# The role of digital intervention in the success of Micro-finance through *SIDBI-PRAYAAS* scheme: A case study

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**Abstract**

Microfinance emerges as a pivotal catalyst within India's micro, medium, and small-scale industries. A notable exemplar is the SIDBI-PRAYAAS initiative, under the auspices of SIDBI, strategically engineered to empower the lower echelons of the financial pyramid. The latest study unveils a compelling triumph, spotlighting an impressive 6.02% Compound Annual Growth Rate (CAGR) surge in the commercial ventures of beneficiaries who availed themselves of this pioneering scheme. In this context, the infusion of digital mechanisms, including *B-POS and B-Bank*, has admirably streamlined the application, disbursement, and meticulous execution of loan reimbursements. The efficacy of these interventions reverberates triumphantly. Notably, the synergy of the Patanjali Ayurved Limited collaboration has further amplified the scheme's resonance, as eager borrowers harness its potential to nurture the expansion of Gramin Arogya Kendra. Considering these advancements, the current case study stands as a compelling testament to the efficacy of the PRAYAAS schemes, seamlessly interwoven with the digital dexterity of contemporary banking paradigms. This holistic approach underscores not only the scheme's operational prowess but also engenders profound customer gratification, thus forging a harmonious synthesis of financial inclusion and technological ingenuity.

**Keywords**

Banking; Microfinance; PRAYAAS scheme; SIDBI; Blockchain technology

## Introduction

Poverty stands as a pervasive global challenge, compelling governments worldwide to prioritize its alleviation. In 2015, over 736 million people lived below the poverty line, with pre-pandemic projections indicating persistent struggles for basic necessities among 10% of the global population (Kolawole, 2021; Matta, 2020). The COVID-19 outbreak, compounded by economic upheavals such as inflation and geopolitical tensions, has exacerbated poverty levels, potentially pushing an additional 75 million to 95 million individuals into extreme poverty by 2022 (Moyer et al., 2022). Such reversals highlight the urgency of addressing poverty through effective measures, including job creation. Micro, Small, and Medium Enterprises (MSMEs) emerge as vital players in this endeavor, fostering economic growth, job opportunities, and empowerment, particularly in economies like India (Agyapong, 2010; Asare et al., 2015). However, MSMEs often encounter significant barriers in accessing finance, stemming from factors like limited capital, market volatility, and information asymmetry, hindering their potential contribution to poverty alleviation (Choudhury & Goswami, 2019; Khatri, 2019). These constraints underscore the need for innovative solutions, with digitally enabled microfinance schemes offering a promising avenue to address MSME financing challenges (Finezza, 2023). By leveraging technology, such initiatives aim to provide accessible financial services to underserved entrepreneurs, thereby facilitating inclusive economic growth and poverty reduction (Singh Jaswal Associate Professor, 2014; UNESCAP, 2022). Through comprehensive evaluation and strategic interventions, it is possible to harness the transformative potential of MSMEs and microfinance to advance sustainable development and uplift communities worldwide.

Microfinance represents a multifaceted approach to financial inclusion, encompassing diverse services such as credit, savings, insurance, mortgages, and retirement plans, tailored to accommodate individuals excluded from traditional banking avenues due to the insignificance of their transactions (Jiang & Hu, 2020; Sengupta & Aubuchon, 2008). Of these, microcredit, or microlending, emerges as the cornerstone, offering small unsecured loans to individuals or organizations seeking to initiate or expand businesses (Jiang & Hu, 2020; Shaik Mohammed & Waheed, 2019; Vassallo et al., 2019). By fostering entrepreneurship, microfinance endeavors to stimulate economic growth and alleviate poverty, facilitating access to financial resources for millions of the world's most economically vulnerable individuals (Sengupta & Aubuchon, 2008). Notably, initiatives like the Grameen Bank, founded by Mohammad Yunus and awarded the Nobel Peace Prize in 2006, have demonstrated the transformative power of microcredit, expanding its reach across 37 countries and disbursing billions of dollars in loans, with a notable focus on empowering women (Sengupta & Aubuchon, 2008; Shaik Mohammed & Waheed, 2019). With microfinance gaining traction as a global development tool, initiatives like the SIDBI-PRAYAAS scheme in India highlight its potential to address financial exclusion and empower marginalized communities. Through collaborative efforts with financial and nonfinancial intermediaries, the scheme extends credit to women and microbusiness owners, providing essential financial support for livelihood activities at competitive interest rates, thereby fostering inclusive economic growth (The Hindu, 2021). Such initiatives underscore the role of microfinance in unlocking economic opportunities and promoting sustainable

development, offering a beacon of hope for millions striving to break free from the cycle of poverty.

In this study, we delve into a case analysis of micro-lending to Micro, Small, and Medium Enterprises (MSMEs) across India, facilitated by the PRAYAAS scheme initiated by the Small Industries Development Bank of India (SIDBI). As a pilot initiative, SIDBI allocated a total of INR 5 Crore to small enterprises, leveraging robust digital interventions provided by Patanjali Ayurved Limited for due diligence and monitoring (Patanjali Ayurved, 2023). Specifically, the scheme targeted small enterprises engaged in the distribution of products by Patanjali Ayurved Limited (PAL) in rural areas, referred to as Grameen Aarogya Kendras (GAKs), with the aim of promoting local products and generating rural employment opportunities. PAL's initiative to establish retail outlets known as Gramin Kendras further underscores its commitment to bolstering self-employment and fostering the sale of indigenous products. Leveraging digital tools, the eligibility criteria for loan availing were meticulously monitored through tracking sales and purchases of individual enterprises, ensuring efficient and transparent allocation of funds. The study assessed the success of the micro-lending scheme post-complete loan disbursal through a survey-based examination conducted between February and September 2022. Utilizing the B-POS device integrated with the B-BANK ERP software, the study aims to discern the financial profiles of borrowers, evaluate PAL's profitability, gauge customer satisfaction in loan processing and disbursement, and ascertain the overarching benefits derived from PAL's digital interventions. Through comprehensive analysis, the study endeavors to shed light on the efficacy of digital technologies in enhancing microfinance initiatives, thus contributing to the broader discourse on inclusive economic development.

## Research Methodology

The research methodology adopted in this study relies on primary data collection directly from loan recipients, aligning with established practices in social science research (Denscombe, 2014). A structured questionnaire encompassing demographic, economic, and satisfaction-related dimensions was utilized to elicit comprehensive responses (Creswell & Creswell, 2017). The survey administration was conducted exclusively via telephone conversations, ensuring efficient data collection while mitigating logistical constraints (Babbie & Benaquisto, 2015). The questionnaire was administered over a condensed timeframe of one week, optimizing respondent participation and minimizing potential response biases (Fowler, 2013). Responses were meticulously recorded, with unanswered queries systematically annotated to uphold data integrity (Bryman, 2016). The resultant dataset was subjected to rigorous analysis, with findings presented graphically in percentage format to facilitate clear and concise interpretation (Miles et al., 2014). This methodological approach ensures robust data acquisition and analysis, underpinning the validity and reliability of the study outcomes.

## Results and Discussion

### Summary of borrowers

The survey results showed that the GAKs who were allocated loans covered 17 states in India and could reach out to ventures that were in a financial crunch but could prosper due to the aid provided by SIDBI. The initial number of loan applicants under the SIDBI PRAYAAS scheme was 321 who were selected for their eligibility for loan sanction. Stringent screening criteria were used after which loan was allotted to 263 applicants and 58 were rejected as they did not meet the criteria. Out of the 263 eligible borrowers, the loan amount had already been transferred to 227 borrowers of whom 221 or 97.3% responded to the telephonic questionnaire-based survey. The applicant numbers in different categories were represented graphically in Figure 1 below.

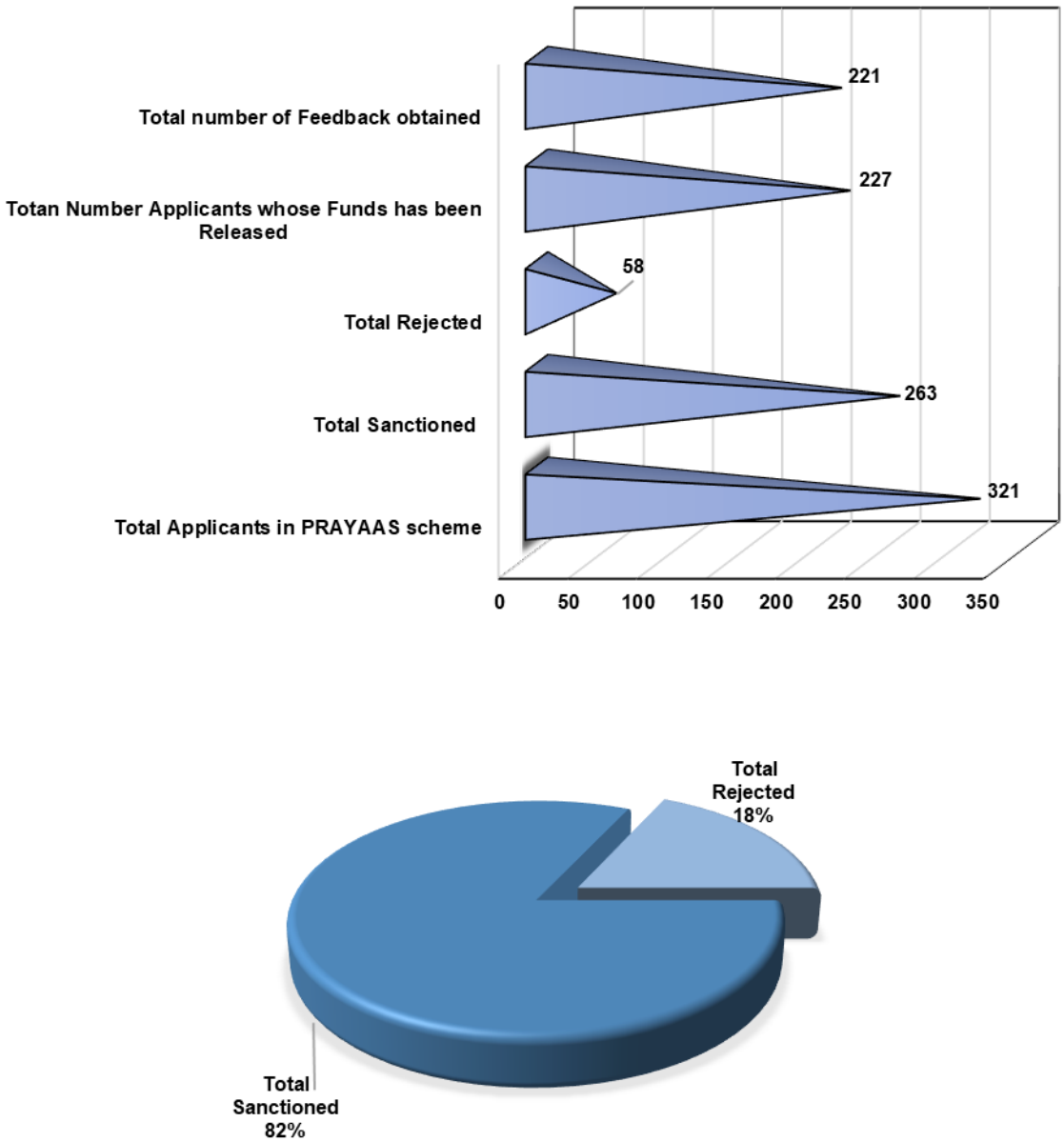


**Figure 1.** Summary of the Applicants with Conversion Rate

**Demographic data of borrowers**

Demographic data obtained from the participants showed that 80% of the borrowers were male, of which 90% were married. The minimum qualification of 96% of the applicant was matriculation of which some had a higher qualification. With regards to the age group of the borrowers, 81% belonged to the middle age group, 7% were below the age of 25 and the rest (12%) were above the age of 50 years. From the answers, it was found that 92% of the borrowers had taken loans for the setup of the new GAK while 8% had taken loans for the existing GAK for its expansion. The reachability of PAL to backward classes in rural areas was proven by the fact that 52% of the borrowers belonged to OBC class and 18% were SC/STs. The demographic distribution of the borrowers is described in Figure 2.

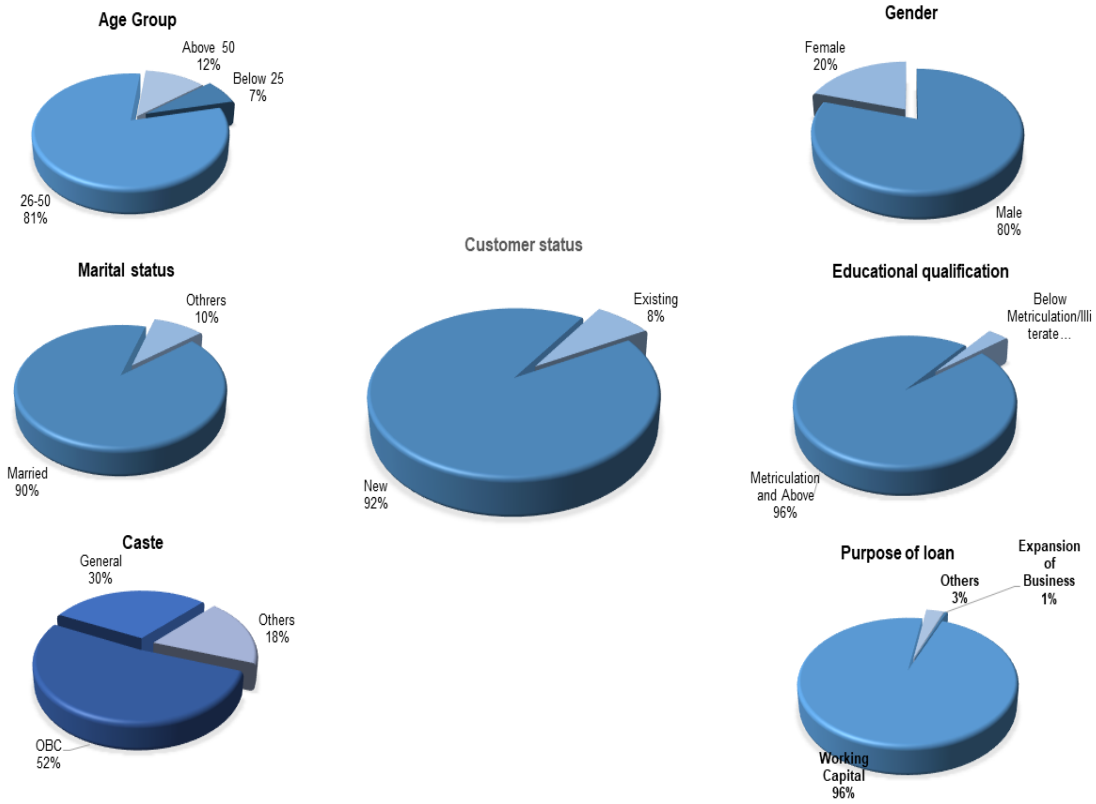


Figure 2: Description of the demographic profile of the borrowers

In support of this, the reachability of the loan sanction to 17 out of 28 states further strengthens this fact. The number of applicants from different states is represented below in Figure 3.

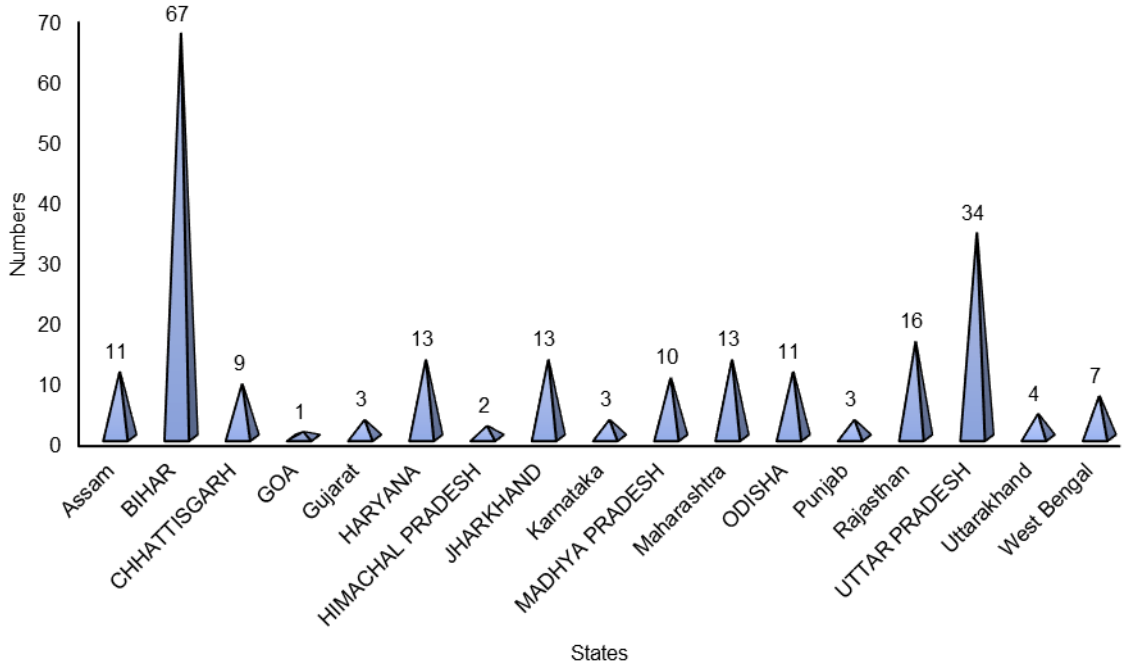


Figure 3: The number of applicants from different states

**The financial profile of the borrowers**

As for the scale of borrowing, 77% of the borrowers had taken loans up to 2.5 lakhs and the rest of the borrowers (23%) had taken loans in the range of 2.5 to 5 lakhs. Most of the borrowers were new and took loans to initiate their venture while the rest of the 8% of the borrowers took loans for the expansion of their existing GAKs which had been running for more than 5 years. Of the borrowers, 59% had not taken loans previously, while the remaining 20% had availed of a loan from different sources and for different purposes. 21% of the respondents chose not to answer this question. Of the borrowers, 2% had declared a mortgage, while 75% did not, and the rest chose not to respond to the question. Of the total borrowers, only 10% had credit cards of which 85% had single cards and the remaining had more than one. A certain fraction (58%) of the borrowers who had a credit card had loans attached to the card and were paying EMI through that. The financial profile of the borrowers has been summarized in Figure 4 below.

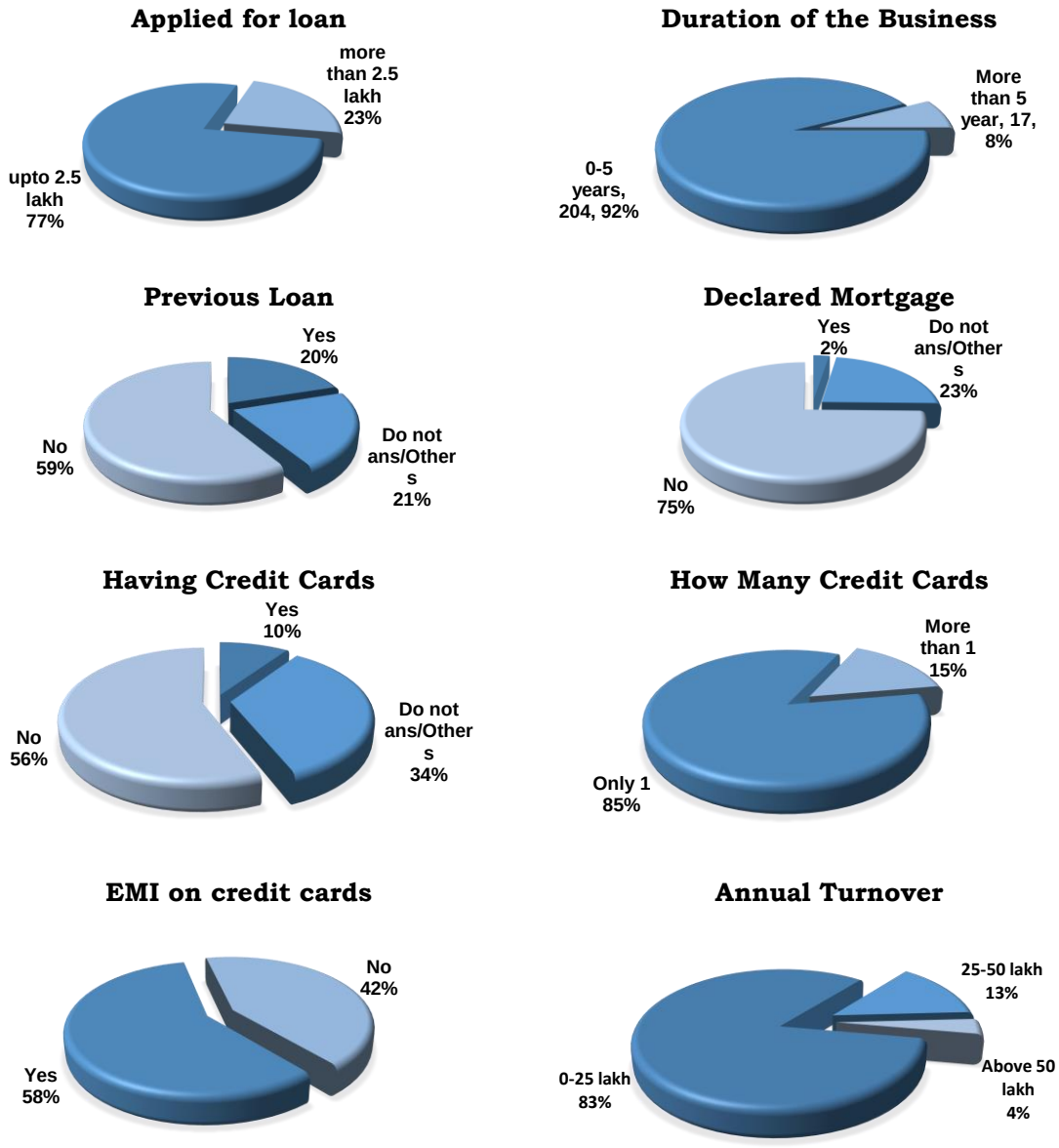


**Figure 4.** The financial profile of the Participants

**Effectiveness of Microlending on the financial growth of Borrowers**

The disbursal of loans to the borrowers is expected to bring about financial growth for the borrowers by increasing sales. The average sales of all GAKs who had availed of the loan had been tracked using the B-POS device, and the change for the period from February 2022 to September 2022 was plotted and is shown in Figure 5 below. The results obtained show a good response to the financial growth of the borrowers during the said period. GAK sales increased by 59.68% with a CAGR of 6.02% after loan dispersal. Thus, it was evident that the allotment of loans to GAKs significantly impacted their financial growth.

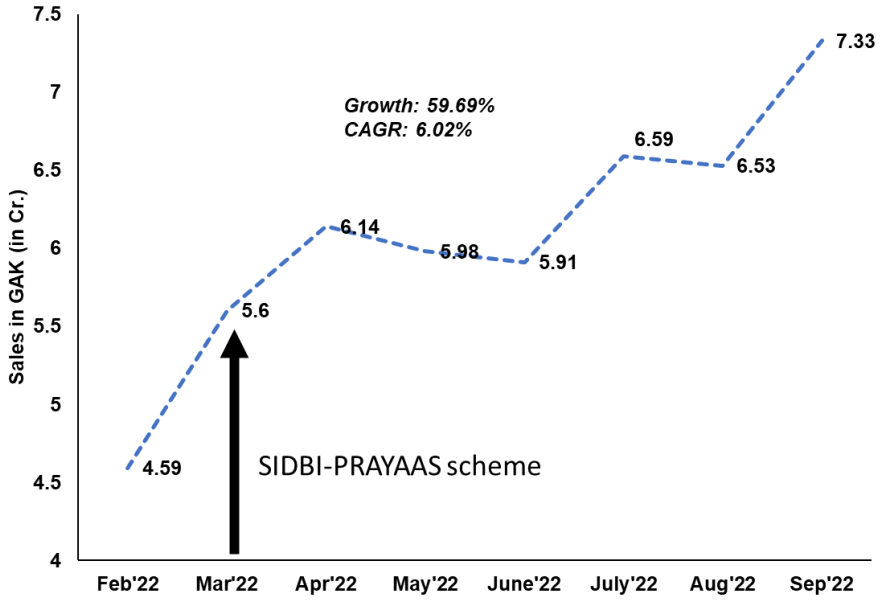


**Figure 5: Effect of the Financial Growth of GAKs**

**The Impact of Digital Interventions**

The success of the scheme lies in the robust digital interventions for monitoring the borrower's pre- and post-disbursal of the loan. This was dependent on the reachability of the network of PAL as well as on the devices and software that had been utilized for sales and inventory management. The B-POS device helped in the management of inventory and tracking sales using the B-BANK software. The benefits of the loan sanction process, verification of eligibility, and approval were analyzed from the answers obtained for certain questions. The summary of the results to determine the level of satisfaction due to borrowing through the digital intervention of PAL has been summarized graphically in Figure 6 below.

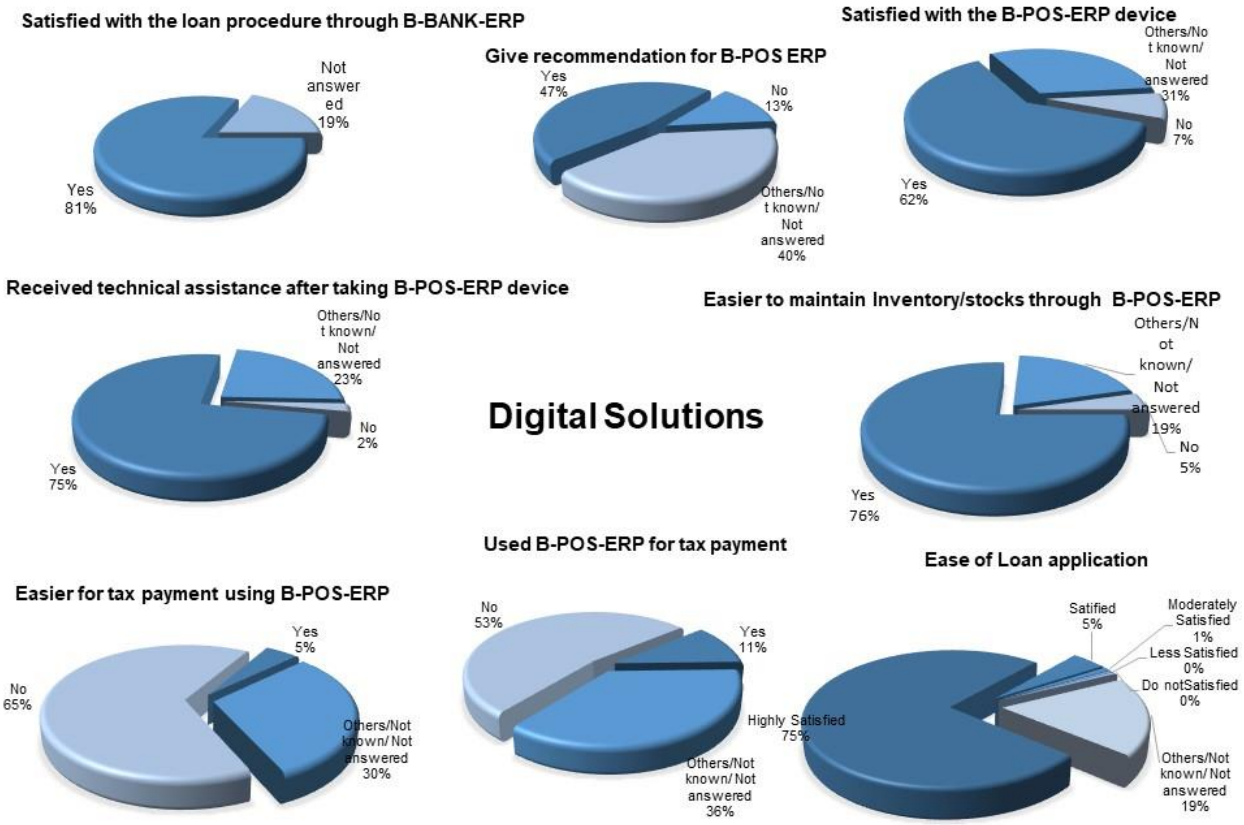


**Figure 6: Summary of factors showing satisfaction of loan borrowers**

As per the results obtained, the majority of the customers (81%) were satisfied with the loan procedure through B-Bank ERP. Similar kinds of positive results were also shown in the case of the utility of the B-POS-ERP machine (62%). As a result of this, 47% of the customer were willing to recommend using the B-POS-ERP machine. The reasons could be several, such as the ease of maintaining inventory stocks through the above digital intervention, as agreed with by 76% of the customers. In addition, 75% of the customers have received technical support regarding the utility of the machine. Although only 11% of the customers were using B-POS ERP for the tax payment which could be because only 5% of the customers felt it was easier to pay tax using the system. This is an accountable matter, and further technical intervention is underway to ease the matter. The general loan application procedure through the digital intervention proved to be highly satisfactory by the majority (75%) of the participants involved in the feedback process.

**Overall review of the system**

The overall review including the effectiveness of the customer care executive in giving resolution to the constraints, the time of delivery of the resolution, etc. has been given in Figure 7.

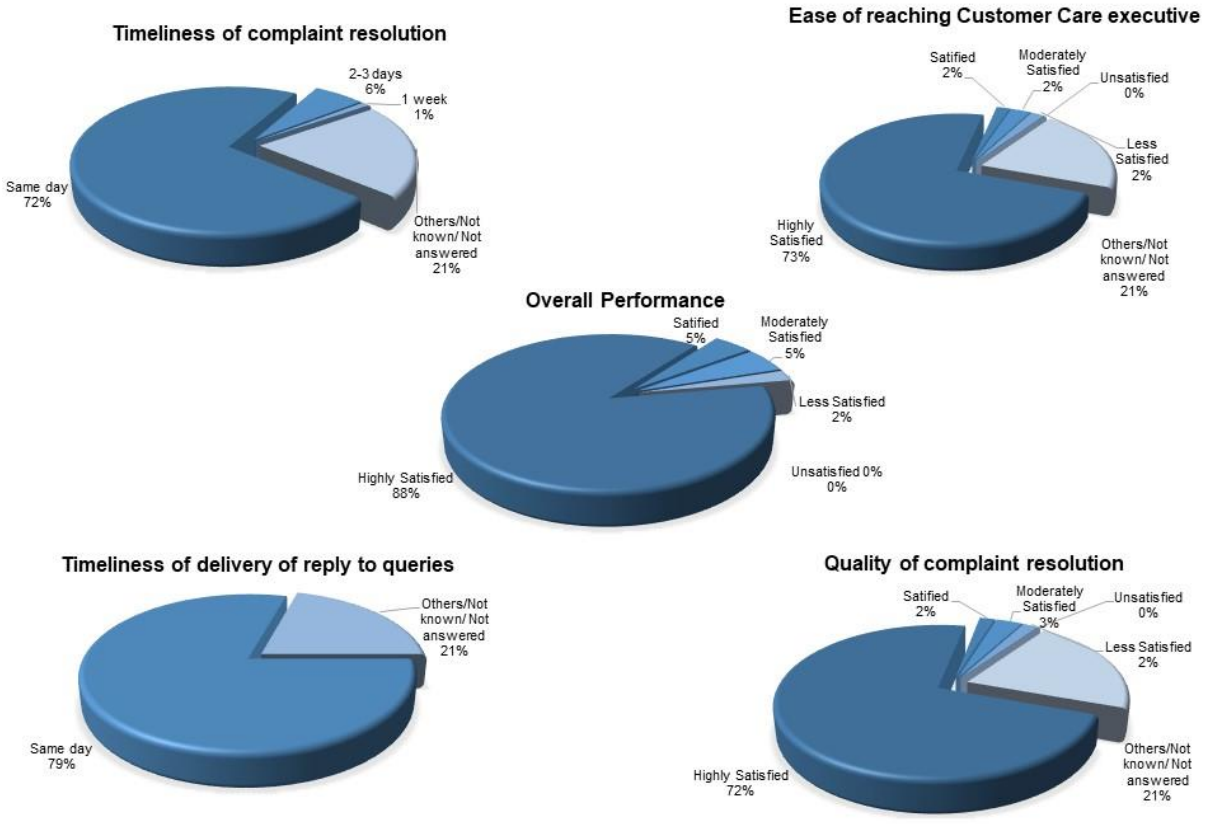


**Figure 7. Overall review of satisfaction with the system and related support**

According to the above analysis, the majority (73%) of the participants were found to be highly satisfied with the customer care executive as they experienced ease in reaching customer care executives. Among the participants, 72% agreed that they obtained a resolution from a customer care executive on the same day. For other queries, 79% of the participants also experienced same-day resolution. In addition, the quality of the resolution was not compromised. 72% of the applicants were highly satisfied with the quality of complaint resolution. Thus, in general, 88% of the participants are highly satisfied with their overall performance. The reviews above could easily reflect that customers are satisfied with their business operations under the PRAYASS scheme. Also, it should be noted that our reach has extended up to 17 states and is continuously expanding. The biggest win-win situation due to the digital solution is that to date there has not been a single defaulter in the repayment of EMIs. This can be accredited to the robust digital monitoring done by PALs digital intervention systems like B-POS-ERP and B-BANK-ERP. The loan borrowers were chosen in such a way and verified through the network that the right number of eligible people were chosen without defaults.

## Conclusions

In summary, the engagement with Grameen Aarogya Kendra (GAK) aspirants unveiled a commendable level of technological proficiency and financial inclusivity, as evidenced by widespread possession of essential tools such as bank accounts, Aadhaar, and mobile phones

among all households. Notably, the Microfinance Institution (MFI) sector has exhibited an impressive growth rate of 80% in the current fiscal year, highlighting its significant potential for driving financial empowerment and socioeconomic progress. The landscape of financial services has experienced a profound transformation, shifting from traditional banking models to digital platforms, a transition expedited by the exigencies of the COVID-19 pandemic. A groundbreaking scheme introduced in May 2022 operates exclusively through a user-friendly mobile application, streamlining loan processes and disbursements while adhering rigorously to regulatory frameworks. This pioneering initiative has distinguished itself through flawless execution, boasting a remarkable track record of zero defaults since its inception. By extending loans ranging from 50,000 to 500,000 rupees, particularly to women and underprivileged individuals from rural India, notably those from Other Backward Classes (OBC), the scheme has catalyzed the growth of GAK businesses and enhanced overall socioeconomic well-being. Indeed, this initiative epitomizes the convergence of technology, financial inclusivity, and social impact, serving as a compelling exemplar of effective implementation, regulatory compliance, and community upliftment. It is evident that microfinance constitutes a fundamental pillar of the Indian economy, playing a pivotal role in addressing socio-economic challenges. Moreover, the transparent monitoring and due diligence mechanisms embedded within the system are poised to foster increased tax compliance among enterprises, thereby bolstering the broader Indian economy.

**Conflict of Interest**

None declared.

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**Author Contributions**

AB conceived the presented idea and developed the theory. VA investigated and supervised the findings of this work. SG, has written and edited the manuscript.

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