



Information Governance

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Assessment 2

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Background and Risk Identification

The ARCHI Public Library's outdated manual processes for cataloging, shelving, and inventory management increase risks such as data entry errors, resource misplacement, and delays in service. These inefficiencies heighten the likelihood of lost or untracked items, compromised inventory accuracy, and reduced patron satisfaction, ultimately threatening the library's operational effectiveness and resource security.

Stakeholders

In this report, we analysed the current situation at the ARCHI Public Library and identified key stakeholders (Figure 01) affected by the existing challenges and the planned technology upgrade. The **primary stakeholders** include the **Library Board and Management**, who are concerned about the inefficiencies in operations and the potential impact on the library's mission and reputation. The **Library IT Department** is struggling to support outdated systems that limit functionality and integration capabilities. The **Circulation Department and the Collection Management**, responsible for cataloging, shelving, and inventory management, face a high workload due to manual processes and frequent data inaccuracies. Finally, **Library Patrons** experience delays and difficulty in accessing resources, which negatively affects their overall satisfaction and engagement with the library.

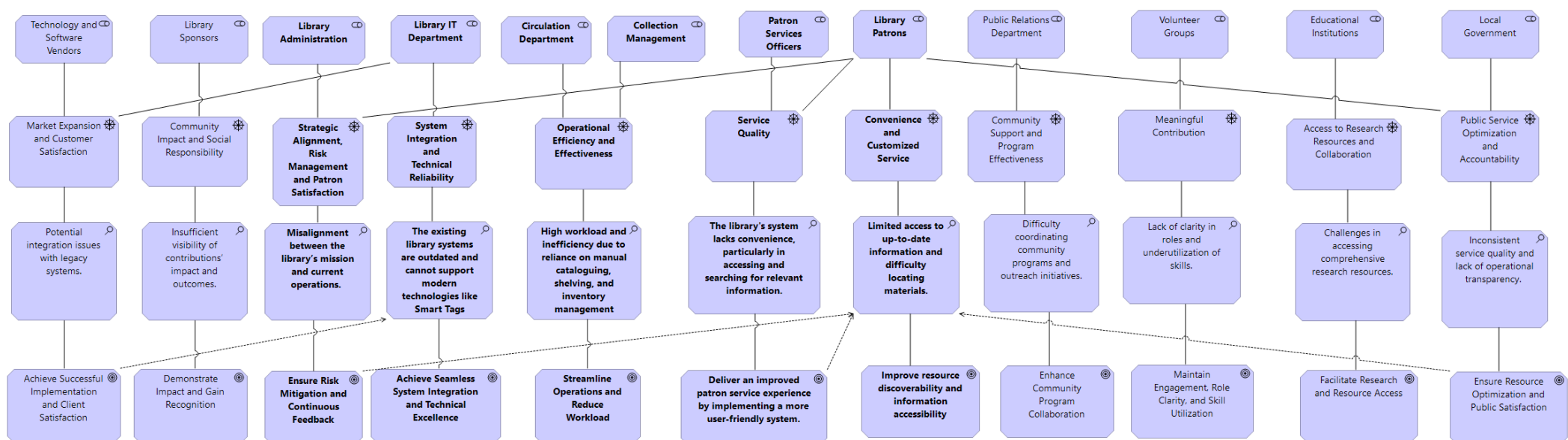
The **secondary stakeholders** are those indirectly affected by the library's current inefficiencies and planned changes. The **Local Government**, which funds and oversees the library, is concerned about optimising public resources and improving service quality. **Technology and Software Vendors** are challenged by the integration of modern technology with the library's legacy systems. **Community Organisations** and **Educational Institutions** are impacted by the library's limited ability to provide seamless support for community programs and academic research. Meanwhile, **Volunteer Groups** face uncertainty as their roles may be affected by the introduction of automated systems, leading to potential underutilisation or changes in responsibilities.



Primary Stakeholder

Secondary Stakeholder

Figure01_Stakeholders

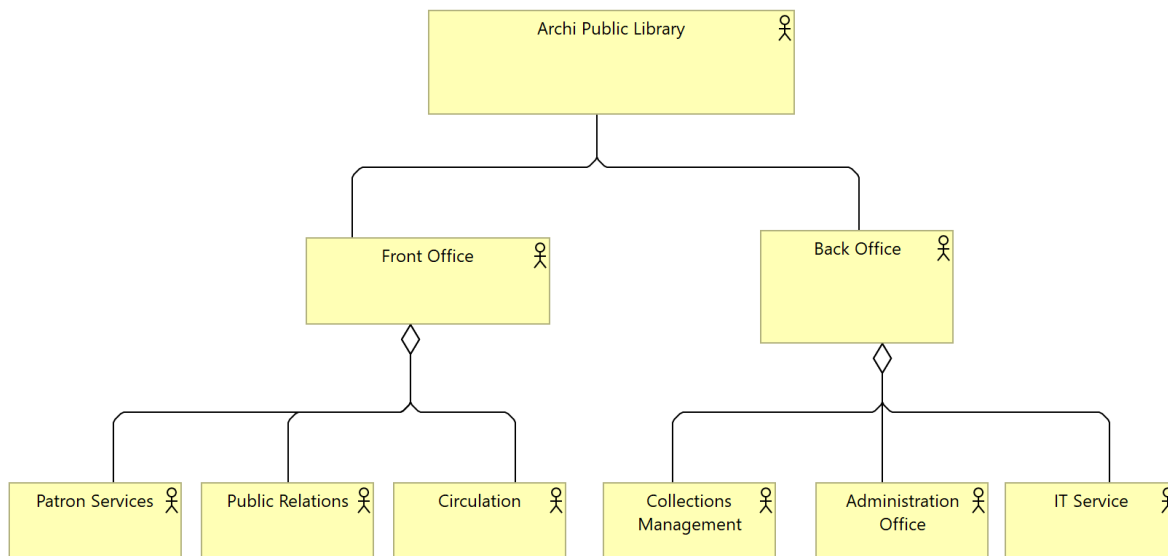


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Business Functions

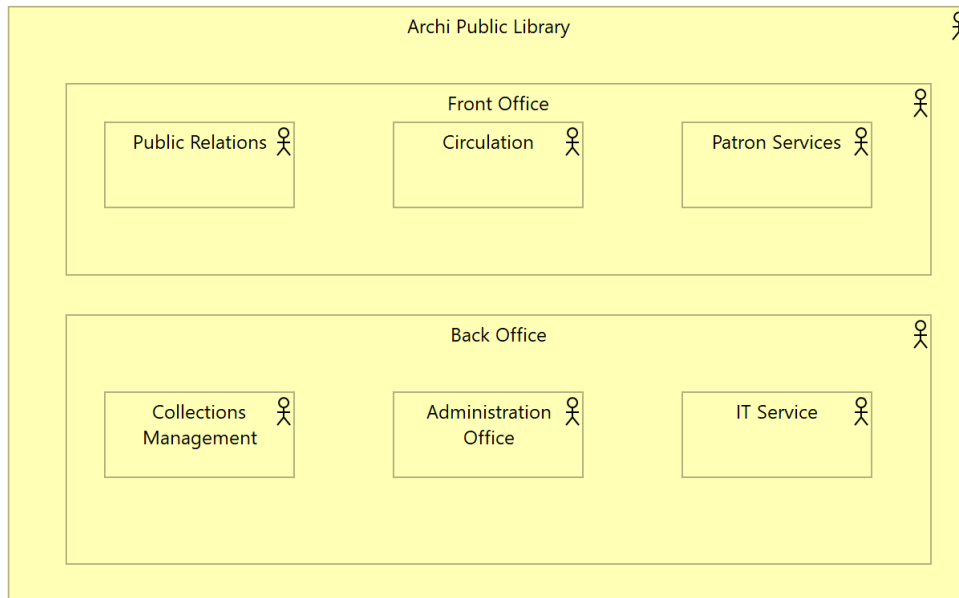
The organisational structure (Figure 02) of the ARCHI Public Library is a hierarchical framework that defines the roles, responsibilities, and relationships among various departments. It is divided into two main sections (Figure 03): the Front Office, which directly interacts with patrons and manages public services, and the Back Office, which focuses on internal operations such as resource management, administration, and IT support. In Figure 04, the Front Office handles essential patron-facing services, including public relations, circulation, and patron services, ensuring that users have seamless access to the library's resources. Meanwhile, the Back Office supports the library's core functions by overseeing the acquisition, cataloging, and maintenance of resources, managing administrative tasks, and ensuring the reliability of the library's technology infrastructure.

Figure02_Organisation Structure



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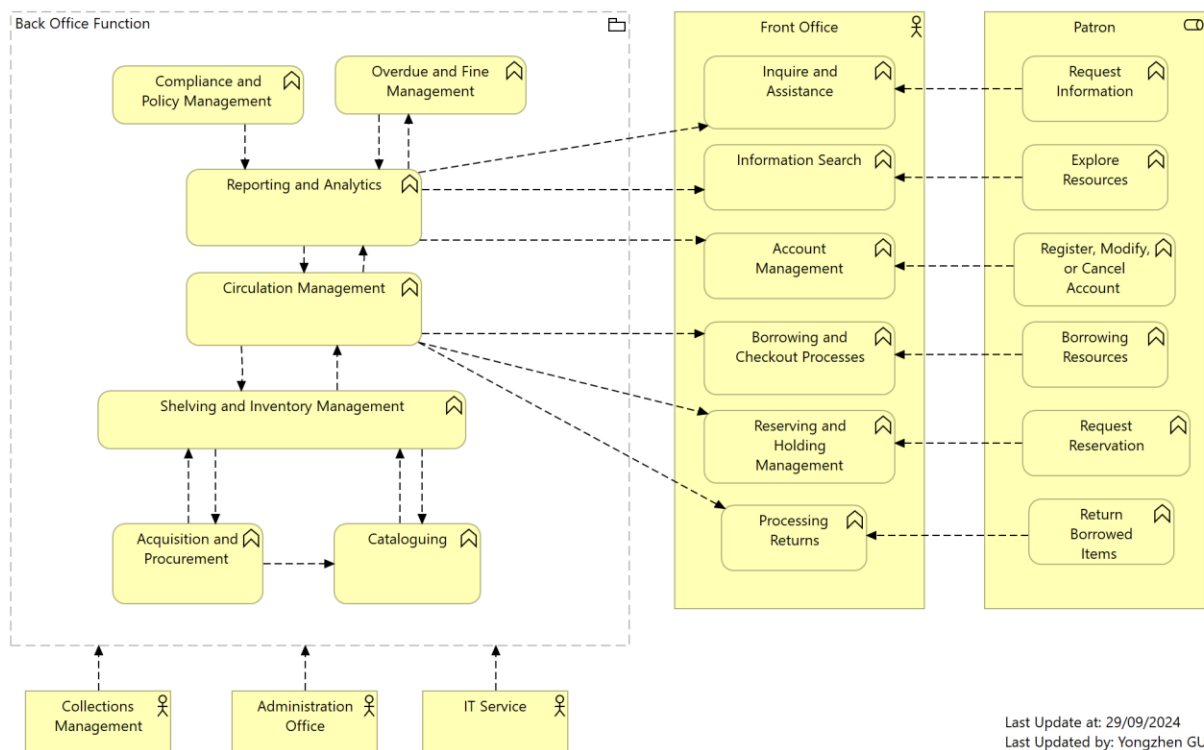
Figure03_Business Decomposition



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Figure04_Business Function View



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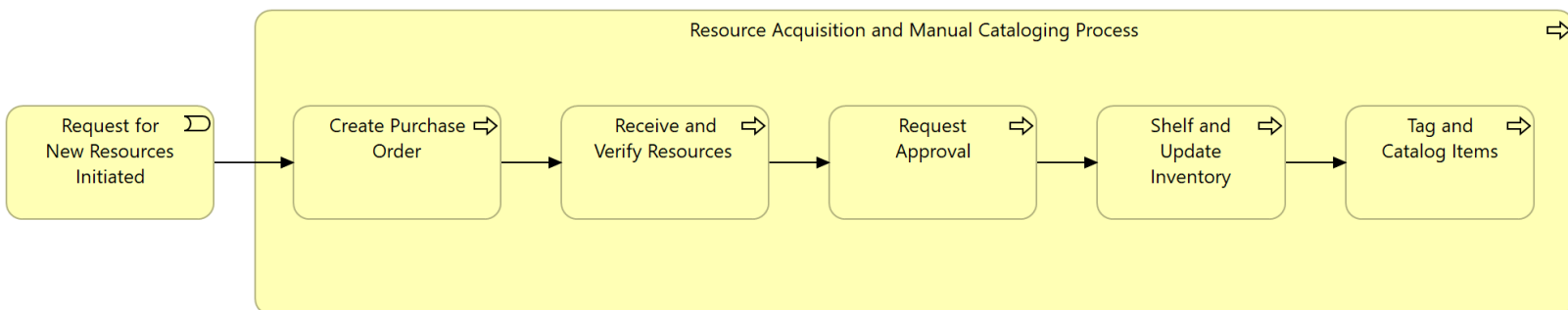
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Business Processes

Resource Acquisition and Manual Cataloging

The first business process (Figure 05) at the Archi Public Library focuses on resource acquisition and manual cataloging. It starts with a request for new resources based on patron needs or community requirements. After approval, a purchase order is created, and resources are verified upon arrival. Once verified, items are manually tagged, cataloged, and placed on shelves. The process concludes with updating the inventory records. Due to the reliance on manual entries and handling, the current process is inefficient and prone to errors, posing operational risks for inventory accuracy and resource availability.

Figure05_Business Process 01

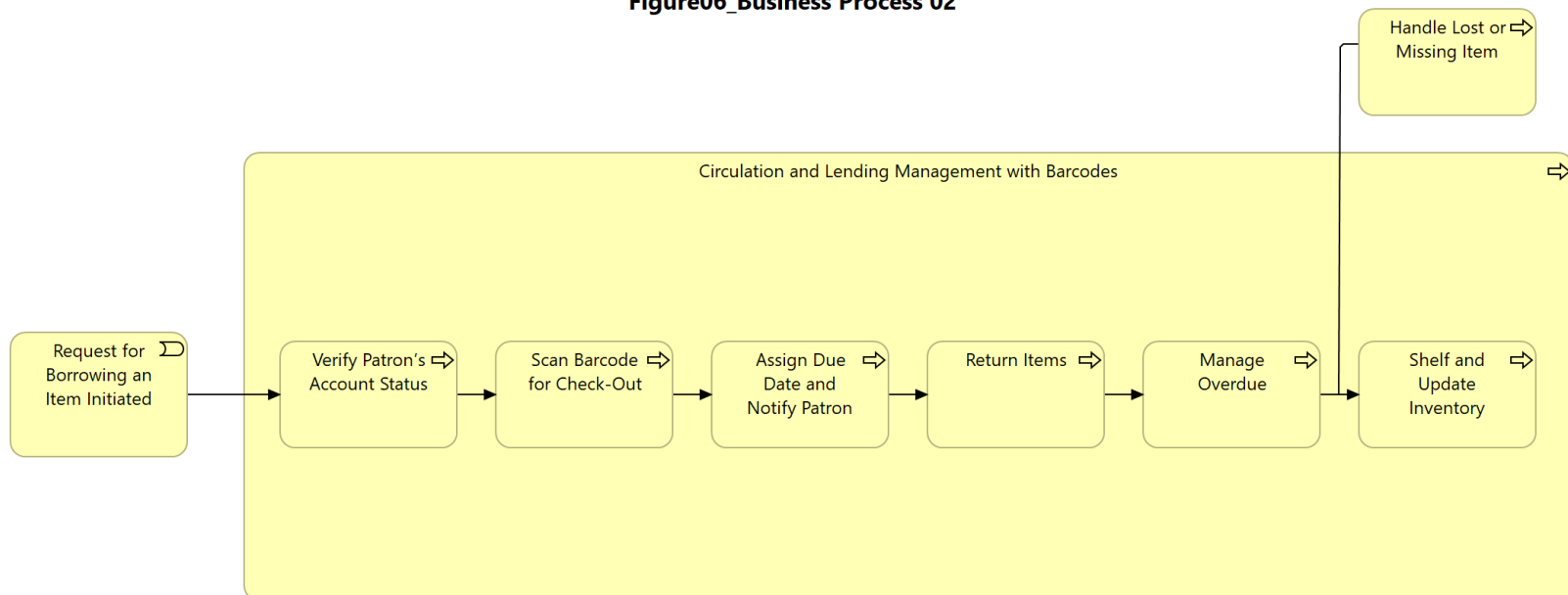


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Circulation And Lending Management with Barcodes

The second business process (Figure 06) at the Archi Public Library involves managing the circulation and lending of items using barcodes. It starts when a patron requests to borrow an item, followed by verifying their account status, scanning the item's barcode for check-out, and assigning a due date. Returned items are manually checked in, and overdue items are managed through reminders and fees. Lost or missing items are handled separately, and finally, inventory records are updated. The current process relies heavily on manual steps, making it time-consuming and prone to errors.

Figure06_Business Process 02

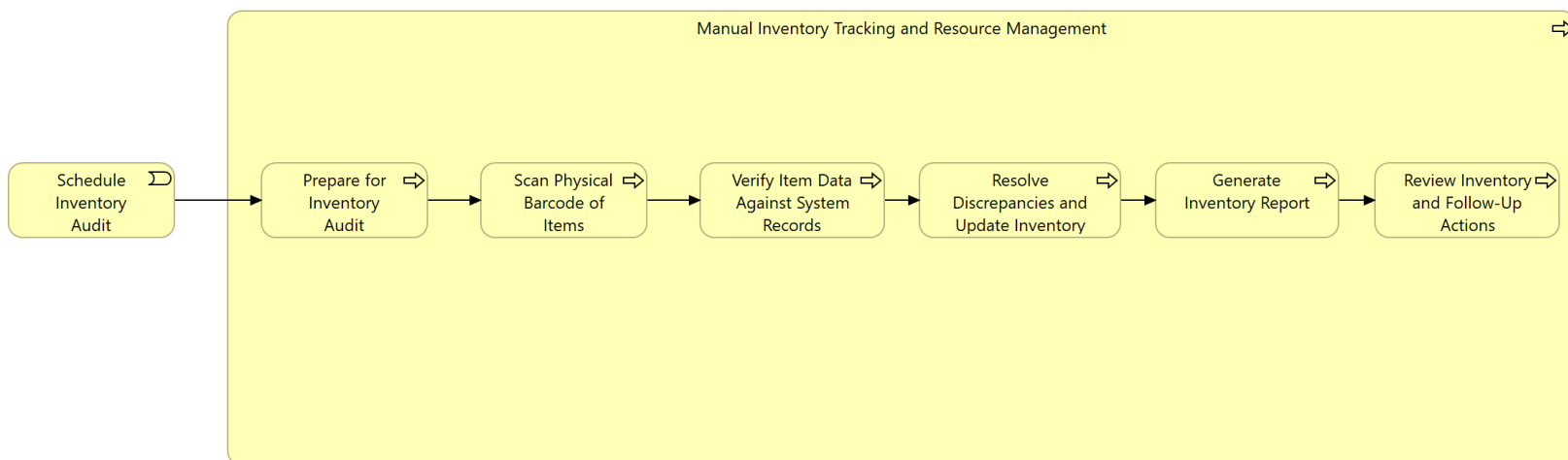


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Manual Inventory Tracking and Resource Management

The third process (Figure 07) begins with scheduling an inventory audit, followed by preparation where librarians compile an up-to-date list of items and ensure barcode scanners are operational. Librarians then scan the physical barcodes of each item and verify the scanned data against system records to identify discrepancies. Any issues found, such as missing or misplaced items, are resolved and inventory records updated. An inventory report is generated and reviewed for follow-up actions. This manual process is labor-intensive and error-prone, highlighting the need for improved tracking methods.

Figure07_Business Process 03

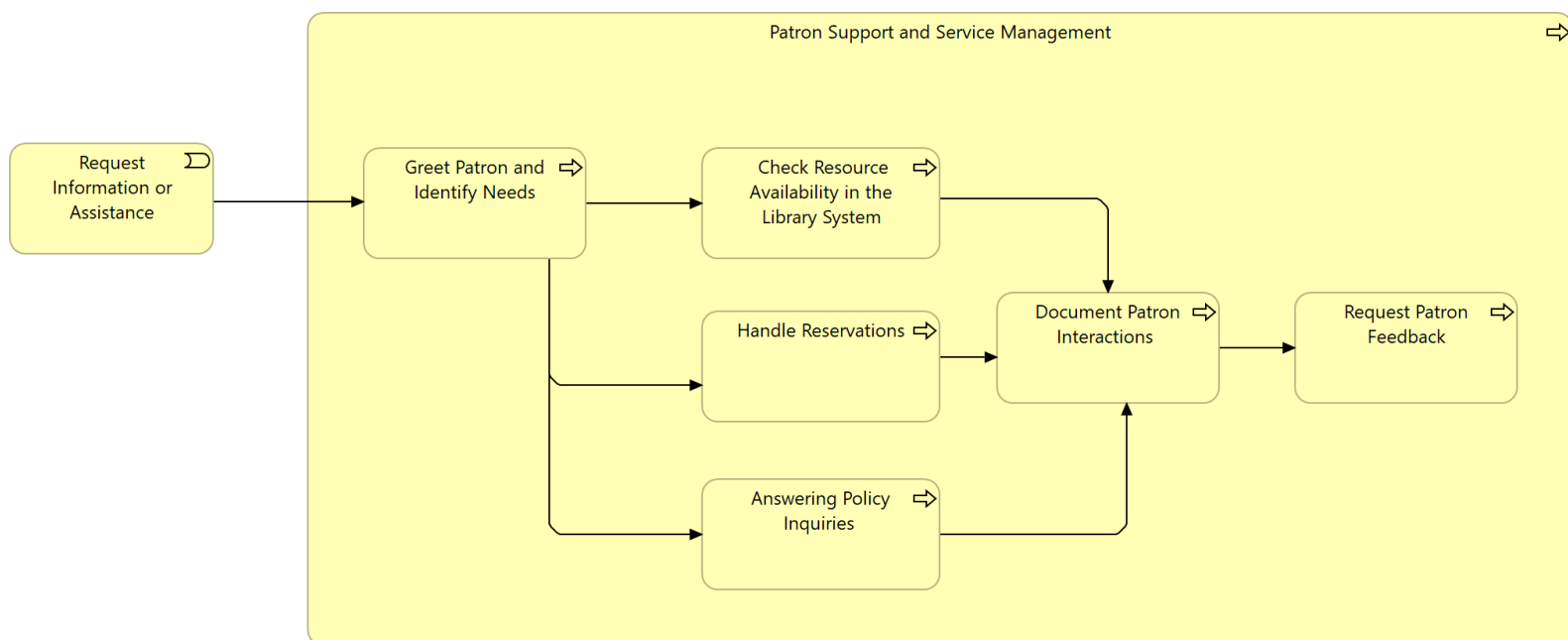


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Patron Support and Service Management

The fourth process (Figure 08) begins when a patron requests information or assistance. The librarian greets the patron and identifies their needs, determining whether the inquiry involves locating resources, handling reservations, or policy-related questions. Next, the librarian checks resource availability in the library system, helps with handling reservations, and provides policy-related answers. All interactions are documented, and patron feedback is requested to improve service quality. The current process is manual and requires significant staff involvement, leading to potential delays and inconsistencies in service delivery.

Figure08_Business Process 04

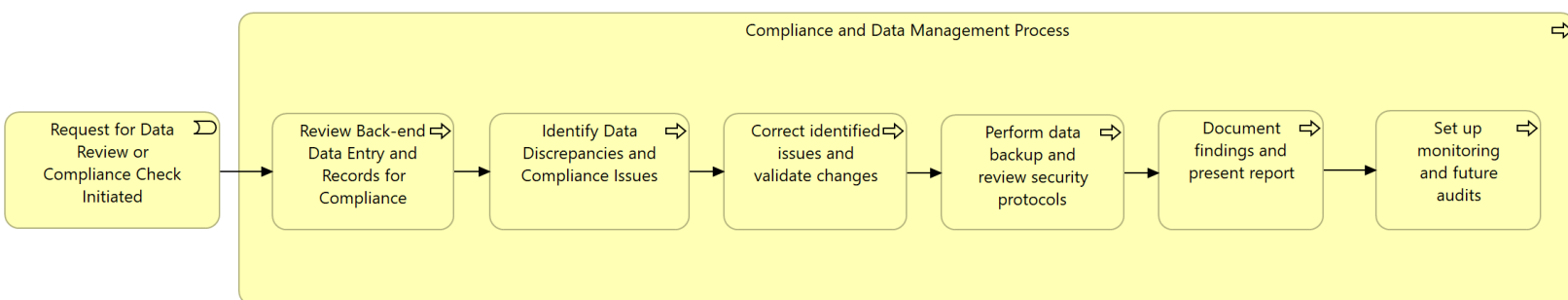


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Compliance and Data Management

The fifth business process (Figure 09), Compliance and Data Management process at Archi Public Library is essential for mitigating risks associated with data integrity and regulatory compliance. This process begins when a Request for Data Review or Compliance Check is triggered, often due to scheduled audits, regulatory requirements, or concerns raised by management. The IT staff conducts a comprehensive review of back-end data entries and records to identify any discrepancies or compliance issues that may pose risks, such as incomplete records or inaccurate information. If issues are detected, they are promptly corrected and validated to prevent future errors and ensure adherence to compliance standards. A critical risk mitigation step involves performing data backups and reviewing security protocols, which helps safeguard sensitive information and reduces the risk of data breaches or loss. The process culminates in documenting findings in a compliance report, providing transparency and accountability. Additionally, continuous monitoring and scheduling of future audits are set up to proactively manage and mitigate any potential data-related risks, ensuring long-term compliance and data accuracy.

Figure09_Business Process 05

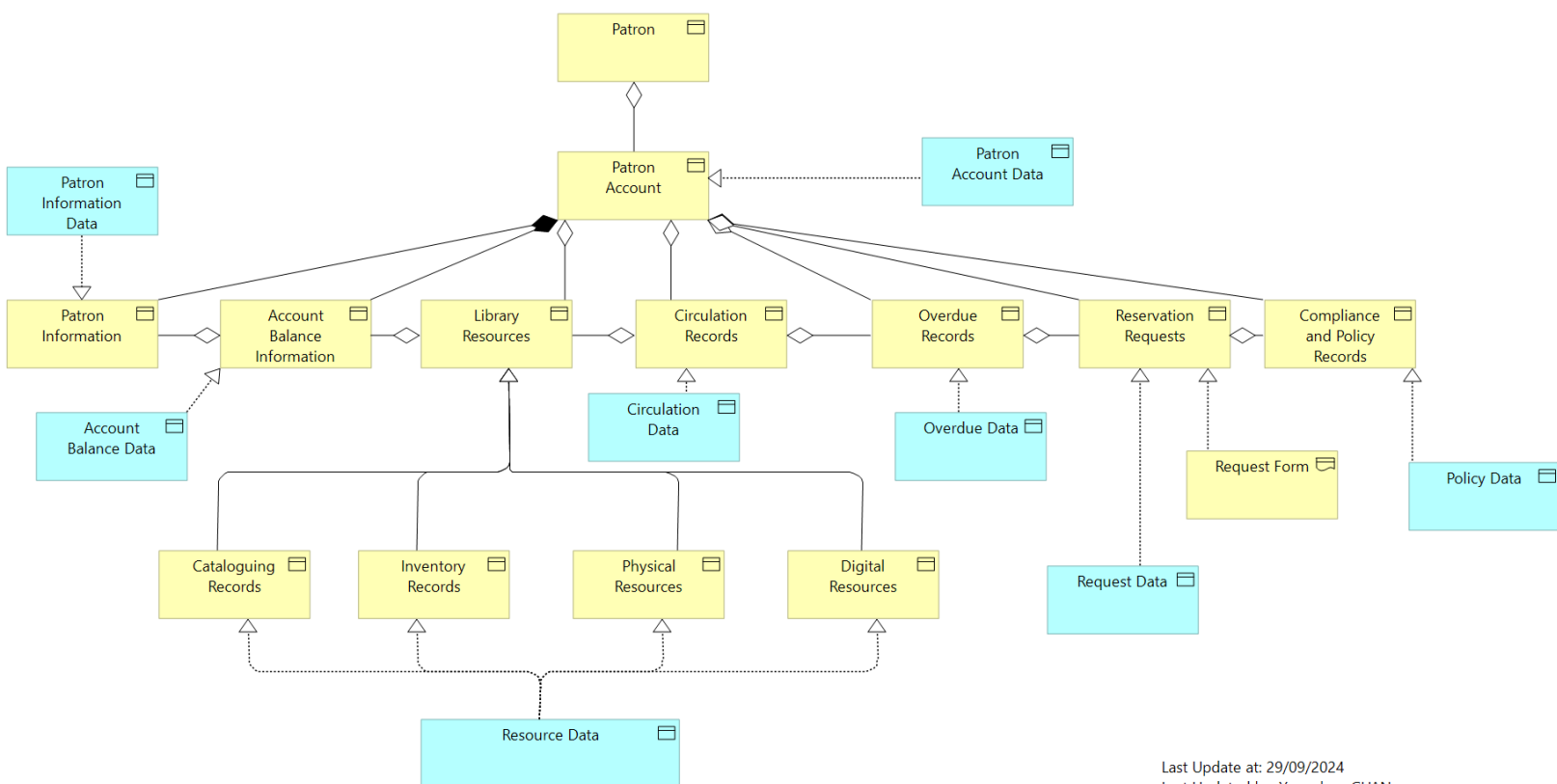


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Information View

The Information View illustrates the flow and interconnection of critical business data elements that support the library's operational efficiency and risk management. The Figure 10 covers Patron Account Data (user details and borrowing records), Library Resource Data (physical and digital resources, cataloguing, inventory), Circulation Records (borrowed and returned items), and Compliance and Policy Records (policy enforcement and adherence). These data points flow through systems such as the Patron Account Management System, Circulation System, and Inventory Management System. Together, these systems support library operations by facilitating resource tracking, patron management, and ensuring up-to-date records across all services.

Figure10_Information



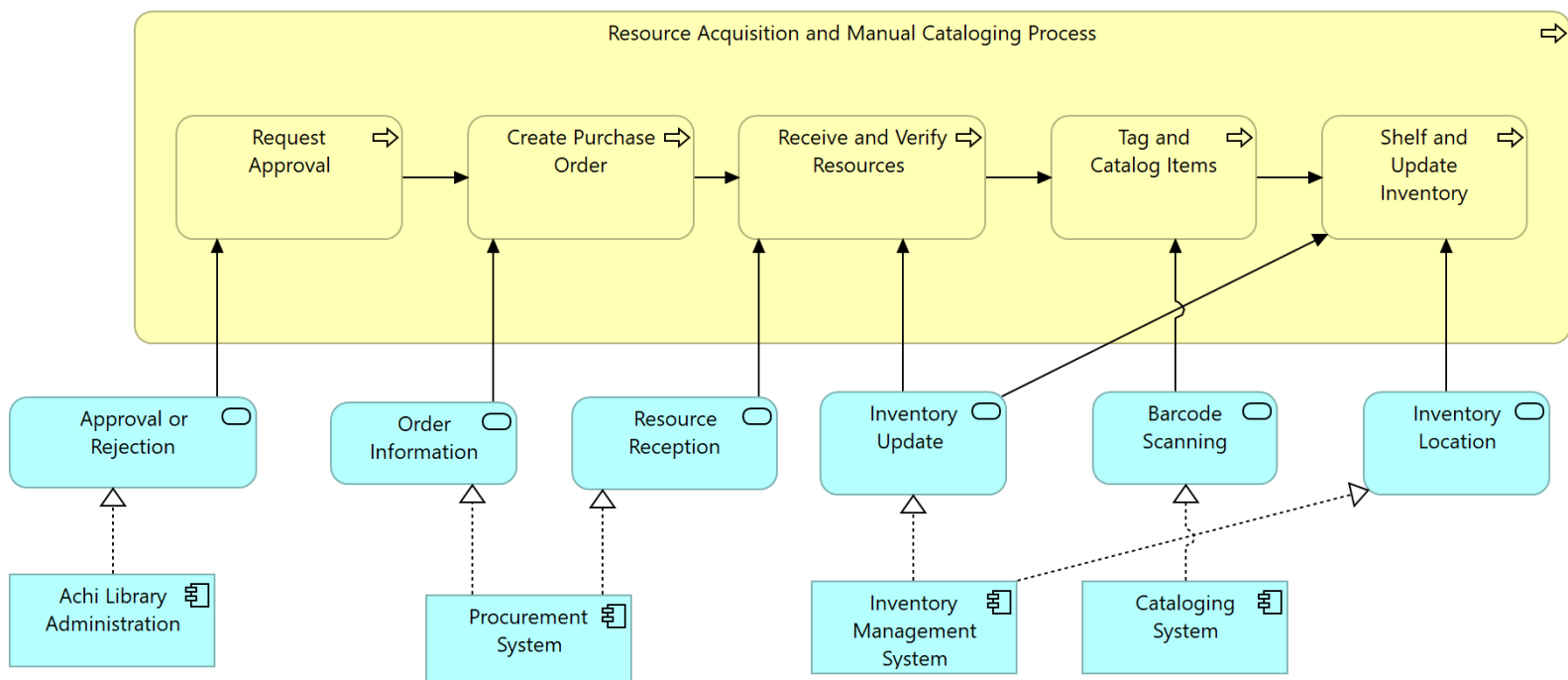
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Application Usage

Application Usage View 01

The Application Usage View illustrates how various systems support the Resource Acquisition and Manual Cataloging Process at Archi Public Library. The key applications in Figure 11 include the *Library Administration* system for approvals, the *Procurement System* for order management, and the *Inventory Management* and *Cataloging Systems* for resource tracking and cataloging. Data flows between these systems to update inventory, location, and catalog information. However, manual interactions create risks like inconsistent data entry and inefficiencies.

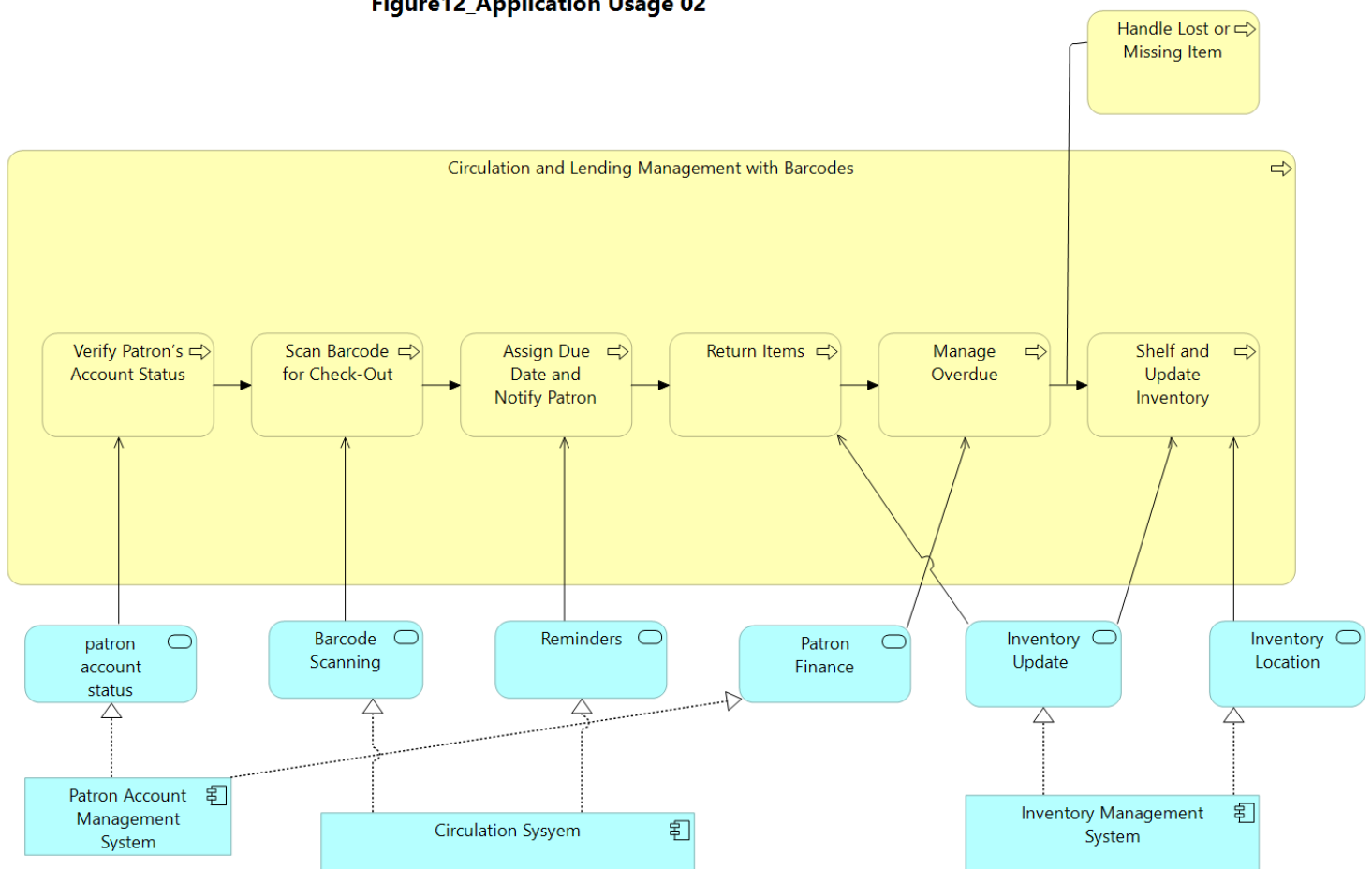
Figure11_Application Usage 01



Application Usage View 02

The Figure 12 depicts how systems support the *Circulation and Lending Management* process at Archi Public Library, utilising barcodes. Key applications include the *Patron Account Management System* for verifying account status, the *Circulation System* for scanning barcodes and managing loans, and the *Inventory Management System* for tracking item locations and availability. Overdue management integrates reminders and patron finance systems for fines. This manual process is prone to errors and inefficiencies due to the lack of automation.

Figure12_Application Usage 02

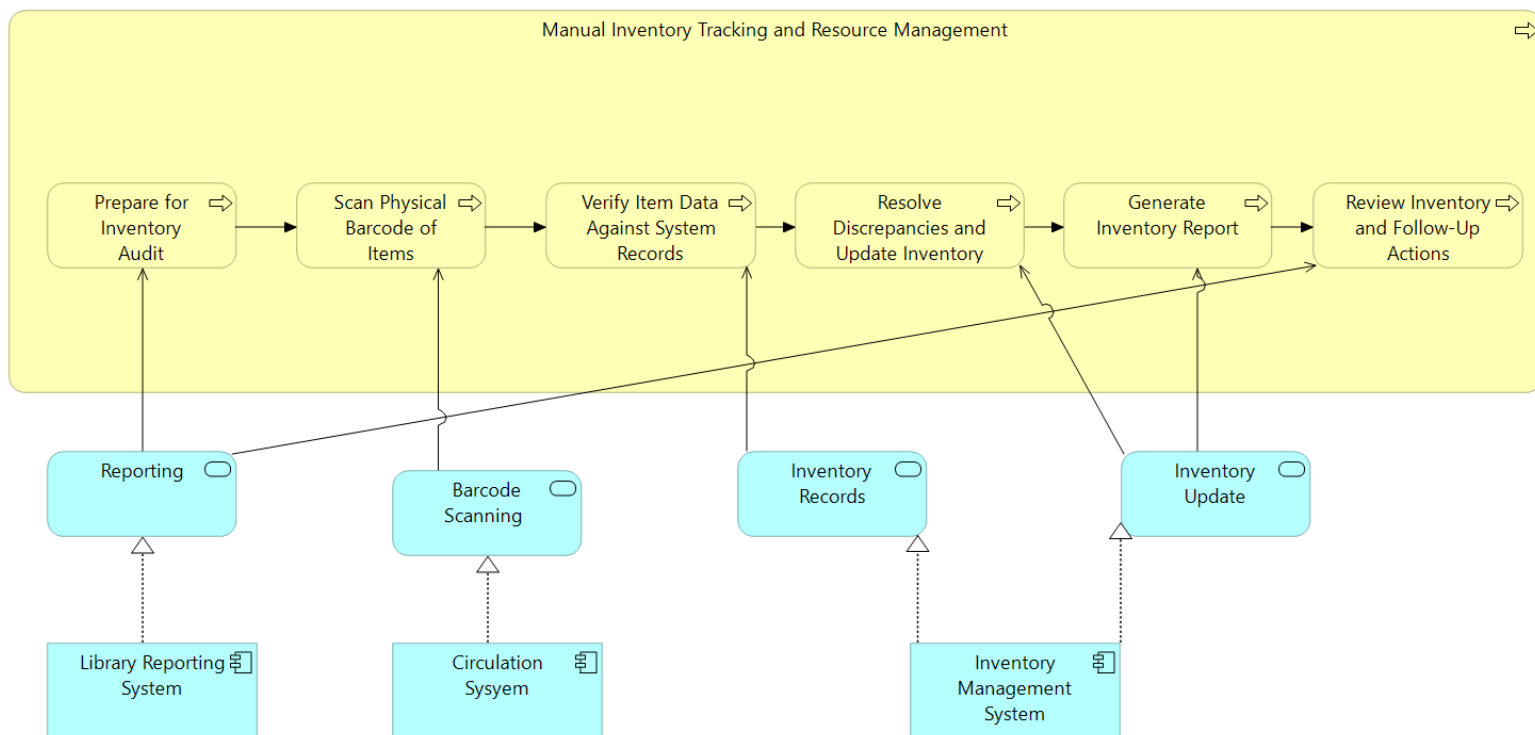


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Application Usage View 03

The Figure 13 illustrates the Manual Inventory Tracking and Resource Management process. Key systems include the *Library Reporting System* for preparing inventory audits, *Circulation System* for barcode scanning, and *Inventory Management System* for updating inventory records. The primary risk associated with this process is the potential for human error during manual scanning and data entry, leading to inaccuracies in inventory records.

Figure13_Application Usage 03

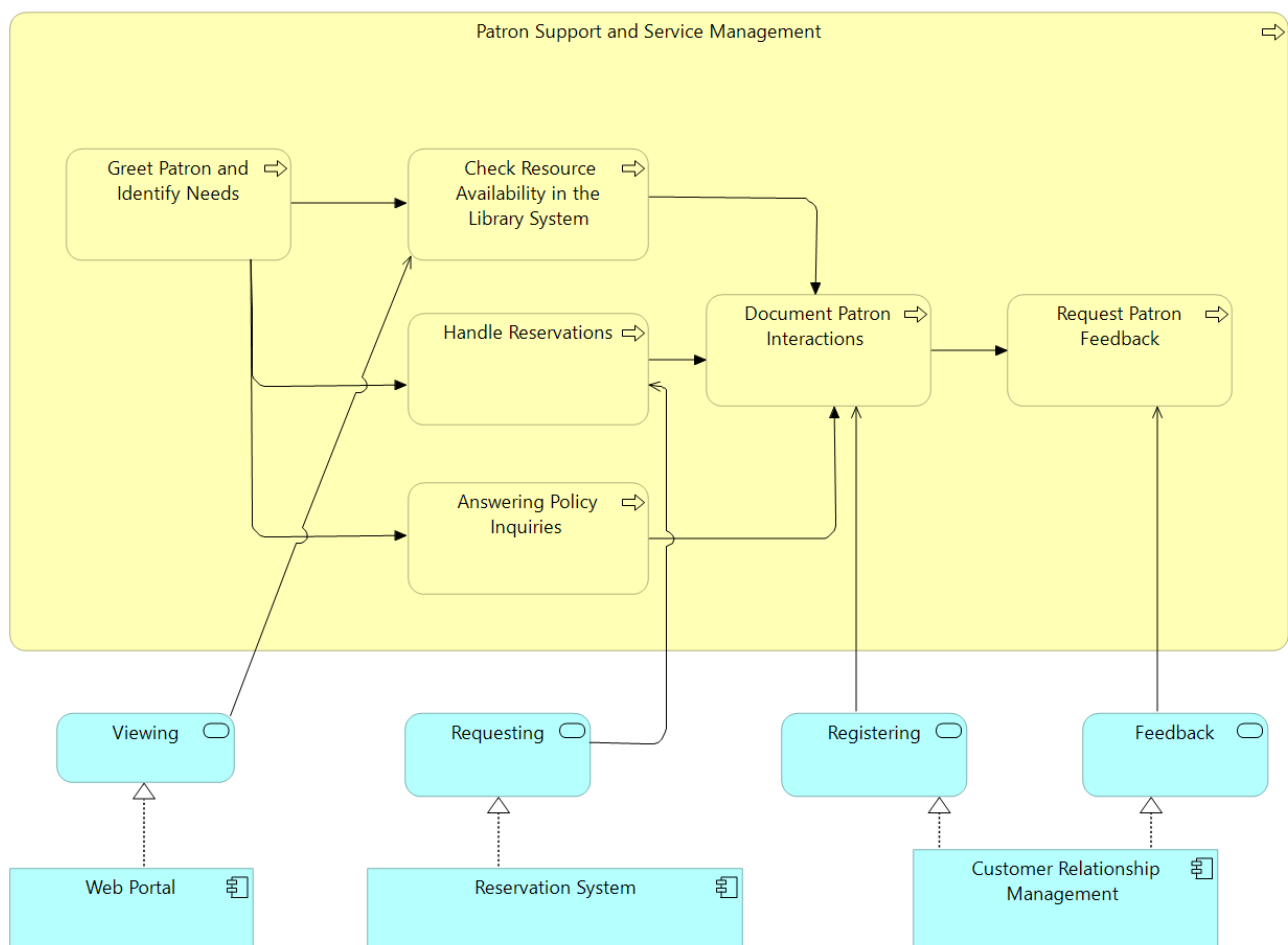


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Application Usage View 04

The Figure 14 focuses on the Patron Support and Service Management process. It involves various systems like the *Web Portal* for viewing, *Reservation System* for managing reservations, and *Customer Relationship Management (CRM)* for feedback and registration. The existing manual and fragmented approach lack integration, resulting in inefficiencies and delays in service delivery.

Figure14_Application Usage 04

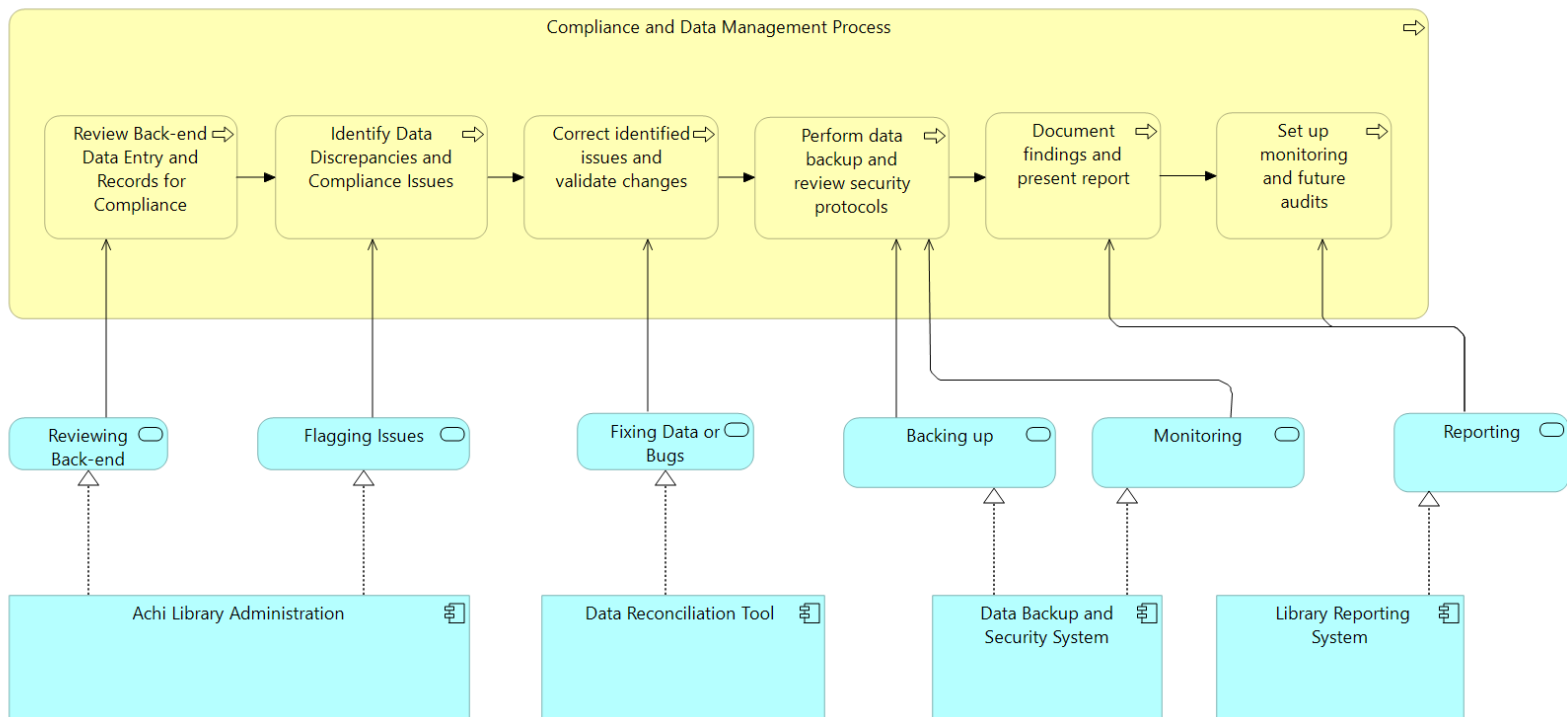


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Application Usage View 05

The Figure 15 includes several key applications for the Compliance and Data Management Process: the *Achi Library Administration System* for reviewing back-end data, a *Data Reconciliation Tool* for fixing issues, a *Data Backup and Security System* for ensuring backups, and the *Library Reporting System* for generating reports. The process ensures that compliance checks are performed, data discrepancies are identified and corrected, backups are completed, and security protocols are followed. Risks include non-compliance with regulations, data discrepancies, and potential data loss, which can be mitigated by regular monitoring and secure backups.

Figure15_Application Usage 05

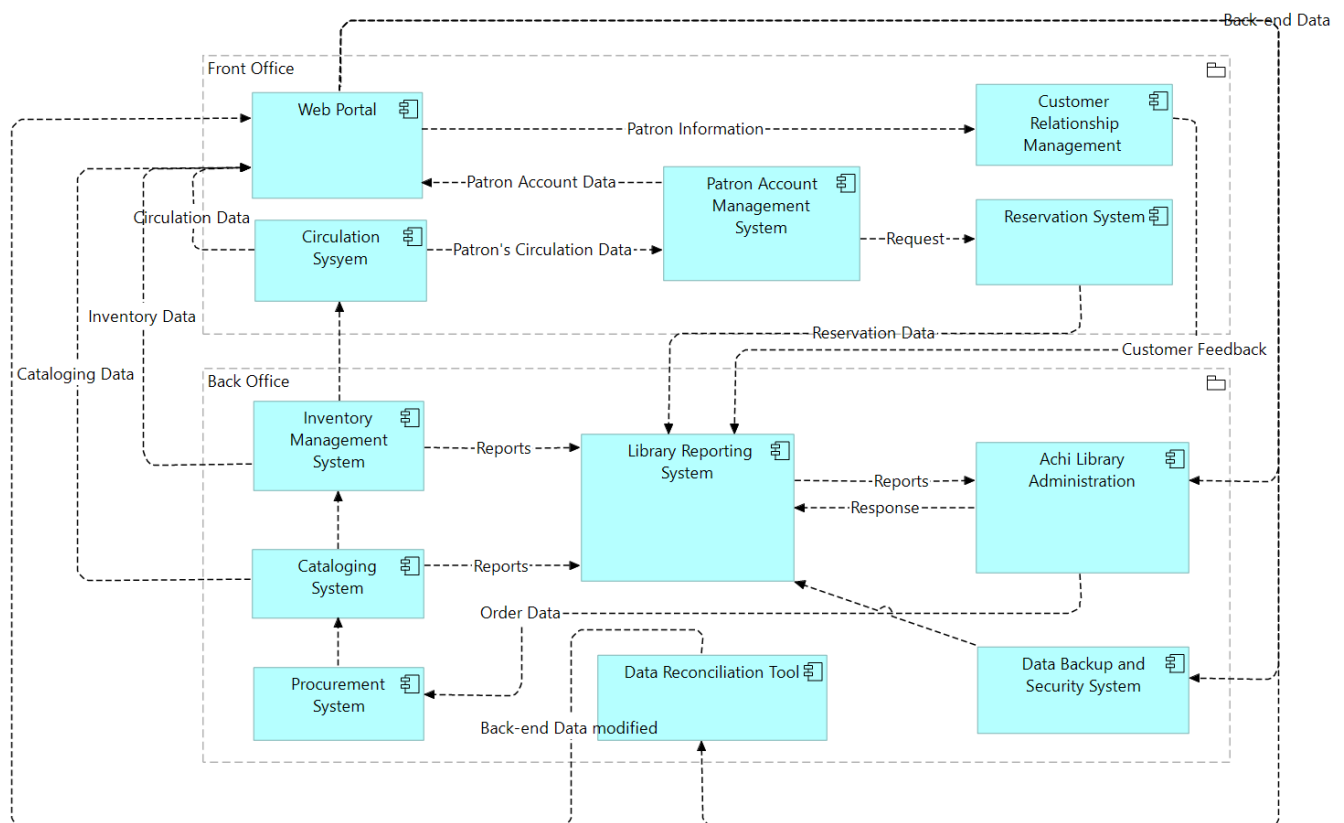


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Application Cooperation View

The Figure 16 demonstrates the integration and interaction between various systems at the Archi Public Library. The key systems involved include the Web Portal, Circulation System, Inventory Management, Patron Account Management, Cataloging, Procurement, Customer Relationship Management, and more. Each system shares data such as patron information, cataloging data, and inventory reports, which flow through the Library Reporting System for oversight. Risks include potential data discrepancies between systems, failure in communication leading to service inefficiencies, and security vulnerabilities when handling back-end data. Mitigating these risks requires proper data governance, secure backups, and regular system audits.

Figure16_Application Cooperation



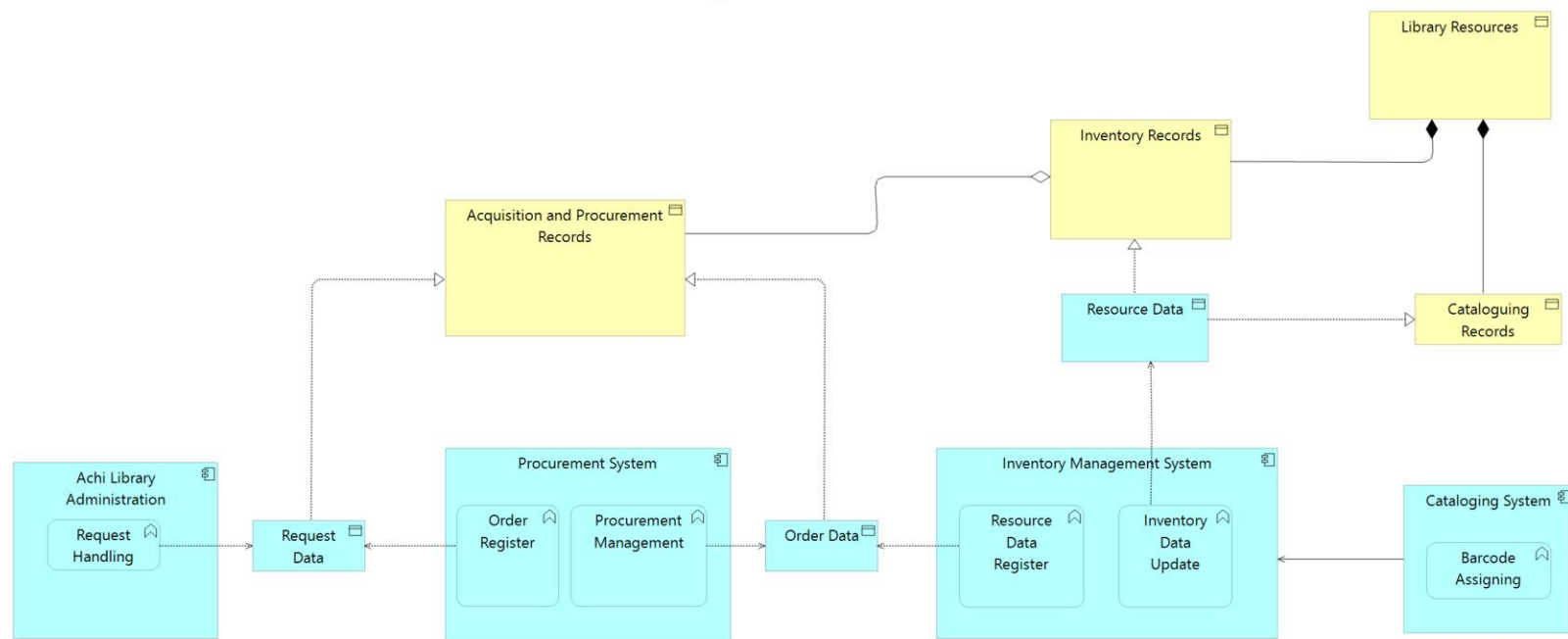
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Data Dissemination

Data Dissemination View 01

Figure 17 outlines how data flows within the Archi Public Library for resource acquisition, inventory management, and cataloguing. It shows the interaction between systems like Procurement, Inventory Management, and Cataloging. Data moves from request handling by library administration, through procurement, and then to inventory management, where updates are recorded. Finally, cataloging records are updated and linked to library resources. Risks include data inconsistencies between systems, delays in procurement updates, and potential misalignment in inventory records, all of which could lead to inefficient resource management and inaccurate cataloging. Mitigation strategies involve implementing real-time data synchronisation and validation checks.

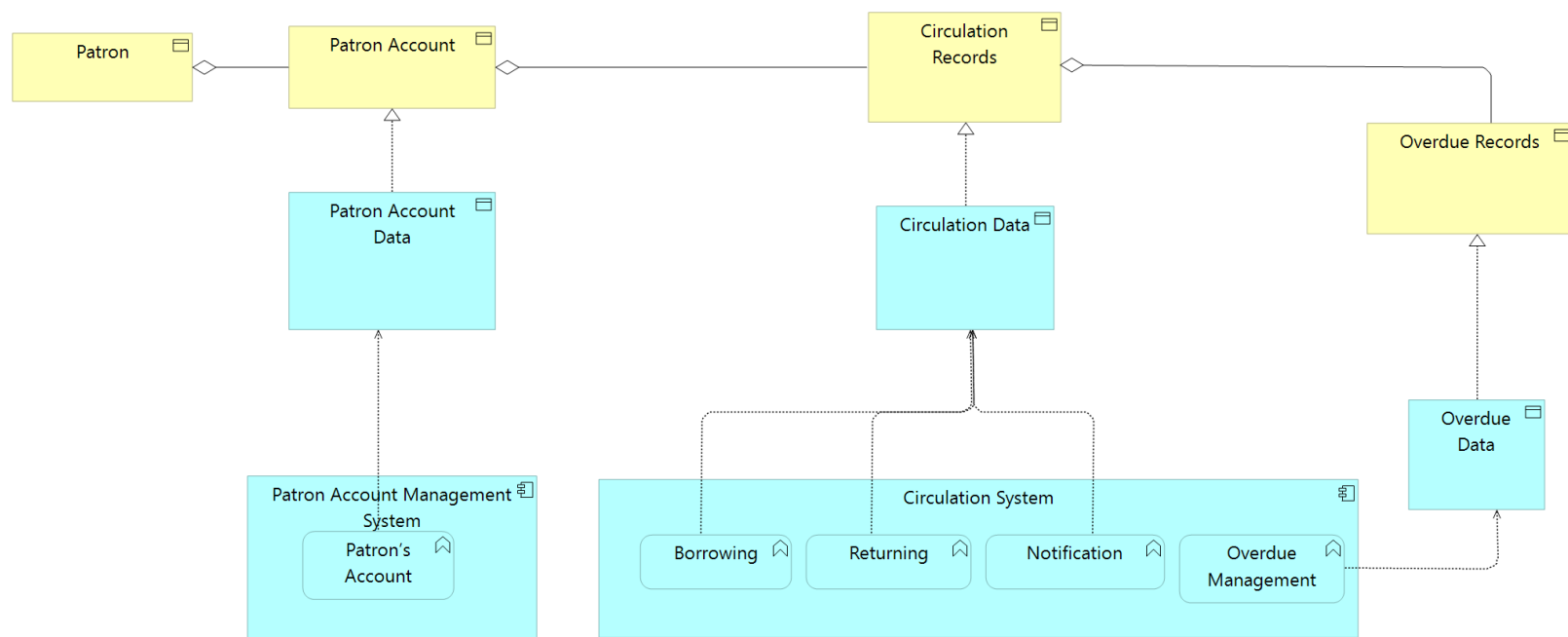
Figure17_Data Dissemination 01



Data Dissemination View 02

Figure 18 illustrates the flow of data related to patron accounts, circulation records, and overdue management. Patron account data is managed through the Patron Account Management System, which feeds information into circulation records and overdue records. The circulation system handles borrowing, returning, and overdue notifications, ensuring accurate tracking of resources and patron activities. Risks include data discrepancies between patron accounts and circulation records, leading to incorrect overdue notices or borrowing restrictions. Inconsistent data updates between systems could also result in patron dissatisfaction. Mitigation strategies involve implementing real-time data synchronisation and error-checking mechanisms to ensure data integrity across systems.

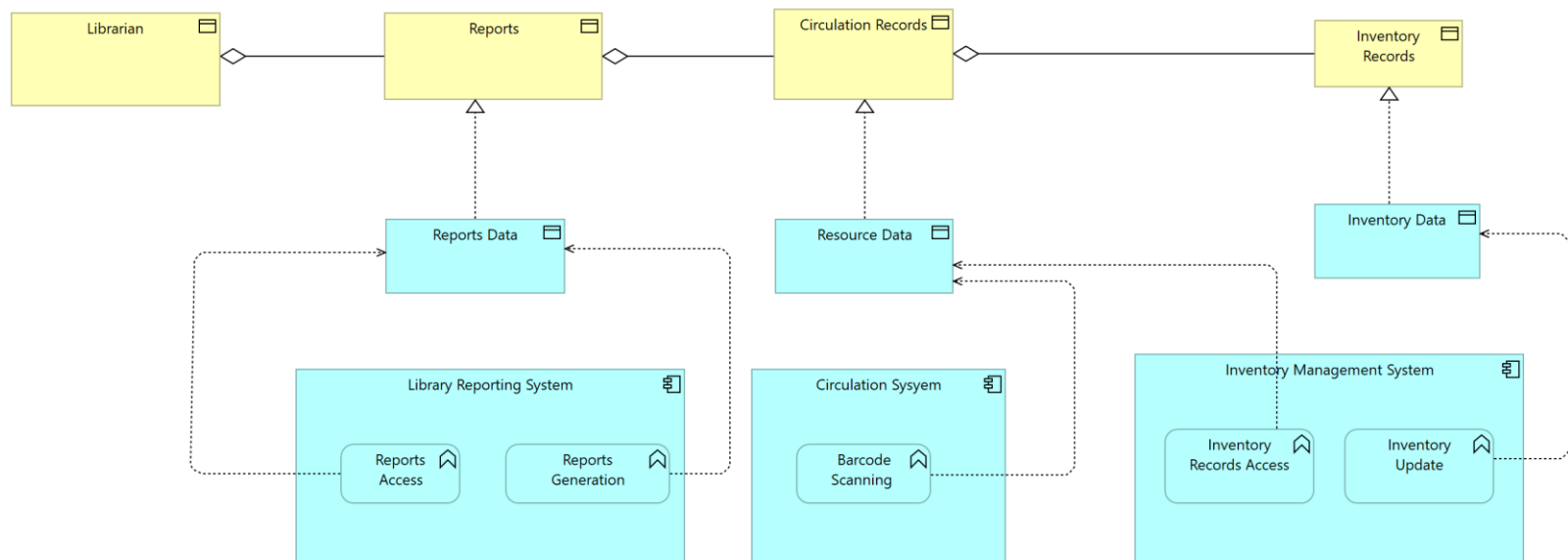
Figure18_Data Dissemination 02



Data Dissemination View 03

Figure 19 illustrates the flow and management of report data, circulation records, and inventory records within the library system. The Library Reporting System consolidates data from both circulation and inventory records to produce comprehensive reports. The Inventory Management System updates and maintains inventory data, while the Circulation System handles barcode scanning and manages circulation records, ensuring accurate tracking of library resources. Manual data reconciliation and integration between these systems pose risks of data inconsistency and reporting errors, potentially impacting decision-making and inventory accuracy.

Figure19_Data Dissemination 03

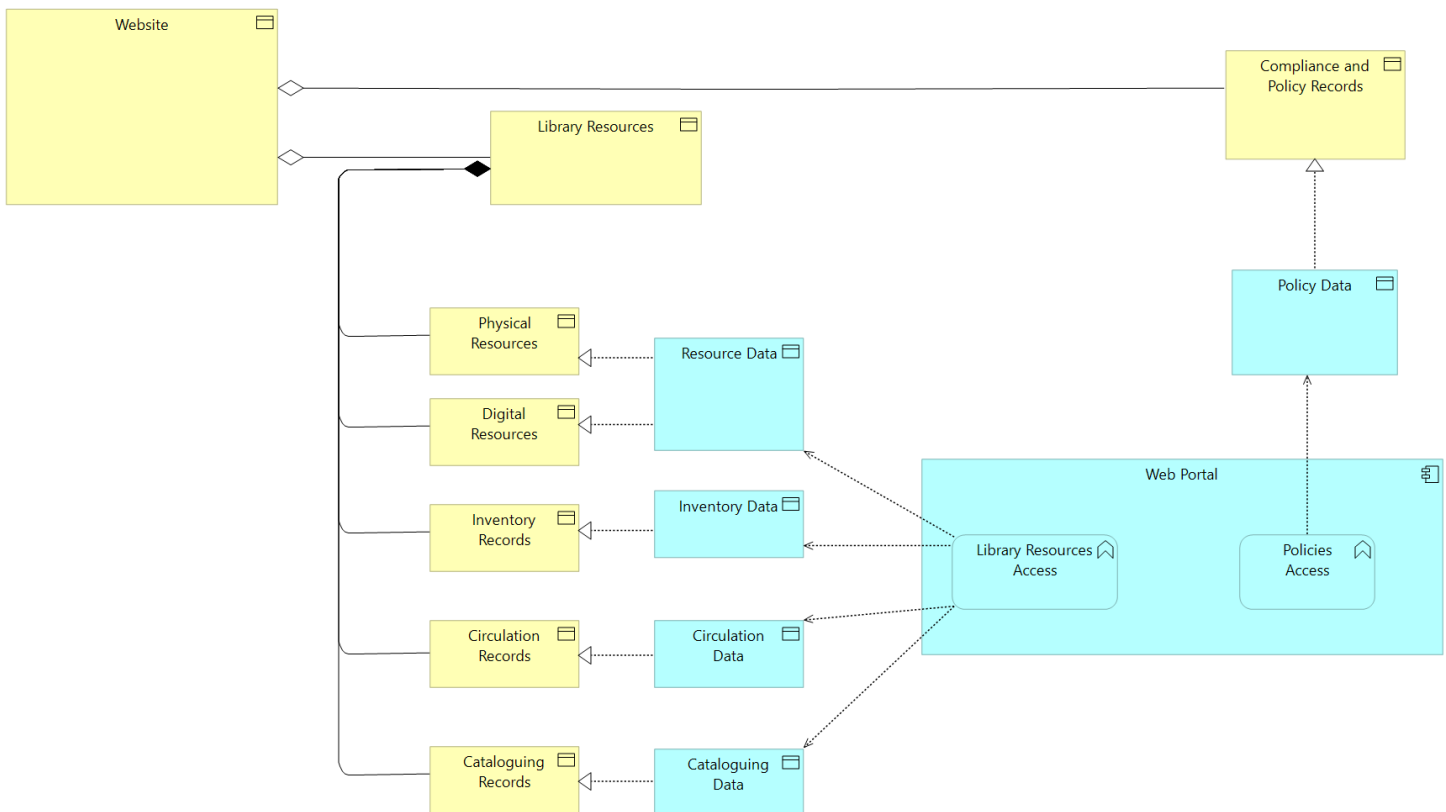


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Data Dissemination View 04

The Figure 20 represents the flow of information within the library's resource management system and web portal. Data from physical, digital, inventory, circulation, and cataloguing records are consolidated into the Library Resource Data repository. The Compliance and Policy Records are also stored and accessed through the web portal. This data is then made available for patron access via the web portal, allowing users to view library resources and policy information. Inadequate data synchronisation across different resource types can lead to inconsistency in resource availability information. Implementing real-time data updates and validation can mitigate these risks and ensure data accuracy for patron access.

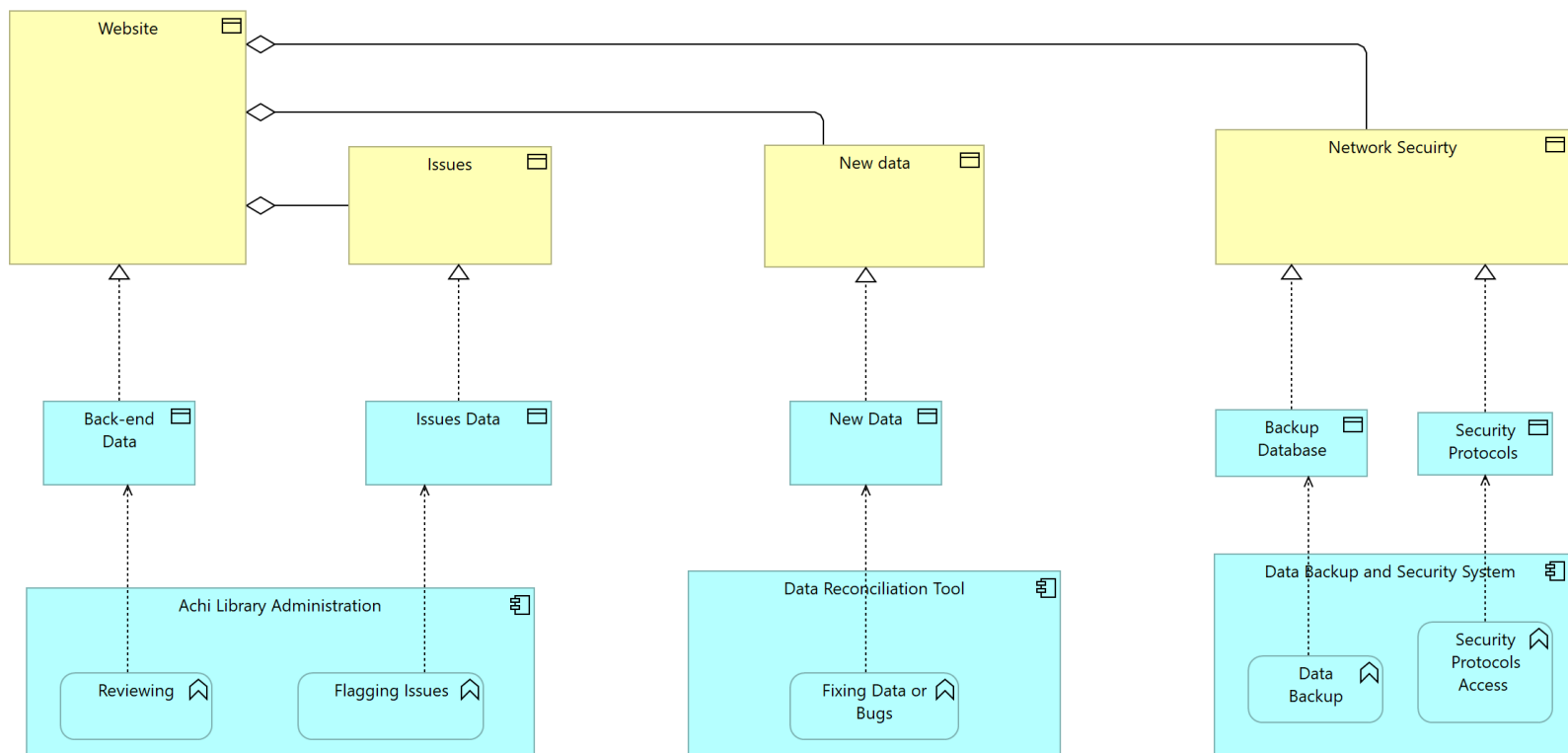
Figure20_Data Dissemination 04



Data Dissemination View 05

The Figure 21 focuses on managing back-end data, addressing system issues, and ensuring data security. Data flow starts from the website and is directed towards managing back-end data and fixing flagged issues. New data is processed through a reconciliation tool, and security measures are in place through a backup database and security protocols. Potential risks include system downtime or data loss due to unresolved issues or ineffective reconciliation. Without robust backup and security protocols, the library's data could be vulnerable to breaches or corruption. Implementing regular backups and monitoring ensures data integrity and system resilience.

Figure21_Data Dissemination 05



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