ABSTRACT

In the current digital world of global economy an electronic distribution channel have gained its pleasant appearance and provides alternatives for quicker delivery of banking services to a wider range of customers. The speed of technological development has created opportunities for banks to offer their services via multiple electronic channels-internet banking is one of the most promising channel benefiting both customers and banks but so far marginally adopted channels for using banking transaction by customers. In spite of the increase in the number of internet users, the level of increase of internet banking for doing banking transaction online has not increased at the same rate. However, customer’s attitude which formulates the behavioral intention and adoption towards internet banking are still the major areas for exploration and study. Despite the media coverage, technical and verbal reassurances provided by the banks, still adoption profoundly depends on consumers’ attitudes.

The research began with an exploratory study involving some preliminary interviews with bank managers in Orissa and a review of literature based on the technology adoption. This led to the wrapping up to base the study on the well known technology acceptance model with extensions to make it more applicable for a developing country whose environment is appreciably different from that of the Western countries. Based on the literature review, a research model or theoretical framework was developed which conceptualize and links customer oriented issues influencing the attitude towards adoption of internet banking.

The purpose of the study was to empirically investigate the factors that influence customer’s attitudes toward and use of internet banking. The empirical data were collected from private and public bank customers by using structured questionnaires and Structural Equation Modeling (SEM) and path analysis was used to test and validate the model. External variables were added to the model consisting of constructs from the consumer and technology perspectives. Further intelligent techniques were used in profiling the internet banking users as well as non-users to identify the potential customers to target and attract them towards internet banking. The data set was analyzed using Chi-squared automatic interaction detection (CHAID) techniques and classification model was built using neural network, to make prediction for specific situation. Computational Artificial neural network (ANN) modeling was used to discover more complex relationships in the data and generate better performing predictive models to the measurement of attitudes. New association in data
found also confirmed with the statistical techniques. Multilayer Perceptron procedure was used which used feed forward architectures and used the weights of connections from input nodes to hidden nodes and the network analyzed the impact of explanatory (input layer) variables on the hidden layer attributes, and through these on the endogenous (output layer) variables. TwoStep clustering analysis procedure was used in clustering or natural groupings within the dataset based on the input variables. Clustering was made to segments the customers on the basis of the parameters taken into the consideration in the framework designed to form the clusters. This study also examined bankers’ perspectives on providing internet banking services to customers specifically on issues relationship banking and customer’s experiences. A qualitative in-depth interviewing design was applied in order to find out the factors that explore customer value perceptions in internet banking. Means-end approach and laddering interviewing technique was used in order to expose how different value creating factors are hierarchically structured and related to each other. Efficiency, convenience and safety are the features in determining the customer value perceptions.

Data analyses were done in accordance with the research question and research model. The results from customer’s data and conclusion were drawn by answering the research questions. The results provides enhanced information for banks and financial institutions to implement successful distribution strategies and offers better knowledge of internet banking customers by adding value to their marketing strategy. It also helps the banks to create actions to enhance internet banking adoption among customer as well as by understanding how attitude leads to behavioral intention .The contributions of the research lies in achieving a more profound understanding on customer attitude towards Internet banking, expands the literature on internet banking adoption , and relevant to the introduction of broad spectrum of internet banking application into other countries of the region and into developing countries in general and in understanding Technology acceptance Model (TAM) validity in technology acceptance research.

**Keywords:** Customer Attitude, TAM, CHAID, Neural Network, Intelligent Techniques