YEAR AT A GLANCE:
Implementing Manageable, Scalable Annual Reviews

UCW UNIVERSITY CANADA WEST

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Introduction

Beginning in December 2024, University Canada West Library undertook a project to establish infrastructure for a voluntary internal annual review of library services and resources.

While program reviews, annual budget reviews, and biannual highlight briefs from select departments have been well established across the University, internal self-studies by student services departments are not required outside of 5-year program review cycles.

Under the direction of the Library Manager and Electronic Resources & Assessment Librarian, the first annual report was delivered in May 2024. This report serves as a pilot for future years to improve assessment practices and streamline gathering of historical data relevant to cyclical program review periods.

As a result of this project, the Library produced an accessible record of year-over-year growth, created a pathway to demonstrate our value within the institution, and strengthened the culture of assessment among the Library staff.

Goals

- Establish infrastructure for annual review asessment

- Design a template for a shareable brief using data distilled from annual tracking infrastructure

- Prepare for Degree Quality Assessment Board (DQAB) cyclical review

Planning & Implementation

Initial planning entailed:
- Reviewing DQAB standards pertaining to libraries
- Assessing Library strategic goals and KPIs underway/completed
- Looking back on the UCW Library Cyclical Program Review self-study report submitted in 2022

This project builds on existing term-by-term library assessment, adapted for long term annual tracking

Implementation began by reviewing data collection, analysis, and visualization currently in practice and identifying knowledge gaps. We then turned attention to distilling results into a easily digestible report brief.

Data Collection

UCW Library operates primarily in a Microsoft environment and data is sourced and stored through software including: MS Forms (reference transactions and patron feedback), MS Bookings (appointments and instruction), and others. Data is then stored in MS SharePoint cloud-based CMS.

Other data sources include: COUNTER 5 database usage reports, ILS circulation and collection data, and LibraryH3lp chat data, among others.

Data is transferred into static master files (Excel workbooks) for data integrity and protection. Data corrections and other adjustments are made within master files, marked, and tracked in an accompanying sheet for future reference; raw data sources are left unaltered.

While the Library maintains a number of robust data collection processes, a number of limitations exist:

Limitations
Patron counting: Manual headcounts submitted hourly provide limited insight into traffic patterns. A proposal for patron counting devices is awaiting approval.

Data harvesting: Due to IT restrictions, UCW Library cannot automate harvesting of reports generated by third-party vendors through API calls. These reports must be manually downloaded by Library staff.

Data Analysis & Visualization

**Figure 1**: Example dashboard visualizations
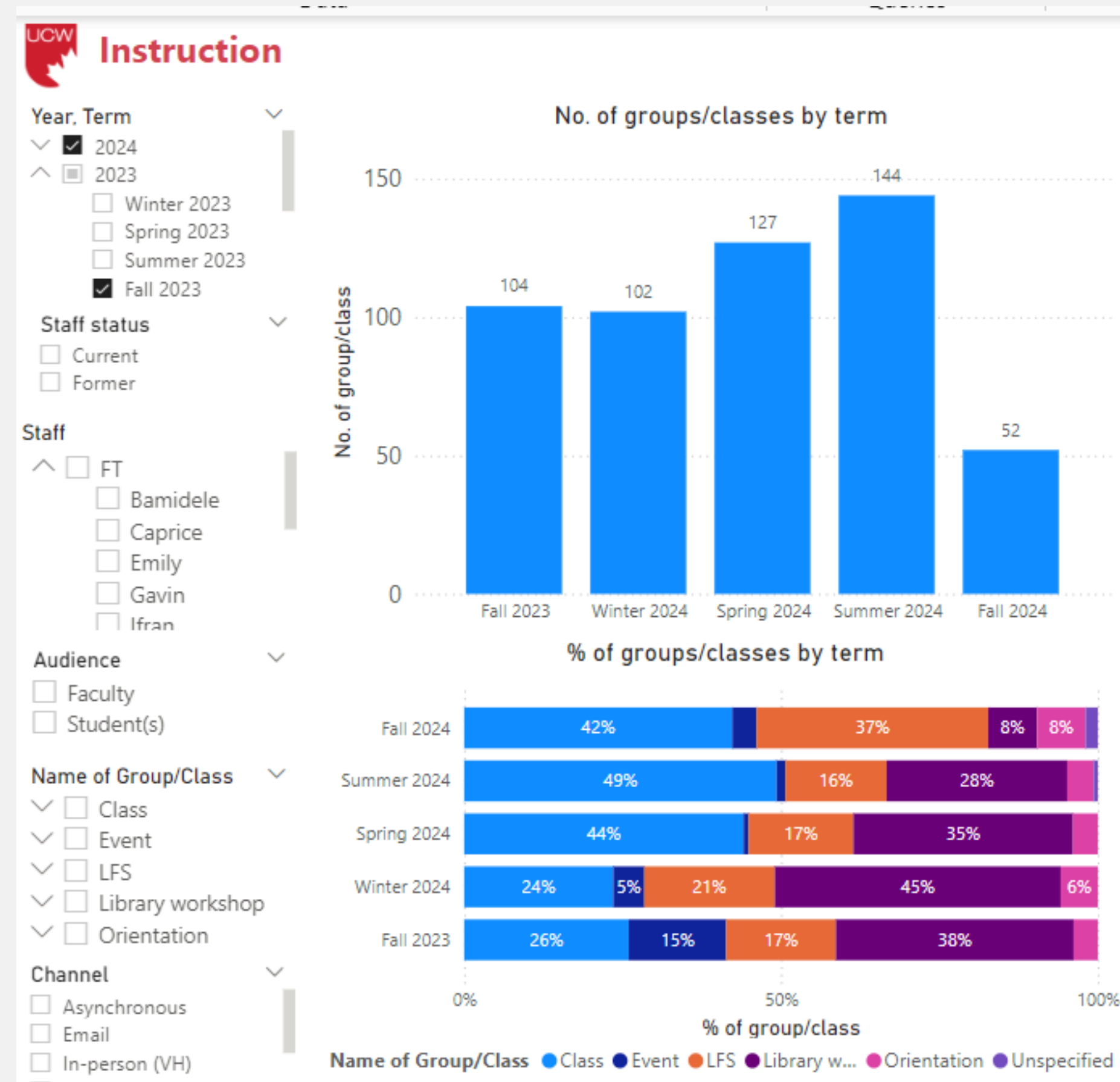
Data master files are transformed, analyzed, and visualized in Power BI business intelligence relational database software.

Manual review and transformations to raw data are needed only to correct data entry errors. On average, optimized library dashboards take 15-20 minutes to update on a bi/weekly to monthly basis. Routine dashboard refreshes can be done by Library staff without in-depth Power BI experience with minimal instruction.

Initial dashboard setup can be time-consuming; however, once scripts and visualizations are established, refreshes to incoming data are automated and continuously adaptable. Updates to master files are enacted immediately on all visualizations once the dashboard is refreshed, making ongoing monitoring manageable.

Figure 2: Example data model for circulation statistics
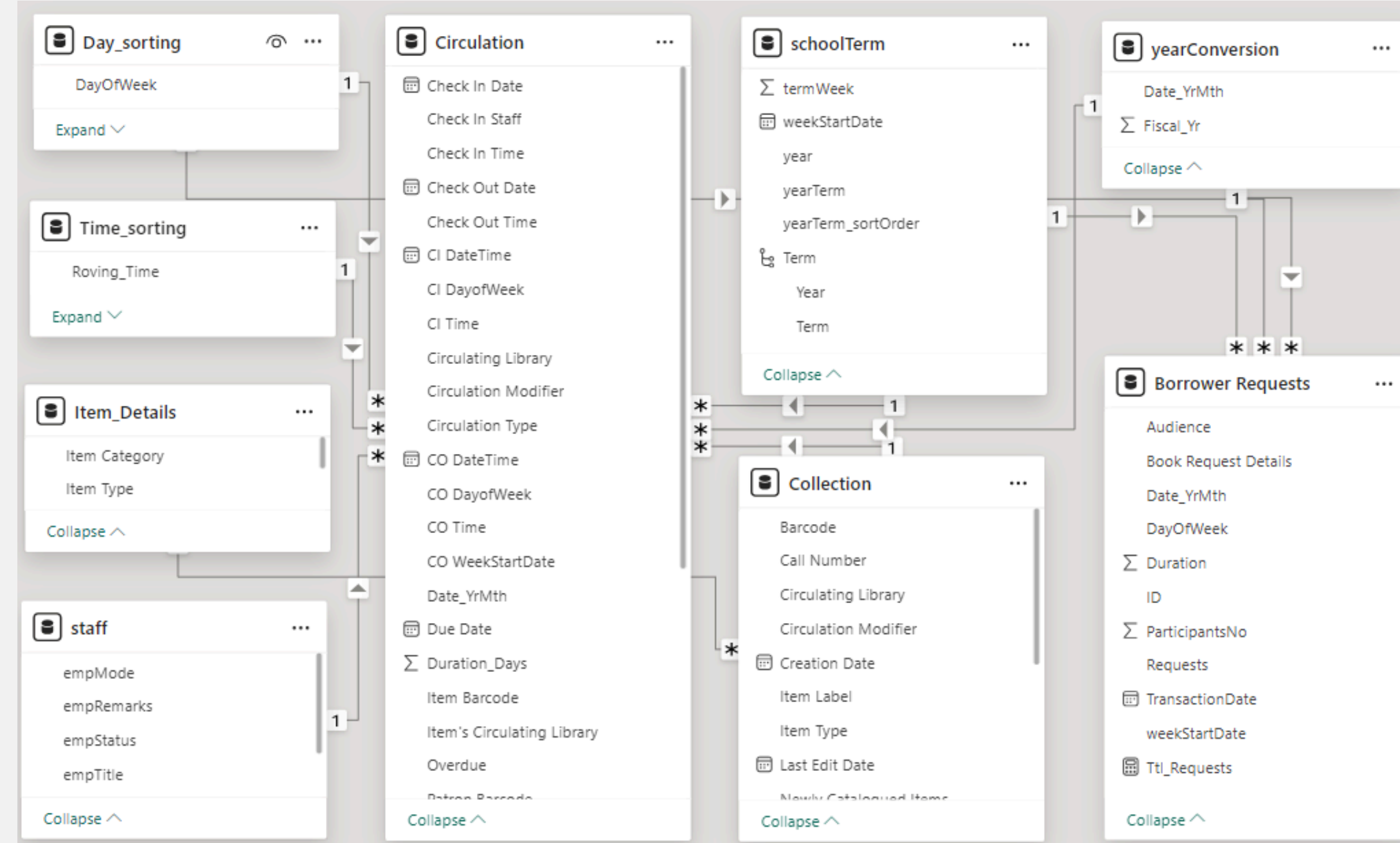
Benefits of Power BI

- Built-in Microsoft integration
- Straightforward data modeling interface
- Ready-made text transformation tools (PowerQuery)
- Widespread user community though Microsoft Fabric forums
- Ease of updates as new data is imported
- Immediate results for continuous monitoring

Development & Final Report

Filling Knowledge Gaps

The most notable knowledge gap identified through this project was the inefficiency of institutional memory. Records of changes in Library staffing, reference resources, classroom integration, electronic resources, etc. has been stored informally or known by only by staff no longer with the Library.

In response to this knowledge gaps, the team has established a log of major changes (or changes since recognized as major) to help explain data anomalies, strengthen institutional memory, and streamline reporting looking back during 5-year cyclical review.
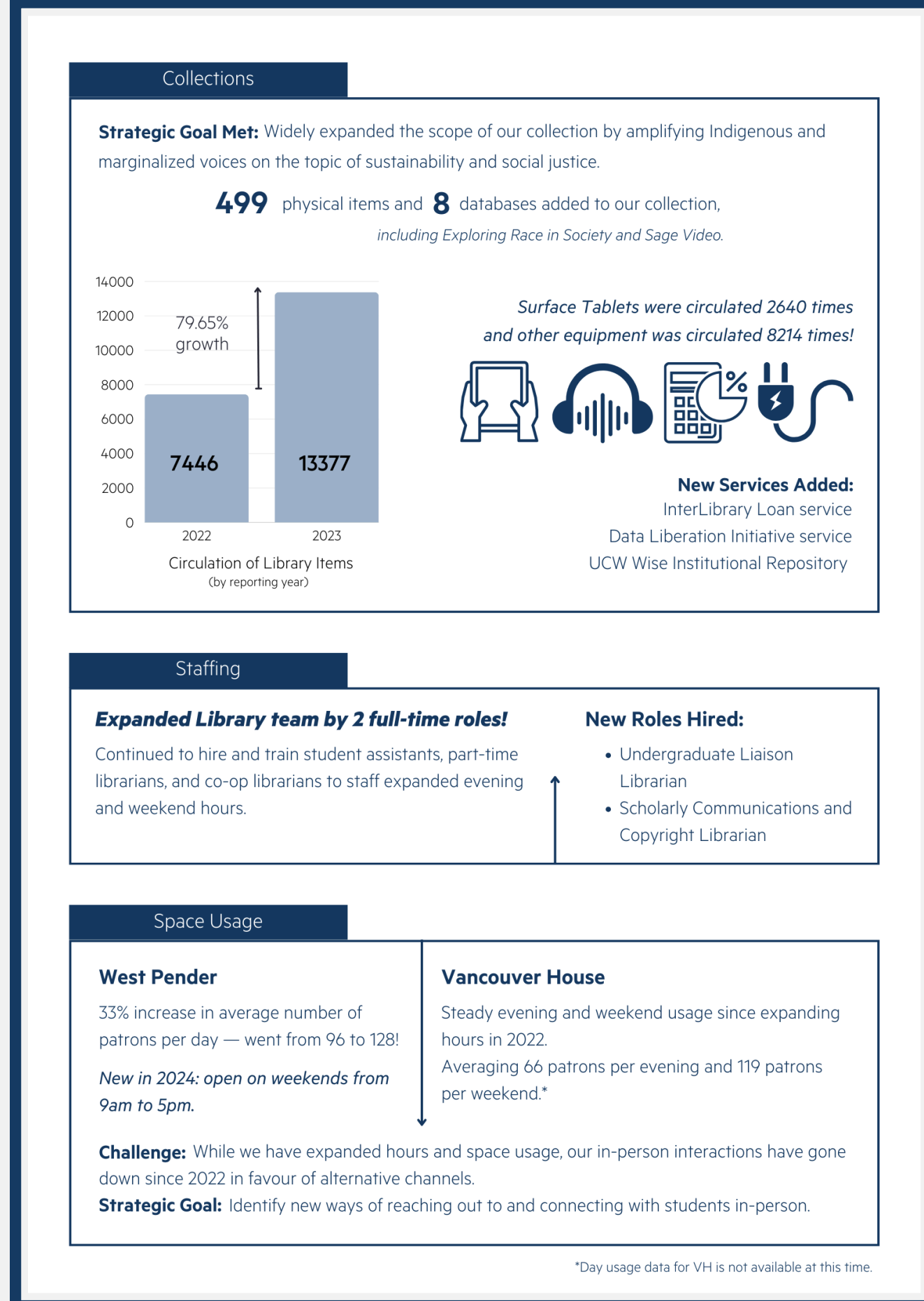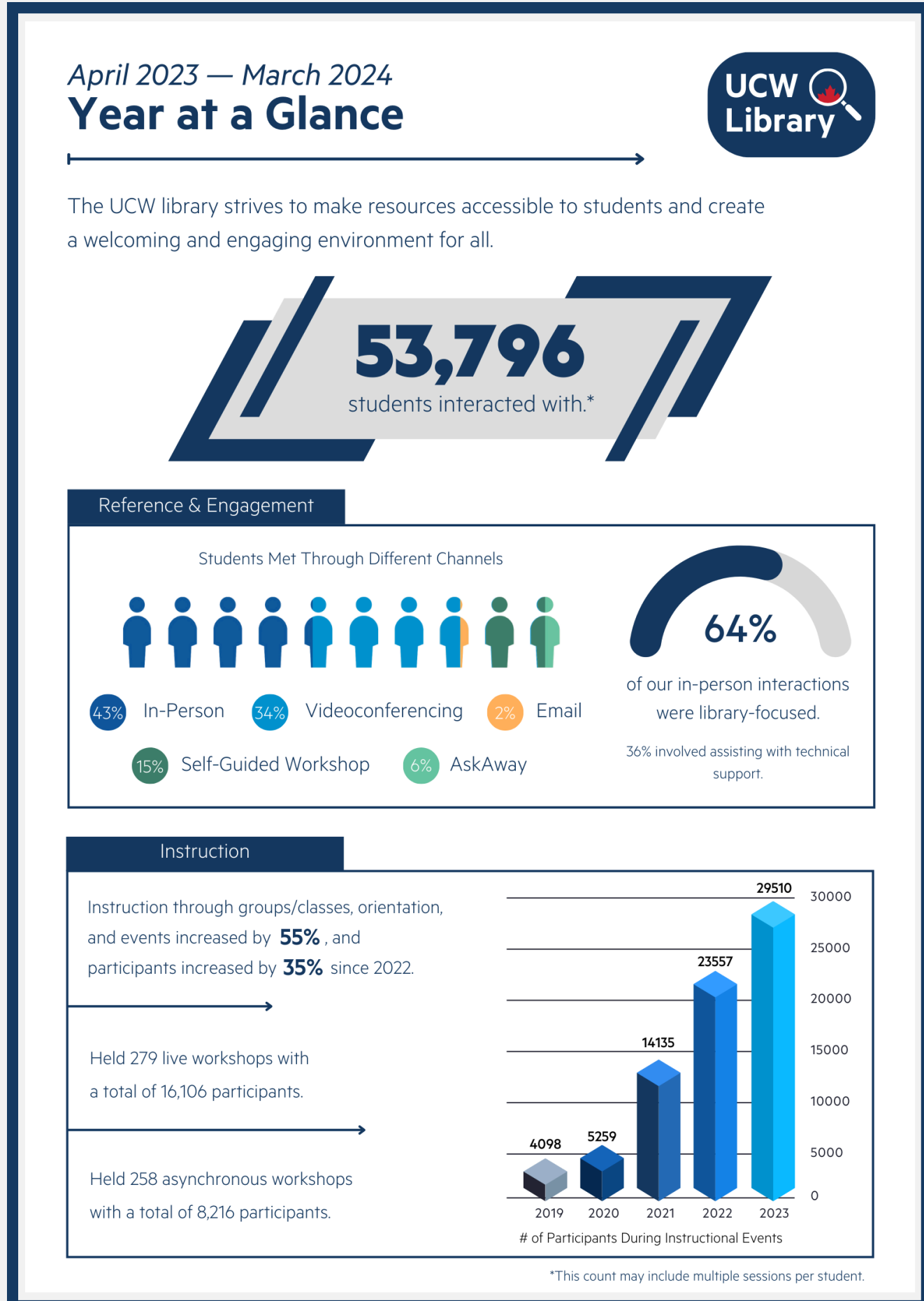
Report Format and Design

Initial attempts were made to develop the annual report as a Power BI dashboard using visualizations and infographic functions within the software. This was determined to be a less-desirable format due to 1) limitations of the tools, 2) audience unfamiliarity with the platform, and 3) the overwhelming amount of data on display.

As an alternative, a static report template was created in Canva. While the data displayed is gathered through dashboard calculations and visualizations, they are distilled into straightforward, bite-sized pieces.

The final annual report emphasizes user-friendliness in design and choice of data represented.

Figure 3: Final draft of Year at a Glance annual report, 2023-24

The report was shared broadly across the institution. Responses have been overwhelmingly positive. Recipients expressed appreciation for the insight into what the library 'does' and the breadth of ways we support students.

Special thanks to Co-Op student librarian Iori Khuhro for report design and data visualization.

Looking Ahead

UCW has seen astronomic growth in enrollment over the past several years, rising from less than one thousand students in 2019 to over twelve thousand in 2024. While growth is expected to stabilize in 2025, this history emphasizes the need to factor scalability into the core design of any library assessment tools.

Best Practices for Scalability

- Import only the data needed; exclude all else
- Divide data across multiple dashboards to reduce size and complexity of a single import
- Focus on maintaining backwards compatibility when enacting changes to data collection processes
- Optimize data transformations to reduce load
- Log when changes were enacted

Next Steps

As a pilot, the 2023-24 Year at a Glance report will serve as a template for the follow-up report in 2024-25.

The Library will continue to refine data processes and improve on the report based on user feedback.

Future Goals

- Integrate staffing and staff KPIs into annual reporting
- Improve patron traffic data collection
- Refine reference statistics categories and reporting on qualitative data
- Highlight patron feedback into annual reporting