

# **Usage Statistics: Reading between the Lines.....**

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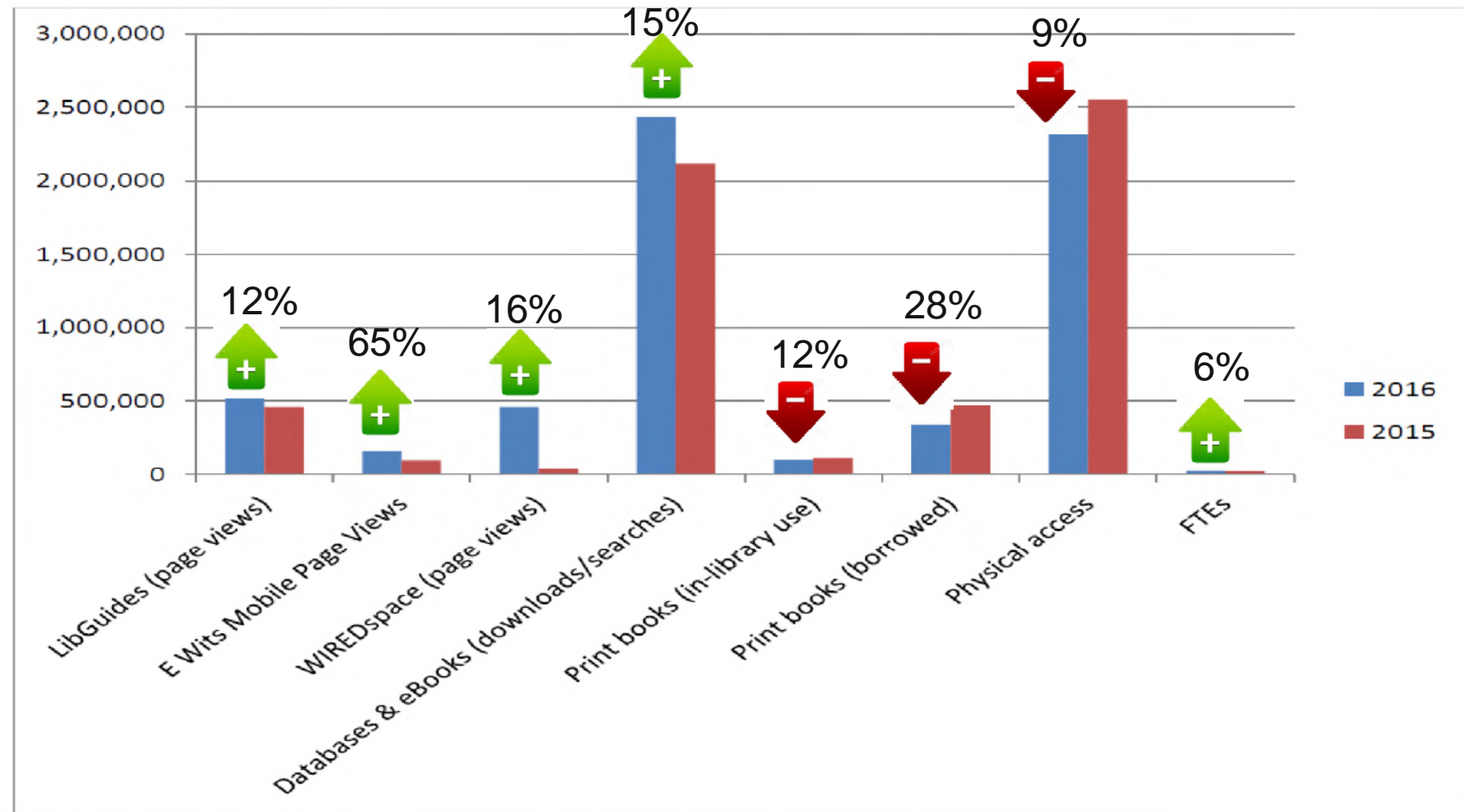


The slide features a light blue background with a faint, semi-transparent image of classical architectural columns on the left side. The columns are white with detailed capitals and are set against a darker blue background. The entire slide is framed by a thin brown border.

## **In this presentation:**

- **Snapshot**
- **Why do we count?**
- **E-metrics: main uses**
- **Limitations of e-Metrics**
- **Homework**

# Snapshot of counting at Wits library



## Why do we count?

- Toughest financial times



VS



- Apart from low usage:
- High cost
- Duplication of content
- Technical problems / Poor customer service
- Collection management and development

## **Oversimplify...**

**A lot of people download  
a lot of things.**

**We're not sure who.**

**We're not sure what things.**

**We're not sure what they did  
with them.**

**If anything.**

# **Counting - Counting - COUNTER**

**Tracking usage since day one**

**E-metrics:**

- is a standardized measurement producing**
- quantitative data that are extracted from using electronic resources.**

# E-Metrics

- **Three main uses of e-metrics as an assessment tool**
  - **Trend Analysis**
  - **Efficiency Studies**
  - **Cost-Benefit Analysis**
- **Important data to gather**
  - **Usage (Log-ins, Searches, Downloads)**
  - **Potential Population of users**
  - **Number of journal Titles/eBooks per database**
  - **Subscription Cost**

# Online Database Annual Usage Report: Number of Downloads 2014, 2015, 2016

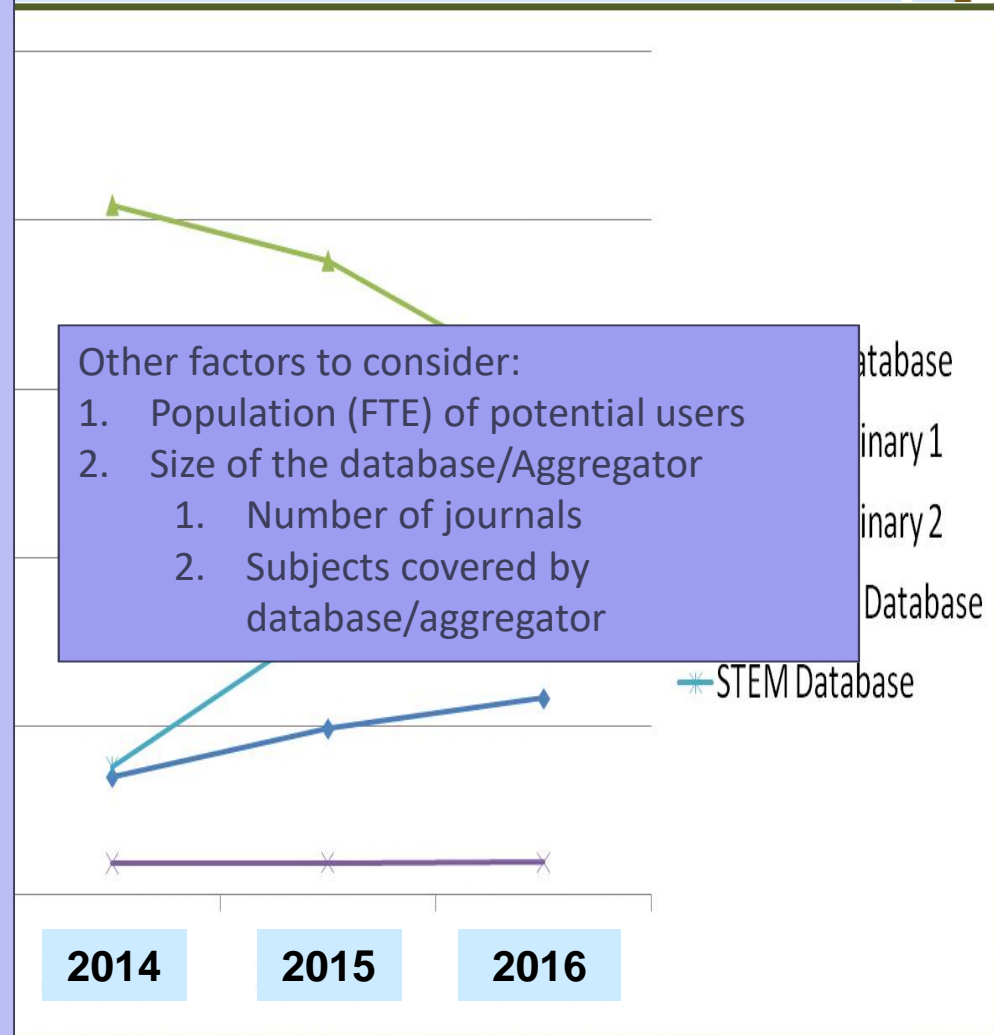
Database/Aggregator	Downloads			Total	Average
	2014	2015	2016		
Business Database	3,492	4,929	5,827	14,248	4,749
Interdisciplinary 1	13,587	13,555	13,576	40,718	13,573
Interdisciplinary 2	20,468	18,808	15,188	54,464	18,155
Psychology Database	925	940	955	2,820	940
STEM Database	3,771	8,108	13,551	25,430	8,477



# Trend Analysis

## Probable Analysis

1. The least used database is Psychology Database;
2. The most used database is Interdisciplinary 2 database.
3. Marketing and Advertising
  - Interdisciplinary 2 needs to be marketed the most as observed by its sharp downward line on the in the last 2 years, followed by Interdisciplinary 1 and Psychology because no improvement in use occurred in last 3 years.
3. Learning Outcomes
  - After two years of offering Information Literacy Sessions, students learned to use STEM Database the most, basing on the steepness of its upward curve on the 3<sup>rd</sup> year.



# Efficiency studies

- **Studies that measure the efficiency of an electronic resource based on extracted transaction logs and other indicators**
  - Usage (Downloads)
  - Actual searches
  - Population (FTE)
  - Number of journals/database
- **Use Ratio and Transaction Log analyses**

## Important formulas: Efficiency rate

$$\text{Utilization Rate} = \frac{\text{Log-in} \times 100\%}{\text{FTE}}$$

$$\text{User Satisfaction Rate} = \frac{\text{Downloads} \times 100\%}{\text{FTE}}$$

$$\text{Database Efficiency Rate} = \frac{\text{Downloads} \times 100\%}{\text{Searches}}$$

$$\text{Database Usability Rate} = \frac{\text{Downloads} \times 100\%}{\text{Number of Journals/Database}}$$

# Overall Performance

Database	Usage	Utilization Rate	User Satisfaction Rate	Database Efficiency Rate	Database Usability Rate	Total	Overall Rank
Business Database	4	5	4	3	5	21	5 <sup>th</sup>
Interdisciplinary 1	2	1	2	1	4	10	1 <sup>st</sup>
Interdisciplinary 2	1	4	5	5	3	18	4 <sup>th</sup>
Psychology Database	5	3	1	2	1	12	2 <sup>nd</sup>
STEM Database	3	2	3	4	2	14	3 <sup>rd</sup>

## Observations

1. Interdisciplinary 1 database is the most important database;
2. Business database is the least important database.

## Probable Recommendations:

1. Sustain subscription to Interdisciplinary 1, Psychology Database and STEM Database.
2. Reconsider Business and Interdisciplinary 2 databases

## Important: Financial Factor

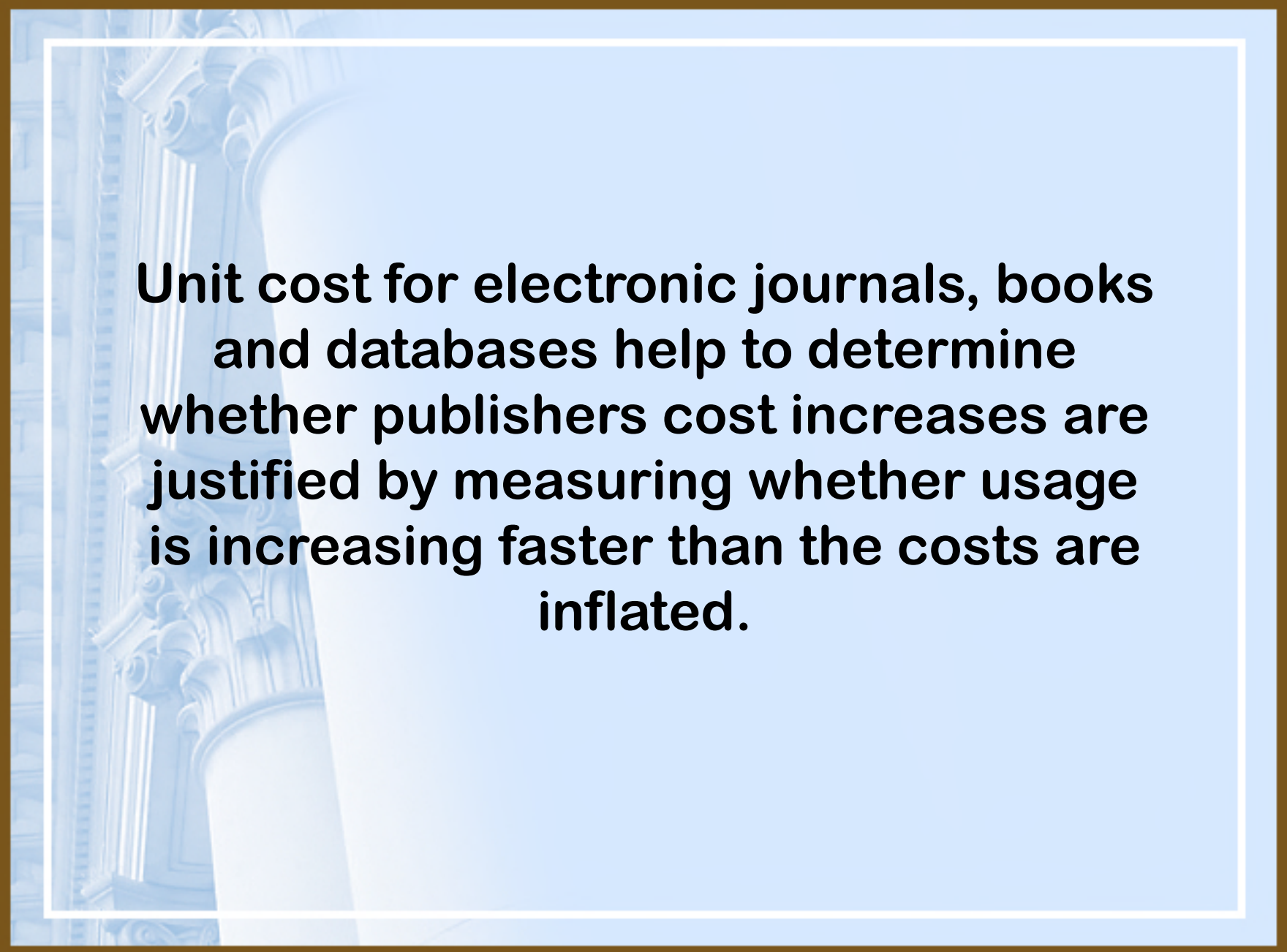
1. Return on Investments (ROI)
2. Cost per article Reading (CPR)

# Cost-Benefit Analysis

- A measure on the efficiency of database based on costs and other financial-related factors
- Popular methods of analyzing benefits are through:
  - Return on Investments (ROI)
  - Cost per Article Reading (CPR)

## **Return on Investments (ROI)**

- **A performance measure that is used to evaluate the efficiency of an investment**
- **Presents gains or losses of an investment.**
  - **positive ROI means gains from investments**
  - **negative ROI means losses from investments**



**Unit cost for electronic journals, books and databases help to determine whether publishers cost increases are justified by measuring whether usage is increasing faster than the costs are inflated.**

# Important formulas: Cost benefit

## Cost Benefit Studies:

$$\text{ROI} = [(\text{average cost/title}) (\text{Total usage}) - \text{Subscription Price}]$$

$$\text{Rate of ROI} = \frac{\text{ROI} \times 100\%}{\text{Subscription Price}}$$



# Online Database Annual Usage Report: Return on Investments Per Database 2016

Database/Aggregator	Downloads	Subscription Cost	Average Cost/Title	ROI per Database	Rate of ROI (%)
Business Database	5,827	1,118,000.00	105.16	-505,232.68	-45.19
Interdisciplinary 1	13,576	134,550.00	28.90	257,796.40	191.6
Interdisciplinary 2	15,188	1,131,927.00	263.55	2,870,870.40	253.63
Psychology Database	955	631,800.00	8,775.00	7,748,325.00	1,226.38
STEM Database	13,551	1,285,975.76	612.08	7,008,320.32	5,433.83

**ROI = [(average cost/title) (Total usage) - Subscription Price]**

**Rate of ROI =  $\frac{\text{ROI} \times 100\%}{\text{Subscription Price}}$**

## Important formulas: Cost per Article Reading (CPR)

- A cost-benefit measure that determines the value of an electronic resource (database).
- Simple formula:

$$\text{CPR} = \frac{\text{Subscription Cost}}{\text{Number of Downloads}}$$

# Online Database Annual Usage Report: Cost Per Article Reading 2016

Database/Aggregator	Downloads	Subscription Cost	CPR
Business Database	5,827	1,118,000.00	191.86
Interdisciplinary 1	13,576	134,550.00	9.91
Interdisciplinary 2	15,188	1,131,927.00	74.53
Psychology Database	955	631,800.00	661.57
STEM Database	13,551	1,285,975.76	94.90

$$\text{CPR} = \frac{\text{Subscription Cost}}{\text{Number of Downloads}}$$

# Limitations of E-Metrics

- **Quality of sessions are not measured**
  - Length of each session
  - User's interaction with the resource is not defined
- **Results can over-emphasize or “hide” real results**
- **Dependent on vendor-supplied data, if in-house transaction log counter is not available**

## **Consider this...**

- **Quality of sessions are not measured.**
- **Different data elements.**
- **Does your database descriptions convince users to use it?**
- **Differences in information-seeking behaviour among users.**
- **Search platform of resources, has it changed.**
- **Take the survey!**

## **Consider more.**

- **Information literacy**
- **LibGuides/Subject guides: Are all the relevant resources listed. Tutorials?**
- **Discovery service marketing**
- **Not another password please.**
- **Supplement individual journal subscription usage data with additional information.**
- **Niche research areas.**
- **Emerging research areas.**

**THANK YOU.**

**SANLiC**

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