

Chapter 10

Customer Perception and Behavioral Intention to Use Biometric–Enabled e–Banking Services in India

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ABSTRACT

Regardless of the success of e-banking services in India, a sizeable fraction of the customers still do not use online banking primarily because of security issues. Rising cybercrimes have further heightened these security concerns. This necessitates the adoption of faster and more reliable ways of user identification and authentication. Banks are ready to adopt biometric enabled systems to offer secure and seamless transactions but we need to find out if the customers are ready to adopt this technology. This paper attempts to evaluate the customer's perception about biometric enabled e banking services in India and their intention to use biometric enabled e-banking services. The study also tries to identify the factors which influence usage of biometrics by these customers. A survey has been carried out among customers to gather primary data and the Technology Acceptance Model has been applied. The value of the paper lies in the understanding of customer perceptions about biometrics enabled banking services which can help banks formulate strategies to encourage customers to use e-banking services.

INTRODUCTION

India has one of the largest and rapidly growing populations of netizens i.e internet users in the world with over 190 million (June 2014) and expected to reach 500 million in the next 3 years. Different sectors of the economy have seized the benefits of this tech savvy population of the country however; the banking industry seems to have failed in utilizing this opportunity. As per the recent survey by IDC, out

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of the 190 million internet users in the country barely 1 million uses internet banking which constitutes for only 0.096% of the total population and only just 15% of the internet users of the country. In comparison, western countries like UK, have probably 25 million internet banking users constituting nearly 70% of the online population of the country.

Despite the numerous benefits that internet banking has to offer to the banks in terms of increased efficiency, reduced cost, greater convenience or customer satisfaction; privacy and security are the two major issues which inhibit the growth of internet banking users. Furthermore, the increasing incidents of frauds aggravate such concerns. As per the Deloitte India Fraud Survey 2014, conducted by Audit & Consultancy Company Deloitte, the 44 banks surveyed unveil an increase of 10% in the number of fraud incidents in the last two years and that too with an average loss of Rs 10 lakhs per fraud with respect to retail banking and nearly 2 crores in case of corporate banking.

A similar report on cyber crime by NCRB states that out of the total 759 fraud cases of online crime reported to them, 248 relate to online banking fraud thus necessitating banks to provide higher security protection to their customers. Adding to this, investment in the development of e-banking systems worldwide is substantial and it is of paramount importance that online systems remain secure as the survival of e-banking is dependent on the bank's trustworthy reputation and ability to convince customers their services and assets are protected (Rana, 2012).

Consequently, banks need to look for more secure and reliable methods of user authentication & authorization. Three different types of methods, or a combination of these, are employed for authentication, viz, something the user possesses like a swipe card, something that user knows like a password and thirdly some unique feature of the user, either physical or behavioral. The last method of authentication is gaining momentum because of the increased security assurance associated with it. This recognition based on physical/ behavioral aspects of a person is what is commonly termed as "Biometrics". Since physical/ behavioral traits like handwriting, iris, voiceprints or fingerprints are unique for every individual, biometrics seems to be more reliable and secure authentication method in comparison to other methods of authentication. This is probably the reason that a number of banks worldwide including India are adopting biometric enabled authentication methods for secure and seamless transactions more specifically in e-banking.

Although technically biometric proves to be a good solution to all these security issues, still their implementation success largely depends on the customer's acceptance. Therefore, this paper attempts to evaluate the customer's perception about biometric enabled e banking services and their intention to use these services.

REVIEW OF LITERATURE

Security and privacy are the most common issues for e-banking users. The increasing number of security breaches and internet frauds call for a strong authentication method to replace the traditional methods of user authentication. Biometric based authentication and identification systems are the new solutions to address the issues of security and privacy as indicated by various researchers.

Using biometrics for identification restricts individuals from access to physical spaces and electronic services (Amtul Fatima, 2011). The study identifies the various security threats in e-banking, their possible biometric enabled solution and its acceptance by consumers using descriptive and exploratory research.

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