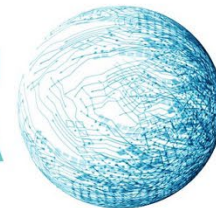


JULAC Forum @ PolyU | 6 Dec 2024

Lingnan University Library | Jeff LIU | Race KU

Meeting the Changing Needs of Users: The Digitalisation Services of Lingnan University Library



Outline

I feel so cold.

It's too HOT!

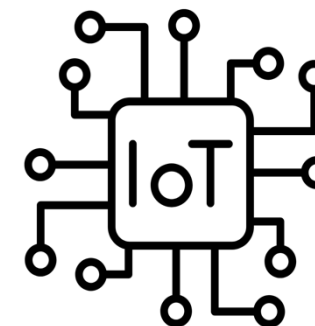
Where
can I find a
seat?

Everything in 1-Search?
But why should I go the
Databases A-Z list for
finding databases?

80+ Recommended
Databases? I only need
the MOST USEFUL ONE!

Physical

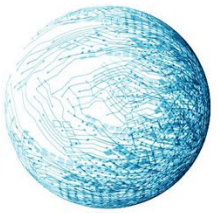
Managing Physical Spaces and
User Expectations with **IoT**



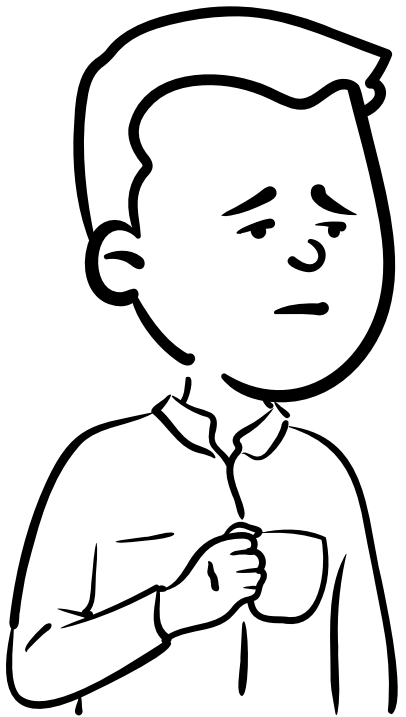
Online

Enhancing User Experience and
Streamlining Workflow on **Primo**





Library Staff Daily Life-mare (1)



Annoyed Library Staff

It's too HOT!

I feel so cold.

Water
Leakage

There are bags
on the table,
can I sit there?

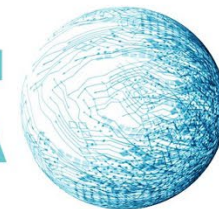
Mould discovered
on books!

MORE seats
please!

Where
can I find
a seat?



Library Users

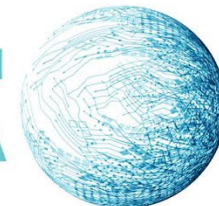


Have You Seen This? Happy Problem?



Are bags
stable,
there?





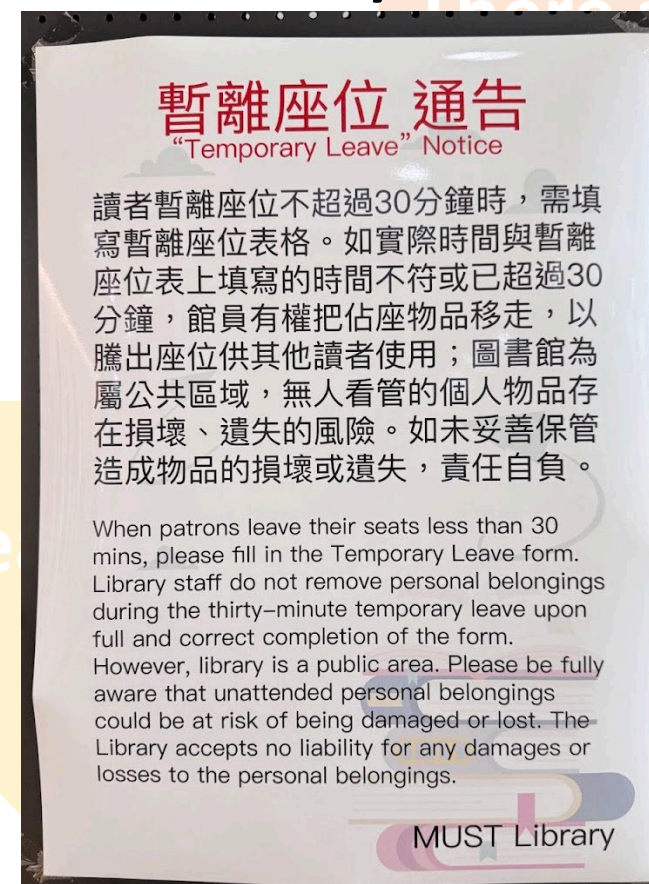
How Libraries Tackle Seat Hogging?

Away Slip issued by Library Staff

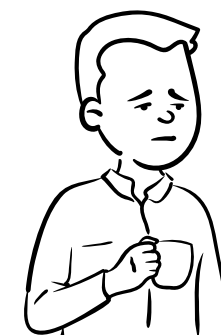


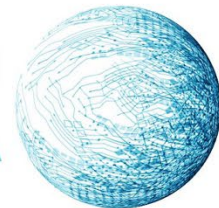
<https://library.wp.st-andrews.ac.uk/files/Seat-hogging-posters-small.png>

Hold Slip filled by User



MORE seats
please!





How Lingnan University Library Tackle Seat Hogging?

Always Be Considerate 文明使用圖書館
共享學習空間 **Share the Study Space**

Library is a space shared by the whole Lingnan Community.

If you leave your personal belongings unattended...

圖書館是一個嶺南人的共享空間，當您留下個人物品佔座.....

1) Your seat can be taken by others 其他讀者可以使用該座位

2) Your stuff may be moved or stolen 物品可能會被移開或帶走



Remember to take your

人走書清，請緊記帶走個人物品

Help yourself

Release the Study Area

You may put the unattended items here.

您可以將無人看管的物品暫放在此處

Let's work together to Release the study area in the Library!

讓我們一起努力騰出學習空間給其他有需要的讀者！



Remember to take your belongings

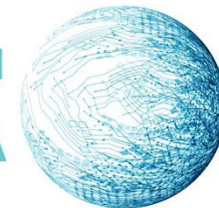
人走書清，請緊記帶走個人物品 **with you ALL THE TIME**

- Experiment to “encourage” users to clear unattended belongings
- No pressing need for staff patrol
- Users still hesitate if they are “legitimate” to move away others' belongings.

There are bags on the table, can I sit there?

seats

Where can I find a seat?



Can These Occupancy Sensors / Display Help?

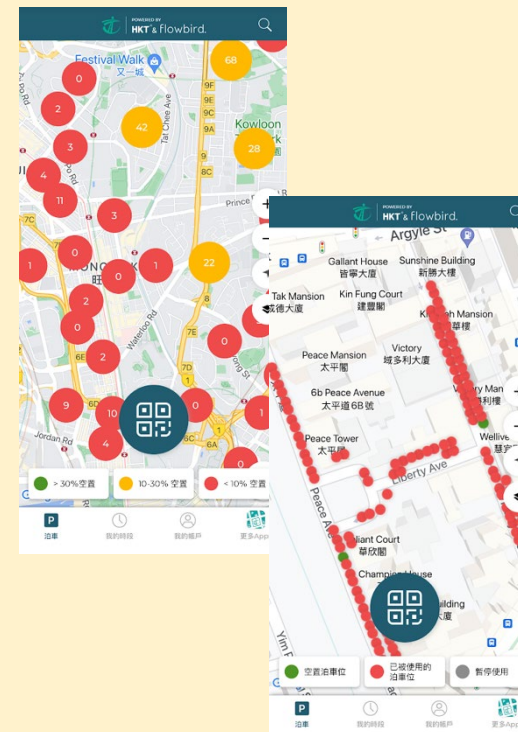
Ramen Restaurant



Indoor Parking



Parking Meter



Public Toilet





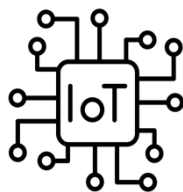
Key Considerations

- Data accuracy to avoid user disputes
- Minimum staff intervention (esp. overnight period)
- Avoid placing sensors on seat/table
- Avoid wired solution
- Real-time data transmission

There are bags on the table, can I sit there?

MORE seats please!

may help!



Where can I find a seat?



IoT (Internet of Things)

- Refers to a **network** of physical devices, vehicles, appliances, and other physical objects that are embedded with **sensors**, software, and **network connectivity**, allowing them to **collect and share data**. [\(IBM\)](#)

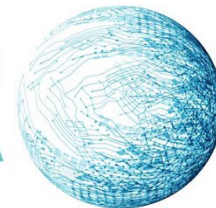
Characteristics:

- Power:** PoE/Battery
- Data Transmission:** WiFi/ LoRaWAN (Thanks to Lingnan ITSC colleagues!)
- Sensors:** Ranging from camera/ motion/ occupancy/ light/ sound/ contact/ water/ temperature/ humidity/ air quality/ proximity/ etc.

There are no seats on the table, can I sit there?

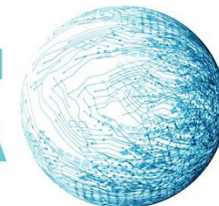
MORE seats please!

Where can I find a seat?

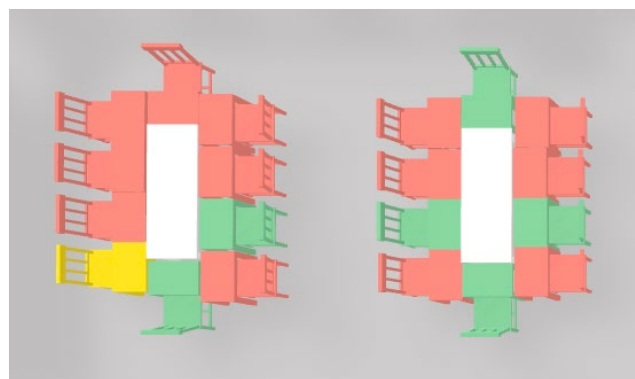


Occupancy Sensors Installation and Coverage





Occupancy Status During Pilot Run



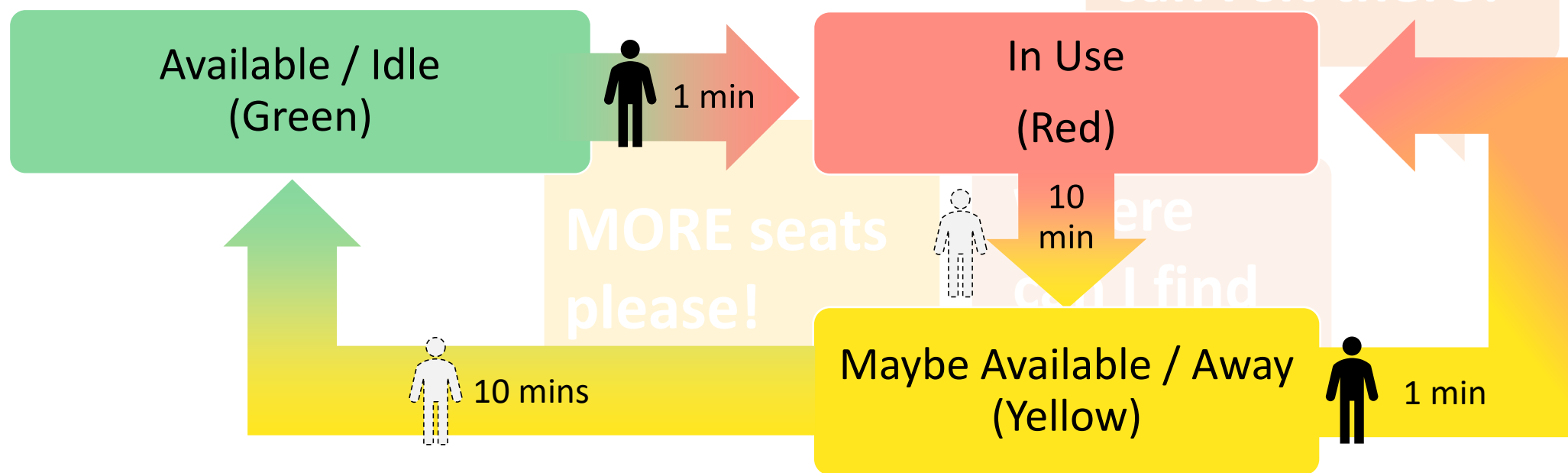
Available / Idle

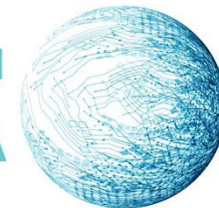


Maybe Available / Away

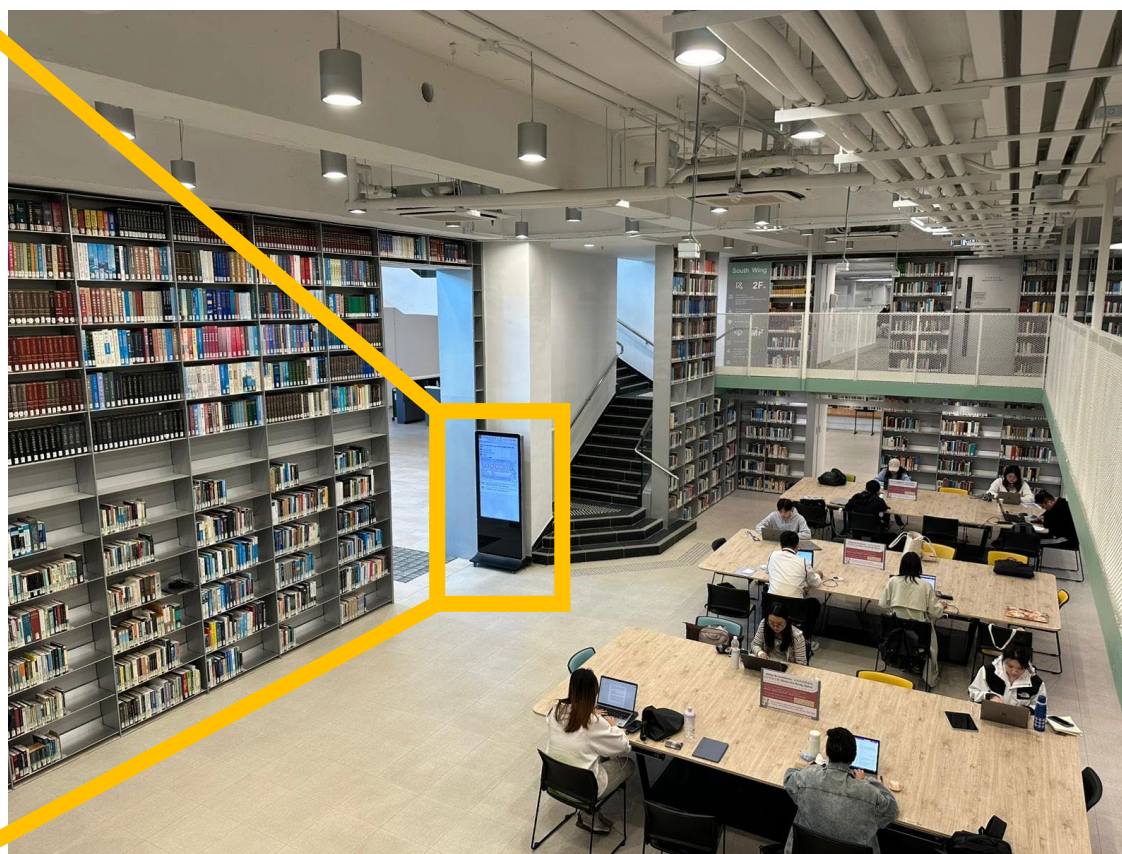
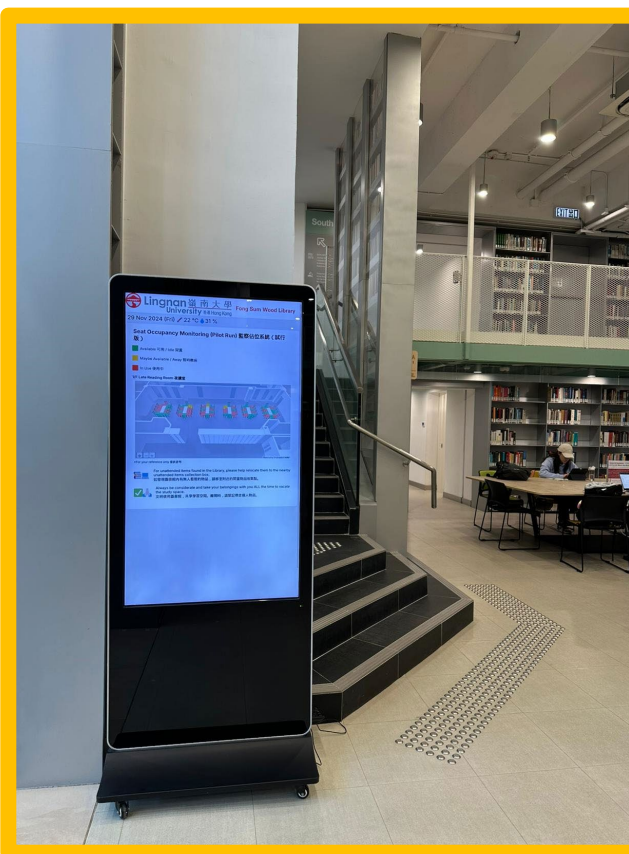


In Use





Info Display in the Late Reading Room (Pilot Run)



**Lingnan 嶺南大學**
University 香港 Hong Kong

Fong Sum Wood Library

02 Dec 2024 (Mon) 21 °C 64 %

Seat Occupancy Monitoring (Pilot Run)
監察佔位系統 (試行版)

Available 可用 / Idle 閒置

Maybe Available / Away 暫時離座

In Use 使用中



1/F Late Reading Room 夜讀室

*For your reference only 僅供參考



For unattended items found in the Library, please help relocate them to the nearby unattended items collection box.
如發現圖書館內有無人看管的物品，請移至附近的閒置物品收集點。



Always be considerate and take your belongings with you ALL the time to vacate the study space.
文明使用圖書館，共享學習空間。離開時，請緊記帶走個人物品。

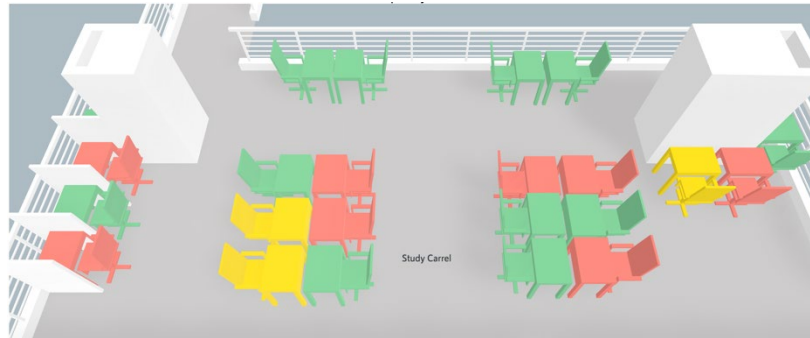


Current Status and Upcoming Plan

- Pilot Run in Late Reading Room since late November 2024

- Will extend to other high usage areas:

- Study carrels
- Computer seats



There are bags
available,
there?

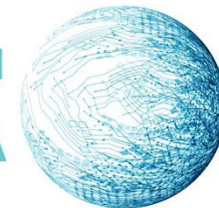
- Sensors for monitoring

- People counting (for floor occupancy)
- Door contact (for trespassing of emergency exit)

MORE seats
please!

Where
can I find
a seat?





Current Status and Upcoming Plan

- Sensors for monitoring
 - Temperature
 - Humidity
 - Indoor Air Quality (IAQ)
 - Water leakage
- Enhance the wellness of our users and books!
- Data collection for campus facilities management for A/C control and water leakage remedial works

Mould discovered on books!

Leakage

I feel so cold.

It's too HOT!





Dashboards for Different Stakeholders

Library Staff

Students/Users

Seat / Floor Occupancy

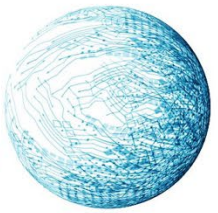
Book Locations

Climate &
Physical Wellness

Securities / Campus Facilities Management

Water Leakage
(instant alert)

Emergency Door
Security/Safety Status
(instant alert)



Monitor → Understand → Resources Planning

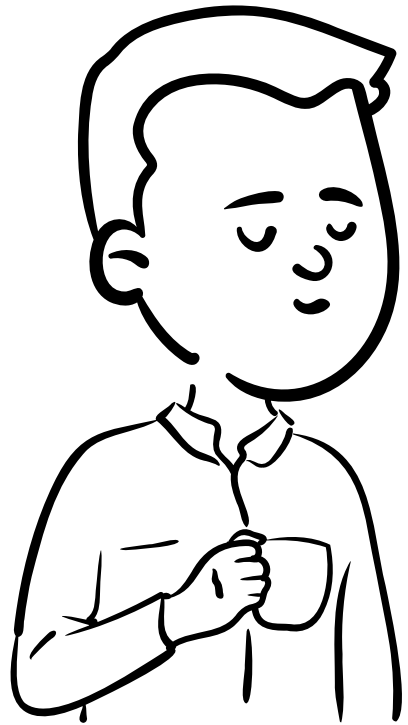
Understanding
User Behaviour /
Habit

Understanding
Facilities Usage &
Instant Status

Monitoring Safety / Security Issues

Contributing to
Campus Space Management

With synergy between Library and ITSC,
Library serves as a pioneer for the Smart Campus
initiatives



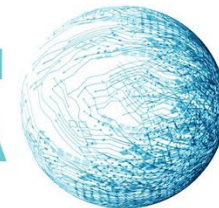
LESS

Annoyed Library Staff

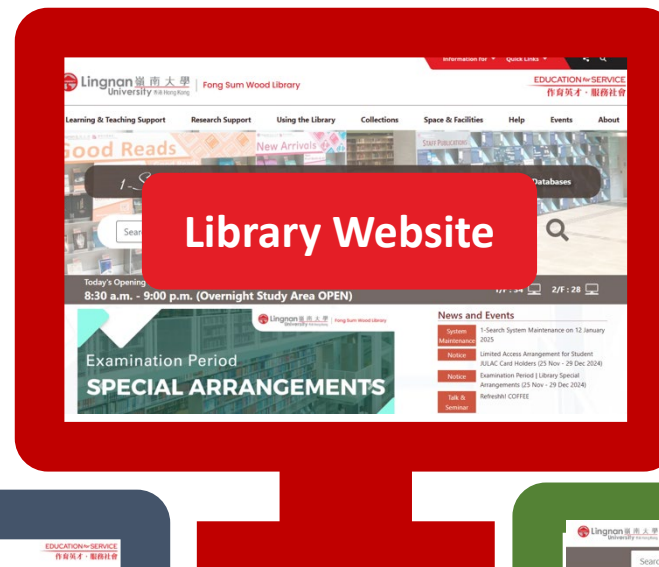
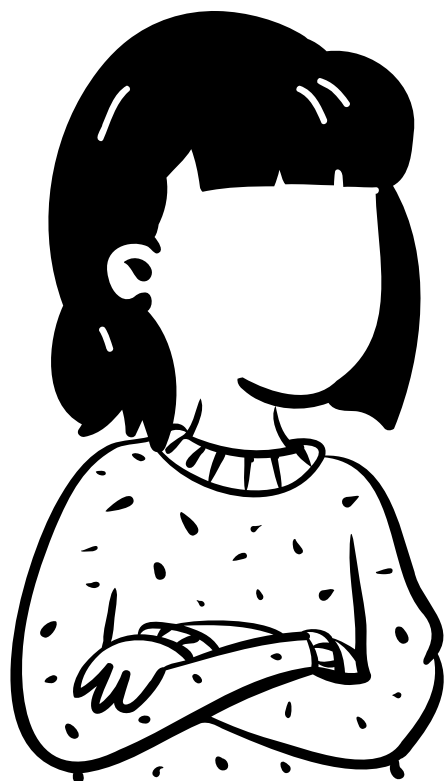


LESS

Annoying Users



User Experience





User Experience | Library Website

❑ Library Information

- Opening Hours, Services Scope / Details, Contact Information, etc.

❑ News and Updates

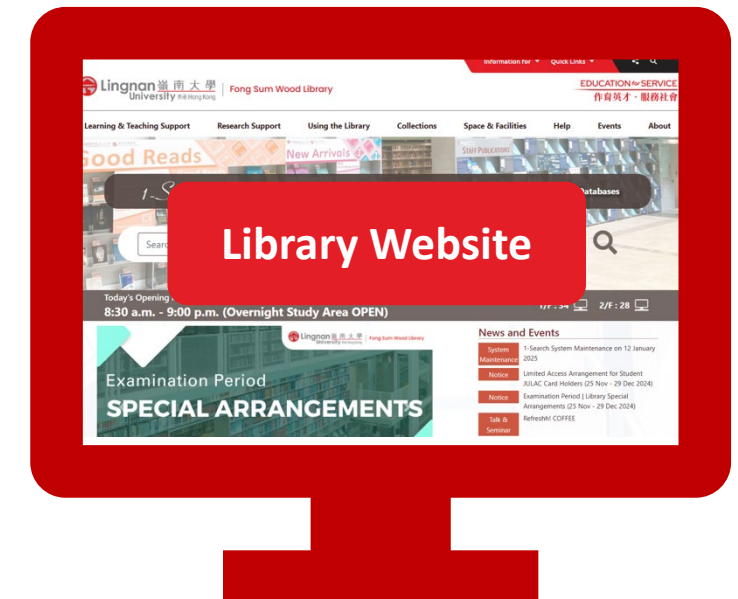
- Temporary Closure, New / Updated Subscription; etc.

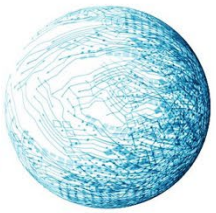
❑ Instructions & Guides

- Where to find facilities, How to Print / Search Information, etc.

❑ Application for Services

- Library Cards, Course Reserves, etc.





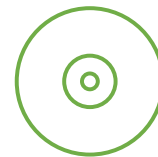
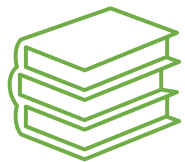
User Experience | Primo

❑ Library Collections

- Physical Materials (Books, AV, etc.)
- Online Materials (Databases, Journals, E-books, etc.)

❑ Library Account

- Check Due Date
- Place Materials Request
- Save Records / Queries





User Experience | LibGuides

☐ Library Collection

- List of Library Subscribed Databases - Databases A-Z List

☐ Trial Databases

- Databases A-Z List

☐ Recommended Resources

- Subject Guides

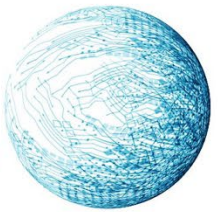
☐ Library Information

- Services Scope / Details, etc.

☐ User Instructions & Guides

- How to use Cite / Manage your Reading List





Library Staff Daily Life-mare (2)

Update Delay in LibGuides

Cannot find a new database from
Databases A-Z list...

Everything in 1-Search?

But why should I go the Databases
A-Z list for finding databases?

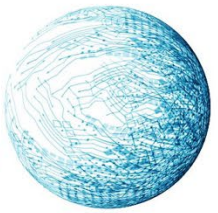
Discrepancy on Information

Some information on the LibGuides
is different from the Library website.
Which one should be correct?

Unhelpful Long List

80+ Recommended Databases?
I only need the MOST USEFUL ONE!





Information on Different Platforms

Library Website

Library Information

Instructions & Guides

Service Application

LibGuides

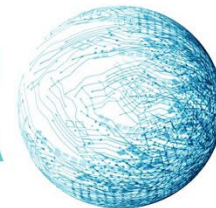
Resources Recommendations

Primo

Library Account

Materials Request

Library Collection



What Do We Actually Need from LibGuides?

LibGuides

Databases A-Z List

Subject Guides

Other Guides

Library Collection

Instructions & Guides

Resources Recommendations

Library Information



LibGuides | Databases A-Z List

List of Subscribed Databases = Databases A-Z List

Pros

- Easy to Browse
- Free to Include different Items
- Clearer Presentation

Trial Database (No Primo record)

Sorting Functions (by A-Z, Types, Subjects)

Cons

- Low Usage
- Time-consuming Manual Update (or, there will be **Discrepancy!**)

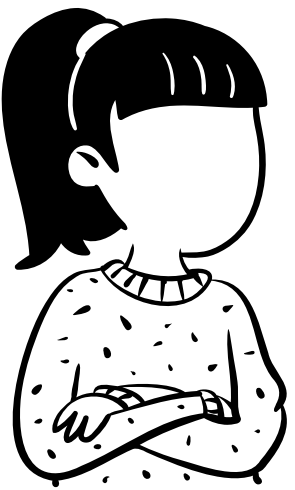
Resources not yet added to A-Z list

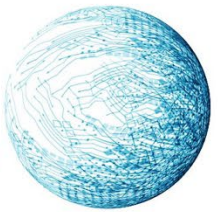
Resources Name / URL Change

Every Manual Update = A Potential Mistake

Murthy's Law

But we keep asking user to search from Primo for EVERYTHING?





LibGuides | Subject Guides

Recommended Resources by Subject Librarians = Subject Guides

Pros

- Quick Access for students
- Maximize the Usage

Helpful Guide for Students

(Hopefully) Not Wasting our Budget

Do we know their new directions well enough to provide recommendations?

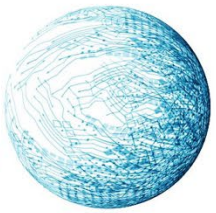
Cons

- Low Usage (**AGAIN**)
- Difficult to Cover the Emerging and Multi-disciplinary Programmes
- Databases are becoming Multi-disciplinary
- Time-consuming Manual Update (**AGAIN**)

Master of Science in Cross-disciplinary Technologies+
Master of Science in Sustainability and Environmental Analytics

80+ “Relevant” Databases for 1 Subject? Helpful?

Every Manual Update = A Potential Mistake



What We Need | “Databases A-Z List” in Primo ^(1-Search)

What We Want

Unified User Experience
on Information Search



Challenges

Save Manual Processes to
Synchronise Information on LibGuides & Primo



A Single Platform for Library Collection Discovery

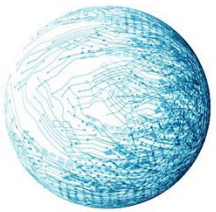
Collection Development and
Management Team

Cataloguing and Preservation
Team

Digital Services
Team

Learning Support
Team

Use 1-Search Primo for displaying the
Library Collection
(including the “Databases A-Z List”)



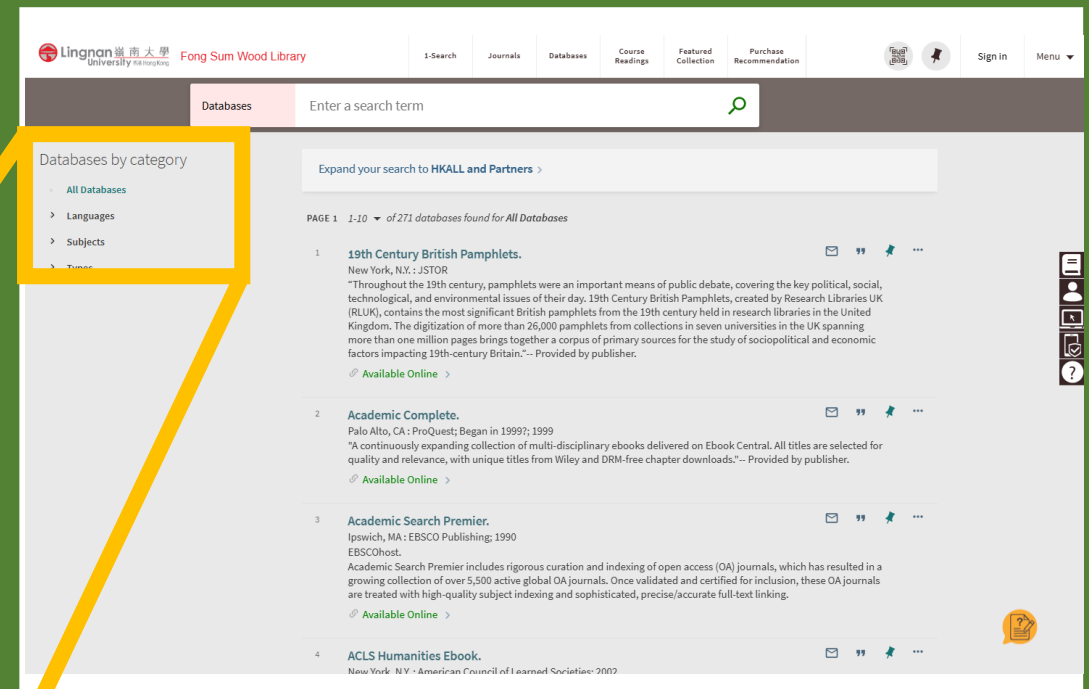
What We Need | “Databases A-Z List” in Primo (1-Search)

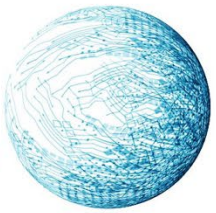
Databases by category

- ❖ Languages
- ❖ Subjects
- ❖ Types

Databases by category

- All Databases
- > Languages
- > Subjects
- > Types

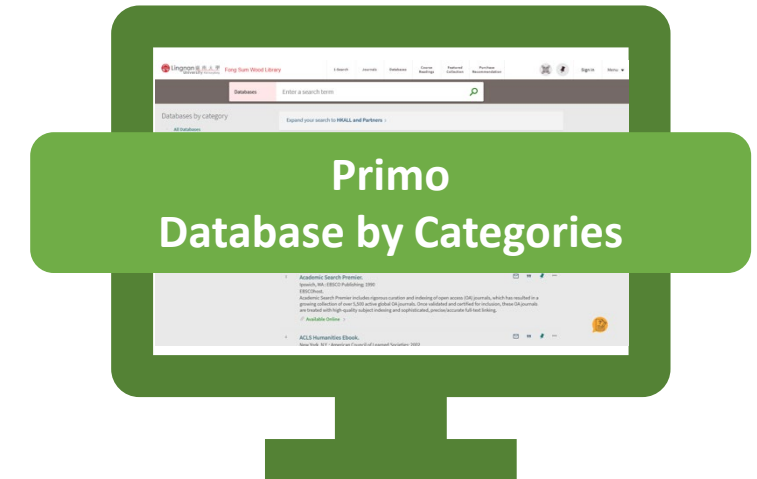




What We Need | “Databases A-Z List” in Primo ^(1-Search)

Databases by category

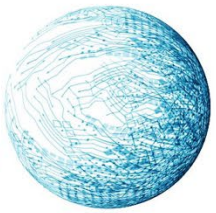
- ❖ Languages
- ❖ Subjects
- ❖ Types



Apply same Subject classification as Primo Journals Browsing which is based on [Hierarchical Interface to LC Classification \(HILCC\) by Columbia University](#) to Databases A-Z List
Unified user experience (no more institutional department/faculty structure)

Refer Users to Primo for ALL Library Collections!





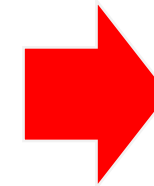
What We Need | “Databases A-Z List” in Primo (1-Search)

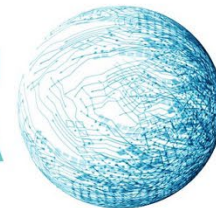
How about Trial Databases?

There are no corresponding Primo records.

☐ News and Updates

- Temporary Closure, New / Updated Subscription; etc.



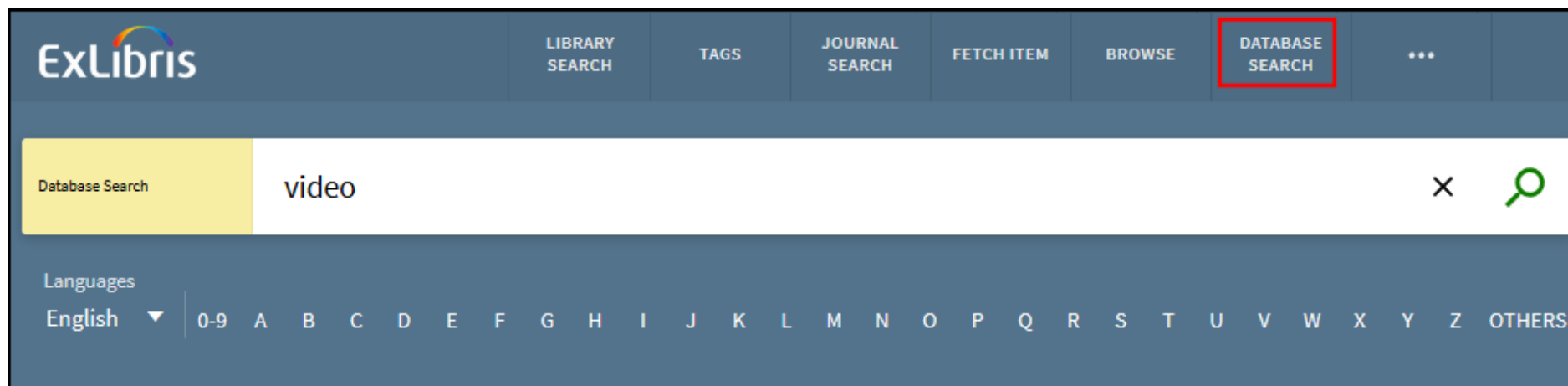


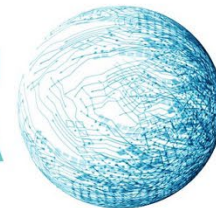
What We Need | “Databases A-Z List” in Primo (1-Search)

A-Z Browsing will be back soon (Hopefully...)

The return of A-Z browsing in Primo

Great tool to further enhance DB browsing experience





What We Need | Useful Recommendations on Primo (1-Search)

What We Want

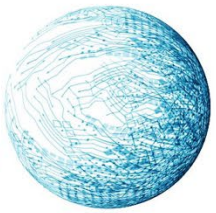
Useful Recommendation
to Users



Challenges

- The University keeps exploring cross-disciplinary collaborations between faculties and units for NEW directions.
- Are Subject Librarians still relevant? Are we fast enough to keep abreast of cross-disciplinary subjects?

Suggest Users to TRY Primo AI Research Assistant
(for Tailor-made Recommendations)



What We Need | Useful Recommendations on Primo (1-Search)

- Use of GAI tools is an unstoppable trend
- Librarians should encourage users to use quality GAI tools to aid their studies
- Librarians should be equipped to provide further assistance in case users need help



**Primo AI Research Assistant
Research Assistant**

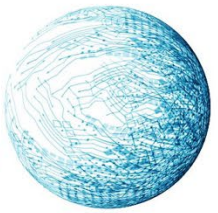
(to be launched)



We are always ready for providing
Research Consultation Service!

**Users may get Useful Tailor-made Recommendations
from Primo and seek for help from Library if need.**

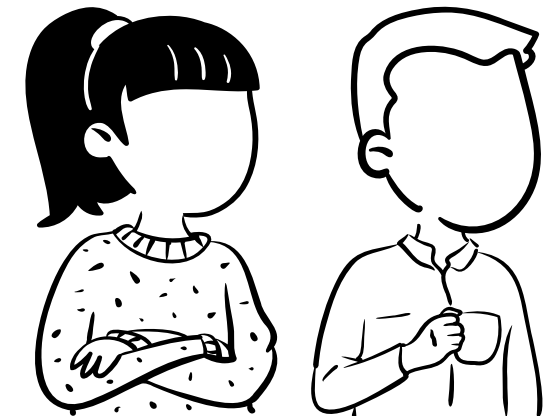




Conclusion

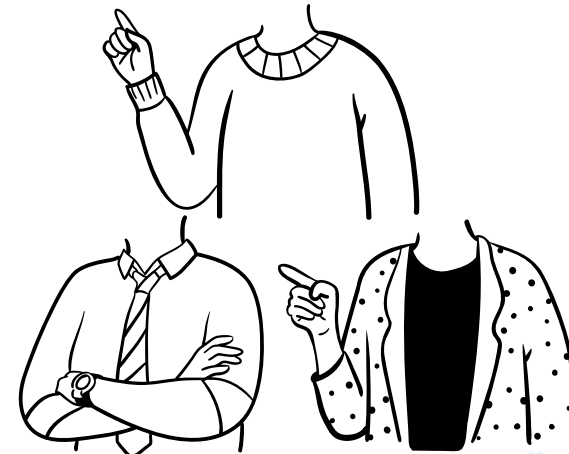
Library

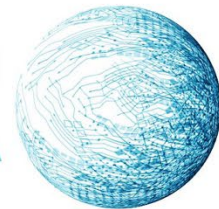
- Streamline workflow, more efficient
- Save duplicate effort and resources
- Rechannel resources to emerging services and areas



Users

- Unified user experience
- Save effort and time on locating resources – study spaces & library resources

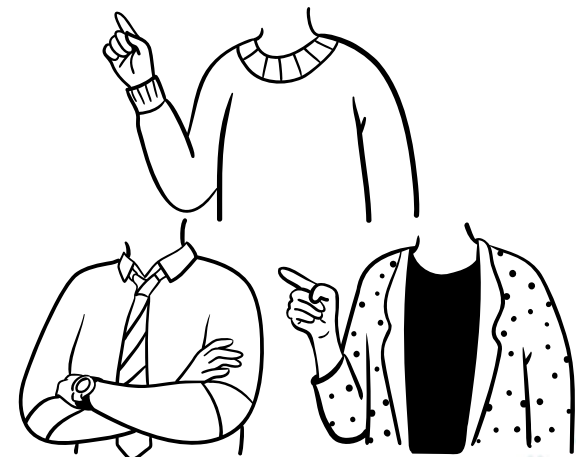
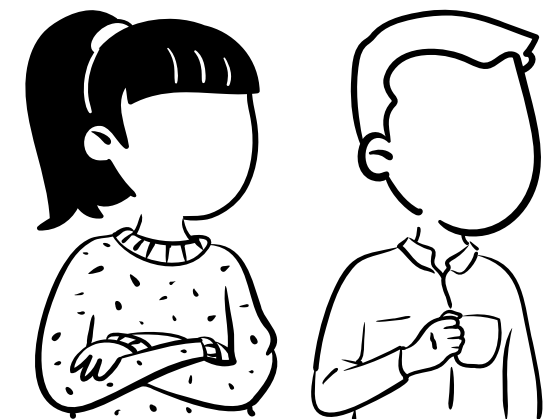


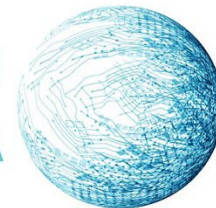


Conclusion

To enhance the user experience, we should always...

- Upskill (Un-learn & Re-learn)
- Think out of the box (Innovating in the Digital Era)
- Embrace changes





Thank you for all colleagues participated in these projects



Contact Information

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