

Technological Proficiency - A competency study of select public sector Banks in India

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Abstract:

The competency of employees in Indian Banking industry is a matter of concern to address in digital era. The employees working at banks face intense challenges on the daily basis. The stress level involved, the level of accuracy and detailing required by bank employees are relatively high in comparison with other sectors. The technological proficiency competency of employees is an issue started with the introduction of technology in banking sector in the 1990s. The government's move to upgrade the workforce with technologically proficient employees in banking sector to face the global competition started with opening up of the economy in the 90s. The present paper focuses on the working of technological competencies in two major Indian public sector banks. The sample size selected for the study is 200 employees in total consisting of 100 employees from both the banks of State Bank of India (SBI) and Canara Bank. The study revealed a significant result with respect to Technological Proficiency Competency (TPC) in the concerned banks selected for sampling.

Key words: Competency, Technological Competencies, Technological Proficiency Competency, Banking Competencies.

Introduction:

Competition and a host of other reasons are responsible for rapid technological changes and innovations all over the world, as a result specialist workers who are technologically proficient are the need of the hour (Rao, 2006). The competency approach to improve human resources management practices is an ongoing process to achieve business excellence. The management field since the industrialization are trying to improve the competency of human resource in an ongoing process to keep-up with the competition. The participation of more than 600 delegates to the third international conference held in London proves the persistency of the competency concept. The concept of competency has evolved over the years through empirical studies administered by renowned authors and scholars in many countries especially in the United States by Richerd Boyatzis. The general meaning of competency is an ability based on performance. The role of competency in enhancing performance is the concern as the competency are context specific and needs to be designed with respect to client organizations requirement. The banking organizations provide the necessary financial structure for the economy to carry out its functions uninterruptedly. The opening up of the world economies in 1990s intensified the competition for banking sector for survival and technology provides the way forward. The dependency on technology is increasing at an alarming rate with the both advantage and disadvantageous levels.

The current study is intended to identify and embrace the importance of Technological Proficiency Competency (TPC). The TPC is one of the aspects of employee competency crucial to the job performance. The TPC component has been administered with the intention to extract information against the following four statements in the respective banks.

- 1) Regularly update my knowledge on latest gadgets in the global market.
- 2) Aware and capable of handling cyber threats which affects my work
- 3) Actively seek information regarding technological breakthrough in my field
- 4) Capable of troubleshooting minor technical problems on the job

The focus is not on the financial outcome of the banks due to the competency aspect present in the employees, but in order to identify and embrace the relevance of competencies to meet the competitive performance in the field of banking.

Literature Review:

Competency generally means the performance ability. The early Romans practiced a form of competency profiling as an endeavour to detail the attributes of a “good Roman soldier” (Draganidis & Mentzas, 2006). The usage of the word competence and competency can be found in the early writings of famous English author Shakespeare in 1594. Competency generally means the performance ability. The competency movement has no single origin and it can be traced back to centuries where in mediaeval ages the apprentice learned skills from masters and in return awarded with credentials upon reaching certain standards demanded by the job (Horton, 2000). The concept got recognition in the field of business through the research conducted worldwide in mid 21st century.

(White, 1959) in an article “Motivation Reconsidered: The concept of competence” used the term competence as a motivational concept which other motivational theory research during the time were unable to explain. The word was used as having a motivational aspect in a broad biological meaning rather than its narrow everyday meaning. The idea of competence was presented in consideration of research carried in the field of animal behaviour, child development, cognitive psychology, psychoanalytic ego psychology and the psychology of personality.

(McClelland, 1973) in the paper titled ‘Testing for Competence rather than Intelligence’ which triggered the competency movement that mainly focuses on conducting competency tests based on criterion sampling rather than the intelligence test for success rate prediction. Since then on the competency research has been carried out.

(Draganidis & Mentzas, 2006) The competency life cycle is the aggregation of four macro-phases which aim at the continuous enhancement and development of individual and organizational competencies. The four macro-phases are competency mapping, competency diagnosis, competency development and competency monitoring.

(Woodruffe, 1993) Competency is often used in different aspects concerning business field to directly or indirectly relating to the outcomes of performance. The further classification of competency into hard and soft skills of employees is made.

“A variety of methods can be employed to identify and examine competencies of interest, including the classic competency study approach, expert panels, or studies of single-incumbent jobs”(Spencer & Spencer, 2008).

Though it has not come to a concise on the procedure of conducting competency study, it is a context specific process aiming at the end-user and needs to be designed with close consultation with subject matter experts, focus groups and participants of the field specific to the study.

The Study Objectives:

- 1) To determine that selected sample on Technological Proficiency Competency (TPC) has above average level of competency.
- 2) Employees from the selected banks differ significantly in their Technological Proficiency Competency (TPC).

Hypotheses of the study:

H₀: The Bank employees do not have the above average TPC

H_{a1}: The Bank employees has the above average TPC

H_{b0}: There is no significant difference in TPC scored by Officers and Assistants

H_{b1}: There is significant difference in TPC scored by Officers and Assistants

Research Methodology:

The study is based on exploratory research design and follows the random sampling method. Sample for the study is selected from 2 major Indian public sector banks, State Bank of India (SBI), and Canara Bank in Karnataka state. The structured questionnaire was formulated to study the competencies in consultation with subject matter experts, focus group interviews with employees and by analysing various previous competency components studied and presented in competency dictionaries. The competency component selected has four statements relevant to the related competency which forms the basis for the competency component in consideration. The data was collected on 5 point Likert scale ranging from Never to Always. The sample size of 200 is selected for the study, 100 each from both of the banks with designations between 50 Officers and 50 Assistants. One sample t-test and Independent Sample t-test is performed for testing the hypothesis to analyse the significance level of the competencies in the study.

Results and Discussion of the study:

The student's t-test or one sample t-test is administered to check the competency level for eighty percent and the test results has shown significance with the TPC competency tested. The Hypotheses tested are as follows:

Hypothesis Ha

Ha0: The samples selected do not have the above average TPC

Ha1: The samples selected has the above average TPC

Table1.1
Mean TPC scores of respondents with other descriptive statistics

One-Sample Statistics

Variable	N	Mean	Std. Deviation	Std. Error Mean
Technological proficiency	200	17.38	2.073	.147

Table1.2
Results of one sample t-test for Mean TPC scores of respondents (Standard value 16.0)

One-Sample Test

Variable	Test Value = 16			
	t	df	Sig. (2-tailed)	Mean Difference
Technological proficiency	9.415	199	.001	1.380

The above table clarifies that, in the TPC the standard/test value was fixed at 16 as against a minimum of 20 scores. For the TPC, the Mean scores obtained by the sample was found to be 17.38: there were excess of 1.38 scores of TPC. Further the one sample t-test revealed a significant difference between the observed and the standard value ($t=9.415$; $p=.001$) indicating sample has higher level of TPC. Hence the null hypothesis is rejected.

Hypothesis Hb

Hb0: There is no significant difference in TPC scored by Officers and Assistants

Hb1: There is significant difference in TPC scored by Officers and Assistants

Table2.1

Mean and other descriptive statistics for TPC competency of respondents in the Officers and Assistants cadre.

Group Statistics

Variable	Designation	N	Mean	Std. Deviation	Std. Error Mean
Technological proficiency	Assistant	100	17.73	1.752	.175
	Officer	100	17.03	2.307	.231

Table2.2

Results of Independent sample t-test for Mean scores on TPC competency of respondents in Officers and Assistants cadre.

Independent Samples Test

Variable		t-test for Equality of Means			
		t	df	Sig. (2-tailed)	Mean Difference
Technological proficiency	Equal variances assumed	2.417	198	.017	.700
	Equal variances not assumed	2.417	184.666	.017	.700

The Independent sample t-test revealed significant mean difference for TPC between Assistants and officers working in the banks. In the TPC competency, Assistants had higher scores than the Officers in the banks. The t values obtained for TPC is ($t=2.417$; $p=.017$), which is found to be highly significant. Hence the null hypothesis is rejected.

Conclusion:

The study of Technological Proficiency Competency of two major Indian public sector banks has revealed significance statistical results. The study concludes that the competency level of employees working in SBI and Canara Bank have a significant mean scores. The Mean score for TPC is found to be in excess of 1.38 conforming significant difference between the observed and the standard value. The comparison of TPC scores between the designations of Officers and Assistants employed in both the banks have revealed a highly significant difference. In the TPC competency, Assistants had higher scores than the Officers of the banks. Hence the null hypothesis is rejected for both the cases through statistical significance in the study. The TPC on updating knowledge regularly, awareness and handling of cyber threats, actively seeking information on breakthrough and troubleshooting minor technical problems are considered to be of utmost importance. This concludes the importance of embracing Technological Proficiency Competency (TPC) in the banking sector.

References:

- Draganidis, F., & Mentzas, G. (2006). Competency based management: A review of systems and approaches. *Information Management & Computer Security*, 14(1), 51–64. <https://doi.org/10.1108/09685220610648373>
- Horton, S. (2000). Introduction – the competency movement: Its origins and impact on the public sector. *International Journal of Public Sector Management*, 13(4), 306–318. <https://doi.org/10.1108/09513550010350283>
- McClelland, D. C. (1973). Testing for competence rather than for “intelligence.” *American Psychologist*, 28(1), 1–14. <https://doi.org/10.1037/h0034092>
- Rao, P. S. (2006). *Personnel and HUMAN RESOURCE MANAGEMENT* (2006th ed.). Himalaya Publishing House.
- Spencer, L. M., & Spencer, S. M. (2008). *Competence at Work: Models for Superior Performance* (Wiley India Edition). John Wiley & Sons, Inc.
- White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review*, 66(5), 297.
- Woodruffe, C. (1993). What Is Meant by a Competency? *Leadership & Organization Development Journal*, 14(1), 29–36. <https://doi.org/10.1108/eb053651>

