FINANCE INDIA © Indian Institute of Finance Vol. XXXIV No 2, June 2020 Pages – 861 – 874

# Awareness of Password Management and Adoption of Digital Banking Services in Rural India"

NITIN BANSAL\*

## Abstract

Lack of awareness of password management is a crucial factor for low "adoption of digital banking services in rural" India. Lack of awareness of password management enhances the risk proportion of cyber-attack, unauthorized access and misuse of devices and services. Password management is a highly decisive component whilst adopting digital banking services. Password composition strategies facilitate the users to construct a safe, secure and strong password which is difficult to crack. The objective of this study is the analysis of relationship between awareness of password management and customer's acceptability of online banking services in rural India. The study reveals the positive impact of awareness of password management on customer's acceptability of online banking services in rural India.

### I. Introduction

ACCORDING TO "THE 2018 Global Fraud and Identity Report", globally 91 percent of the total mobile phones' users having smart phones followed by 83 percent laptop computers to interact between business and customers. Digital activities among users reveal widespread squeeze of digital commerce, and the currency of digital commerce is trust, and trust can be enhanced through enhancing the awareness level of the users and make them independent to use the service and operate the device without any assistance of others. Presently internet affects the life of individuals and corporate to a greater extent. Now a days, internet is required at home as well as at workplace to communicate search information, banking and investments etc. Sometimes the functions performed by the users need privacy and individuals use passwords to secure their performed functions and information. Online security has become a challenge for the corporate, individuals, banking institutions, social networking websites and many more (Anderson and Moore, 2006). There are policies in the corporate and universities to educate the users regarding the password creation and on regular basis corporate remind the users to create and secure a strong password (Habib, Naeini, Devlin, Oates, Swoopes, Bauer, Christin and

Submitted January 2020; Accepted June 2020

Article accepted under MoU signed with GLA University (India) in 2019-2020

<sup>\*</sup> Research Scholar, FMS-WISDOM, Banasthali Vidyapith, Rajasthan 304022, INDIA

#### References

Adams, A., and M.A. Sasse, (1999), "Users are not the enemy", *Communications* of the ACM, Vol. 42, No. 12, pp. 41-46

Anderson, R., and T. Moore, (2006), "The economics of information security", *Science*, Vol. 314, No. 5799, pp. 610-613

Bansal, N., (2020), "The Impact of Training Programme of Digital Banking Services to employees of unorganised sector and their acceptability in India", *International Journal of Electronic Customer Relationship Management*, Vol. 13, No. 1

Bansal, N., N. Pareek, and A. Nigam, (2020), "The Impact of Awareness of Password Management of Digital Banking Services on Customer's Adoption in India", *International Journal of Recent Technology and Engineering*, Vol. 9, No. 2

Beautement, A., M.A. Sasse, and M. Wonham, (2009), "*The compliance budget: managing security behaviour in organisations*", In Proceedings of the 2008 New Security Paradigms Workshop, August 2009, pp. 47-58

Bishop, M., (1991), "Password management", In Compcon, pp. 167-169

Cavana, R.Y., B.L. Delahaye and U. Sekaran, (2001), "Applied Business Research: *Qualitative and Quantitative Methods*", John Wiley and Sons Australia, 2001

Churchill, G.A., D. Iacobucci and D. Israel, (2010), "Marketing Research: A South Asian Perspective", Cengage Learning, Delhi, 2010

Cranor and S. Egelman, (2011), "Of passwords and people: measuring the effect of password-composition policies", In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, May 2011, pp. 2595-2604

Dourish, P., E. Grinter, Delgado, J. De La Flor and M. Joseph, (2004), "Security in the wild: user strategies for managing security as an everyday, practical problem", *Personal and Ubiquitous Computing*, Vol. 8, No. 6, pp. 391-401

Florencio, D., and C. Herley, (2007), "A large-scale study of web password habits", In Proceedings of the 16th international conference on World Wide Web, May 2011, pp. 657-666

Florêncio, D., C. Herley, and B. Coskun, (2007), "Do strong web passwords accomplish anything? *HotSec*", Vol. 7, No. 6

Furnell, S.M., A. Jusoh and D. Katsabas, (2006), "The challenges of understanding and using security: A survey of end-users", *Computers and Security*, Vol. 25, No. 1, pp. 27-35

Gaw, S., and E.W. Felten, (2006), "*Password management strategies for online accounts*", In Proceedings of the second symposium on Usable privacy and security, July 2006, pp. 44-55

George, D. and P. Mallery, (2010), "SPSS for Windows Step by Step: A Simple Guide and Reference 17.0 Update", 10th Edition, Pearson, Boston

George, D., and P. Mallery, (2003), "SPSS for Windows step by step: A simple guide and reference 11.0 update", (4th ed.) Allyn and Bacon Boston

Grawemeyer, B., and H. Johnson, (2011), "Using and managing multiple passwords: A week to a view", *Interacting with Computers*, Vol. 23, No. 3, pp. 256-267

Habib, H., P.E. Naeini, S. Devlin, M. Oates, C. Swoopes, L. Bauer, N. Christin and L.F. Cranor, (2018), "User behaviors and attitudes under password expiration policies", In Fourteenth Symposium on Usable Privacy and Security (SOUPS) 2018, pp. 13-30

#### © Indian Institute of Finance

Hair, J.F., B.C. William, B.J. Barry, R.E. Anderson and R.L. Tatham, (2009), "Multivariate Data Analysis (6th ed.)", Pearson Education Delhi, 2009

Inglesant, P.G., and M.A. Sasse, (2010), "The true cost of unusable password policies: password use in the wild", 2010

Komanduri, S., R. Shay, P.G. Kelley, M.L. Mazurek, L. Bauer, N. Christin, F.C. Lorrie and S. Egelman, (2011), "*Of passwords and people: measuring the effect of password- composition policies*", In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, May 2011, pp. 2595-2604

Malhotra, N., (2008), "Marketing Research – An Applied Orientation (5th ed.)", Pearson Education Delhi, 2008

Malone, D., and K. Maher, (2012), "Investigating the distribution of password choices", In Proceedings of the 21st international conference on World Wide Web, April 2011, pp. 301-310

Nunnally, J., (1967), "Psychometric Methods", McGraw-Hill, New York, NY

Pearman, S., J. Thomas, P.E. Naeini, H. Habib, L. Bauer, N. Christin, L.F. Cranor, S. Egelman and A. Forget, (2017), "*Let's Go in for a Closer Look: Observing Passwords in Their Natural Habitat*", In Proceedings of the 2017 ACM SIGSAC Conference on Computer and Communications Security, October 2017, pp. 295-310

Riley, S., (2006), "*Password security: What users know and what they actually do*", Usability News, Vol. 8, No. 1, pp. 2833-2836

Shay, R., S. Komanduri, P.G. Kelley, P.G. Leon, M.L. Mazurek, L. Bauer, N. Christin and L.F. Cranor, (2010), "*Encountering stronger password requirements: user attitudes and behaviours*", In Proceedings of the Sixth Symposium on Usable Privacy and Security, July 2010, pp. 2

Singh, S., A. Cabraal, C. Demosthenous, G. Astbrink and M. Furlong, (2007), "*Password sharing: implications for security design based on social practice*", In Proceedings of the SIGCHI conference on Human factors in computing systems April 2007, pp. 895-904

Spafford, E., (2006), "Security myths and passwords", CERIAS Blog, pp. 19

Stobert, E., and R. Biddle, (2014), *"The Password life cycle: User Behaviour in managing Passwords"*, In 10th Symposium on Usable Privacy and Security ({SOUPS} 2014), pp. 243-255

Ur, B., F. Noma, J. Bees, S.M. Segreti, R. Shay, L. Bauer, N. Christin and L.F. Cranor, (2015), "I Added'!' at the End to Make It Secure": Observing Password Creation in the Lab", In Eleventh Symposium on Usable Privacy and Security ({SOUPS} 2015), pp. 123-140

Yan, J., A. Blackwell, R. Anderson and A. Grant, (2004), "Password memorability and security: Empirical results", *IEEE Security and Privacy*, Vol. 2, No. 5, pp. 25-31

Zhang-Kennedy, L., S. Chiasson, and P. Van Oorschot, (2016), "Revisiting Password Rules: Facilitating human Management of Passwords", In 2016 APWG symposium on electronic crime research (eCrime), pp. 1-10

Zviran, M., and W.J. Haga, (1999), "Password security: an empirical study", *Journal of Management Information Systems*, Vol. 15, No. 4, pp. 161-185

© Indian Institute of Finance

874