

BiblioCon 114· Berlin, 2026

From Passive Usage into Actionable Insights

A Case Study in Data Analytics from the Bibliotheca Alexandrina (BA)

Submitted by: Almoataz Gad Elkarim · Acting Head, Data Collection & Analysis

Bibliotheca Alexandrina, Alexandria, Egypt. almoataz.gad@bibalex.org

Funded by **Bibliothek & Information International (BII)** — **BI-International Exchange Programme**

Event	BiblioCon 114 — Annual German Library Congress
Location	Berlin, Germany
Date	2026
Presentation	From Passive Usage into Actionable Insights A Case Study in Data Analytics from the Bibliotheca Alexandrina (BA)
Published Presentation	https://opus4.kobv.de/opus4-bib-info/frontdoor/deliver/index/docId/20051/file/Almoataz_Gad_Strategically.pdf

01 Introduction

This report is submitted in fulfillment of the grant conditions of the **Bibliothek & Information International (BII)** Exchange Programme, which supported my participation in **BiblioCon 114** held in Berlin in 2026. The conference, organized by Bibliothek & Information Deutschland (BID), is the premier annual congress for the German-speaking library and information community, drawing participants from across Europe and beyond.

I participated as a presenting speaker in the session "*Use Data Strategically*", delivering a 20-minute case study followed by a 10-minute open discussion. The BII grant enabled my active international contribution to this event and provided invaluable professional exchange opportunities with colleagues from Germany and other countries.

02 The Presentation

Background and Problem Statement

At the Bibliotheca Alexandrina, borrowing privileges are restricted to registered researchers. The general public, the majority of daily visitors, uses materials entirely within reading halls, leaving no trace in the circulation system. This creates a critical data gap: thousands of items are consulted every week, yet none of this activity appears in traditional library statistics. Decision-making based solely on circulation logs therefore reflects an incomplete and potentially misleading picture of actual patron behavior and collection demand.

Methodology

Rather than investing in expensive smart-shelving infrastructure, the BA implemented a **lean, privacy-first BI pipeline** using existing RFID handheld scanners. The workflow consisted of five stages:

- **RFID Scanning** — Timestamped scan logs from three scanning stations using a custom mobile app
- **CSV Export** — Monthly data batches exported from scanning devices
- **Metadata Enrichment** — An ICT-developed web application linking scan records to bibliographic data (title, subject, language, call number, floor level)
- **Consolidation** — Google Sheets with Apps Script auto-merging data from three devices into a single database
- **Visualization** — Google Looker Studio live dashboard with interactive filters for real-time analysis

Critically, the system is **item-centric only** — scans are completely unlinked from user profiles, ensuring full compliance with patron privacy principles.

Key Findings

130,693 Total Usage Events	12 Months of Data	~10,500 Avg. Scans / Month	6 Floor Levels Tracked
--------------------------------------	-----------------------------	--------------------------------------	----------------------------------

Temporal patterns: Peak usage occurred in October (32,629 scans) and November (24,889 scans), closely following the academic calendar. A notable secondary peak in July (11,330 scans) revealed significant summer demand — previously undetected. This enables staff deployment and reshelving planning three months in advance.

Language preferences: Arabic dominates at 64.4% (84,243 scans), followed by English at 25.1% (32,875), French at 5.7%, and Spanish at 2.0%. These findings directly challenge assumed acquisition priorities and provide an evidence base for budget reallocation.

Subject demand: Top-consulted areas included Modern Arabic Fiction & Literature (DDC 892.736–892.737), History of Ancient Egypt (DDC 932), and Islamic Studies & Sources (DDC 297.14) — none of which was visible in circulation data.

Floor-level activity: Level B2 (Arabic humanities) was the busiest floor, followed by Level F1 (Literature & History) and the Entry Level (mixed browsing). Cross-referencing DDC subjects with floor locations creates an actionable map of patron interest zones.

Impact and Replicability

The project demonstrated that libraries do not require expensive infrastructure to understand their users. The entire BI system was built on **existing RFID hardware, Google Sheets, and Looker Studio at zero additional cost**. The presentation concluded with a replicability checklist confirming that any library with RFID scanners, an ILS, and Google Sheets access can implement this model immediately.

03 Conference Experience and Key Takeaways

BiblioCon 114 provided an exceptional environment for professional exchange. As one of the largest library congresses in Europe, it brought together practitioners, researchers, and policymakers working across the full spectrum of library and information science. Several dimensions of the experience stand out as particularly valuable:

Data-driven library management is a growing global priority

Multiple sessions across the conference confirmed that the shift from passive data collection to active analytical practice is a shared challenge for libraries worldwide. The BA's case study resonated strongly with international colleagues facing similar constraints.

Low-cost solutions attract significant interest

The replicability framing of the presentation — emphasizing that the entire pipeline costs nothing beyond existing infrastructure — generated the most engagement during the open discussion. Colleagues from smaller institutions expressed particular interest in adopting the model.

Privacy-first design is a non-negotiable expectation

The GDPR environment in Germany reinforced the importance of item-centric (non-user-linked) scanning. The BA's approach was well-received as a model that balances analytical depth with ethical data practice.

International networking

The conference offered valuable opportunities to connect with library professionals from Germany and other countries, exchange methodologies, and explore potential future collaboration — directly serving the mission of BII's exchange programme.

04 Professional Value and Institutional Impact

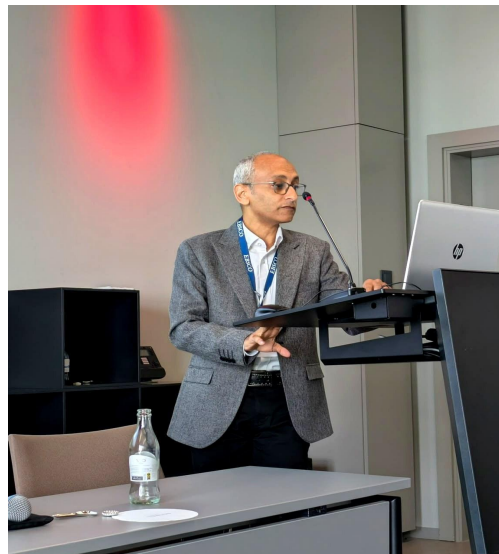
Participation in BiblioCon 114, made possible through BII's generous support, delivered measurable professional value at both the individual and institutional levels:

- International visibility for the Bibliotheca Alexandrina's data analytics works on a European stage
- Validation of the BA's lean BI methodology by peers from well-resourced library environments
- Direct exposure to current European practice in digital collections, open access, AI in libraries, and community engagement
- Strengthened motivation and concrete ideas for expanding the BA's data analysis programme

The key takeaway from BiblioCon 114 — that *"Libraries do not need expensive infrastructure to understand their users — they need the right workflow to listen to the data they already collect"* — was affirmed by the international response to the presentation and will continue to guide the BA's data strategy going forward.

05 Acknowledgement

This participation was made possible through the financial support of **Bibliothek & Information International (BII)**, the standing committee of Bibliothek & Information Deutschland (BID), under the Exchange Programme "*Foreign Library Experts to Germany (AnD)*". The author is sincerely grateful to BII for enabling this international professional exchange and for its continued commitment to fostering global library cooperation.



The author presenting at the session "Use Data Strategically", BiblioCon 114



The author at the BiblioCon 114 official banner, Berlin, May 2026

© Almoataz Gad Elkarim, CC BY-SA 4.0