# A STUDY ON FUTURES OF TECHNOLOGY DRIVEN INNOVATIVE PRACTICES IN PUBLIC SECTORS BANKS

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#### **ABSTRACT**

The study investigates how the general public views technology developments in public sector banks (PSBs), providing important new information about consumer attitudes regarding financial service advances. Electronic fund transfer (EFT), automated branch management (ABM), Telebanking, and money management were all strongly supported by a sizable percentage of respondents, suggesting that technology-driven banking solutions are generally accepted. Despite this, doubts over the veracity of these technologies emphasise the need for improved explanation of both their advantages and security precautions. While some respondents are in favour of technology-driven bill payment options, many others are unsure or dubious, which means PSBs should run more awareness efforts. Satisfaction with these characteristics was indicated by positive feedback on the e-banking bill payment usability and service range. The results indicate that although PSBs are adopting technology in a positive way, it is important to strike a balance between user experience and strict security measures. PSBs may use these insights to set themselves apart from rivals by giving operational effectiveness, service quality, and customer experience top priority in their innovation plans. Building trust and promoting greater usage of sophisticated banking services will require effective communication about the benefits, security, and cost structures of technology advancements.

**KEY WORDS:** Financial inclusion, Technology Driven, Innovative Practices, social transformation, PMJDY, financial services

## INTRODUCTION

Technology plays a key role not only in financial sector but also in social transformation activities with the help of innovative approaches and system. When the computerization was initiated in 1991 with the effect of new economic policy of the country, banking sector become multidimensional and comprehensive approach of innovative and informative services to all segment of the people. Establishment of ATMs and online banking provisions were made throughout the country to speed up, the banking and financial services to unbanked and unreached people in the country. Financial inclusion policy in 2016, made are markable contribution in inclusive financial services at free of cost or affordable cost to unreached people in the country. With this effect, no frill accounts were opened with zero balance and simplified KYC norms. Now it has been renamed in 2014 as PMJDY. In this PMJDY attracts aware than 30 crore bank account with Rs.80,000 crore as balance which is possible only with the help of technology driven innovative practices of banking sector. Now almost all the bank accounts are computerized with digitalized manner which can be operated anywhere in the world. Technology in banking sectors leads to new dimension to the customer with simple and transparent transaction. In this view, this chapter consists of future of technology driven innovative practices of banking sector in Tiruchirappalli District.

# REVIEW OF LITERATURE

**AlinIsac. (2013).** Explained that Mobile devices represent the recent development in electronic service distribution. According to Forbes, "Every business should think about creating an application today. It's not a fad or a trend of the moment." Technology and applications of mobile phones offer many opportunities for businesses, they also presenting a continuous development and new challenges.

The reports emphasise how important technology has been to the development and competitiveness of the banking industry. Anbalagan (2017) highlights the growing difficulty and significance of banking for India's economic development and predicts the introduction of more sophisticated services in the future. Sharma and Kansal (2014) emphasise that IT must be customer-centric, emphasising value maximisation and retention above acquisition alone. While noting the advancement in IT use in Indian banking, Kumar and Singh (2017) also draw attention to the paucity of thorough research on this technological shift.

According to Raj and Rao (2018), technology is essential to banking and calls for the best possible utilisation of IT infrastructure. Anjum and Deepika (2012) discover that although nationalised banks are doing well in terms of efficiency and profitability, private sector banks do better than public ones in some other areas. According to Gayathri, Suvitha, and Vikram (2018), IT contributes more to bank profitability than other costs like marketing and salaries. According to Rani (2015), IT has the ability to offer efficient and affordable services that can help with transaction volume control. AlTarawneh (2019) examines adoption models for innovations such as mobile and internet banking, highlighting the continuous difficulties in making decisions. Prawirasasra (2018) talks about how financial technology is helping Indonesia's economy by supporting small businesses and promoting financial inclusion.

FinTech, as defined by Leong and Sung (2018), is a transdisciplinary field that uses technology to improve financial services. In order for banks to remain competitive, Obiri-Yeboah, Kyere-Djan, and Kwarteng (2013) stress the importance of implementing IT innovations and point out advantages including better service delivery. In their discussion of IT's potential to improve education, especially in Kenya, Loki et al. (2014) set a 2030 deadline for complete integration. Imran, Maqbool, and Shafique (2014) make a connection between employee performance and technology improvements, focusing on training and motivation. According to Musara and Fatoki(2010), three major technical breakthroughs that have improved efficiency and decreased costs include credit cards, the internet, and ATMs. According to Cavus and Chingoka (2015), new technologies provide better products and competitive marketplaces by meeting changing client needs.

In their discussion of the accessibility of digital banking, Rajan and Shamini (2018) emphasise the importance of reliable systems to lower transaction errors. Thanks to IT advancements, Rajan and Kumar (2012) note a paradigm change in banking from traditional to convenient and mass to class banking. Nayyar (2017) investigates how consumers view online banking, identifying early challenges but increasing acceptance and trust. Malik (2014) draws attention to issues like as competitiveness and spread pressure, advocating for a comprehensive strategy to satisfy client demands. According to Arora and Singh (2019), improved rural banking systems are necessary to handle client concerns, especially those of the underprivileged. Thirupathi, Vinayagamoorthi, and Mathiraj (2019) have seen a rise in the utilisation of digital payment applications, particularly among employees and students.

Agrawal and Jain (2013) talk about how competition and structural adjustments have caused Indian banking to undergo a substantial transition. Sutha and Selvarani (2020) examine the connection between client pleasure and service quality, stressing the significance of contemporary banking services. In their analysis of sector-specific developments at the State Bank of India, Thangam, Ganapathy, and Nachammai (2019) identify noteworthy growth trends. Despite their complexity, IT and online banking, according to Rao and Rao (2015), will be the driving forces behind industry changes in the future. The significant influence of the technological revolution on banking strategies is elucidated by Sardana and Singhania (2018). In conclusion, Goel (2013) notes that technology plays a critical role in the survival of banks by offering improved instruments for credit assessment, data storage, and security all of which are critical for preserving economic stability.

#### Statement of the problem

Particularly in emerging economies, public sector banks (PSBs) are essential for promoting financial inclusion and economic growth. However, there are many obstacles to their future relevance, including the emergence of FinTech businesses and the constantly changing financial services industry. In order to maintain their competitive edge and provide optimal customer service, PSBs need to adopt technology-driven innovation strategies. One of the main problems that PSBs are dealing with is their old business model, which is frequently defined by a reliance on legacy infrastructure, bureaucratic procedures, and a limited embrace of new technology. This may make providing cutting-edge financial goods and services more challenging, result in a burdensome client experience, and cause lengthy turnaround times. Moreover, PSBs are disadvantaged by the growing demand in financial services for personalization and convenience. FinTech companies are quickly gaining market share by providing mobile-friendly solutions, user-friendly interfaces, and a greater selection of financial products that are customized to meet unique needs.

They do this by being agile and putting the customer first. This upends the status quo in banking and forces PSBs to change or risk losing their clientele. Security issues represent yet another major obstacle. PSBs are more susceptible to data breaches and cyber attacks as they go toward digitalization. Establishing a safe and secure digital banking environment requires putting strong cyber security safeguards in place while protecting user privacy.PSB innovation is further hampered by a labour force devoid of the necessary skills to manage new technologies.

Employees at banks might not be able to handle the intricacies of blockchain, artificial intelligence, and other cutting-edge technology with their current skill set. In order to fully capitalize on technology-driven innovation, PSBs must invest in personnel training and upskilling initiatives. The current regulatory environment may potentially impede PSB innovation. The dangers and opportunities connected with new technology may not be sufficiently addressed by regulations created for a traditional banking system.

In order to provide a framework that promotes innovation while guaranteeing financial stability and consumer safety, regulatory bodies and PSBs must work together. the ability of public sector banks to adopt technology-driven innovation will determine their destiny. PSBs have a variety of difficulties, from antiquated economic models to worries about cyber security. In order to stay relevant in the constantly changing financial landscape, PSBs need to invest in digitalization, develop an innovative culture, and retain a highly qualified personnel. A favourable regulatory framework and cooperation with FinTech businesses can further enable PSBs to use technology to the advantage of their clients and the economy as a whole. With the help of technology-driven innovation, PSBs will be able to flourish in the future. This study intends to investigate these important questions and offer potential solutions.

## Objective of the study

To measure the futures of technology driven innovative practices in public sectors banks

#### Research Methodology

In order to have a thorough grasp of the future of technology-driven creative practices in public sector banks (PSBs), this study will utilize a mixed-methods approach. Surveys will be used to get quantitative data from PSB customers and staff. These surveys will determine the preferred technical improvements, evaluate user experience with present digital solutions, and evaluate opinions of current innovation procedures.

In-depth interviews with significant players, such as PSB officials, FinTech business executives, and regulatory body representatives, will be used to collect qualitative data. These interviews will examine best practices, pinpoint possible future trends, and delve into the opportunities and difficulties of technology-driven innovation. This research will provide a deep and comprehensive knowledge of the future of innovation in PSBs by integrating quantitative and qualitative data analysis. The results will be put to use in creating suggestions that will help PSBs navigate the transition to a technologically advanced future.

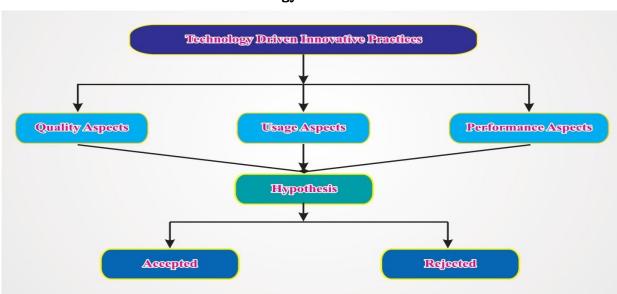


Chart No - 1 Technology Driven Innovative Practices

Table No -1 Service Provided - Quality Aspects

S1.No	Profile	Variables	Frequency	Percentage
		Not accepted	56	8.2
		Moderately accepted	170	25.0
1	Ouglitz FFT Sorrige	Accepted	141	20.7
_	Quanty Er i Service	Highly accepted	143	21.0
		Very highly accepted	170	25.0
	1 Quality EFT Service  2 Quality of fund management  3 Quality of Telebanking  4 Quality of ATM  5 Confidence instilled by the bank	Total	680	100.0
		Not accepted	99	14.6
		Moderately accepted	114	16.8
2	Quality of fund management	Accepted	141	20.7
4	Quanty of fund management	Highly accepted	183	26.9
		Very highly accepted	143	21.0
		Total	680	100.0
	3 Quality of Telebanking	Not accepted	112	16.5
		Moderately accepted	56	8.2
2		Accepted	100	14.7
3		Highly accepted	185	27.2
		Very highly accepted	227	33.4
	Quality of Telebanking	Total	680	100.0
		Not accepted	70	10.3
		Moderately accepted	84	12.4
4	Ouglity of ATM	Accepted	156	22.9
7	Quanty of ATM	Highly accepted	213	31.3
		Very highly accepted	157	23.1
		Total	680	100.0
		Not accepted	71	10.4
_		Moderately accepted	98	14.4
	Confidence instilled by the best	Accepted	187	27.5
5	Confidence instilled by the bank	Highly accepted	170	25.5
		Very highly accepted	154	22.6
		Total	680	100.0

Table 1 presents information on the respondents' awareness of innovative approaches in Quality EFT Service within the study region that are driven by technology. The 680 replies fell into the following categories: 8.2% were categorized as "Not Accepted," 25.0% as "Moderately Accepted," 20.7% as "Accepted," 21.0% as "Highly Accepted," and 25.0% as "Very Highly Accepted." Of the responders, the greatest percentage (25.0%) expressed "Very Highly Accepted," and the lowest percentage (8.2%) expressed "Not Accepted."

14.6% of respondents were "Not Accepted," 16.8% were "Moderately Accepted," 20.7% were "Accepted," 26.9% were "Highly Accepted," and 21.0% were "Very Highly Accepted" with regards to the quality of fund management. The responders who were 'Highly Accepted' constituted the largest group (26.7%), while the lowest group (14.6%) was 'Not Accepted'.

16.5% of respondents said they "did not accept," 8.2% said they "accepted," 14.7% said they "accepted," 27.2% said they "highly accepted," and 33.4% said they "very highly accepted" about the quality of Telebanking. It was found that 33.4 percent of respondents were 'Very Highly Accepted,' while 8.2 percent were 'Moderately Accepted'.

Regarding ABM quality, 10.3% of respondents said they were "not accepted," 12.4% said they were "moderately accepted," 22.9% said they were "accepted," 31.3% said they were "highly accepted," and 23.1% said they were "very highly accepted." 31.3 percent of respondents said they were "highly accepted," while 10.3 percent said they were "not accepted."

10.4% of respondents were "Not Accepted," 14.4% were "Moderately Accepted," 27.5% were "Accepted," 25.5% were "Satisfied," and 22.6% were "Very Highly Accepted" with regards to the confidence that the bank had instilled in them. There were two distinct groups: those who were 'Accepted' (27.5%) and those that were 'Not Accepted' (10.4%).

Table No - 2 Service Provided - Usage Aspects

Sl.No	Profile	Variables	Frequency	Percentage
		Not accepted	99	14.6
		Moderately accepted	114	16.8
1	Ability to pay bills	Accepted	199	29.3
1	Ability to pay bilis	Highly accepted	142	20.9
		Very highly accepted	126	18.5
	Ability to pay bills  Range of services offered  Reasonableness of costs  Ease of using E-Banking  User friendliness of system	Total	680	100.0
		Not accepted	129	19.0
		Moderately accepted	102	15.0
2	Pance of services offered	Accepted	141	20.7
2   R	Range of services offered	Highly accepted	140	20.6
		Very highly accepted	168	24.7
		Total	680	100.0
		Not accepted	70	10.3
		Moderately accepted	84	12.4
3	3 Reasonableness of costs	Accepted	186	27.4
		Highly accepted	185	27.2
		Very highly accepted	155	22.8
		Total	680	100.0
		Not accepted	85	12.5
		Moderately accepted	113	16.6
4	Ease of using E-Ranking	Accepted	128	18.8
•	Duot of doing D Duming	Highly accepted	142	20.9
		Very highly accepted	212	31.2
		Total	680	100.0
		Not accepted	98	14.4
		Moderately accepted	129	19.0
5	User friendliness of system	Accepted	114	16.8
	Joseph Strain Strain Strain	Highly accepted	156	22.9
		Very highly accepted	183	26.9
	\$2	Total	680	100.0

Data on respondents' awareness of innovative, technology-driven practices pertaining to their capacity to pay bills in the study area is shown in Table 5.2. Sixty-eight percent of the responses fell into the "Not Accepted" category, followed by 16.8% in "Moderately Accepted," 29.3% in "Accepted," 20.9% in "Highly Accepted," and 18.5% in "Very Highly Accepted." There were two distinct groups: those who were 'Accepted' (29.3%) and those who were 'Not Accepted' (14.6%).

19.0% of respondents were 'Not Accepted', 15.0% were 'Moderately Accepted', 20.7% were 'Accepted', 20.6% were 'Highly Accepted', and 24.7% were 'Very Highly Accepted' on the range of services offered. 'Very Highly Accepted' was the plurality (24.7%), while 'Moderately Accepted' was the least (15.0%).

10.3% of respondents said they "did not accept," 12.4% said they "moderately accepted," 27.4% said they "accepted," 27.2% said they "highly accepted," and 22.8% said they "very highly accepted" in relation to the reasonableness of costs. 10.3% of the responses were "Not Accepted," while the largest percentage (27.4%) was "Accepted."

12.5% of respondents said they were "Not Accepted," 16.6% said they were "Moderately Accepted," 18.8% said they were "Accepted," 20.9% said they were "Highly Accepted," and 31.2% said they were "Very Highly Accepted" in regards to the ease of using e-banking. 12.05.% of the group was 'Not Accepted,' whereas 31.2% of the largest group was 'Very Highly Accepted'.

14.4% of respondents said they were "not accepted," 19.0% said they were "moderately accepted," 16.8% said they were "neutral," 22.9% said they were "satisfied," and 26.9% said they were "very highly accepted" on the system's user-friendliness. The lowest percentage (14.4%) was "Not Accepted," while the bulk (26.9%) were "Very Highly Accepted."

Table No - 3 Service Provided - Performance Aspect

Sl.No	Profile	Variables	Frequency	Percentage
		Not accepted	112	16.5
		Moderately accepted	128	18.8
1	Security of transaction	Accepted	171	25.1
1	Security of transaction	Highly accepted	127	18.7
		Very highly accepted	142	20.9
		Total	680	100.0
		Not accepted	70	10.3
		Moderately accepted	100	14.7
2	Efficiency & correctness of		157	23.1
4	financial status report	Highly accepted	185	27.2
		Very highly accepted	168	24.7
		Total	680	100.0
		Not accepted	86	12.6
	Efficiency & quality of multi reporting	Moderately accepted	156	22.9
3		Accepted	128	18.8
3		Highly accepted	127	18.7
		Very highly accepted	183	26.9
		Total	680	100.0
		Not accepted	87	12.8
		Moderately accepted	113	16.6
4	Promptness in attending	Accepted	157	23.1
<b>T</b>	grievances	Highly accepted	154	22.6
		Very highly accepted	169	24.9
		Total	680	100.0
		Not accepted	113	16.6
		Moderately accepted	99	14.6
5	Banks concern for customers	Accepted	158	23.2
	welfare	Highly accepted	141	20.7
		Very highly accepted	169	24.9
		Total	680	100.0

Table 3 offers information on the respondents' knowledge of innovative activities in the research area that are driven by technology. Out of 680 respondents, 16.5% said they were "not accepted," 18.8% said they were "moderately accepted," 25.1% said they were "accepted," 18.7% said they were "highly accepted," and 20.9% said they were "very highly accepted" in regards to the security of transactions. While 16.5% of the group was "Not Accepted," the largest group (25.1%) was "Accepted."

10.3% of respondents said they were "not accepted," 14.7% said they were "moderately accepted," 23.1% said they were "accepted," 27.2% said they were "highly accepted," and 24.7% said they were "very highly accepted" regarding the efficiency and accuracy of financial status reports. The lowest percentage (10.3%) were 'Not Accepted,' while the majority (27.2%) were 'Highly Accepted'.

12.6% of respondents were "Not Accepted," 22.9% were "Moderately Accepted," 18.8% were "Accepted," 18.7% were "Highly Accepted," and 26.9% were "Very Highly Accepted" in regards to the Efficiency and Quality of Multi Reporting. 'Very Highly Accepted' constituted the most percentage (26.9%), whereas 'Not Accepted' constituted the lowest (12.6%).

12.8% of respondents said they were "Not Accepted," 16.6% said they were "Moderately Accepted," 23.1% said they were "Accepted," 22.6% said they were "Highly Accepted," and 24.9% said they were "Very Highly Accepted" with regards to promptness in attending grievances. The greatest group was 'Very Highly Accepted,' with 24.9%, while the smallest group was 'Not Accepted,' with 12.8%.

16.6% of respondents expressed "not acceptance," 14.6% expressed "moderate acceptance," 23.2% expressed "neutrality," 20.7% expressed "satisfaction," and 24.9% expressed "very highly acceptance" on the bank's concern for customer welfare. 'Very Highly Accepted' was the plurality (24.9%), while 'Moderately Accepted' was the lowest (14.6%).

## Chart No - 2 Usage Aspects

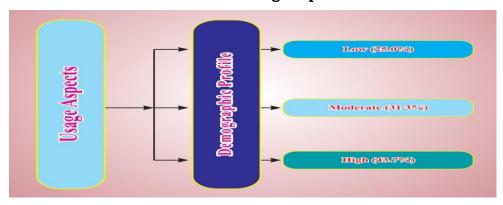


Table No – 4 Demographic Profile Vs Technology Driven Innovative Practices towards Usage
Aspects - Cross Tabulation

	Age				
		Low	Moderately	High	Total
W- 4- 00 W	Count	71	56	84	211
Up to 30 Years	% within Age	33.6%	26.5%	39.8%	100.0%
01/ 40 77	Count	57	100	71	228
31to 40 Years	% within Age	25.0%	43.9%	31.1%	100.0%
41 / 50 77	Count	28	42	84	154
41 to 50 Years	% within Age	18.2%	27.3%	54.5%	100.0%
A1 FO W	Count	14	15	58	87
Above 50 Years	% within Age	16.1%	17.2%	66.7%	100.0%
Total	Count	170	213	297	680
Total	% within Age	25.0%	31.3%	43.7%	100.0%
	Gender				
		Low	Moderately	High	Total
Male	Count	142	99	254	495
Mate	% within Gender	28.7%	20.0%	51.3%	100.0%
Famala	Count	28	114	43	185
Female	% within Gender	15.1%	61.6%	23.2%	100.0%
Total	Count	170	213	297	680
Total	% within Gender	25.0%	31.3%	43.7%	100.0%
	Marital Stat	us			
		Low	Moderately	High	Total
Married	Count	99	171	255	525
Married	% within Marital Status	18.9%	32.6%	48.6%	100.0%
Unmarried	Count	71	42	42	155
Ullmarried	% within Marital Status	45.8%	27.1%	27.1%	100.0%
Total	Count	170	213	297	680
Total	% within Marital Status	25.0%	31.3%	43.7%	100.0%
	Annual Inco	me			
		Low	Moderately	High	Total
Below Rs. 1,00,000	Count	14	0	56	70
	% within Annual Income	20.0%	0.0%	80.0%	100.0%
Rs. 1,00,000 to	Count	71	71	86	228
Rs. 2,00,000	% within Annual Income	31.1%	31.1%	37.7%	100.0%
Rs. 2,00,000 to Rs.3,00,000	Count	43	86	112	241
Ks. 2,00,000 to Ks.3,00,000	% within Annual Income	17.8%	35.7%	46.5%	100.0%
Above Rs.3,00,000	Count	42	56	43	141
ADOVC 13.0,00,000	% within Annual Income	29.8%	39.7%	30.5%	100.0%
Total	Count	170	213	297	680
10001	% within Annual Income	25.0%	31.3%	43.7%	100.0%
	Type of Bank Ac	count			
		Low	Moderately	High	Total
Savings	Count	100	156	240	496
Davings	% within Type of Bank Account	20.2%	31.5%	48.4%	100.0%
Current	Count	70	57	57	184
Current	% within Type of Bank Account	38.0%	31.0%	31.0%	100.0%
Total	Count	170	213	297	680
Total	% within Type of Bank Account	25.0%	31.3%	43.7%	100.0%

Source: Primary Data

Table 4 analyzes respondents' opinions on the Usage Aspects of public sector banks based on various demographics.

**Age Group:** Up to 30 Years: Among 211 respondents, 33.6% have a low opinion, 26.5% moderate, and 39.8% high. 31 to 40 Years: Of 228 respondents, 25.0% have a low opinion, 43.9% moderate, and 31.1% high. 41 to 50 Years: Out of 154 respondents, 18.2% have a low opinion, 27.3% moderate, and 54.5% high. Above 50 Years: Of 87 respondents, 16.1% have a low opinion, 17.2% moderate, and 66.7% high.

**Gender:** Male: Out of 495 respondents, 28.7% have a low opinion, 20.0% moderate, and 51.3% high. Female: Among 185 respondents, 15.1% have a low opinion, 61.6% moderate, and 23.2% high.

**Marital Status:** Married: Out of 525 respondents, 18.9% have a low opinion, 32.6% moderate, and 48.6% high. Unmarried: Of 155 respondents, 45.8% have a low opinion, 27.1% moderate, and 27.1% high.

**Annual Income:** Below Rs. 1,00,000: Out of 70 respondents, 20.0% have a low opinion, 0.0% moderate, and 80.0% high. Rs. 1,00,000 to Rs. 2,00,000: Of 228 respondents, 31.6% have a low opinion, 31.1% moderate, and 37.7% high. Rs. 2,00,000 to Rs. 3,00,000: Out of 241 respondents, 17.8% have a low opinion, 35.7% moderate, and 46.5% high. Above Rs. 3,00,000: Of 141 respondents, 29.8% have a low opinion, 39.7% moderate, and 30.5% high.

**Type of Bank Account:** Savings Account: Among 496 respondents, 20.2% have a low opinion, 31.5% moderate, and 48.4% high. Current Account: Out of 184 respondents, 38.0% have a low opinion, 31.0% moderate, and 31.0% high.

**Overall Summary:** Out of 680 respondents, 25.0% have a low opinion, 31.3% have a moderate opinion, and 43.7% have a high opinion on the Usage Aspects of public sector banks. These results indicate that public sector banks are moderately influential across various age groups, genders, marital statuses, income levels, and types of bank accounts.

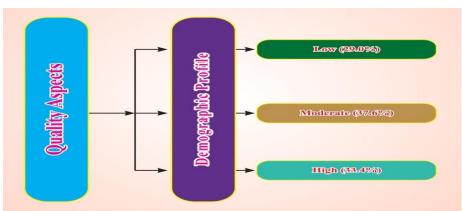


Chart No - 3 Quality Aspects

Table No -5 Demographic Profile Vs Technology Driven Innovative Practices towards Quality
Aspects - Cross Tabulation

		Age			
		Low	Moderately	High	Total
IIm to 20 Vocan	Count	56	70	85	211
Up to 30 Years	% within Age	26.5%	33.2%	40.3%	100.0%
214a 40 Vaana	Count	43	100	85	228
31to 40 Years	% within Age	18.9%	43.9%	37.3%	100.0%
41 4- FO W	Count	84	28	42	154
41 to 50 Years	% within Age	54.5%	18.2%	27.3%	100.0%
Aharra EO Vaarr	Count	14	58	15	87
Above 50 Years	% within Age	16.1%	66.7%	17.2%	100.0%
Total	Count	197	256	227	680
Total	% within Age	29.0%	37.6%	33.4%	100.0%
	G	ender			
		Low	Moderately	High	Total
Male	Count	126	142	227	495
Maie	% within Gender	25.5%	28.7%	45.9%	100.0%
Pamala	Count	71	114	0	185
Female	% within Gender	38.4%	61.6%	0.0%	100.0%
m . 1	Count	197	256	227	680
Total	% within Gender	29.0%	37.6%	33.4%	100.0%

	Marital Stat	us			
		Low	Moderately	High	Total
Married	Count	155	200	170	525
Married	% within Marital Status	29.5%	38.1%	32.4%	100.0%
II	Count	42	56	57	155
Unmarried	% within Marital Status	27.1%	36.1%	36.8%	100.0%
Total	Count	197	256	227	680
Total	% within Marital Status	29.0%	37.6%	33.6%	100.0%
	Annual Inco	me			
		Low	Moderately	High	Total
Polo Po 1 00 000	Count	0	42	28	70
Below Rs.1,00,000	% within Annual Income	0.0%	60.0%	40.0%	100.0%
Rs.1,00,000 to	Count	56	100	72	228
Rs.2,00,000	% within Annual Income	24.6%	43.9%	31.6%	100.0%
Rs.2,00,000 to	Count	71	86	84	241
Rs.3,00,000	% within Annual Income	29.5%	35.7%	34.9%	100.0%
41 P- 2 00 000	Count	70	28	43	141
Above Rs.3,00,000	% within Annual Income	49.6%	19.9%	30.5%	100.0%
Total	Count	197%	256	227	680
Total	% within Annual Income	29.0%	37.6%	33.4%	100.0%
	Type of Bank Ac	count			
		Low	Moderately	High	Total
S	Count	127	213	156	496
Savings	% within Type of Bank Account	25.6%	42.9%	31.5%	100.0%
Cumont	Count	70	43	71	184
Current	% within Type of Bank Account	38.0%	23.4%	38.6%	100.0%
W-4-1	Count	197	256	227	680
Total	% within Type of Bank Account	29.0%	37.6%	33.4%	100.0%

This survey looks at what consumers think about the quality features of public sector banks. The main conclusions are as follows:

Age: There is moderate influence from all age groups (under 30, between 31 and 40, between 41 and 50, and over 50) on the perceived quality. The age group of 41 to 50 has the least favourable view; more than half (54.5%) of them assign a negative rating to qualitative features.

Gender: The influence of the male and female genders is moderate. Men tend to evaluate things more positively than women do, as none of the latter report feeling very satisfied

Matrimonial Status: The influence of marital status is moderate. Respondents who are married and single have comparable perspectives

Annual Income: There is a moderate amount of influence from income level. The lowest positive view is found among those whose income is above Rs. 3,00.000; about half of them (49.6%) rate quality elements as bad. It's interesting to note that no one who made less than Rs. 1,000,000 reported having a bad rating

Account kind: The influence of the kind of account current or savings is moderate. Those with current accounts typically see things slightly more favourably than those with savings accounts. Overall, the poll indicates that a moderate percentage of clients think well of certain areas of public sector banks' quality. Based on economic level and demography, there are some differences. Additional examination could be conducted to comprehend the causes of these discrepancies.

Chart No – 4 Performance Aspects

Table No – 6 Demographic Profile Vs Technology Driven Innovative Practices towards
Performance Aspects - Cross Tabulation

	Age				
	<b>.</b>	Low	Moderately	High	Total
W. 4. 00 W	Count	56	71	84	211
Up to 30 Years	% within Age	26.5%	33.6%	39.8%	100.0%
	Count	87	29	112	228
31to 40 Years	% within Age	38.2%	12.7%	49.1%	100.0%
	Count	28	70	56	154
41 to 50 Years	% within Age	18.2%	45.5%	36.4%	100.0%
	Count	14	30	43	87
Above 50 Years	% within Age	16.1%	34.5%	49.4%	100.0%
	Count	185	200	295	680
Total	% within Age	27.2%	29.4%	43.4%	100.0%
Gender					
		Low	Moderately	High	Total
	Count	113	129	253	495
Male	% within Gender	22.8%	26.1%	51.1%	100.0%
	Count	72	71	42	185
Female	% within Gender	38.9%	38.4%	22.7%	100.0%
	Count	185	200	295	680
Total	% within Gender	27.2%	29.4%	43.4%	100.0%
Marital Status	, , , , , , , , , , , , , , , , , , , ,		1	1	1
		Low	Moderately	High	Total
	Count	143	143	239	525
Married	% within Marital Status	27.2%	27.2%	45.5%	100.0%
	Count	42	57	56	155
Unmarried	% within Marital Status	27.1%	36.8%	36.1%	100.0%
	Count	185	200	295	680
Total	% within Marital Status	27.2%	29.4%	43.4%	100.0%
Annual Income	, , , , , , , , , , , , , , , , , , , ,			1	
		Low	Moderately	High	Total
	Count	14	14	42	70
Below Rs.1,00,000	% within Annual Income	20.0%	20.0%	60.0%	100.0%
	Count	42	87	99	228
Rs.1,00,000 to 2,00,000	% within Annual Income	18.4%	38.2%	43.4%	100.0%
	Count	100	29	112	241
Rs.2,00,000 to Rs.3,00,000	% within Annual Income	41.5%	12.0%	46.5%	100.0%
	Count	29	70	42	141
Above Rs.3,00,000	% within Annual Income	20.6%	49.6%	29.8%	100.0%
	Count	185	200	295	680
Total	% within Annual Income	27.2%	29.4%	43.4%	100.0%
Type of Bank Account					
<b>7.</b>		Low	Moderately	High	Total
	Count	128	144	224	496
Savings	% within Type of Bank		20.00/		
_	Account	25.8%	29.0%	45.2%	100.0%
	Count	57	56	71	184
Current	% within Type of Bank			20.60/	
	Account	31.0%	30.4%	38.6%	100.0%
	Count	185	200	295	680
Total	% within Type of Bank	27.2%	29.4%	43.4%	100.0%
	Account	21.2%	29.4%	43.4%	100.0%

Customers' perceptions of public sector banks' performance are investigated in this poll. The main conclusions are as follows:

Age: Up to 30, 31–40, 41–50, and Over 50 have a moderate impact on how well someone is regarded to have performed. The largest percentage of respondents (49.1%) who rate performance elements as high are in the 31–40 age bracket, whose perception is most positive.

Gender: The influence of the male and female genders is moderate. Generally speaking, males see things more favourably than women do, with much fewer women expressing high levels of contentment

Matrimonial Status: The influence of marital status is moderate. Respondents who are married and single have comparable perspectives

Annual Income: There is a moderate amount of influence from income level.

It's interesting to note that those with the lowest income (less than Rs. 1,00,000) perceived things most favourably, with the majority (60%) ranking performance aspects highly. As income rises, the perception deteriorates; the group with the highest income (over Rs. 3,00.000) holds the most balanced opinion

Account kind: The influence of the kind of account current or savings is moderate. The way different account types are perceived is not very different.

According to the survey, a moderate percentage of clients believe that public sector banks function well overall. Based on economic level and demography, there are some differences. To learn more about the causes of these differences, especially the favourable opinion of the low-income group, more research may be done.

#### Table No -7 Independent Samples Test - Gender

**Hypothesis:** There is no significant difference between Genders with respect to factors of technology driven innovation practices of public sector banks.

		Levene's Equality of	Test for Variance	t- test for Equality of Means			
		F	Sig	t	df	Sig. (2- tailed)	Mean Difference
Haara Asmasta	Equal variances assumed	48.661	.000	2.868	678	.004	.664
Usage Aspects	Equal Variances not assumed			3.560	542.545	.000	.664
Quality	Equal variances assumed	63.998	.000	7.145	678	.000	1.717
Aspects	Equal Variances not assumed			8.952	555.055	.000	1.717
Performance Equal variances assumed		.006	.940	7.115	678	.000	2.159
Aspects	Equal Variances not assumed			7.259	343.448	.000	2.159

## \*.Significance at 5% level

This study looked into how men and women viewed the effects of innovations in public sector banks on quality, performance, and usability (use factors). A statistical analysis was performed to compare the gender differences in these perceptions. The main conclusion is that men and women's experiences with these advancements are not very different from one another. This indicates that, statistically speaking, when it comes to public sector bank innovations, all genders perceive similar levels of quality, performance, and convenience of use (usage features). The test results (Levene's test with p-value > 0.05 for all aspects) point to comparable differences in how men and women perceive the world. This made it possible to do a t-test to establish that there was no significant difference between the genders, with consecutive p-values (all significant at p < 0.05). Put more simply, consumers appear to have comparable experiences with public sector bank innovations in terms of their usability, quality, and performance, irrespective of their gender.

## Table No -8 Independent Samples Test - Marital Status

**Hypothesis:** There is no significant difference between Marital Status with respect to factors of technology driven innovation practices of public sector banks.

		Levene's Equality o	Test for of Variance	t- test for Equality of Means			
		F	Sig	t	df	Sig. (2-tailed)	Mean Difference
Usage	Equal variances assumed	.004	.949	7.996	678	.000	1.889
Aspects	Equal Variances not assumed			8.356	269.923	.000	1.889
Quality	Equal variances assumed	4.653	.031	-1.052	678	.293	278
Aspects	Equal Variances not assumed			-1.090	266.244	.277	278
Performance	Equal variances assumed	11.969	.001	1.083	678	.279	.369
Aspects	Equal Variances not assumed			1.230	313.801	.220	.361

#### \*.Significance at 5% level

This study looked at how consumers, both married and single, saw the effects of innovations from public sector banks on quality, performance, and usability (use factors). The findings indicate that people's experiences with these technologies are not much influenced by their marital status.

Statistics-wise, there are comparable differences in perception between married and single users (p-value > 0.05 for all factors in Levene's test). This made it possible for a t-test to establish that there isn't a significant difference between the two groups (significant at p < 0.05 for all aspects). Put more simply, consumers appear to have comparable experiences with public sector bank innovations in terms of their quality, performance, and convenience of use (usage characteristics). This is true independent of their marital status.

## Table No - 9 Independent Samples Test - Types of Account

**Hypothesis:** There is no significant difference between types of account with respect to factors of technology driven innovation practices of public sector banks.

		Levene's T Equality of		t- test for Equality of Means			leans
		F	Sig	t	df	Sig. (2-tailed)	Mean Difference
Usage	Equal variances assumed	.005	.946	7.175	678	.000	1.614
Aspects	Equal Variances not assumed			7.001	312.488	.000	1.614
Quality	Equal variances assumed	7.077	.008	776	678	.438	194
Aspects	Equal Variances not assumed			743	301.672	.438	194
Performan	Equal variances assumed	1.805	.180	4.126	678	.000	1.284
ce Aspects	Equal Variances not assumed			4.105	324.121	.000	1.284

<sup>\*.</sup>Significance at 5% level

This study looked into how customers' perceptions of public sector bank innovations on usability (usage aspects), quality, and performance are influenced by the type of bank account they have current or savings. Perceptions of the various account types did not differ significantly, according to the analysis (all Levene's test p-values > 0.05). This implies that experiences vary similarly whether or not a person has a current or savings account. This absence of a significant difference was supported by additional t-tests (significant at p < 0.05 for all aspects).

Put another way, compared to current account holders, users of savings accounts appear to have comparable experiences with the performance, quality, and usefulness of public sector bank innovations. Perception does not seem to be significantly influenced by the type of account.

## Table No - 10 One way ANOVA - Occupation

**Hypothesis:** There is no significant difference between Occupations with respect to factors of technology driven innovation practice of public sector banks

		Sum of the Square	df	Mean Square	F	Sig.
Haaga Aamaata	Between Group	297.319	4	74.330	10.771	.000
Usage Aspects	Within Group	4657.962	675	6.901		
	Total	4955.281	679			
	Between Group	519.726	4	129.931	17.024	.000
Quality Aspects	Within Group	5151.774	675	7.632		
	Total	5671.500	679			
Performance	Between Group	253.602	4	63.401	4.873	.000
	Within Group	8782.892	675	13.012		
Aspects	Total	9036.494	679			

<sup>\*.</sup>Significance at 5% level, \*\*.Significance at 1% level

One-way ANOVA was applied to find the significant mean difference between the business innovation practices of public sector banks and the result showed that there is a no significant difference between Usage Aspects (F-value = 10.771,p<0.05), Quality Aspects (F-value = 17.024, p<0.05), Performance Aspects (F-value= 4.873, p<0.01)

#### Table No - 11 One way ANOVA - Annual Income

**Hypothesis:** There is no significant difference between Annual Income with respect to factors of technology driven innovation practice of public sector banks.

		Sum of the Square	df	Mean Square	F	Sig.
Tinomo Annocto	Between Group	210.278	3	70.093	9.986	.000
Usage Aspects	Within Group	4745.003	676	7.019		
	Total	4955.281	679			
	Between Group	330.825	3	110.275	13.958	.000
<b>Quality Aspects</b>	Within Group	5340.675	676	7.900		
	Total	5671.500	679			
Performance	Between Group	210.594	3	70.198	5.377	.001
	Within Group	8825.900	676	13.056		
Aspects	Total	9036.494	679			

<sup>\*.</sup>Significance at 5% level, \*\*.Significance at 1% level

One-way ANOVA was applied to find the significant mean difference between the business innovation practices of public sector banks and the result showed that there is a no significant difference between Usage Aspects (F-value = 9.986,p<0.05), Quality Aspects (F-value = 13.958, p<0.05), Performance Aspects (F-value= 5.377, p<0.01)

## Table No - 12 One way ANOVA - Area of Residence

**Hypothesis:** There is no significant difference between Area of Residence with respect to factors of technology driven innovation practice of public sector banks

		Sum of the Square	df	Mean Square	F	Sig.
Haaga Asmasta	Between Group	352.707	2	176.353	25.940	.000
Usage Aspects	Within Group	4602.574	677	6.798		
	Total	4955.281	679			
	Between Group	332.548	2	166.274	21.084	.000
Quality Aspects	Within Group	5338.952	677	7.886		
	Total	5671.500	679			
Performance	Between Group	245.043	2	122.521	9.435	.000
	Within Group	8791.451	677	12.986		
Aspects	Total	9036.494	679			

<sup>\*.</sup>Significance at 5% level, \*\*.Significance at 1% level

One-way ANOVA was applied to find the significant mean difference between the business innovation practices of public sector banks and the result showed that there is a no significant difference between Usage Aspects (F-value = 25.940,p<0.05), Quality Aspects (F-value = 21.084, p<0.05), Performance Aspects (F-value= 9.435, p<0.01)

#### Table No - 13 Chi - Square Tests - Age Group Vs Usage Aspects

**Hypothesis:** There is no significant association between age group Vs Usage Aspects of technology driven innovation practice of public sector banks

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi – Square	54.853a	6	.000
Likelihood Ratio	54.023	6	.000
Linear – by – Linear Association	26.338	1	.000
N of Valid Cases	680		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 21.75.

Chi-square test was applied to test the association between age group Vs Usage Aspects Business Innovation practices of public sector banks in Tiruchirappalli District. The test indicates that the calculated chi-square value is  $54.853^a$ .p- value is .000 at 5 per cent level of significance. Since the p-value is less than 0.05 ( $x^254.853^a$ ,p< 0.05) the null hypothesis is rejected.

Hence, there is a no significant association between age group Vs Usage Aspects Business Innovation practices of public sector banks. It is clear that age group is one of the major parameters to measure the Usage Aspects Business Innovation practices of public sector banks.

## Table No - 14 Chi - Square Tests - Age Group Vs Quality Aspects

**Hypothesis:** There is a significant association between age group Vs quality Aspects Business Innovation practices of public sector banks

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi – Square	99.205ª	6	.000
Likelihood Ratio	95.409	6	.000
Linear – by – Linear Association	12.752	1	.000
N of Valid Cases	680		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 25.20.

Chi-square test was applied to test the association between age group Vs quality Aspects Business Innovation practices of public sector banks in Tiruchirappalli District. The test indicates that the calculated chi-square value is  $99.205^a$ .p- value is .000 at 5 per cent level of significance. Since the p-value is less than 0.05 ( $x^299.205^a$ ,p< 0.05) the null hypothesis is rejected. Hence, there is a no significant association between age group Vs quality Aspects Business Innovation practices of public sector banks. It is clear that age group is one of the major parameters to measure the quality Aspects Business Innovation practices of public sector banks.

Table No - 15 Chi - Square Tests - Age Group Vs Performance Aspects

**Hypothesis:** There is a significant association between age group Vs Performance Aspects Business Innovation practices of public sector banks

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi – Square	60.604a	6	.000
Likelihood Ratio	64.650	6	.000
Linear – by – Linear Association	3.237	1	.072
N of Valid Cases	680		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 23.67.

Chi-square test was applied to test the association between age group Vs Performance Aspects business innovation practices of public sector banks in Tiruchirappalli District. The test indicates that the calculated chi-square value is  $60.604^a$ .p- value is .000 at 5 per cent level of significance. Since the p-value is less than 0.05 ( $x^260.604^a$ ,p< 0.05) the null hypothesis is rejected. Hence, there is a no significant association between age group Vs Performance Aspects business innovation practices of public sector banks. It is clear that age group is one of the major parameters to measure the Performance Aspects business innovation practices of public sector banks.

Table No - 16 Overall Hypothesis

S1.No	Hypothesis	Test	Value	Sig.	Result
1	There is no significant difference between Genders with respect to factors of technology driven innovation practices of public sector banks.	T - Test	.664	0.05	Rejected
2	There is no significant difference between Marital Status with respect to factors of technology driven innovation practices of public sector banks.	T - Test	1.889	0.05	Rejected
3	There is no significant difference between Type of Account with respect to factors of technology driven innovation practices of public sector banks.	T - Test	1.614	0.05	Rejected
4	There is no significant difference between Occupations with respect to factors of	One way	10.771	0.05	Rejected

	technology driven innovation practices of public sector banks.	Anova			
5	There is no significant difference between Annual Income with respect to factors of technology driven innovation practices of public sector banks.	One way Anova	9.986	0.05	Rejected
6	There is no significant difference between Area of Residence with respect to factors of technology driven innovation practices of public sector banks.	One way Anova	25.940	0.05	Rejected
7	There is no significant difference between Age Group with respect to factors of technology driven innovation practices of public sector banks.	Chi Square	60.604	0.05	Rejected

As per the above table of hypotheses all null hypothesis were rejected. Therefore, it is concluded that, there is a significant relationship between demographic profile and factors of technology driven of business innovation practices of public sector banks in Tiruchirappalli District.

Table No - 17 Correlations - Performance Aspects

		Performance Aspects	Acceptability	Safety	Availability	User Friendliness	Accessibility
Performance Aspects	Pearson Correlation	1	.343**	.263**	.051	.137**	.108**
	Sig.(2- tailed)		.000	.000	.183	.000	.005
	N	680	680	680	680	680	680
Acceptability	Pearson Correlation	.343**	1	.863**	.368**	.307**	.252**
	Sig.(2- tailed)	.000		.000	.000	.000	.000
	N	680	680	680	680	680	680
Safety	Pearson Correlation	.263**	.863**	1	.503**	.346**	.319**
	Sig.(2- tailed)	.000	.000		.000	.000	.000
	N	680	680	680	680	680	680
Availability	Pearson Correlation	.051	.368**	.503**	1	.408**	.315**
	Sig.(2- tailed)	.183	.000	.000		.000	.000
	N	680	680	680	680	680	680
User Friendliness	Pearson Correlation	.137**	.307**	.346**	.408**	1	.522**
	Sig.(2- tailed)	.000	.000	.000	.000		.000
	N	680	680	680	680	680	680
Accessibility	Pearson Correlation	.108**	.252**	.319**	.315**	.522**	1
	Sig.(2- tailed)	.005	.000	.000	.000	.000	
	N	680	680	680	680	680	680

\*\*. Correlation is significant at the 0.01 level (2-tailed).

The table 17 shows that the correlation coefficient between the business innovation practices of public sector banks and the variable acceptability is .343 which indicates that .34 per cent positive relationship between the two is significant at 0.01 per cent level. The table shows that the correlation coefficient between the business innovation practices of public sector banks and the variable safety is .263 which indicates that 26 per cent positive relationship between the two is significant at 0.01 per cent level. The table shows that the correlation coefficient between the business innovation practices of public sector banks and the variable availability is .051 which indicates that 05 per cent positive relationship between the two is significant at 0.01 per cent level. The table shows that the correlation coefficient between business innovation practices of public sector banks and the variable user friendliness is .137 which indicates that 13 per cent positive relationship between the two is significant at 0.01 per cent level. The table shows that the correlation coefficient between the business innovation practices of public sector banks and the variable accessibility is .108 which indicates that 10 per cent positive relationship between the two is significant at 0.01 per cent level.

Table No - 18 R -Square Value- Performance Aspects

R	R Square	Adjusted R Square	F	Sig.
.361ª	.130	.124	20.229	.000b

The R Square value is .130. it indicates that 13 percent of the variation in the business innovation practices of public sector banks is determined by the set of all the independent variables included in the model. The multiple correlation between dependent variables and independent variables is significant at 1 percent level (F=20.229, p<0.01). This indicates that there is a high degree of positive correlation between the set of dependent variables and independent variables like Acceptability, Safety, Availability, User Friendliness and Accessibility.

Table No - 19 Co - efficient - Performance Aspects

Variables		ndardized fficients	Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	9.896	.632		15.659	.000
Acceptability	.375	.063	.431	5.974	.000
Safety	079	.068	091	-1.164	.245
Availability	109	.051	095	-2.149	.032
User Friendliness	.045	.033	.061	1.366	.172
Accessibility	.020	.033	.026	.609	.543

The regression coefficients show that the variables of business innovation practices of public sector banks such as Acceptability, Safety, Availability, User Friendliness and Accessibility. It indicates that there is a significant association between business innovation practices of public sector banks and Acceptability (t= 5.974, p<0.05) is significant at 5 percent level. There is a significant association between business innovation practices of public sector banks and Safety (t=-1.164, p<0.05) is significant at 5 percent level.

There is a significant association between business innovation practices of public sector banks and Availability (t=-2.149, p<0.01) is significant at 1percent level. There is a significant association between business innovation practices of public sector banks and User Friendliness (t=1.366, p<0.01) is significant at 1 percent level. There is a significant association between business innovation practices of public sector banks and Accessibility (t=.609, p<0.01) is significant at 1 percent level.

Table No - 20 Correlations - Quality Aspects

Factors		Quality				User	
		Aspects	Acceptability	Safety	Availability	Friendliness	Accessibility
Quality Aspects	Pearson Correlation	1	.264**	.321**	.614**	.520**	.448**
_	Sig.(2-tailed)		.000	.000	.000	.000	.000
	N	680	680	680	680	680	680
Acceptability	Pearson Correlation	.264**	1	.863**	.368**	.307**	.252**
	Sig.(2-tailed)	.000		.000	.000	.000	.000
	N	680	680	680	680	680	680
Safety	Pearson Correlation	.321**	.863**	1	.503**	.346**	.319**
	Sig.(2-tailed)	.000	.000		.000	.000	.000
	N	680	680	680	680	680	680
Availability	Pearson Correlation	.614**	.368**	.503**	1	.408**	.315**
	Sig.(2-tailed)	.000	.000	.000		.000	.000
	N	680	680	680	680	680	680
User Friendliness	Pearson Correlation	.520**	.307**	.346**	.408**	1	.522**
	Sig.(2-tailed)	.000	.000	.000	.000		.000
	N	680	680	680	680	680	680
Accessibility	Pearson Correlation	.448**	.252**	.319**	.315**	.522**	1
	Sig.(2-tailed)	.000	.000	.000	.000	.000	
	N	680	680	680	680	680	680

\*\*. Correlation is significant at the 0.01 level (2-tailed).

The table 20 shows that the correlation coefficient between the business innovation practices of public sector banks and the variable acceptability is .264 which indicates that .26 per cent positive relationship between the two is significant at 0.01 per cent level. The table shows that the correlation coefficient between the business innovation practices of public sector banks and the variable safety is .321 which indicates that 32 per cent positive relationship between the two is significant at 0.01 per cent level. The table shows that the correlation coefficient between the business innovation practices of public sector banks and the variable availability is .614 which indicates that 61 per cent positive relationship between the two is significant at 0.01 per cent level. The table shows that the correlation coefficient between business innovation practices of public sector banks and the variable user friendliness is .520 which indicates that 52 per cent positive relationship between the two is significant at 0.01 per cent level. The table shows that the correlation coefficient between the business innovation practices of public sector banks and the variable accessibility is .448 which indicates that 44 per cent positive relationship between the two is significant at 0.01 per cent level.

Table No - 21 R - Square Value - Quality Aspects

R	R Square	Adjusted R Square	F	Sig.
.702ª	.492	.489	130.765	.000b

The R Square value is .492. It indicates that 49 percent of the variation in the business innovation practices of public sector banks is determined by the set of all the independent variables included in the model. The multiple correlation between dependent variables and independent variables is significant at 1 percent level (F=130.765, p<0.01). This indicates that there is a high degree of positive correlation between the set of dependent variables and independent variables like Acceptability, Safety, Availability, User Friendliness and Accessibility.

Unstandardized Standardized **Variables** Coefficients Coefficients t Sig. В Std. Error Beta 2.092 4.444 .000 (Constant) 471 Acceptability .077 .047 .090 1.641 .101 Safety -.130 .051 -.153 -2.562 .011 Availability .038 .499 14.826 .000 .561 User Friendliness .241 7.075 .175 .025 .000 Accessibility .144 .025 .191 5.820 .000

Table No - 22 Co-efficient- Quality Aspects

The regression coefficients show that the variables of business innovation practices of public sector banks such as Acceptability, Safety, Availability, User Friendliness and Accessibility. It indicates that there is a significant association between business innovation practices of public sector banks and Acceptability (t= 1.641, p<0.05) is significant at 5 percent level. There is a significant association between business innovation practices of public sector banks and Safety (t=-2.562, p<0.05) is significant at 5 percent level. There is a significant association between business innovation practices of public sector banks and Availability (t=14.826, p<0.01) is significant at 1 percent level. There is a significant association between business innovation practices of public sector banks and User Friendliness (t=7.075, p<0.01) is significant at 1 percent level. There is a significant association between business innovation practices of public sector banks and Accessibility (t=5.820, p<0.01) is significant at 1 percent level.

Table No - 23 Correlations - Usage Aspects

Fac	tors	Usage Aspects	Acceptability	Safety	Availability	User Friendliness	Accessibility
	Pearson Correlation	1	.430**	.538**	.377**	.437**	.513**
Usage Aspects	Sig.(2- tailed)		.000	.000	.000	.000	.000
	N	680	680	680	680	680	680
	Pearson Correlation	.430**	1	.863**	.368**	.307**	.252**
Acceptability	Sig.(2- tailed)	.000		.000	.000	.000	.000
	N	680	680	680	680	680	680
Safety	Pearson Correlation	.538**	.863**	1	.503**	.346**	.319**

	Sig.(2- tailed)	.000	.000		.000	.000	.000
	N	680	680	680	680	680	680
	Pearson Correlation	.377**	.368**	.503**	1	.408**	.315**
Availability	Sig.(2- tailed)	.000	.000	.000		.000	.000
	N	680	680	680	680	680	680
	Pearson Correlation	.437**	.307**	.346**	.408**	1	.522**
User Friendliness	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	680	680	680	680	680	680
Accessibility	Pearson Correlation	.513**	.252**	.319**	.315**	.522**	1
	Sig.(2- tailed)	.000	.000	.000	.000	.000	
	N	680	680	680	680	680	680

\*\*. Correlation is significant at the 0.01 level (2-tailed).

The table shows that the correlation coefficient between the business innovation practices of public sector banks and the variable acceptability is .430 which indicates that .43 per cent positive relationship between the two is significant at 0.01 per cent level. The table shows that the correlation coefficient between the business innovation practices of public sector banks and the variable safety is .538 which indicates that 53 per cent positive relationship between the two is significant at 0.01 per cent level. The table shows that the correlation coefficient between the business innovation practices of public sector banks and the variable availability is .377 which indicates that 37 per cent positive relationship between the two is significant at 0.01 per cent level. The table shows that the correlation coefficient between business innovation practices of public sector banks and the variable user friendliness is .437 which indicates that 43 per cent positive relationship between the two is significant at 0.01 per cent level. The table shows that the correlation coefficient between the business innovation practices of public sector banks and the variable accessibility is .513 which indicates that 51 per cent positive relationship between the two is significant at 0.01 per cent level.

Table No - 24 R - Square Value - Usage Aspects

R	R Square	Adjusted R Square F		Sig.
.660a	.436	.432	104.316	.000b

The R Square value is .436 it indicates that 43 percent of the variation in the business innovation practices of public sector banks is determined by the set of all the independent variables included in the model. The multiple correlation between dependent variables and independent variables is significant at 1 percent level (F=104.316, p<0.01). This indicates that there is a high degree of positive correlation between the set of dependent variables and independent variables like Acceptability, Safety, Availability, User Friendliness and Accessibility.

Table No - 25 Co-efficient - Usage Aspects

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	В	Std. Error	Beta		1	
(Constant)	1.380	.637		2.165	.031	
Acceptability	116	.063	106	-1.829	.068	
Safety	.516	.069	.471	7.505	.000	
Availability	.038	.051	.026	.736	.462	
User Friendliness	.125	.033	.134	3.728	.000	
Accessibility	.301	.033	.311	9.009	.000	

The regression coefficients show that the variables of business innovation practices of public sector banks such as Acceptability, Safety, Availability, User Friendliness and Accessibility. It indicates that there is a significant association between business innovation practices of public sector banks and Acceptability (t= -1.829, p<0.05) is significant at 5 percent level. There is a significant association between business innovation practices of public sector banks and Safety (t=7.505, p<0.05) is significant at 5 percent level. There is a significant association between business innovation practices of public sector banks and Availability (t=.736, p<0.01) is significant at 1 percent level.

There is a significant association between business innovation practices of public sector banks and User Friendliness (t=3.728, p<0.01) is significant at 1 percent level. There is a significant association between business innovation practices of public sector banks and Accessibility (t=9.009, p<0.01) is significant at 1 percent level.

Table No - 26 Correlations - Service Satisfaction

		Service Satisfaction	Usage Aspects	Quality	Acceptability	Safety	Availability	User Friendlines	Accessibility	Relationship
Service Satisfaction	Pearson Correlation	1	.891"	.689"	.474"	.453"	.325"	.448"	.459"	.286"
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000
	N	680	680	680	680	680	680	680	680	680
Usage Aspects	Pearson Correlation	.891"	1	.741"	.450"	.538**	.377"	.437"	.515"	.172"
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000
	N	680	680	680	680	680	680	680	680	680
Quality Aspects	Pearson Correlation	.689"	.741"	1	.264"	.521"	.614"	.520"	.448"	045
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.244
	N	680	680	680	680	680	680	680	680	680
Acceptability	Pearson Correlation	.474"	.430"	.264"	1	.863"	.368"	.307**	.252"	.343"
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000
	N	680	680	680	680	680	680	680	680	680
Safety	Pearson Correlation	.453"	.538"	.521"	.865"	1	.503"	.346"	.519"	.263"
	Sig.(2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000
	N	680	680	680	680	680	680	680	680	680
Availability	Pearson Correlation	.325"	.377"	.614"	.368"	.503"	1	.408"	.515"	.051
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.185
	N	680	680	680	680	680	680	680	680	680
User Friendliness	Pearson Correlation	.448"	.437"	.520**	.307**	.346"	.408"	1	.522"	.137"
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000
	N	680	680	680	680	680	680	680	680	680
Accessibility	Pearson Correlation	.459"	.515"	.448"	.252"	.519**	.315"	.522"	1	.108"
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.005
	N	680	680	680	680	680	680	680	680	680
Relationship	Pearson Correlation	.286"	.172"	045	.345"	.263"	.061	.157"	.108"	1
	Sig. (2-tailed)	.000	.000	.244	.000	.000	.185	.000	.005	
	N	680	680	680	680	680	680	680	680	680

# \*\*. Correlation is significant at the 0.01 level (2-tailed).

This investigation looks at the relationship between several components of innovation and business innovation practices in public sector banks. The findings demonstrate a robust positive association (correlation coefficient = 0.891) between business innovation activities generally and technology innovation.

This suggests that banks are more likely to implement technological innovations if they have robust innovation procedures. Positive relationships are also seen with other dimensions of innovation, albeit to differing degrees. The following metrics show how corporate innovation methods are related: quality innovation (0.689), user friendliness (0.448), accessibility (0.459), acceptability (0.474), safety (0.453), and relationship (0.286).

These relationships gradually get weaker, indicating that technical innovation is the most influential factor. High confidence in the results is indicated by the fact that all correlations are statistically significant at the 0.01% level. According to this report, public sector banks that prioritize business innovation processes are likely to see gains in a number of innovation-related areas, with technology taking the lead.

Table No - 27 R - Square Value - Service Satisfaction

R	R Square	Adjusted R Square	F	Sig.
.927ª	.860	.858	514.975	$.000^{b}$

The R Square value is .860 it indicates that 86 percent of the variation in the business innovation practices of public sector banks is determined by the set of all the independent variables included in the model. The multiple correlation between dependent variables and independent variables is significant at 1 percent level (F=514.975, p<0.01). This indicates that there is a high degree of positive correlation between the set of dependent variables and independent variables like Acceptability, Safety, Availability, User Friendliness and Accessibility.

Table No - 28 Co-efficient - Service Satisfaction

Variables		ndardized fficients	Standardized Coefficients	t	Sig.	
	В	Std. Error	Beta			
(Constant)	030	.368		081	.935	
Usage Aspects	.823	.028	.873	29.753	.000	
Quality Aspects	.064	.038	.053	1.686	.092	
Performance Aspects	.125	.019	.106	6.506	.000	
Acceptability	.409	.032	.398	12.947	.000	
Safety	435	.037	422	-11.621	.000	
Availability	.010	.031	.008	.334	.739	
User Friendliness	.048	.016	.055	2.926	.004	
Accessibility	019	.017	021	-1.148	.252	

The relationship between different facets of company innovation and public sector banks is examined in greater detail in this investigation. The results demonstrate a statistically significant relationship (at the 5% or 1% level) between the characteristics of acceptance, quality, performance, utilization, and user friendliness and overall innovation approaches. This implies that banks that put an emphasis on innovation witness improvements in client satisfaction and the general calibre of their products. Remarkably, the correlation with safety seems to be negative (t=-11.621), however it remains noteworthy. This suggests that novel approaches may at first affect safety protocols and necessitate additional modification for best outcomes. Whereas accessibility has a negative but substantial connection, availability exhibits a lesser but significant association. Perhaps more investigation is required to completely comprehend these particular dynamics.

Chart No - 5 STRUCTURAL EQUATION MODELLING

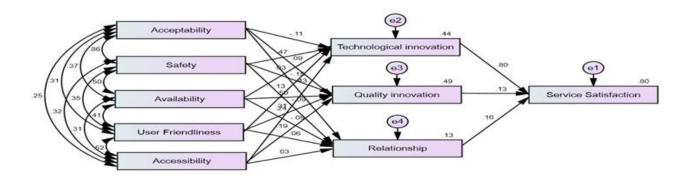


Table No - 29 Variance in the Structural Equation Model Analysis

Variables			Estimate	S.E.	C.R.	P
Usage Aspects	<	Acceptability	116	.063	-1.836	***
Quality Aspects	<	Acceptability	.077	.047	1.647	***
Performance Aspects	<	Acceptability	.375	.063	5.997	***
Usage Aspects	<	Safety	.516	.069	7.533	***
Quality Aspects	<	Safety	130	.051	-2.572	.010
Performance Aspects	<	Safety	079	.068	-1.168	***
Usage Aspects	<	Availability	.038	.051	.739	. ***
Quality Aspects	<	Availability	.561	.038	14.881	***
Performance Aspects	<	Availability	109	.051	-2.157	.031
Usage Aspects	<	Friendliness	.125	.033	3.742	***
Quality Aspects	<	Friendliness	.175	.025	7.101	***
Performance Aspects	<	Friendliness	.045	.033	1.372	***
Usage Aspects	<	Accessibility	.301	.033	9.042	***
Quality Aspects	<	Accessibility	.144	.025	5.842	***
Performance Aspects	<	Accessibility	.020	.033	.611	***
Service Satisfaction	<	Usage Aspects	.727	.017	43.842	***
Service Satisfaction	<	Quality Aspects	.151	.021	7.135	***
Service Satisfaction	<	Performance Aspects	.187	.020	9.571	***

Note: \*\* denotes significant at 1% level, \* denotes significant at 5% level

This analysis investigates the distinct impacts of several innovation features on public sector banks, going beyond simple correlations. It separates the effects of variables on the performance, quality, and use of the bank's services, such as acceptability, safety, availability, and accessibility. Positive and statistically significant correlations are highlighted by the findings. For instance, higher acceptance raises the standard of services provided overall as well as how consumers interact with the bank (usage factors). In a same vein, accessibility, user friendliness, and safety all enhance quality and usage. It's interesting to note that availability has a larger influence on quality and a smaller but still favourable impact on usage.

The influence of these innovative characteristics on consumer satisfaction is also examined in this investigation. Usefulness factors have the biggest impact here, followed by quality and performance factors. This shows that total customer satisfaction rises when they believe the bank's services to be high-quality, efficient, and easy to use. Though most partnerships are happy ones, certain subtleties do show up. Enhanced security protocols may at first affect parts of usage, indicating a need for modification to preserve user experience. Furthermore, availability influences quality more strongly than it does utilization, suggesting a possible trade-off between easily accessible features and overall service excellence. For public sector banks, this research provides insightful information overall. Financial institutions can gain a competitive advantage and increase customer satisfaction by emphasizing innovation that puts user experience, service quality, and efficient operations first.

Variable	Value
Chi-square value	7.809
p- value	0.000
GFI	0.952
AGFI	0.916
CFI	0.947
RMR	0.014
RMSEA	0.021

Table No - 30 Model fit summary

This study looks at Tiruchirappalli's public sector banks' approaches to business innovation. According to the findings, social empowerment should be prioritized over economic factors. A desire for community standing and social duty may be the driving force behind this concentration. According to the research, these banks greatly benefit families and society as a whole, and they are essential to the district's social fabric. They do, however, encounter difficulties in their endeavours. The study's conclusion urges society, the government, and people to work together to support and encourage innovation in these public sector banks. Their sustained success is attributed in large part to customers' consistent use of their goods and services.

#### FINDINGS AND SUGGESTIONS

The study's conclusions regarding the public's view of technology developments in public sector banks (PSBs) offer important new information about the attitudes and actions of clients towards innovation in financial services. With a sizable percentage of participants endorsing Telebanking, automated branch management (ABM), money management, and electronic fund transfer (EFT) services, technology-driven innovation is generally well received. Notwithstanding, apprehensions regarding the bank's credibility underscore the significance of enhancing communication regarding the advantages and safety of these technological innovations. Similar to this, there is some support for technology-driven bill payment practices, but many respondents are still unsure or sceptical, which suggests that more awareness-raising campaigns are necessary.

The range of services offered by PSBs is perceived more favourably, and a sizable percentage of respondents express pleasure with them. On the other hand, reservations exist concerning the rationality of the costs, indicating the need for more transparent information regarding the pricing structure. Positive comments are generally received about how simple it is to use e-banking to pay bills and how user-friendly the system is, suggesting that there may be room for these services to be adopted more widely with better user experience and pricing transparency. Conflicting views on transaction security are also revealed by the study, which highlights the significance of PSBs providing thorough explanations of their security procedures. Nonetheless, the majority of respondents think favourably of PSBs' commitment to customer satisfaction and their effectiveness in handling grievances and filing financial reports. The study identifies favourable trends in the relationship between technology adoption and service quality, customer interactions, and overall pleasure by examining the varied effects of several innovative elements on PSBs.

Increased use and better service quality are correlated with accessibility, usability, and safety. Nonetheless, there can be a trade-off between conveniently accessible features and general service excellence, emphasising the necessity of giving novel feature design considerable thought. The importance of user experience on customer satisfaction is also highlighted by the study; customers are more satisfied when they believe that PSB services are of a high calibre, convenient, and effective nature. Stricter security measures, however, might make some parts of the user experience more difficult, indicating that some changes are necessary to maintain the user-friendliness of the system. All things considered, PSBs may use these results to set themselves apart from rivals and boost customer satisfaction by giving user experience, high-quality services, and effective operations top priority in their innovation projects. Building trust and encouraging a wider uptake of cutting-edge banking services requires open communication regarding the advantages, security, and cost structure of technological improvements.

#### CONCLUSION

The study looked into how the public felt about technology innovations in public sector banks (PSBs), and it found that feedback on these innovations was generally positive for a range of service categories. There is still a worrying amount of apprehension, especially with regard to bank confidence, even if a sizable portion of participants indicated strong acceptance for features including fund management, ABM services, Telebanking, and electronic fund transfers (EFT). This emphasises how important it is to communicate better about security precautions and the advantages of new technology. The results got more complicated when it came to technology-driven bill payment processes. The majority of respondents remained dubious or sceptical despite some support, indicating a significant awareness gap that PSBs should address with focused campaigns. The range of services offered was well-received; nonetheless, reservations over the rationale of expenses point to the need for further cost transparency.

There was broad agreement about usability; many participants said e-banking was very user-friendly for bill payments and the system as a whole. This suggests that PSBs' efforts to make their technical solutions easily accessible and user-friendly have resulted in a positive user experience. The results showed inconsistent use of technology in PSB reporting and customer service. While some respondents voiced worries over transaction security, others gave excellent ratings to features like the efficiency of financial reporting and grievance resolution. In general, trust was placed in PSBs' commitment to the welfare of their customers. The research highlights the need of a dual approach for PSBs, tackling issues related to transaction security and utilising technology to improve customer contentment, grievance handling, and the efficacy of reporting. It also emphasises how closely user experience and consumer satisfaction are related, highlighting the necessity of giving user-friendly innovations top priority.

The study also highlights the necessity of striking a balance between convenience and quality in order to maintain a high standard of service in all areas. It also raises the possibility of a trade-off between accessibility and service quality. Through improved public awareness, improved security and cost communication, and continuous technological advancements, PSBs can use this insightful information to prioritise user experience, service quality, and efficient operations in their innovation efforts, ultimately gaining a competitive advantage and increasing customer satisfaction.

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