



THE ECONOMIC VIABILITY OF SBI KIOSK BANKING SERVICES: A STUDY OF CUSTOMER SERVICE POINTS IN KERALA

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ABSTRACT

This study examines the economic viability of State Bank of India (SBI) kiosk banking services with special reference to Customer Service Points (CSPs) in Kerala. It focuses on profitability, transaction-based income generation, and the effect of operational efficiency on sustainability. Primary data were collected from 150 SBI CSPs/BCs in Malappuram, Palakkad, and Thiruvananthapuram using a structured interview schedule. The study used descriptive statistics, one-sample t-test, correlation, and multiple regression analysis through IBM SPSS Statistics. The findings show that most CSPs have low profitability due to high expenses and low returns. Transaction volume significantly improves income generation, while operational efficiency has only limited influence on economic viability. The study suggests better commission structures, institutional support, and reduced operational costs to improve CSP sustainability.

KEYWORDS: Kiosk Banking, Business Correspondent, Customer Service Point (CSP), Financial Inclusion, Economic Viability, Transaction Volume, Operational Efficiency, SBI, Kerala

1. INTRODUCTION

Financial inclusion is a key policy goal in India aimed at extending affordable financial services to rural and economically weaker sections. Despite banking expansion, access remains limited in many rural areas due to infrastructure gaps, distance, low financial literacy, and high transaction costs. To address this, the RBI introduced the Business Correspondent (BC) model and Customer Service Points (CSPs) or kiosk banking to provide basic banking services such as deposits, withdrawals, remittances, and AEPS at the doorstep. SBI has developed a wide CSP network, particularly in Kerala, to support last-mile banking and financial inclusion. However, the sustainability of these services depends on their economic viability, which is affected by low commissions, high costs, limited transactions, and operational issues. Since limited studies have examined CSP viability from an operational and income perspective, this study analyses the economic viability of SBI kiosk banking in Kerala with focus on profitability, transaction income, and operational efficiency.

2. REVIEW OF LITERATURE AND RESEARCH GAP

Studies on financial inclusion have emphasized the importance of the Business Correspondent (BC) model and kiosk banking services in extending banking facilities to underserved populations. Mehrotra et al. (2009), Kochhar (2010), and Chakrabarty (2011) highlighted that branchless and technology-enabled banking services significantly promote financial inclusion in India. Sreeram and Bingimalla (2013) and Dhar and Sarkar (2016) found that BCs improve banking accessibility in rural areas. However, studies have also identified challenges such as inadequate remuneration, poor connectivity, technological issues, and low financial literacy, which affect the sustainability of BC operations (Mukherjee, 2014; Singh & Tandon, 2012; Sundaram, 2015). Basheer (2021) further emphasized the importance of accessibility and institutional support in improving financial inclusion in Kerala.

Studies on the sustainability of Customer Service Points (CSPs) revealed that high operational costs, low transaction volume, and inadequate commission structures negatively affect the economic viability of kiosk banking services. Uzma and Pratihari (2019) found that these factors significantly reduce CSP sustainability. Shafi and Reddy (2021) and Jahfarali (2022) observed that operational support, transaction performance, and technological efficiency significantly influence CSP sustainability in Kerala. Goel (2018) highlighted the importance of operational efficiency for the success of the BC model, while Nguyen (2020) emphasized the usefulness of index-based approaches in evaluating financial inclusion performance.

Although many studies have discussed the role of business correspondents and kiosk banking services in promoting financial inclusion, most of them mainly focused on banking access and customer outreach. Very few studies have examined whether Customer Service Points (CSPs) are economically viable and sustainable from the viewpoint of CSP operators. Moreover, limited studies have analysed how transaction volume and operational efficiency influence income generation and economic viability,



particularly in Kerala. Therefore, the present study attempts to examine the profitability, sustainability, transaction intensity, and operational efficiency of SBI kiosk banking services in Kerala.

3. STATEMENT OF THE PROBLEM

The Business Correspondent (BC) model has become an important mechanism for extending banking services to rural and underserved areas through kiosk banking services. State Bank of India has played a significant role in promoting financial inclusion by providing basic banking facilities through Customer Service Points (CSPs). However, the sustainability of the BC model largely depends on the economic viability of CSP operations. Many CSP operators face financial and operational challenges such as low commission income, high operating expenses, technological disruptions, inadequate institutional support, and limited customer transactions, which may affect their profitability and long-term sustainability. Further, empirical evidence regarding the relationship between transaction volume, operational efficiency, and economic viability remains limited, particularly in Kerala. Therefore, the present study attempts to evaluate the economic viability of SBI kiosk banking services in Kerala with special focus on profitability, transaction intensity, and operational efficiency of CSPs.

4. OBJECTIVES OF THE STUDY

1. To evaluate the profitability and sustainability of kiosk banking operations.
2. To examine the relationship between transaction volume and income generation.
3. To assess the impact of operational efficiency (skills, practices) on economic viability.

5. HYPOTHESES OF THE STUDY

The following null hypotheses are set on the basis of objectives:

1. SBI kiosk banking operations are not economically viable and sustainable.
2. Transaction volume does not significantly influence income generation among CSPs.
3. Operational efficiency does not significantly influence the economic viability of CSPs.

6. RESEARCH METHODOLOGY

The present study adopts a descriptive and analytical research design to examine the economic viability of SBI kiosk banking services in Kerala. The study is primarily based on primary data collected from 150 SBI CSPs/ BCs through a structured interview schedule, while secondary data were gathered from books, journals, reports of the RBI, reports of SBI, and other related sources. The study covers selected districts of Kerala, namely Malappuram, Palakkad, and Thiruvananthapuram. The samples were selected using the simple random sampling method. The study specifically focuses on evaluating the profitability and sustainability of kiosk banking operations, examining the relationship between transaction volume and income generation, and assessing the impact of operational efficiency on economic viability.

To measure the major variables, the study constructed different indices including the Operational Skills Index (SI), Practices Index (PI), Transaction Intensity Index (TII), and Economic Viability Index (EVI). The skills and practices indices were developed using Likert scale responses, while the transaction intensity and economic viability indices were constructed using Z-score standardization techniques. The economic viability index was derived using net income, return on investment, and cost-income ratio. For data analysis, statistical tools such as mean, standard deviation, one sample t-test, correlation analysis, and multiple regression analysis were employed using IBM SPSS Statistics. The study further used a regression model to examine the influence of transaction intensity, operational skills, and practices on the economic viability of SBI CSPs.

7. CONSTRUCTION OF INDICES

1. **Operational Skills Index (SI)** - The operational skills index was constructed using eight operational skill statements measured on a five-point Likert scale.

$$SI = \frac{1}{8} \sum_{i=1}^8 S_i$$

2. **Practices Index (PI)** - The practices index was developed using seven statements relating to operational and customer service practices.

$$PI = \frac{\sum_{i=1}^7 P_i}{7}$$

3. **Transaction Intensity Index (TII)** - The transaction intensity index was constructed using standardized values of average daily transactions, active accounts, and monthly transactions per account.

$$TII = \frac{Z_{ADT} + Z_{AAC} + Z_{MTA}}{3}$$

Where Z_{ADT} = Z-score of average daily transactions; Z_{AAC} = Z-score of active accounts; Z_{MTA} = Z-score of monthly transactions per account.



4. **Economic Viability Index (EVI)** - The economic viability index was constructed using standardized values of net income, return on investment, and cost-income ratio.

$$EVI = \frac{Z_{NI} + Z_{ROI} - Z_{CIR}}{3}$$

Where Z_{NI} = Z-score of net income; Z_{ROI} = Z-score of return on investment; Z_{CIR} = Z-score of cost-income ratio. The cost-income ratio was treated as a negative indicator; therefore, it was subtracted while constructing the index.

8. RESULTS AND DISCUSSION

Table 1 - Descriptive Statistics of Economic Viability and Transaction Variables of SBI CSPs

Variables	Minimum	Maximum	Mean	Standard Deviation
Monthly CSP Income (₹)	200.00	20000.00	5215.00	3778.74
Recurring Monthly Expenses (₹)	0.00	120000.00	10425.67	19550.67
Net Income (₹)	-105000.00	10000.00	-5210.67	18692.45
Return on Investment	-1.12	0.28	-0.02	0.19
Cost-Income Ratio	0.00	60.00	3.17	7.46
Economic Viability Index	-3.17	0.81	0.00	0.77
No. of Active Accounts	0	5000	460.28	843.32
Average Monthly Transactions per Account	1	10	3.49	2.31
Average Daily Transactions	3	353	29.23	46.34

Source: Primary data

Note: N = 150

Table 1 shows the descriptive statistics relating to the economic viability and transaction performance of SBI CSPs. The average monthly income of CSPs was ₹5,215, while the average monthly recurring expenses were ₹10,425.67. As a result, the average net income was negative (–₹5,210.67), indicating poor profitability of many CSPs. The negative return on investment and low economic viability index further suggests low economic sustainability of kiosk banking operations. On average, the sampled CSPs maintained around 460 active accounts and conducted nearly 29 daily transactions, showing a moderate level of transaction activity in the study area.

TESTING OF HYPOTHESIS

H₀₁: SBI kiosk banking operations are not economically viable and sustainable.

Table 2 - One-Sample t-Test of Net Income for Economic Viability of SBI CSPs

Variable	N	Mean	SD	t-value	df	p-value	Mean Difference
Net Income	150	-5210.67	18692.45	-3.414	149	0.001	-5210.67

Test Value = 0

A one sample t-test was employed to examine whether the mean net income of SBI CSPs significantly differs from zero. The average net income was found to be negative (–₹5,210.67), indicating that the monthly expenses of many CSPs exceed their income. The one sample t-test showed that the mean difference is statistically significant ($p < 0.05$), indicating poor economic viability of kiosk banking operations. Hence, the null hypothesis stating that SBI kiosk banking operations are not economically viable and sustainable is accepted.

H₀₂: Transaction volume does not significantly influence income generation among CSPs.

Table 3 - Correlation between Transaction Volume and Monthly CSP Income

Variables	Correlation Coefficient (r)	p-value
Average Daily Transactions	0.289**	$p < 0.001$
No. of Active Accounts	0.177*	$p = 0.031$
Transaction Intensity Index	0.376**	$p < 0.001$

Note: *Correlation is significant at the 0.05 level (2-tailed)

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

The correlation analysis shows that average daily transactions ($r = 0.289$, $p < 0.001$) and number of active accounts ($r = 0.177$, $p = 0.031$) have a positive relationship with monthly CSP income. The transaction intensity index also shows a significant positive correlation ($r = 0.376$, $p < 0.001$), indicating that higher transaction volume leads to better income generation.

Table 4 - Regression Analysis of Transaction Volume on Monthly CSP Income

Variables	B	Beta	t-value	p-value
Constant	4313.244	—	11.580	$p < 0.001$
Average Daily Transactions	21.672	0.266	3.344	$p = 0.001$
No. of Active Accounts	0.583	0.130	1.637	$p = 0.104$

**Table 5 - Model Summary of Regression**

R	R ²	Adjusted R ²	F-value	Sig.
0.316	0.100	0.087	8.140	p < 0.001

The regression analysis shows that transaction volume influences the monthly income of CSPs. Average daily transactions have a positive and significant effect on monthly CSP income ($\beta = 0.266$, $p = 0.001$), indicating that higher daily transactions lead to higher income. However, the number of active accounts does not have a significant effect on income ($p = 0.104$), showing that more accounts alone do not guarantee higher income. The overall model is statistically significant ($F = 8.140$, $p < 0.001$), and the R^2 value of 0.100 indicates that 10 per cent of the variation in monthly CSP income is explained by these transaction-related variables. This confirms that transaction volume plays an important role in income generation among CSPs.

H₀₃: Operational efficiency does not significantly influence the economic viability of CSPs.

Table 6 - Correlation between Operational Efficiency and Economic Viability Index

Variables	Correlation Coefficient (r)	p-value
Skills Index	-0.161*	p = 0.049
Practices Index	-0.159	p = 0.051
Transaction Intensity Index	-0.166*	p = 0.042

Note: *Correlation is significant at the 0.05 level (2-tailed)

The table shows that skills index ($r = -0.161$, $p = 0.049$) and transaction intensity index ($r = -0.166$, $p = 0.042$) have a weak but significant relationship with the economic viability index, while practices index ($r = -0.159$, $p = 0.051$) is not statistically significant. The negative correlation indicates an opposite relationship between these variables and economic viability. Overall, operational efficiency has only a limited influence on the economic viability of CSPs.

Table 7 - Regression Analysis of Operational Efficiency on Economic Viability Index

Variables	B	Beta	t-value	p-value
Constant	1.638	—	2.410	p = 0.017
Transaction Intensity Index	-0.146	-0.123	-1.494	p = 0.137
Skills Index	-0.208	-0.137	-1.684	p = 0.094
Practices Index	-0.859	-0.145	-1.802	p = 0.074

Table 8 - Model Summary of Regression

R	R ²	Adjusted R ²	F-value	Sig.
0.256	0.066	0.046	3.421	p = 0.019

The regression analysis shows that transaction intensity index, skills index, and practices index do not have a strong individual significant effect on the economic viability index, as their p-values are greater than 0.05. However, all the coefficients are negative, indicating an inverse relationship with economic viability. The overall regression model is statistically significant ($F = 3.421$, $p = 0.019$), which means that operational efficiency as a whole influence the economic viability of CSPs. The R^2 value of 0.066 shows that about 6.6 per cent of the variation in economic viability index is explained by these variables, indicating a limited but meaningful influence.

9. CONCLUSION

The study concludes that the economic viability of SBI kiosk banking services in Kerala is relatively weak, as most CSPs operate with low profitability due to high recurring expenses, inadequate commission income, and negative net returns. The one-sample t-test confirms that the average net income is significantly below zero, indicating poor financial sustainability of kiosk operations. The findings further show that transaction volume, particularly average daily transactions, has a significant positive influence on monthly income generation, whereas operational efficiency factors such as skills and practices have only a limited effect on economic viability. This suggests that structural factors like commission structure, transaction flow, and institutional support are more important than individual operational efficiency alone. Therefore, SBI should revise commission policies, ensure timely and adequate remuneration, reduce operational costs, and provide stronger institutional and technological support to CSP operators. Regular training, improved digital infrastructure, better connectivity, and financial assistance for working capital may further enhance the long-term sustainability and effectiveness of kiosk banking services in promoting financial inclusion in Kerala.

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