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User Behavior Analysis in Online Service Aggregation: A Case Study of Sarvkarya

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***Abstract*—Sarvkarya is an emerging all-in-one service aggregation platform designed to connect local service providers with customers, particularly in rural and semi-urban areas. Under- standing user behavior on the platform is essential for improving service adoption, user retention, and operational efficiency. This study analyzes early-stage user engagement trends, identifies challenges faced by service providers and customers, and explores methods to enhance the platform's usability. The research uses basic data tracking, qualitative feedback, and observational analysis to assess user behavior. The findings highlight key factors affecting service bookings, common drop-off points, and potential improvements. By addressing these challenges through simplified workflows and better provider support, Sarvkarya can optimize its growth and impact in the service aggregation sector.**

***Index Terms*—Online Service Aggregation, User Behavior, Digital Marketplace, Service Provider Challenges, Customer Engagement, Sarvkarya**

I. INTRODUCTION

The rise of online service aggregation platforms has transformed the way individuals access daily services. Sarvkarya aims to bridge the gap for rural and semi-urban regions, offering a platform where local service providers can register and connect with customers. This study focuses on understanding user behavior, service provider engagement, and platform usability to ensure smooth adoption and improvement.

Despite the platform's potential, understanding user behavior, service provider engagement, and customer expectations is crucial to ensuring smooth adoption and growth. Unlike well-established platforms, Sarvkarya faces challenges related to trust-building, digital literacy among users, and operational efficiency. By analyzing how users interact with the platform, identifying common issues, and implementing targeted improvements, Sarvkarya can refine its service model to better cater to its audience.

This study explores the behavioral patterns of early adopters, focusing on how customers discover and book services, what influences their decisions, and where they face difficulties. Similarly, the study examines service provider challenges, including onboarding issues, pricing concerns, and response management. By leveraging both quantitative data (basic booking trends) and qualitative feedback (user experiences), this research provides actionable insights to improve the platform's functionality and user experience.

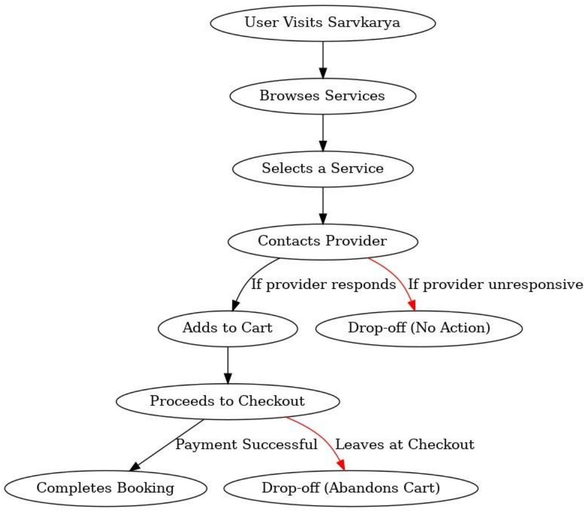

Fig. 1. User interaction flow chart

II. STUDY AREA

Sarvkarya operates in semi-urban and rural regions where organized service aggregation is still developing. Unlike urban areas where users are tech-savvy and comfortable with app- based service bookings, Sarvkarya's target audience relies more on traditional methods like word-of-mouth referrals and local advertisements. The platform is designed to bridge this gap by digitally connecting service providers with customers, offering a structured way to access essential services.

Currently, Sarvkarya hosts a diverse range of service providers, including electricians, plumbers, tutors, event planners, and digital consultants. These providers list their services, and customers browse and book based on availability and need. However, given the limited familiarity with online platforms among rural users, it is crucial to study their behavior, challenges, and expectations to improve service adoption.

To gain meaningful insights, this study focuses on three key stakeholders: customers, service providers, and platform administrators. Customers are observed for their browsing patterns, booking behaviors, and potential barriers that prevent them from completing transactions. Service providers are evaluated based on response times, availability, and onboarding difficulties. Platform administrators play a role in managing listings, addressing complaints, and optimizing user experience.

The study aims to track user engagement trends, drop- off points, and common pain points in the Woo Commerce- based Sarvkarya platform. By analyzing how users interact with the system and where they face difficulties, necessary improvements can be implemented to create a seamless service booking experience.

III. EXISTING SYSTEMS

In semi-urban and rural regions of India, access to local services such as plumbing, tuition, event planning, and beauty care remains largely dependent on informal networks. Most customers rely on word-of-mouth referrals or local notices to find professionals for daily service needs. This system, while culturally familiar, often lacks consistency, trust, and scalability. There is no centralized platform where users can search, compare, and book reliable service providers. As a result, many individuals face difficulties when seeking urgent or quality-assured services in their locality.

While several service aggregation platforms such as Urban- Clap (now Urban Company), Sulekha, and Justdial operate successfully in urban areas, their reach and relevance in rural and semi-urban spaces remain limited. These platforms focus mainly on a narrow band of premium services—like salon, AC repair, and housekeeping—leaving out a wide range of essential, localized, and culturally relevant services. Moreover, they depend on high-speed internet, digital payment systems, and urban-style service norms, which are not fully compatible with the behavioral patterns or needs of rural populations.

Sarvkarya addresses this gap by offering a truly comprehensive solution. It brings together an exceptionally broad set of service categories under one platform—including technical services (electrician, mechanic), educational services (tuitions, computer classes), creative and event services (photography, catering, decoration), consultancy (legal, financial, digital marketing), and even wellness, tailoring, and spiritual guidance. Unlike other platforms that limit providers to standard tem- plates and categories, Sarvkarya allows hyper-local customization, enabling service providers to describe offerings in local language, define their own service areas, and accept both online and offline bookings. This makes the platform inclusive for users with varying degrees of digital familiarity.

Service providers are given an easy dashboard to manage appointments, pricing, and communication, without needing prior tech knowledge. Customers can browse services with filters tailored to local needs, view verified reviews, and make informed choices across a much wider spectrum of services than what existing platforms offer. By catering to the full ecosystem of rural and semi-urban services, Sarvkarya not only bridges a digital gap but also nurtures self-employment and local economic growth at the grassroots level.

IV. METHODOLOGY

The study follows a mixed-method approach, combining quantitative and qualitative data analysis. The methodology includes: At its current stage, Sarvkarya is in the process of establishing itself as a functional service aggregation platform. Given the early development phase, the methodology for analyzing user behavior is based on basic data tracking, direct feedback from users and service providers, and observational insights rather than advanced analytics.

The primary data collection method involves monitoring service bookings, user interactions, and common issues faced on the WooCommerce-based platform. This includes tracking how many users visit the site, how many proceed to book a service, and where they drop off in the process. Since automated analytics tools are not fully integrated yet, insights are gathered through manual observation of WooCommerce logs, payment failures, and service provider responses.

For qualitative feedback, informal conversations and direct inputs from early users (both customers and service providers) help understand their experiences. Service providers share challenges in managing bookings and payments, while customers provide feedback on ease of booking, service reliability, and platform usability. This approach helps identify immediate pain points without requiring extensive survey structures.

Additionally, small trial experiments are conducted to test improvements. For example, adjusting the service listing lay- out, simplifying the booking process, or improving response times can help measure whether such changes lead to higher engagement. By continuously refining the platform based on these early observations, Sarvkarya can gradually build a more data-driven approach as it scales up.

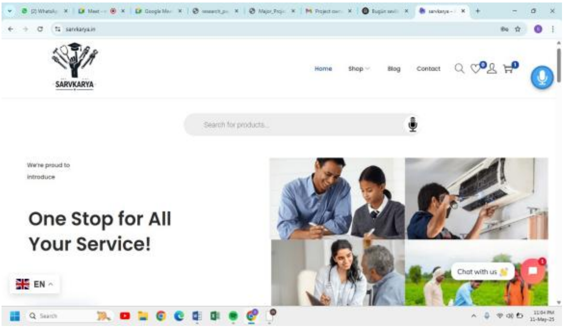

Fig. 2. Sarvkarya home page

V. RESULTS

A. User Engagement Trends

Early observations indicate that most user interactions hap- pen in the evening, suggesting that customers browse after work hours. There is a strong preference for mobile-based access, with very few interactions from desktops, highlighting the importance of optimizing mobile usability.

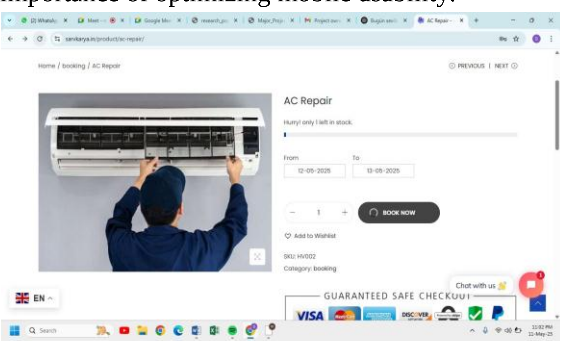

Fig. 3. Sarvkarya service page

B. Drop-off Points and Booking Challenges

A major issue identified is that many users hesitate to complete bookings, often due to a lack of verified service providers and unclear pricing details. Additionally, some bookings fail due to technical issues, including slow website performance and payment gateway failures. These problems contribute to abandoned transactions and lower user retention.

C. Service Provider Response Patterns

Observations reveal that some service providers delay responses, leading to customer dissatisfaction and missed opportunities. The lack of automated notifications results in missed service requests, as providers are not always actively checking their listings. Addressing this issue could significantly improve booking completion rates.

VI. DISCUSSION

The results highlight key areas that need improvement for Sarvkarya to enhance user experience and service adoption. Trust-building mechanisms such as verified service provider badges can help increase customer confidence and encourage bookings. Additionally, automated notifications for service providers can reduce response times and improve booking success rates.

Website performance issues are a major obstacle, with slow loading times and occasional errors causing frustration. Ad- dressing these technical challenges will be crucial in retaining users and ensuring a smooth booking process.

Another important finding is that pricing transparency is a significant concern. Customers are often unsure about service costs, leading to hesitation in confirming bookings. Implementing clear price breakdowns and provider ratings could help users make informed decisions and complete more transactions.

By implementing these strategic improvements, Sarvkarya can boost customer trust, improve service provider engagement, and increase overall platform adoption.

VII. FUTURE SCOPE

The study opens several avenues for future research and system improvements:

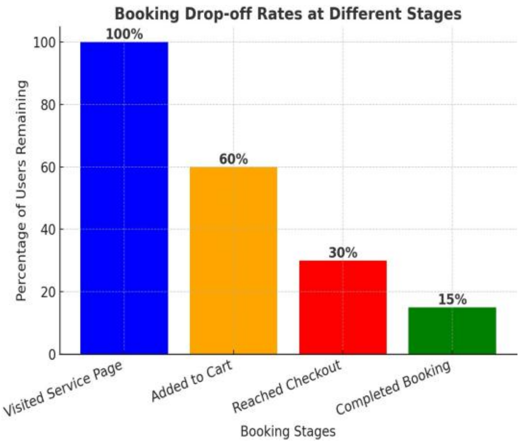

Fig. 4. Booking Drop Off rates different stages

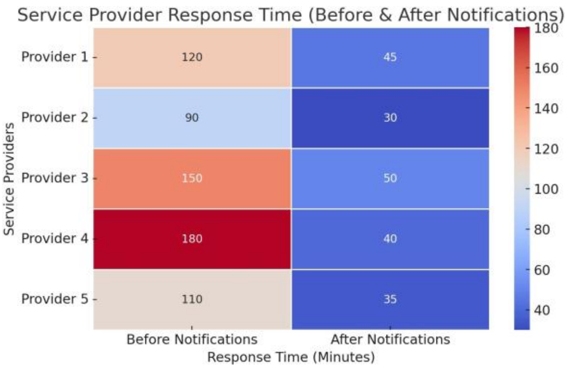

Fig. 5. Service provider response time

Future improvements for Sarvkarya include expanding data tracking capabilities, integrating automated analytics tools, and enhancing AI-driven service recommendations. A structured customer and service provider review system will be implemented to increase transparency and trust.

Additionally, efforts will be made to train service providers on digital tools to help them better manage bookings and respond faster to customer inquiries. A focus on mobile-first design will also be critical, given the dominance of mobile users on the platform.

By continually refining these aspects, Sarvkarya can position itself as a reliable and user-friendly service aggregation platform in semi-urban and rural markets.

VIII. ACKNOWLEDGMENT

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