

KLISC 2026 Biennial Workshop - 20th - 22nd May 2026 - Alpha University, Beirut

# Monitoring and Assessing E-Resources Utilization

Evidence-based Approaches to Demonstrating Value and Return on Investment, and Data-Driven Decision-Making

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**KLISC**  
Mission: facilitating access to knowledge & info

Workshop Focus  
COUNTER 5, cost-per-use, dashboards, renewal decisions

Visual: A photograph of a group of people standing in front of a building entrance.

Strategic Context

## Why E-resource Assessment Matters

Evidence-based library management is now essential for demonstrating value and making informed resource decisions

- Rising subscription costs**  
Annual increases outpacing budget growth
- Underutilized resources**  
Only 20% of databases actively used
- Budget pressure**  
Accountability to stakeholders
- Standardized evidence**  
Need for COUNTER 5 metrics

**Cost-per-Use Comparison**  
Database performance analysis

ScienceDirect	€100 downloads	\$0.44
Low-use DB	100 downloads	\$15.00

→ 33x higher cost-per-use

From prestige-based renewals to evidence-based decisions

Discussion Prompt  
"Would your institution renew a database with low usage but high prestige?"

Executive Takeaway  
Cost per-use does not decide alone — but it quickly signals what to renew, promote, renegotiate, or renew.

Workshop example adapted from source dash data

Session Outline & Outcomes

## Learning Outcomes & Agenda

A comprehensive roadmap for library leaders and practitioners across KLISC institutions to move from raw data to strategic decisions.

- Why utilization evidence matters
- COUNTER 5 essentials
- Harvesting via vendor portals and SUSHI
- Interpreting key metrics and spotting underuse
- Cost-per-use and ROI calculations
- Presenting renewal or cancellation recommendations

Strategic Context

## Why Usage Matters

- Rising subscription costs
- Budget constraints
- Accountability demands
- Shift to evidence-based librarianship
- Need to demonstrate value

Usage evidence links library spending to institutional outcomes.

Workshop Framing

# Are we investing in the right resources for our users?

This session builds the evidence needed to answer that question.

Core Concepts

## What is Usage Data?

- Downloads**  
Count of full-text items successfully retrieved by users.
- Sessions**  
Continuous periods of user activity within a single platform.
- Turnaways**  
Access denied due to concurrency limits or lack of subscription.
- Searches**  
Queries performed across databases or platform interfaces.
- Article views**  
Number of times an abstract or HTML full-text is rendered.
- Requests / Investigations**  
Expressions of interest or actual delivery of content.

Usage data becomes decision-ready when standardized and interpreted in context.

### Market Context

## The E-resource Reality in Academic Libraries

#### Resource Spending Allocation

**E-resources** **Print**

\*Illustrative workshop input

#### 10-Year Trend: Digital Subscriptions vs. Print Spending

**Digital Subscriptions** **Print Acquisitions**

**Libraries are increasingly judged by access, usage, and impact — not collection size alone.**

### Kenyan Context

## KLISC and the Kenyan E-resource Ecosystem

**Rift Valley** **Western** **Central** **Nairobi** **South Eastern** **Coast**

\*Subsidiary institutional/department — not to scale

**Established 2003**  
Access to digital content to knowledge & info

**146 Members**  
From 2014 CIP, institutional list

**EIFL Partner**  
Working in Africa since 2008

#### Data-Driven Ecosystem Flow

**Libraries, Faculty, Students & Researchers** → **Evidence for Decisions**

Research-4Life and other partnerships expanded this access ecosystem.

Sources: KLAS or Ken EIFL Kenya page, EIFL KLISC member institutions, 2024 PDF.

### Workshop Example

## Illustrative Institutional Scenario

**Sample scenario for workshop discussion:** A university may spend KES 12–20 million annually on e-resources, yet some databases record minimal usage.

DATABASE	ANNUAL COST	DOWNLOADS	COST PER USE
ScienceDirect	\$20,000	45,000	\$0.44
Low-use Database	\$12,000	800	\$15.00

**Can libraries justify expensive subscriptions without evidence of usage?**

Your team should first compare figures with other open access journals and COUNTER usage data to reveal local review priorities.

\* Illustrative data adapted from course deck for workshop training purposes — not a sourced national statistic.

### Institutional Reality

## Why E-resource Monitoring Has Become Critical

CHALLENGE	INSTITUTIONAL IMPACT
Rising subscription costs	Budget pressure
Low awareness	Underutilization
Duplicate subscriptions	Wasteful expenditure
Limited analytics	Weak reporting

→ **Monitoring converts scattered vendor data into evidence for action.**

### Value & ROI

## Understanding ROI in Libraries

$$ROI = \frac{\text{Benefits} - \text{Costs}}{\text{Costs}} \times 100$$

DATABASE	ANNUAL COST	DOWNLOADS	COST PER USE
Database X	\$15,000	25,000	\$0.60
Database Y	\$12,000	1,200	\$10.00

**Database X demonstrates stronger value.**

Database Y requires review, promotion, renegotiation, or cancellation analysis.

### 15-Minute Activity

## Guided Workshop Exercise

1. Review a sample COUNTER report 01
2. Compute cost-per-use metrics 02
3. Identify underperforming resources 03
4. Decide: Renew, Promote, Review, or Cancel 04
5. Prepare a one-minute recommendation 05

Dataset: Sample workshop data for training purposes only.

### Value & ROI

## Example of Cost-per-use Analysis

**Cost-per-Use = Annual Subscription Cost ÷ Annual Full-Text Request**

Calculated per resource to establish an evidence-based value benchmark.

\*Simple workshop slide for training

RESOURCE	ANNUAL COST	ANNUAL REQUESTS	COST PER USE
Database A	\$20,000	45,000	\$0.44
Database B	\$15,000	15,000	\$1.00
Database C	\$12,000	2,400	\$5.00
Database D	\$10,000	500	\$20.00

**Data-Driven Actions:**

- Review:** High use demonstrates strong institutional value.
- Promote & Train:** Mid-tier usage reveals untapped potential.
- Review / Cancel:** High cost-per-use triggers critical evaluation and possible renegotiation.

Note: Actual decisions should combine cost-per-use with strategic relevance, curriculum alignment, and access denied evidence.

### Workshop Discussion

## Why Are Our Databases Underused?

01 Google dependency

02 Limited information literacy

03 Weak faculty collaboration

04 Remote access hurdles

05 Connectivity constraints

06 Low marketing & awareness

**Discussion Focus:** In your experience, what are the top reasons for low e-resource utilization in African universities, and what interventions could change the trend?

### Ecosystem Context

## Research4Life Ecosystem

Providing institutions in lower-income countries with online access to academic and professional peer-reviewed content.

**Quality Content**

Online access to academic & professional peer-reviewed resources.

**Global Reach**

Supporting institutions across lower- and middle-income countries.

**Broad Impact**

Improving teaching, research & policy in health, agriculture & sciences.

**Core Programs:**

HINARI
AGORA
OARE
ARDI
GOALI

Note: This slide presents ecosystem facts, not local institutional usage metrics.

Source: research4life.org and Research4Life Strategy 2020.

### Strategic Challenge

## The Problem Is Not Access – It Is Utilization

**Access exists**

- ✔ Consortium licenses
- ✔ Hundreds of databases
- ✔ Wide journal availability

**Utilization lags**

- ❌ Google Scholar habit
- ❌ Low awareness of specialist databases
- ❌ Authentication barriers

→

Training, LMS integration, and easier access pathways are what convert access into use.

### Case Highlights

## Example from Kenyan Universities

Multidisciplinary research training content.

- 📖 Awareness creation
- 👤 User orientation
- 🔄 Continuous training
- 🤝 Faculty collaboration & LMS

**Usage trend after training cycles**

\* Illustrative workshop pattern, not a reported national statistic.

**Institutions that embed training and faculty engagement typically see stronger utilization.**

### Standards Foundation

## Understanding COUNTER 5

01 Global standard for measuring online usage of electronic resources

02 Ensures audited comparability across platforms with standard report IDs

03 Enables machine-readable, automated harvesting via COUNTER\_SUSHI API

04 Supports evidence-based budget accountability and ROI demonstration

**For KLISC institutions, COUNTER 5 ensures that renewal decisions are based on trusted, comparable data across all vendors.**

Source: COUNTER Code of Practice Review 5 Project (COUNTER5)

### Metric Glossary

## Common COUNTER Metrics

**TR\_J1**  
Journal requests (excluding Gold OA)

**TR\_B1**  
Book requests (excluding Gold OA)

**DR\_D1**  
Database search and item usage

**PR\_P1**  
Platform overall usage

**Investigations**  
User exploration (abstract views)

**No\_License**  
Turnaways (access denied)

**1** Detailed examples and interpretation follow on the next slides.

### COUNTER 5 ESSENTIALS

## Priority COUNTER Metrics at a Glance

**Requests**  
Evidence of full-text use.

**Investigations**  
Interest before or beyond download.

**Searches**  
Discovery activity.

**No\_License**  
Unmet demand or access gap.

→ Start with a small core set before expanding to more detailed reports.

### COUNTER 5 Workshop Example

## Interpreting a COUNTER 5 Standard View (DR\_D1) of (DB A)

Sample Workshop Data

DATABASE	METRIC_TYPE	PERIOD_TOTAL	JAN	FEB	MAR	APR
Sample DB A	Searches_Regular	12,600	2,400	2,000	4,500	3,700
Sample DB A	Total_Item_Requests	26,400	5,100	4,800	10,400	6,500
Sample DB A	Unique_Item_Requests	14,350	2,800	2,500	5,800	3,350
Sample DB B	Searches_Regular	2,300	500	450	850	500
Sample DB B	Total_Item_Requests	4,100	800	850	1,600	950

**Trend Interpretation**  
**Seasonality & Peaks:** The March spike clearly reflects assignment or exam cycles.  
**Stable Baseline:** Consistent off-peak requests show underlying recurring usage.  
**Next Step:** Compare total requests against costs to establish ROI.

**Official Source Reference**

\* Sample workshop data. Layout and metrics based on COUNTER Code of Practice Release 5.0R\_01 report standard view.

### WORKSHOP GUIDANCE

## How to Read a COUNTER 5 Report

**Step 1 — Header:** Contains vital metadata including Report Name, Report ID (e.g., TR\_J1 / DR\_D1), Release (S1), Institution Identifiers, Filters, and Attributes.

**Step 2 — Body Columns:** Details the specific resource: Platform, Database/Electem, Publisher, and standard identifiers (DOI, ISBN, ISSN, URI).

**Step 3 — Usage Columns:** Starts with Reporting\_Period, Total followed by individual monthly usage columns labeled as Mmm-yyyy (e.g., Jan-2026).

**Step 4 — Metric Types:** Defines the action: Total vs. Unique Item Requests, Investigations vs. Requests, Searches, and Turnaways (No\_License).

**Step 5 — Validation Checks:** Always verify UTF-8 encoding, correct date ranges, ensure monthly sums match period totals, and investigate abnormal spikes.

(Based on COUNTER Code of Practice Release 5.0 guidelines for tabular reports.)

**ANATOMY of a Standard View**  
**COUNTER 5 Structure:** Sample Workshop Data  
 All COUNTER 5 reports share a consistent layout, ensuring that additional filtering and manual interpretation remain standardized across publishers.

### Workshop Analysis

## Faculty/Discipline Comparison Heat Map

Sample Workshop Data

	ScienceDirect	JSTOR	EBSCOhost	ProQuest	Springerlink
Science	850	120	210	180	720
Arts & Humanities	40	910	430	310	90
Business	150	320	680	540	220
Law	60	280	340	750	110
Medicine	950	80	410	290	810

**Usage Intensity (Req / 100 FTE)**

LOW  MEDIUM  HIGH

**Strong Core Matches**  
 Science and Medicine rely heavily on ScienceDirect. Arts disproportionately utilizes JSTOR, confirming research portfolio fit.

**Distributed/Moderate Usage**  
 Business and Law show a more even distribution across aggregator databases like EBSCOhost and ProQuest.

**Identify Underuse**  
 This tool highlights low engagement. Assess if this is due to poor curatorial fit, or a lack of awareness requiring targeted training.

\* Designed for workshop training. Pair low usage areas with COUNTER 'No\_License' reports to distinguish demand from awareness gaps.

### Renewal Preparation

## 3-Year Cost vs Usage Trend — Toward Renewal Decisions

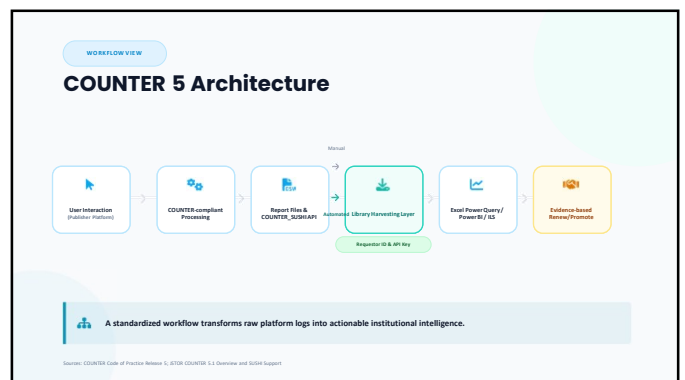
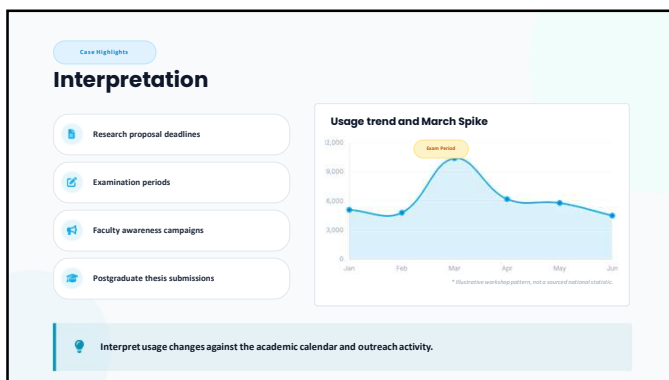
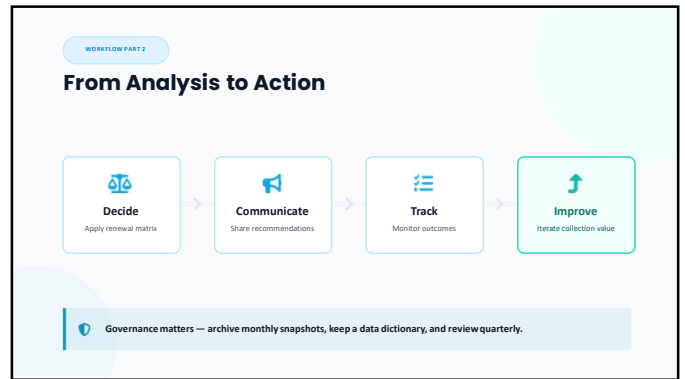
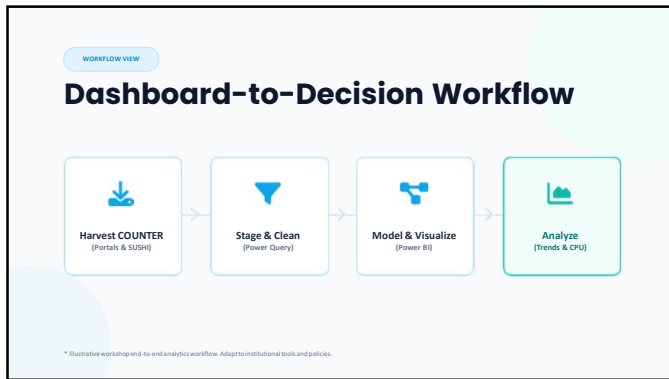
Sample Workshop Data

**Cost-Per-Use (CPU) Summary**

Year	Cost	Requests	CPU
2024	\$160k	450k	\$0.36
2025	\$170k	520k	\$0.33
2026	\$180k	620k	\$0.29 ↓

**Strategic Interpretation**  
**Positive:** Falling CPU means usage outpaces cost.  
**Red Flag:** Rising cost with flat usage causes CPU spikes.

\* Sample workshop data designed for training purposes. Use local financial and COUNTER reports.



### Data Analysis

## Example Analysis

**SAMPLE WORKSHOP DATA** Review the simulated usage trend below and consider institutional factors that explain the variance.

MONTH	SEARCHES	DOWNLOADS	UNIQUE USERS
January	2,100	4,500	890
February	1,850	4,200	760
March	3,400	8,900	1,540

**What to Interpret:**

- Downloads rising:** Do spikes correlate with assignment periods or exam prep?
- Unique users lag:** Total activity doubled, but unique users did not. Is a small group driving usage?
- Outreach impact:** Was there a library training or faculty campaign in late February?

\* Sample workshop data, not real-world national statistics.

### Analytics Workflow

## Tools for Harvesting and Analytics

Tool	Best For	Maturity Level
Vendor Portals	Manual extraction	Low Barrier
SUSHI Harvesting	Automated API retrieval	Medium Maturity
Excel Power Query	Data cleaning & merging	Medium Barrier
Power BI	Executive dashboards	High Maturity

**KLISC Strategy:** Start simple with manual downloads, then scale to SUSHI automation and Power BI as data literacy grows.

**Strategic Value**

### Why Libraries Are Moving Toward Automation

- 01 Reduces manual work
- 02 Improves consistency
- 03 Speeds dashboard reporting
- 04 Supports executive reporting
- 05 Scales across many vendors

Automation improves repeatability, timeliness, and confidence in decisions.

**Analytics Stack**

### Starter Analytics Stack for Small Teams

- 01 Monthly vendor downloads
- 02 Excel Power Query cleanup
- 03 Simple KPI dashboard
- 04 Faculty outreach follow-up

You do not need a perfect system to begin making evidence-based decisions.

**Extended Options**

### Extended Analytics Options

TOOL	STRENGTH	WHEN TO USE
Tableau	Advanced flexible visualization	Complex dashboarding needs
Alma Analytics	Deep ILS integration	Unified library platforms
EBSCO Usage Consolidation	Purpose-built vendor analytics	Streamlined usage views
Custom scripts	Full SUSHI automation	Advanced data teams

Consider these extended options once the starter analytics stack is fully operational.

**Challenges**

### Challenges Libraries Face with COUNTER and SUSHI

CHALLENGE	INSTITUTIONAL IMPACT
Vendor inconsistencies	Incomparable statistics
API authentication problems	Missing or delayed data
Partial COUNTER compliance	Reporting gaps
Integration complexity	Slow implementation

Maintain a credential register and monthly harvest log to reduce operational risk.

**Dashboard Example**

### Practical Power BI Dashboard Example

Filters: Year (2025), Platform (Multiple selections), Faculty (All), Resource Type (Journals, Books...)

KPIs: Total Requests (124,500), Unique Users (8,450), Denied Access (320), Average Cost per use (\$0.85)

Charts: Resource Comparison (Requests) bar chart, Monthly Request Trend line chart, Faculty / Resource Usage Intensity heatmap.

Dashboard mock-up using sample workshop data.

**Institutional Capability**

### Important Institutional Lesson

- 01 Skilled staff
- 02 Data literacy
- 03 Vendor engagement
- 04 Continuous training

Technology alone is insufficient — people, process, and capability turn data into decisions.

### Impact Reporting

## Demonstrating Library Impact Through Data

Traditional reporting

"The library subscribed to databases."

**2,000** Downloads

→

5x Growth

Evidence-based reporting

"Following faculty sensitization and LMS integration, downloads increased from 2,000 to 2,000 to over 10,000 within one semester."

**10,000+** Downloads

Drivers of Uplift: Training, Faculty sensitization, LMS integration, Off-campus access

### Decision Framework

## Data-driven Renewal Decisions

<p><b>Promote &amp; Train</b> Low Utilization, High Relevance</p>	<p><b>Renew &amp; Protect</b> High Utilization, High Relevance</p>
<p><b>Cancel / Replace</b> Low Utilization, Low Relevance</p>	<p><b>Renegotiate or Review</b> High Utilization, Low Relevance</p>

Utilization / Value (Low to High)

**Evaluation Factors**

- Cost-per-use trend**  
Historical history of resource efficiency
- Curriculum alignment**  
Direct support for taught programs
- Research intensity**  
Criticality for active research clusters
- Access denied signals**  
Unmet demand/overrides (business)
- Alternative access / Uniqueness**  
Availability via aggregators or OER alternatives

Note: Thresholds shown are illustrative workshop criteria and must be adapted locally.

### Practitioner Context

## Real-world Example from Librarians

- 01 High cost-per-use triggers review (e.g., >\$20/use as an illustrative benchmark)
- 02 Decisions must align with institutional mission and core curriculum
- 03 Assess specialized faculty research and accreditation requirements
- 04 Evaluate alternative access routes and aggregator database overlaps
- 05 Choose actions: renegotiate, promote, alter bundles, or cancel

High cost-per-use is a signal to initiate a review conversation—not an absolute rule for cancellation.

### FUTURE TRENDS

## The Emerging Future of E-resource Assessment

- 01 AI-assisted analytics
- 02 Predictive usage analysis
- 03 Personalized recommendations
- 04 Real-time dashboards
- 05 Research impact tracking

Future-ready assessment blends automation, analytics, and strategic judgment.

### Future Direction

## From collection-centered management to evidence-centered management.

↓

Tie budgets and renewals to demonstrable use, impact, and institutional alignment.

### Action Plan

## Strategic Recommendations for KLISC Institutions

- 01 Standardize a monthly evidence cycle
- 02 Build shared dashboard and interpretation capability
- 03 Use evidence in renewal and faculty conversations

\* Local adaptation is essential.

SUMMARY

## Key Takeaways

- 01 COUNTER gives the standard.
- 02 Value requires usage plus cost plus relevance.
- 03 Decisions improve when review becomes routine.

Conclusion

**In modern academic libraries, value is no longer measured by ownership alone, but by demonstrable institutional impact supported by evidence.**

— Dr. Samuel Macharia, PhD

# Thank You

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COUNTER 5    ROI & Cost-per-Use    Analytics for Decisions