

Factor Analysis

Client Financial Institution

Multivariate Solutions

Factor Analysis

- ***Factor Analysis attempts to identify underlying variables (factors) that explain the pattern of correlations within a set of observed variables. Factor analysis is often used in data reduction. It can also be used to group variables (e.g. Bank Transaction Preferences) into discernable patterns.***
- ***Two Factor Analyses were performed. The first on Question XX to attempt to group preferable methods of bank transactions together. The second factor analysis was performed on Question XX, which groups the importance of financial reasons into clusters that the bank may want to use to identify customer needs and create new services to address them.***
- ***The output is sorted in descending order of factor loading. Variables are reported with the loading of its factor rounded to two decimal places. All loadings below 0.4 are omitted.***

Banking Transaction Preferences Group into Three Distinct Methodologies

Bank Transaction Preferences

	Phone/Computer Banking Transactions	Remote Banking Transactions	Face-to-Face Banking
Prefer to make transactions by phone	0.83		
Prefer to use phone more for financial business	0.81		
Prefer to make transactions by computer	0.74		
Use bank branches much less frequently than in past		0.82	
Use mail for everyday transactions		0.65	
Prefer branches in shopping centers where you shop			0.87
Prefer financial business transactions face to			0.49

Customer's Primary Banking Concerns Can Be Broken Down into Five Main Categories

Principle Reasons for Bank Usage

	Safety	Beginnings	Recreation	Retirement/Death Planning	Financial Planning
Make sure you have a good standard of living when you retire	0.74				
Provide an education for you children	0.73				
Save enough for any emergency that could appear	0.58				
Make sure family is okay in case of death	0.48				
Increase standard of living in the next five years	0.47				
Start your own business		0.78			
Buy a house		0.71			
Make improvements on your house		0.51			
Save for annual vacation			0.75		
Get a second house or a summer home			0.65		
Get a car for recreation			0.61		
Save enough to retire before most people				0.65	
Leave a large inheritance				0.63	
Do not decrease your current standard of living when retire				0.63	
Consolidate your debts					0.75
Pay all of your mortgage					0.64
Minimize your taxes					0.63

Summary

- ***Customer Preference for Banking Transactions Can Be Broken Down Into Three Methodologies; Computer/Phone, Remote, and Face-to-Face. This is useful information for the bank because they may now be able to group customers according to their preferred transaction method and offer services accordingly.***
- ***Customer's Primary Banking Concerns Can Be Broken Down into Five Main Categories. Again, the Some Bank has an opportunity to understand that various bank uses can be grouped together. For example, if a customer indicates that he is using the bank to 'Consolidate his Debts,' it is likely that he may be interested in paying off his mortgage more quickly. We know this because these reasons fall in the same factor and have a high correlation. Customers can also be clustered in this manner.***