

LIBRARY ANALYTICS IN SINGAPORE MANAGEMENT UNIVERSITY



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SINGAPORE MANAGEMENT UNIVERSITY

ABOUT SINGAPORE MANAGEMENT UNIVERSITY

- A YOUNG UNIVERSITY OPENED IN 2000
- 6 Schools Business, Economics, Accounting, Information Systems, Law, Social Sciences and many research Centers
- CITY CAMPUS 6 BUILDINGS AT THE HEART OF SINGAPORE
- BROAD BASED EDUCATION, SMALL CLASSES, INTERACTIVE TUTORIAL STYLE LEARNING,

SMU at a glance



among specialist universities worldwide



undergrad and postgrad students

357

globally diverse faculty



Rated 5 Stars by Quacquarelli Symonds (QS) World University Rankings (WUR)



Ashoka U Changemaker Campus



Korn Ferry Employee Engagement Award

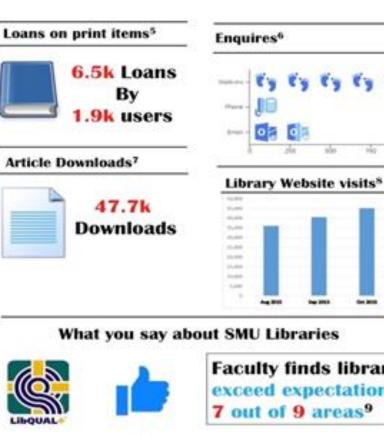
1st in Asia in accounting research in the Brigham Young University Accounting Research Rankings 1st in Singapore (3rd in Asia) in the University of Texas Dallas Top 100 Worldwide Business School Research Rankings

4th in Asia in Tilburg University's Top 100 Worldwide Schools Research Rankings

In a typical month¹ this happens in the library...

Think you know SMU Libraries? Here are some facts that might surprise you.

Library visits E-Resources access Access 8 OUT OF 10 E-books. visit the library at E-Journals least once a month² at least once a month3 Sign-ons 57K monthly3 Top Resources (by sign-ons)3 Occupancy rate Lawnet 1118 @ learning commons at midnight4 Ebscohost Proquest Passport Factiva





Faculty finds libraries exceed expectations in 7 out of 9 areas9

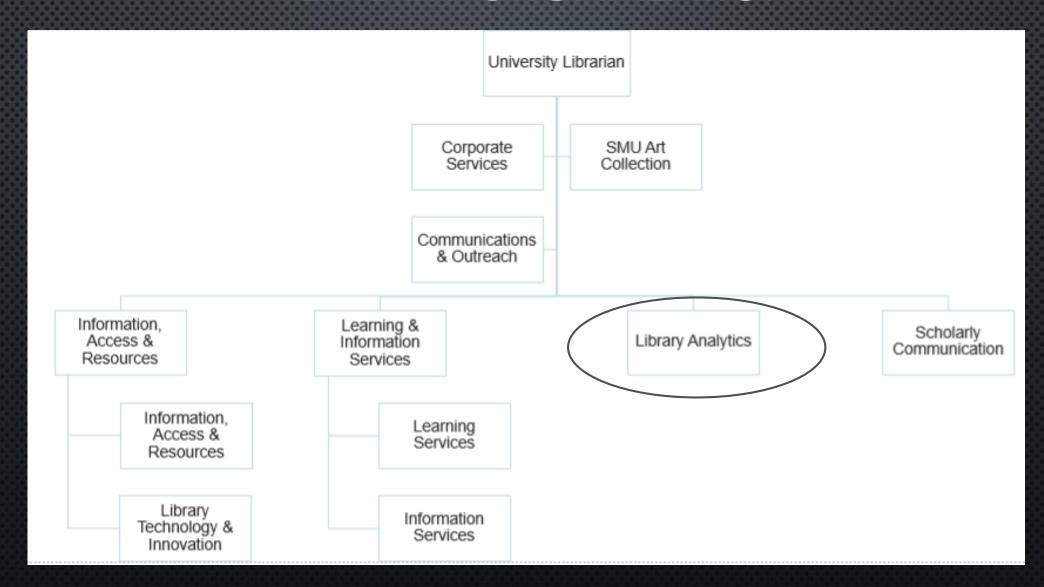




Most preferred place to study by students10

GENERAL USAGE STATISTICS

LIBRARY ORGANIZATION



LIBRARY ANALYTICS

- NEW ROLE CREATED IN 2015
- 0.8 FTE + 1 FTE (OUT OF 35 LIBRARY STAFF)
- MEMBER OF LIBRARY MANAGEMENT TEAM



Faculty research productivity



Faculty teaching impact



Student experience & learning



Reputation/ impact on community

Innovation and Operational Excellence

WHY THIS ROLE?

PROVIDE HOLISTIC VIEW



VARIETY OF ANALYSIS WE DO



Benchmarking surveys



Supplementary statistics for renewals of electronic resources



Analysis of space data



Information Literacy assessment



Open Access analysis



Bibliometric analysis

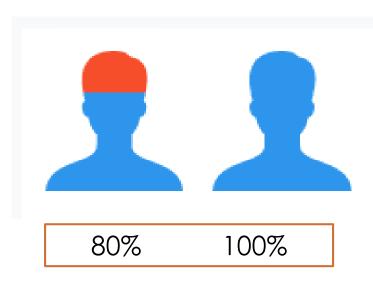
Library analytics in SMU (2019)













Research Data Librarian



Library Technology & Innovation

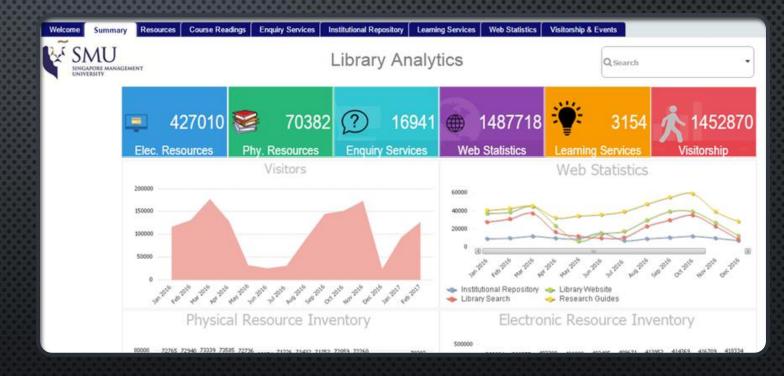
Library Data interest group

Library



ROLE #1

MANAGE AND
 STRATEGIZE USES OF
 LIBRARY
 DASHBOARD
 (QLIK)



SOURCES IN DASHBOARD



ALMA/PRIMO ANALYTICS (INCLUDING CIRCULATION, COUNTER)



GOOGLE ANALYTICS



TURNSTILE/PEOPLE COUNTER/LIVELABS ANALYTICS



INFORMATION
LITERACY &
REFERENCE
STATISTICS



INSTITUTIONAL REPOSITORY

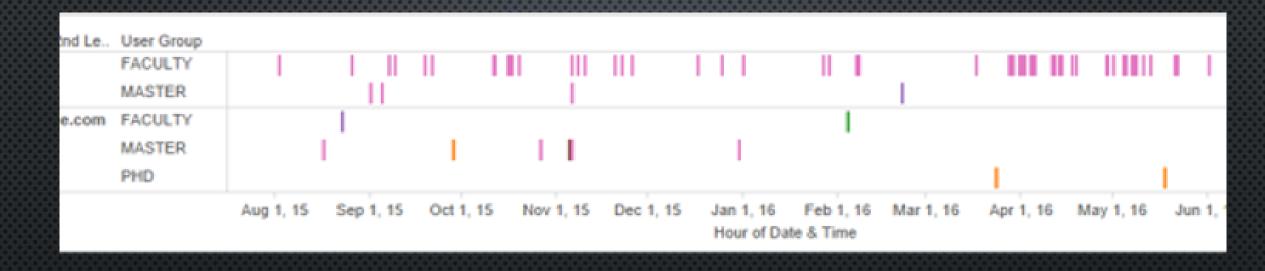


EZPROXY

EZPROXY ANALYSIS



GRANULAR ANALYSIS OF USAGE







What Do They Use?















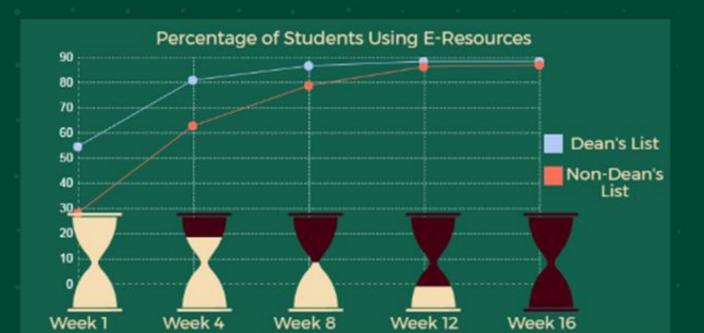
50% of Dean's List students used of their studies while only 25% on-Dean's List students accessed the same number

How Much?



the average Dean's List student uses the library's electronic resources almost busines as much as a non-Deam's List student in the first two years of university and 1.5 times as much in the third and fourth years.

When Do They Use?



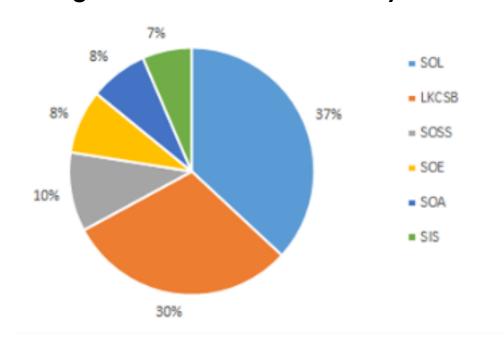
...more than half of Dean's List students get a head start on their research even in the 1st week of school. Non-Dean's List students tend to only start using e-resources when there are deadlines looming.

ARY

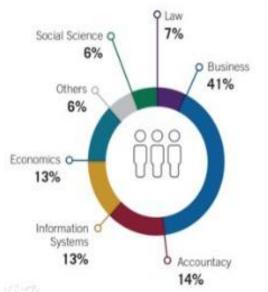
INT

18

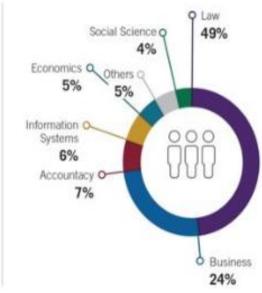
% usage of electronic resource by School



Who visited Li Ka Shing Library?



Who visited Kwa Geok Choo Law Library?



RCA (RESPONSIBLE COST ACCOUNTING)

ROLE #3 MANAGING COLLABORATIONS (INTERNAL AND EXTERNAL)

COLLABORATION IN CAMPUS WITH



TECH PARTNERS IN CAMPUS (E.G. SMU LIVE LABS, LIBRARY IT CENTRE)



EDUCATION/ PEDAGOGY STUDIES (E.G. CENTRE FOR ENGLISH COMMUNICATION, SMU-X)



STUDENTS PROJECTS (E.G. RESEARCH METHOD CLASSES, BUSINESS IMPROVEMENT CLASSES, ANALYTICS PRACTICUMS, PHD PROGRAMMES)

Complexity

Seat Occupancy Detection(PHD) Library heat map (with SMU Livelabs)

quantitative





With students

With Campus units

Data visualization

– Library turnstile
data (ANLY482)

Seat hogging Business improvement (MGMT 317)

Focus group + ethnography on reasons for use of spaces (IDIS 100)

Operating hours analysis (IS102)

Analytics on Space User downloads of eBooks in ezproxy data (ANLY482) Texual analytics of search queries in databases (ANLY482)

Reading list process Business improvement (MGMT 317)

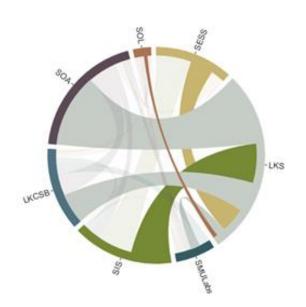
> Research behavior (SMUX)

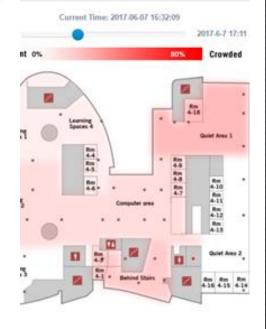
Analytics on online use

Impact of PWR training on students GPA (With CEC)

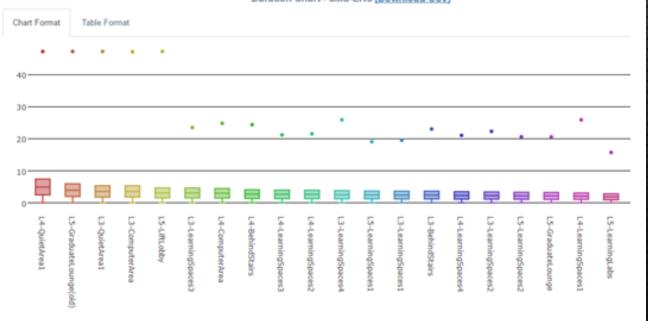
Library dashboard (With IITS)

Student outcomes





Duration Chart - SMU-LKS (Download CSV)



CASE #1 – SMU LIVE LABS + LIBRARY ANALYTICS PORTAL

(Yahaya et al., 2016)

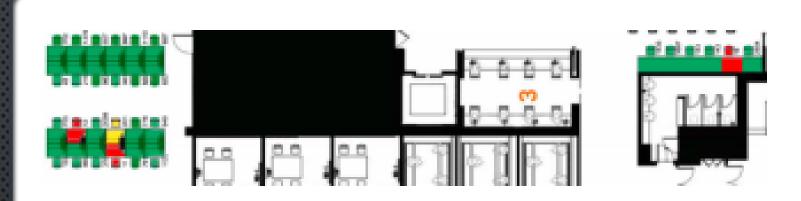


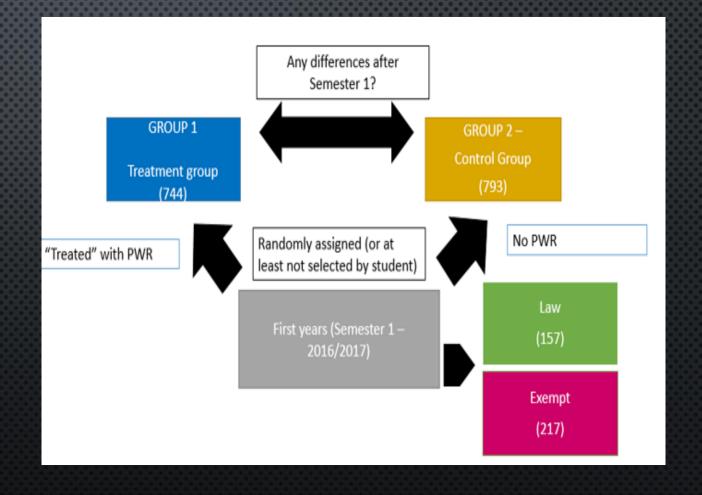
Figure 1: The map of library with seat occupancy status overlay color. We use three color red, yellow, green for people occupancy, object occupancy and unoccupied state respectively.

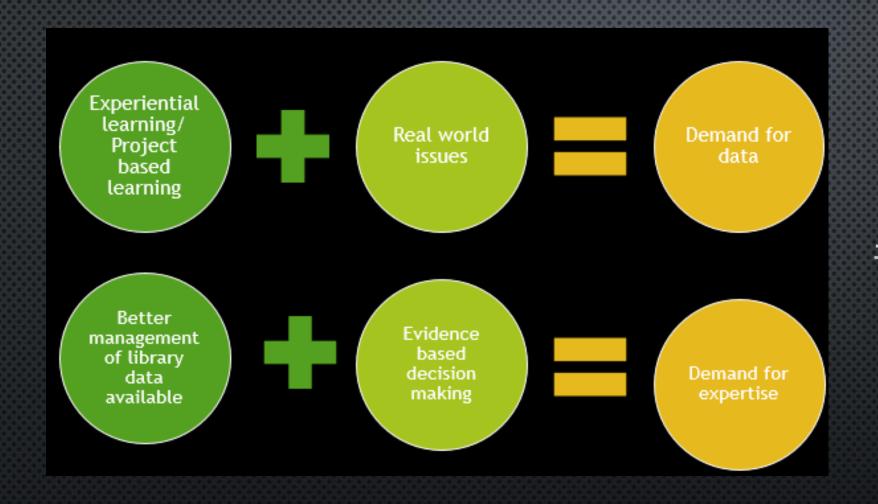
SEAT OCCUPANCY

CASE #2 – IMPACT OF LIBRARIAN + WRITING COURSE ON STUDENT GPAS

PARTNERSHIP WITH CEC (CENTRE FOR ENGLISH COMMUNICATION)

Librarians partner with CEC to teach Programme in Writing & Reasoning (PWR) and to measure impact

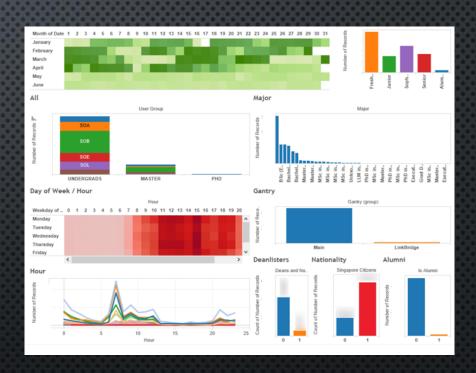




#3 – LIBRARY AS A CLIENT

TWO SAMPLE CASES – ANALYTICS PRACTICUM ANLY482





COLLABORATIVE PARTNERSHIP IN COURSES

USERS WHO OVERDUE

Jack borrows 'Financial Accounting' on 7th April, **Saturday at 7pm**

He has to return the book by latest Sunday 1.30pm. This gives him an assigned loan period of 18.5 hours.

He returns the book 24.5 hours later, on Sunday 7.30pm. This gives him an overdue period of -6 hours.



Loan Timestamp	07/04/2018 7:00:00 PM
Return Timestamp	
Hours Borrowed	
Assigned Loan Period	
Overdue Period	
Overdue?	

INTRODUCTION | METHODOLOGY | KIASUISM | ATTRIBUTES | SOCIAL | DISCUSSION

RESEARCH QUESTION:

What are the factors that influence students' preferences for certain study spaces?

3 FACTORS

- 1. Kiasuism
- 2. Physical Attributes
- 3. Social Groups

STUDY 1: QUANTITATIVE

STUDY 2: QUALITATIVE

ROLE #4 CAPACITY BUILDING



Manages the library survey policy



Chair of the data interest group



Started and manages "data science track" in bite-sized workshops

FUTURE INITIATIVES

- SPLUNK + OCLC EZPROXY EZPAARSE PROJECT
- MOVING FROM QLIKVIEW TO QLIK SENSE DASHBOARD.

REFLECTIONS ON THE ROLE #1

• DATA SCIENCE SKILLS ARE IMPORTANT BUT BUSINESS DOMAIN RULES

REFLECTIONS ON THE ROLE #2

• GET THE RIGHT MIX OF GENERALISTS AND SPECIALISTS

REFLECTIONS ON THE ROLE #3

• COLLABORATION OPPORTUNITIES ABOUND

QUESTIONS

THANK YOU



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Aarontay



https://musingsaboutlibrarianship.blogspot.com