process | 0.145 | 0.092 | 0.808 | 0.137 | 0.331 |
| Seniors don't interfere in selection | 0.117 | 0.117 | 0.796 | -0.046 | 0.384 |
| Need based selection process | 0.109 | 0.212 | 0.775 | 0.187 | -0.339 |
| Improvement in individuals | 0.261 | 0.108 | 0.076 | 0.778 | 0.075 |
| Enhances self-confidence | 0.242 | 0.114 | 0.183 | 0.772 | 0.138 |
| Improvement in competence/decision-making | 0.433 | 0.119 | 0.170 | 0.681 | 0.136 |
| Training programme is useful | 0.059 | -0.010 | -0.010 | 0.673 | 0.536 |
| Helps in personality development | 0.490 | 0.119 | 0.066 | 0.670 | -0.027 |
| Theoretical/practical knowledge is gained | 0.067 | 0.110 | 0.210 | 0.591 | 0.441 |
| Adequate interaction with trainers | 0.097 | 0.031 | 0.147 | 0.188 | 0.903 |
| Trainers have the capability to clear the doubts | 0.111 | 0.117 | 0.154 | 0.043 | 0.887 |
| Trainers adopt latest concepts | 0.102 | 0.085 | 0.229 | 0.267 | 0.734 |

***Extraction Method: Principal Component Analysis. 0 Rotation Method: Varimax with Kaiser Normalization.***

***a. Rotation converged in 6 iterations.***

### 1.1.3 Total Variance Explained

As the final objective of factor analysis is data reduction so in the next step of factor analysis, five factors were extracted from 25 items on the basis of Kaiser's criterion. Kaiser's criterion is applied and five factors have eigen value greater than one. Similarly, the Scree plot, which is a graph of eigen values against all factors also suggested retaining five factors. Finally, five factors are extracted from the analysis explaining 77.19 per cent of the total variance which is higher than 50 per cent.

**Table 1.1.3:** Total Variance Explained

| Component | Initial Eigen values | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 9.566 | 38.265 | 38.265 | 9.566 | 38.265 | 38.265 | 4.408 | 17.632 | 17.632 |
| 2 | 3.261 | 13.046 | 51.311 | 3.261 | 13.046 | 51.311 | 4.348 | 17.392 | 35.025 |
| 3 | 2.943 | 11.772 | 63.083 | 2.943 | 11.772 | 63.083 | 3.815 | 15.259 | 50.283 |
| 4 | 2.072 | 8.289 | 71.372 | 2.072 | 8.289 | 71.372 | 3.560 | 14.238 | 64.522 |
| 5 | 1.454 | 5.818 | 77.190 | 1.454 | 5.818 | 77.190 | 3.167 | 12.668 | 77.190 |
| Extraction Method: Principal Component Analysis. | | | | | | | | | |

### 1.1.4 Naming of the Factors

It is usually based on the subjective view of the researcher. Indeed, there is no scientific method to naming the extracted factors. The factors under study have been named as "Salesperson and Technical skills", "Personality of Sales person", "Coaching and Sales Coordination", "Performance Management of Bank" and "Customers' Orientation Policy of Bank". The various factors and the subsequent variables, along with their loadings, Eigen values, variance and reliability alpha (Cronbach) values are demonstrated in Table shows that the factor analysis contains 25 statements covered with five factors which accounted for 77.19 per cent of total variance. Cronbach's alpha reliability analysis (α) had been conducted of the newly created factors to check the reliability of the scale. It may be noted that all factor's Cronbach reliability alpha (internal consistency) values for the present study ranged from 0.876 to 0.957, which sponsors the existence of internal consistency (reliability) among the items of the constructs. All the constructed factors are renamed according to statements loaded on to each factors. The statements under each factor and their factor loadings are shown in Table 1.1.4.

**Table 1.1.4:** Summary of Factors affecting Cross Selling

| Sr. No | Factors Name | Label | Variables | Loadings | Eigen value | Variance percentage | Cronbach's alpha |
|--------|--------------|-------|-----------|----------|-------------|---------------------|------------------|
| I. | Salesmanship and Technical Skills | X3 | Interpersonal skills of Salesperson | 0.855 | 9.566 | 17.632 | 0.909 |
| | | X6 | Extraversion nature of salesperson | 0.822 | | | |
| | | X12 | Intuition of Salesperson/ turn of sale person | 0.766 | | | |
| | | X15 | Individual initiative of Salesperson | 0.747 | | | |
| | | X18 | Salesmanship skills | 0.727 | | | |
| | | X21 | Sales orientation of Salesperson | 0.705 | | | |
| II. | Personality | X2 | Conscientiousness of Salesperson | 0.929 | 3.261 | 17.392 | 0.957 |
| | | X7 | Experience of Salesperson | 0.907 | | | |
| | | X10 | Attitude of Salesperson | 0.896 | | | |
| | | X13 | Customer orientation of Salesperson | 0.868 | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | X19 | Extra push of Salesperson | 0.851 | | | |
| III. | Coaching and Sales Coordination | X4 | Coordination among Employees | 0.878 | 2.943 | 15.259 | 0.914 |
| | | X8 | Cross-selling enablement of Sales Manager | 0.821 | | | |
| | | X14 | Areas/departments of salesperson | 0.808 | | | |
| | | X20 | Sales training | 0.796 | | | |
| | | X22 | Cross-sale planning | 0.775 | | | |
| IV. | Performance Management of Bank | X5 | Company image | 0.778 | 2.072 | 14.238 | 0.876 |
| | | X9 | Company culture | 0.772 | | | |
| | | X16 | Product range of company | 0.681 | | | |
| | | X24 | Payment equity of company | 0.673 | | | |
| | | X25 | Profitability of the company | 0.670 | | | |
| | | X17 | Companies policies | 0.591 | | | |
| V. | Customers' orientation | X1 | Customer's education | 0.903 | 1.454 | 12.668 | 0.888 |
| | | X11 | Customer satisfaction | 0.887 | | | |
| | | X23 | Customer' relationship | 0.734 | | | |

### Factor 1: Salesperson and Technical skills

Salesperson and Technical skills account for 17.632 per cent of the total variance and having eigen value of 9.566 with Cronbach's alpha ($\alpha$) =0.909. Six statements relating to the experience and interpersonal conduct of the Salesperson are loaded on to this factor and it has emerged as the most vital factor. All the variables loaded on this factor have high factors loadings and ranged from 0.855 to 0.705. The customers perceive the empathy of the sales person towards the customers' and their ability to understand the customers' needs as an important banks service quality factor. As the salespersons spend most of their time with customers the when customers visit the bank, therefore, this Salesperson and Technical skills plays a dominating role in the measuring the quality of banking services which have strong impact on cross selling.

### Factor 2: Personality of Sales person

This factor explained 17.392 per cent of the total variance and has emerged as the second most important factor. This factor having eigen value of 3.261 with Cronbach's alpha ($\alpha$)=0.957. The Personality of Sales person play a

very important role in forming a positive or negative thought of the banks in the minds of the customers. Five statements relating to the Personality of Sales person are loaded on this factor. The most significant item in this factor is "Conscientiousness of Salesperson" with the highest factor loading of 0.929, followed by "Experience of Salesperson" (0. .907), Attitude of Salesperson (0.896), Customer orientation of Salesperson (0.868) and Extra push of Salesperson (0.851).

### Factor 3: Coaching and Sales Coordination

Coaching and Sales Coordination is the third important factor and it deals with Cross-selling Sales training, mindset and enablement aspects of the salesperson and it explains 15.259 per cent of the variance and having eigen value of 2.943 with Cronbach's alpha (α)=0.914. The results show that the Coaching and Sales Coordination is an important bank feature to verify service quality. "Coordination among Employees" has emerged as the most significant item in this factor with a loading of 0.878. All the five statements in this factor relate to sales person's coordination among the salespersons which influence the perception of the customers towards bank services.

### Factor 4: Performance Management of Bank

Performance Management of Bank responsible for the 14.238 per cent of the total variance having eigen value of 2.072 with Cronbach's alpha (α) =0.876. Six items have loaded on to this factor and the most significant item is "Company Image" with factor loading of 0.778 followed by "Company culture" (0.772), "Product range" (0.681) and "Payment Equity" (0.673) and "Profitability" (0.670). Besides the salesperson skills and personality, the Performance of the bank also plays significant role in measuring customers' perception towards the quality of banking services which is clearly replicated in this factor.

### Factor 5: Customers' Orientation Policy of Bank

Access and Convenience has been considered as another important factor in measurement of service quality and it accounts for 12.668 per cent of the variance having eigen value of 1.454 with Cronbach's alpha (α) =0.888. This factor includes three statements namely, "Customers' education" (0.903), "Customers' satisfaction" (0.887), and "Customers' relationship" (0.734).

## IV. SUGGESTIONS AND RECOMMENDATIONS

Although much of the effort was done to select the underlying factors effecting the cross selling but it cannot be said conclusively that these are the only factors which effects the customer as well as banking personnel behavior towards helping the customers on cross buying and banks on cross selling. It is further suggested that various other factors like accessibility of services, customer access of the bank branches, costs involved in the buying and selling a particular product, profitability of the existing as well as new customer's vis-a-vis cost of customer retention and of acquiring new customer for the banks may also be studied in close consideration Since these are the factors based on which any bank for that matter engage customers and gain profits. The same also translates from the customer point of view as not only the tangiles or intangible services of the banks be looked upon but also the cost of acquiring those services must be taken care of.

## V.    CONCLUSION

From the above analysis we can comfortably say that it is very important to derive at the various factors which effects the cross selling tendencies. The representative of the respective banks need to be trained on the technical education and must be adequately coached to have proper coordination amongst themselves and also to deliver on the various skills that are required for maintaining the customer relationship leading to the customer satisfaction. This comes with the prior experience together with the willingness on the part of sales person to push the bank products with positive attitude. Furthermore, the image of the respective bank helps in driving the performance along with the defined product range

As while engaging the customer's personal bankers spend most of their time with customers therefore all their skills plays a dominating role in the measuring the quality of banking services which have strong impact on cross selling.

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