

Mobile Applications Usage and Awareness Among Sri Lankan Small Business Owners

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ABSTRACT

Many Sri Lankan small business owners (SBO) today use mobile applications to manage their businesses. The relatedness of the purpose of the mobile applications that the SBO communities commonly use to the objectives and nature of their business (i.e. specifically designed for small businesses), the awareness among the SBOs in finding applications that can serve their business purposes, or their awareness of the importance of using dedicated applications for small business' purposes is an area that has not been investigated. This paper presents the findings of a pilot study on current trends and the nature of mobile application usage among Sri Lankan small business owners to understand the level of awareness they have on choosing mobile applications tailored for small businesses, and their expectations for features in such applications. It also investigates SBO demand for integrated, SBO-specific mobile solutions. The findings show that the Sri Lankan SBO community has either not considered these facts in their mobile applications usage or has found it difficult to manage their businesses using existing mobile applications because those applications are not designed to cater to their specific needs. This paper also summarizes the nature of mobile application usage among SBOs from several perspectives, providing meaningful insights for mobile application developers about this competitive community of users.

KEYWORDS: *Mobile Applications, Small Business Owners (SBO), Small Business Management, User Experience (UX) Enhancement, User-centric mobile applications*

1 INTRODUCTION

Mobile applications have become essential tools for modern business operations, offering convenience, automation, and accessibility in a fast-paced digital environment. In Sri Lanka, small business owners (SBOs) play a vital role in the local economy, accounting for a significant share of the business landscape. As smartphones and internet connectivity become increasingly widespread (Bandara & Jayawardena, 2022), many SBOs have turned to mobile applications to manage various aspects of their businesses, including inventory and sales tracking, communication, and financial management.

While mobile application usage is on the rise among Sri Lankan SBOs, it is evident that most applications in use are general-purpose or designed for larger enterprises in mind. These mobile applications may not adequately address the unique operational needs, budgetary constraints, and growth goals of small businesses. The challenges include customers' unfamiliarity, employees' limited knowledge of mobile payment systems, inadequate management focus, and customers' low computer literacy (Jayarathne et al., 2023). Additionally, there is a noticeable gap in user awareness regarding the importance and availability of mobile applications specifically designed for small-scale enterprises.

Despite the growing adoption of mobile applications by Sri Lankan SBOs, many may be unaware of mobile applications specifically designed for their business scale, or they may face challenges using existing mobile applications that lack features tailored to their workflows. This disconnect results in underutilization of digital tools or reliance on inefficient workarounds. To date, little research has been conducted to explore the nature of mobile application usage among SBOs in Sri Lanka and their level of awareness about purpose-built mobile solutions. This paper presents the findings of a pilot study that aimed to address this research gap by analysing current application usage patterns, assessing awareness levels, and identifying the demand for more targeted mobile applications among this user group.

2 RELATED WORK

The impact of literacy challenges on usability is a well-studied area in mobile application usage research. However, finding applicable results on the objective use of mobile applications among Sri Lankan communities, particularly small business owners, is challenging because of the lack of studies and possibly inconsistent terminology. As such, we reviewed studies where researchers employed various terms like ‘low literates’ and ‘semi-literates’ preambled by ‘Sri Lankan’ to describe users, as all these terms commonly refer to individuals who encounter difficulties in areas requiring literacy for full societal participation.

Raveendran and Rajeshwaran (2016) have highlighted the need to implement a quick, yet strategic approach that matches the pace of internet adoption and mobile device usage in the growing Sri Lankan online market. Sahina and Sachithra (2021) found a significant relationship between mobile marketing initiatives such as mobile application marketing and SMS marketing, highlighting the importance for the marketers to understand the influence of these initiatives on consumer buying attitudes and behaviors whether they are positive or negative.

Silva and Kariyapperuma (2021) showed that Sri Lankan managers engage in conspicuous consumption of mobile phones to maintain or enhance their wealth and social status, influenced by psychological factors such as personal achievement, personality traits, attitudes, and the development of self-concept. Although they have identified that brand-related elements, interpersonal influences, a drive to stay current with technological trends, and market demand shape their intentions, no evidence has been presented regarding the use of mobile applications in particular. However, these researches are focused on the perspective of digital marketing, with the main attention given to customers and how they behave on electronic market platforms, rather than on how the business owners thrive in their businesses using digital media and/or mobile applications.

3 METHODOLOGY

The SBOs referred to in this study are self-managed enterprises with small operational scales, such as grocery shops, beauty salons, private medical practices, and local retail stores, which typically employ fewer than 10 personnel and rely on owner-led management. We used a descriptive study design to:

1. Explore how mobile applications are currently used by SBOs in Sri Lanka, including understanding the commonly used types of mobile applications and how they help manage business operations such as sales, inventory, customer service, or finance.
2. Identify the limitations and challenges faced by SBOs when using existing mobile applications, with a specific focus on the feature availability gaps between available mobile applications and SBOs specific needs (e.g. lack of customization, unnecessary complexity, missing key features, etc.).
3. Explore whether there is demand or preference among SBOs for mobile applications tailored to their needs. This will help determine the perspective of Sri Lankan SBOs on whether the current mobile applications are satisfactory, and/or whether they would benefit from solutions designed specifically for small-scale business environments.

3.1 User Grouping

Based on their responses, the respondents were grouped into three categories based on their current usage namely: 1) SBOs who do not use any mobile applications, 2) SBOs who use multiple separate mobile applications for different tasks, and 3) SBOs interested in adopting an integrated, single mobile application. Preliminary investigations indicated that a vast majority of those who use mobile applications in their business use more than one application to meet their needs. Table 1 summarises the respondents numbers to each category. Surveys with questions focused on deriving answers to the above were designed and used. The 100 participants comprised a range of small businesses including beauty salons, private medical practices, teachers, and local shops, etc.

Table 1. No of respondents from each category

Categories	No of Participants
Business owners not using any mobile application	37
Business owners using multiple separate mobile applications for different tasks	58
Business owners interested in adopting an integrated, single mobile application	5

3.2 Data Collection

A structured questionnaire was developed and shared through social media platforms, WhatsApp business groups, and direct email outreach to reach a wide and diverse sample of self-managed small business owners across sectors. Responses were collected over a defined period. The survey was focused on key areas, namely the nature of current mobile application usage, awareness of small business-specific mobile applications, common business challenges in using mobile technology, and feature preferences in a customizable small business-oriented application. To strengthen the analysis, the geographical scope was also considered, eight participants classified as urban or rural areas. The questions were both multiple-choice and open-ended, targeting both quantitative and qualitative insights.

3.3 Data Analysis

The data analysis was categorized into two: Challenge Identification, and Feature Expectation Study. The Challenges Identification involved identifying the main operational challenges faced by SBOs, particularly those not using mobile applications and/or using various/mismatched mobile applications. Common pain points identified included difficulties in managing appointments, tracking customers, organizing staff schedules, maintaining financial records, and monitoring inventory. The Feature Requirements Analysis was used to understand which features SBOs desire most in an SBO-focused mobile application. The survey included questions on functionalities SBOs consider essential in a business management tool. The most frequently requested features such as inventory control, financial tracking, customer relationship management, appointment booking, and sales tracking were highlighted and ranked based on frequency of mention and user priority.

Collected data were processed and visualized to present user preferences, awareness levels, and application usage patterns. Graphical trends helped identify behaviour patterns across user groups and provided key insights into the need for more tailored mobile solutions for SBOs.

4 RESULTS

4.1 Mobile Application Usage Among Small Business Owners

Sixty-three percent (63%) of participants responded positively to using some form of mobile application in their small businesses, indicating a general awareness of the use of mobile technologies for business operations. However, over 30% of participants indicated to have not been using any mobile application for business purposes is significant, highlighting a gap in digital adoption among SBOs. This suggests a need for greater awareness and/or availability of more suitable application solutions for small businesses. The question “Do you use multiple mobile applications in your business?” was used to determine whether SBOs use multiple separate mobile applications for different business functions (e.g. different mobile applications for accounting, communication, reservation, etc.), manage their operations using a single application or are merely using one application without much consideration. Of those who use mobile applications, 92.1% reported using to use multiple applications for business purposes. This indicates both the lack of available mobile applications that can be customized to different business needs and/or the SBOs lack of awareness of such mobile applications.

Participants were asked whether the different mobile applications they use in their business for different purposes are easy and/or user friendly. Figure 1 shows the ratings they provided in the four application categories they have experienced, namely: Human Resource Management, (HRM) Finance Management, Inventory Management and Scheduling and Appointments.

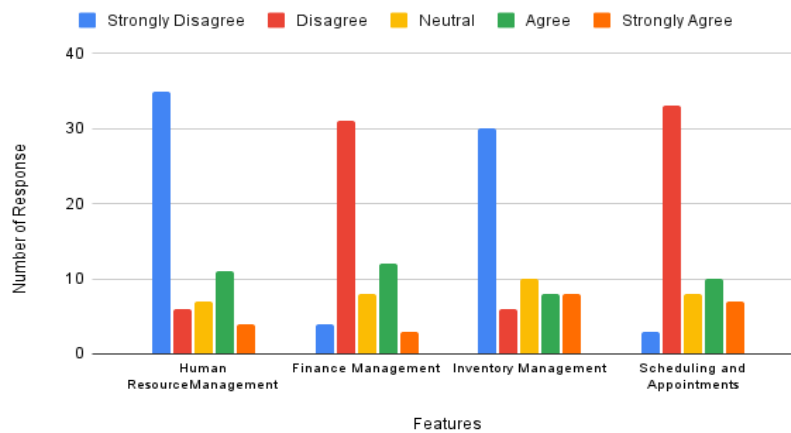


Figure 1: User Ratings on the Ease of Use Across Business App Categories

This rating reflects the combined responses from multiple users for each application category. Rather than evaluating a single application, users rated different mobile applications they personally use under each category. Therefore, the results represent a broader perception across various mobile applications commonly used for these business functions.

The participants have indicated that the HRM and inventory control systems as least user friendly, with most respondents (over 30%) opting to 'Strongly Disagree'. This indicates significant usability challenges in with mobile applications for staff scheduling and payroll functions in HRM with stock-tracking and restocking alert features that do not meet user expectations in inventory control. Interestingly, only a limited number of participants have 'strongly agreed' that any of the mobile applications are easy to use. The reason for this could be either the unavailability of destined mobile applications or unawareness for user-friendlier mobile applications. Finance Management mobile applications and scheduling mobile applications have received the largest negative responses (around 30%) selecting 'Disagree' and only a small percentage 'Strongly Agree'. This indicates that invoicing and expense-tracking mobile applications may be too complex or not sufficiently intuitive for SBOs. Inventory Management mobile applications also had a high number of 'Strongly Disagree' responses, indicating that stock tracking and restocking alert features are not meeting user expectations in terms of ease of use. Scheduling and Appointments mobile applications saw a similar trend to finance mobile applications, with most users (around 30%) disagreeing on ease of use, and relatively low agreement levels. This shows that calendar management and booking systems may also need improvements.

Overall, this data highlights that ease of use varies widely across application types, and many small business owners struggle with the usability of essential mobile tools. These findings emphasize the need for simplified and user-focused mobile application design across functional areas to improve adoption and satisfaction among Sri Lankan small business owners.

4.2 Specific Features Users Find Difficult to Use

The individual respondents were asked about the features they find difficult to use in the applications they use. This question aimed to gather insights into aspects of mobile applications that would create difficulties for users in their real-world, authentic scenarios. Unlike previous aggregated responses across application categories, this question reflects the direct experiences of individual users with specific features they personally interact with.

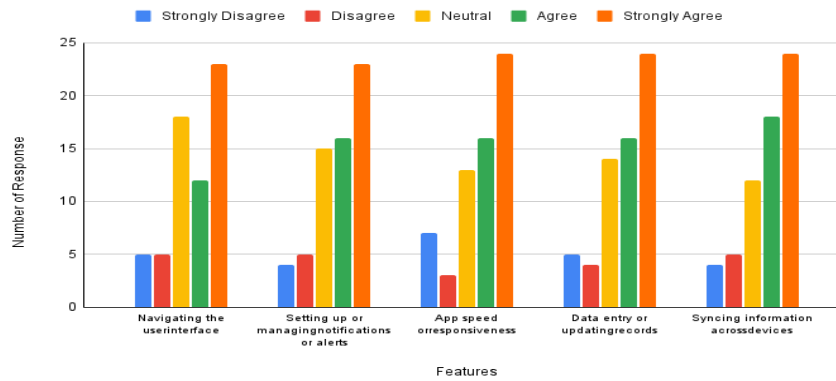


Figure 2: User difficulty ratings for specific applications features

As shown in Figure 2, 63% of respondents reported facing difficulties with certain applications features. The most frequently mentioned issues were navigating the user interface, setting up or managing notifications or alerts, application speed or responsiveness, data entry or record updates, and syncing information across devices/mobile applications. These results suggest that even basic application functions can pose barriers to effective use, especially for SBOs who may lack advanced technical skills. This user feedback highlights the importance of simplifying key features, improving performance, and ensuring that critical functions such as syncing and data entry are intuitive and reliable. These findings reinforce the need for user-centered design in mobile applications tailored for Sri Lankan SBOs, with special attention to usability, accessibility, and feature relevance.

4.3 Reasons for Not Using Mobile Applications

Participants who indicated they had not used any mobile applications for their small businesses were surveyed to understand the barriers to mobile application adoption. When asked for the main reasons as to why they have not been using any mobile applications to support their business, 67.6% indicated that they do not find mobile applications sufficiently suited to their business purposes. Figure 3 shows the main reasons the SBOs have indicated for not using mobile applications in their businesses namely: the cost of dedicated mobile applications, lack of knowledge and awareness of the availability and/or use of such applications, and reluctance to trust third party mobile applications.

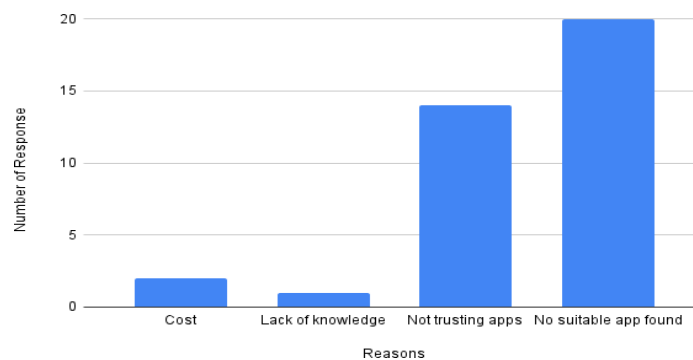


Figure 3: Reasons for Not Using Mobile Applications

Nevertheless, when the participants were asked if they would be interested in a common mobile application that integrates all necessary business features into one platform, a strong majority (92%) expressed interest, indicating a clear demand for a centralized mobile solution for small business operations. These findings highlight a key area of opportunity for developers and service providers: there is a pressing need for affordable, trustworthy, and customizable mobile applications destined for SBOs along with a need for increasing awareness for less tech-savvy users.

4.4 Desired Features for Improvement in Mobile Application

In order to further understand user expectations, respondents were asked about the features they would like to add or remove from the mobile applications that they already use for their business purposes. The results highlight the features users find most important for business functionality (Figure 4) and most commonly requested improvements as: Financial records and expense tracking, customer notifications and alerts, and business performance tracking in finance mobile applications and bookings and appointment management, and staff scheduling in human resource management applications.

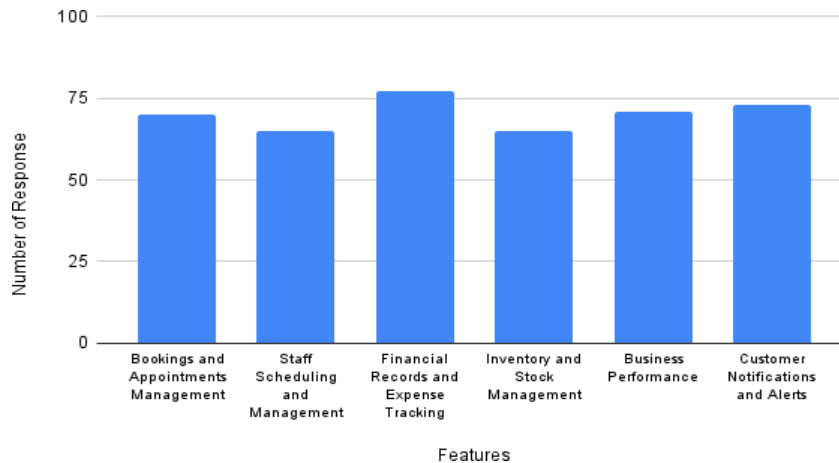


Figure 4: Features to added to or improved in commonly used business mobile applications

5 DISCUSSION AND CONCLUSION

This study highlights the current state of mobile applications usage among Sri Lankan SBOs and reveals key gaps in both awareness and functionality. It shows that although many Sri Lankan SBOs use mobile applications for their business, a significant portion still do not. The main reasons they cited were the complexity of the existing mobile applications, poor usability, and a lack of suitable/customizable mobile applications to suit their specific business needs, highlighting a gap in the mobile applications development market for tools designed specifically for small businesses. Among current users, many rely on multiple mobile applications for different tasks, which create confusion and inefficiency. The most commonly used mobile applications among Sri Lankan SBOs were for human resource management, finance, inventory control, and scheduling. However, they indicate that the mobile applications they already use are difficult to use, especially when for data entry, application speed, and synchronization since they are individual applications. A vast majority of the participants showed an interest in a single application that combines all essential business features, with key features requested including finance tracking, customer alerts, performance reports, appointment and schedules management, and inventory control. These findings suggest a strong need for well-designed, all-in-one mobile applications made for SBOs in Sri Lanka. Developers should focus on simplicity, affordability, and essential features to better support this community.

The findings clearly show a strong demand for a user-friendly, all-in-one mobile application that supports essential business operations such as finance, inventory, customer management, appointments, and staff scheduling, presented in a less-complex, small business friendly manner. The participants' strong interest in such a solution suggests a significant opportunity for developers to create purpose-built tools that are affordable, easy to use, and specifically designed to meet the authentic needs of Sri Lankan small businesses. Addressing these needs through thoughtful application design can enhance digital adoption, improve operational efficiency, and empower SBOs to manage their businesses more effectively in the digital age.

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