Unraveling Library Over dues: Exploring Overdue Patterns through Analyzing Koha Reports from Rajarata University of Sri Lanka

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Abstract

This study addresses the pervasive issue of Library Over dues (LO) by investigating their present situation and overdue patterns in the RUSL Library System. To understand these dynamics, the study employs quantitative analysis, utilizing a dataset retrieved from the Koha Library Management System. Extracting overdue report files, borrower records, and circulation logs, the research aims to discern patterns in frequency, type, and duration of over-dues, distributions faculty wise considering factors like user types and material categories. The study identified both the students and teacher's overdue books as a nominal activity. When analyzing the clarifications for over dues noted that such as forgetfulness and extended borrowing mainly caused the lengthy over dues. The study intends to propose tailored strategies to eliminate the issue. Recommendations may involve user education, policy revisions, or technological interventions to enhance library services and mitigate over dues, adding more copies of outstanding books thereby contributing to a more efficient library system.

Keywords: Library Over dues, User Behavior, Koha Library Management System, Library Services, Policy Interventions, RUSL

Introduction

Library Over dues (LO) pose global challenges, disrupting library operations and hindering resource access for users (Alao, 2002). Basak and Yesmin's (2021) study at BRAC University library identified forgetfulness and incomplete tasks as primary causes for late book returns. Despite fines, students continued library use, suggesting policy effectiveness. The research advocated for increased hard-copy and e-book collections to enhance services. Addressing long-term thefts, interviews at an undisclosed library revealed a lack of orientation among students, emphasizing the need for proactive feedback (Jayasundara, 2021). Alao (2002) observed delays in book returns due to unfinished readings and forgetfulness among medical students. Proposed solutions included renewals, more copies, and extended loan periods. This research delves into the magnitude and causes of library over dues, utilizing data from Koha reports at Rajarata University of Sri Lanka (RUSL) to devise effective strategies for overdue materials.

Rajarata University of Sri Lanka using Koha: Open Source Library Integrated System to automate its Collections, Library users and their check in and checkout transactions since 2009 including its Main Library which mainly serves to the faculties of Management Studies and Social Sciences & Humanities, faculty libraries which mainly serve to the faculties of Applied Sciences, Agriculture, Medical and Allied Sciences and Technology. Under this project, nearly 250000 library materials and 6000 users' have been integrated and provide online Public Access Catalogue Service (Web OPAC) via www.opac.rjt.ac.lk throughout the centralized main server under the Linux platform. Since the said system running over 13 years it has not analyzed its overdue

behavior by the users and this study will be significant for overlooking the users' overdue behavior within the systemic level. Based on the achieving of the above significant following objectives was set up.

Objectives

The study mainly aims to analyze the major distributions and identify the patterns of Library Over dues (LOs) within the RUSL Library System using the Koha reports of its Library Integrating System including identifying the root causes, understanding the impact on library services, and proposing improvement strategies as its specific objectives.

Materials and Methods

The research objective involves a quantitative analysis of library over dues utilizing data from the Koha Library Management System up to 30.03.2023 and clarifications given by the users when they attempted such a situation. These methodologies involve extracting relevant data, including overdue report files, borrower records, and circulation logs, to analyze the frequency, type, and duration of over dues along with user demographics. The data will be cleaned and organized, followed by statistical analysis and visualization, examining factors such as user types, material types, and loan periods to identify trends and causes. The analysis will focus on understanding user behavior, library policies, and resource availability, pinpointing reasons for over dues analyzing the borrowers' clarifications which are collected by the check in & checkout counters. Based on these methods, findings will be figured out and recommendations will be proposed, which might involve targeted user education, policy revisions, or technological interventions to enhance

library services and reduce over dues.

Results and Discussion

Major Distribution of Total Library Checkouts

The study exhaustively examined the users' checkouts from the library over a duration of three years, specifically from January 1, 2020, to March 31, 2023. It revealed the following comprehensive distribution of checkouts among its users (Figure 1):

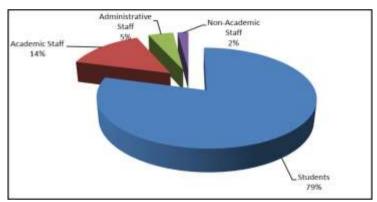


Figure 1: Major Distribution of Total Library Checkouts

Source: Koha Time Series Data, 2023

Figure 1 shows, library checkouts history by its users reveals a robust engagement: 79.30% by students, emphasizing their focus on academic resources, 14.20% by academic staff, reflecting continuous learning, 4.53% by administrative staff and 1.94% by non-academic staff. These figures depict a diverse and active library community, fostering knowledge exchange and learning across the university.

Major Distribution of Over Dues

The study meticulously analyzed the Active Library Over dues profile and outlined the following comprehensive distribution of dues among its users (Figure 2):

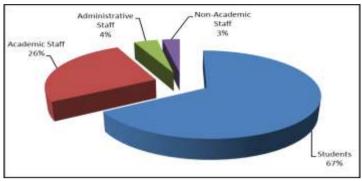


Figure 2: Major Distribution of Total Library Overdues

Source: Koha Time Series Data, 2023

The figure 2 indicates the majority at 67% over dues by student and academic staff members follow at around 26%,

Major Reasons for over dues

The study then analyzed the major causes behind over dues based on the clarifications given by the users.

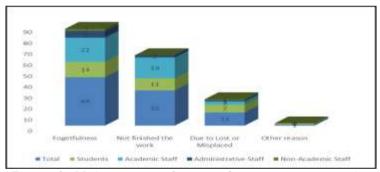


Figure 3: Major reasons for over dues vs user categories

Source: Koha Time Series Data, 2023

As shown in figure 3, the primary factors identified include forgetfulness (49%), due to their unfinished academic works (36%), loss or misplacement of materials (14%), and various other reasons such as being abroad or having illnesses, etc. The provided data reveals several noteworthy patterns within an academic or institutional context.

Forgetfulness emerges as a prevalent issue, affecting both students (31.82%) and academic staff (50%), with academic staff experiencing a notably high percentage of cases. Incomplete work is a significant challenge faced by both students (34.38%) and academic staff (59.38%), indicating potential difficulties in managing workload or time constraints. Lost or misplaced items primarily affect students (58.33%), highlighting possible organizational challenges. Interestingly, there is only one reported case under "Other Reason" (100%), suggesting that miscellaneous factors contributing to incomplete tasks are relatively rare.

Conclusion and Recommendations

The analysis of Rajarata University's library data spanning three years reveals significant trends. Students dominate checkouts at 79.30%, emphasizing their focus on academic resources, while academic staff contributes 14.20%, indicating continuous learning. The predominant overdue patterns, with 67% attributed to students, underscore the need for enhanced time management skills and awareness programs. Over dues, primarily from forgetfulness (49%) and unfinished academic work (36%), highlight areas for targeted interventions. To mitigate over dues, the university can implement timely reminders and academic support strategies, fostering a responsible borrowing culture. By addressing these patterns, the university can create a more efficient and responsible library environment, promoting timely returns and fostering a culture of accountability among its users.

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