Providing User Experience (UX) to academic libraries

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把用戶体验带进学术图书馆

香港大學圖書館副館長暨
馮平山圖書館館長胡美華

UX 用户体验

User experience

Design

"What people say, what people do, and what people say they do are entirely different things."

(Margaret Mead, anthropologist)

https://guycookson.com/2015/06/26/design-vs-user-experience/

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用户体验定义

UX

- **ISO9241-210标准**：人们对於针对使用或期望使用的产品、系统或者服务的认知印象和回应"

  → 主观 ＋ 不断变化

- **ISO定义的补充说明**：用户在使用一個产品或系统之前、使用期间和使用之后的全部感受，包括情感、信仰、喜好、认知印象、生理和心理反应、行为和得著等各个方面。
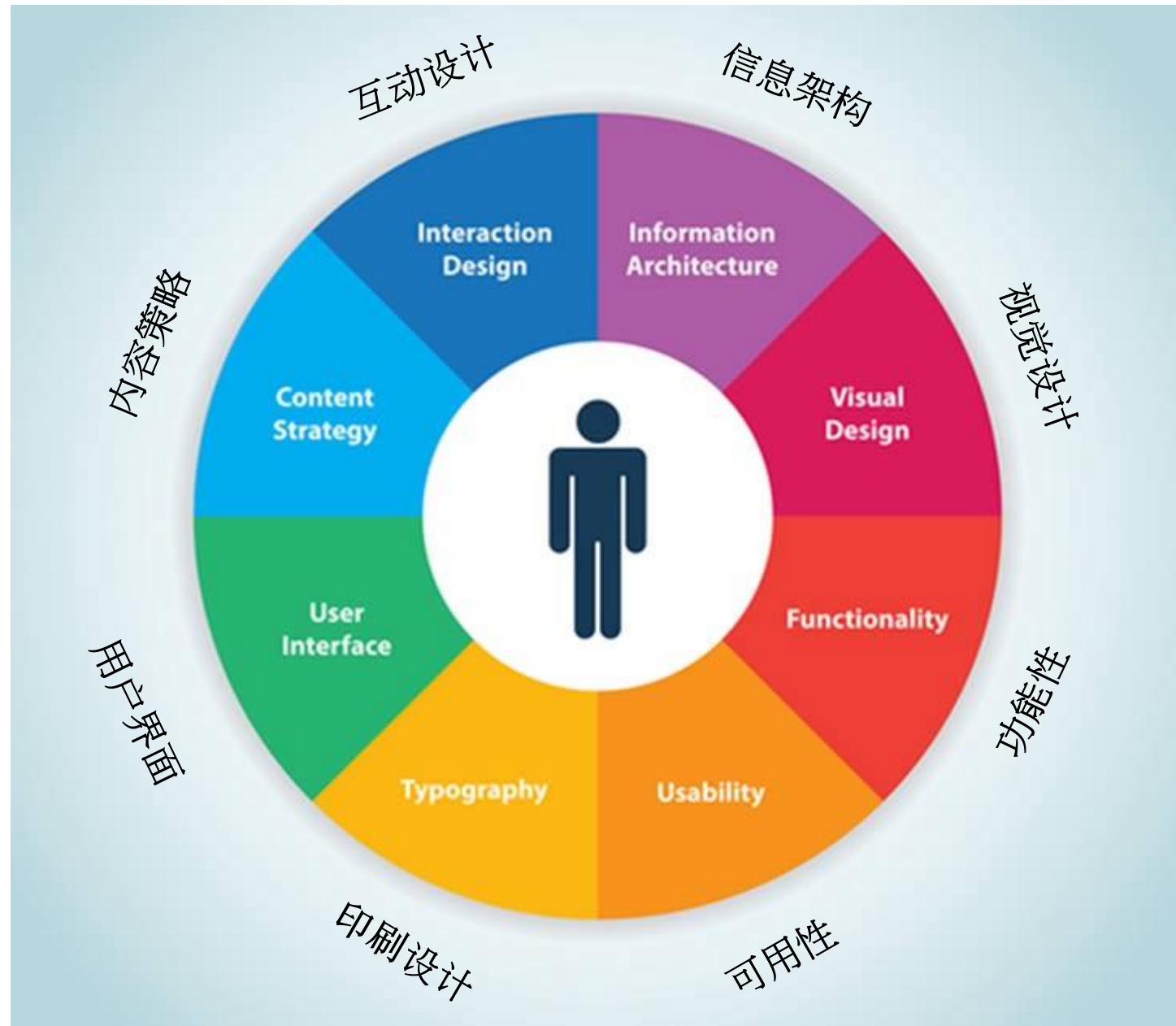
(参考http://wiki.mbalib.com/zh-tw/用戶體驗;

https://en.wikipedia.org/wiki/User_experience)

這個東西好用嗎？用起來方便嗎?

🤔

互动设计　信息架构

内容策略

视觉设计

用户界面

功能性

印刷设计　可用性

用戶体验的内涵
What is UX

https://usabilitygeek.com/user-experience/

😤 "poorly designed products can frustrate, anger, sadden, exclude, and even kill people who use them." 💀

Gautam Krishnan

Hacker | Product Designer at Vitech | Former UI/UX Designer at Zoho

https://uxdesign.cc/the-purpose-of-ux-you-dont-know-what-you-don-t-know-6a94c0d30023

用户体验研究的价值 UX Value

- "...the traditional quantitative metrics and measures used by libraries (eg. statistics on visits, holdings, loans, renewals, database use, downloads, views, social media followers, etc.) do not reveal anything about the success or quality of the interaction experienced by the library user and ultimately the **value or impact** that this has **on the user**. "

- "...look at how and why library users use libraries in the way that they do ... in order to better understand **what users want** from libraries."

(Appleton, L. (2016). User experience (UX) in libraries: let's get physical (and digital). *Insights, 29*(3) , 224–227.)

用戶体验研究目的 UX Purpose

- 觀察和找出用戶需求和行為
  - 做得好的可以繼續或稍作微調，使其更為完善。
  - 做得不好的可以重新思考，運用以用戶為中心的設計流程提昇服務設施。

用户体验研究方法 UX Methods

- **observation** of user movement in the library (to see where users naturally physically travel to within their library spaces as opposed to where the librarians think they travel to)

- **observation** of activity within given spaces (to see how users naturally behave in demarked spaces and environments)

- **walking** through library spaces with users to **observe and discuss** how they use the library

- focused **discussion** with library users about what works for them and what does not

- **diaries and reflective exercises** about users' experience of the library

- **observation** of alternative library- or service-oriented spaces

- directed **storytelling**

- unstructured **interviews**

- **photo studies**

- **cognitive mapping**

用户体验研究 UX research
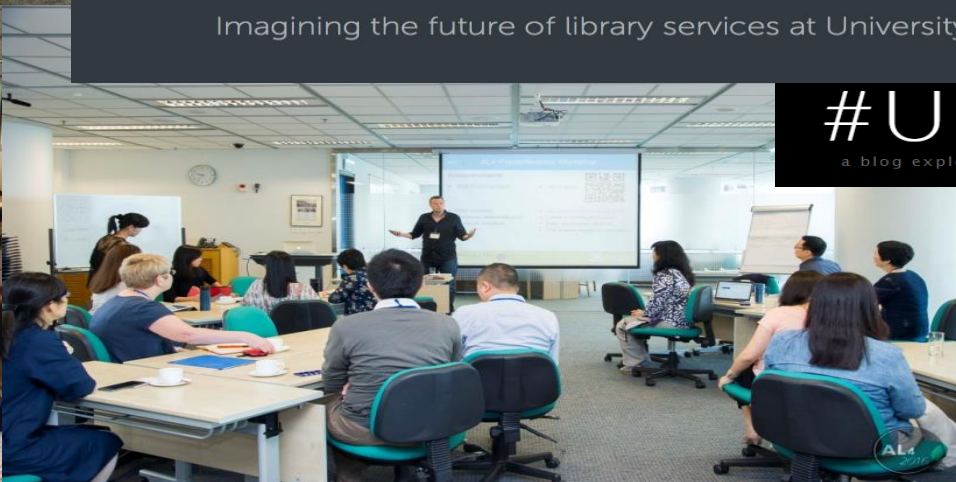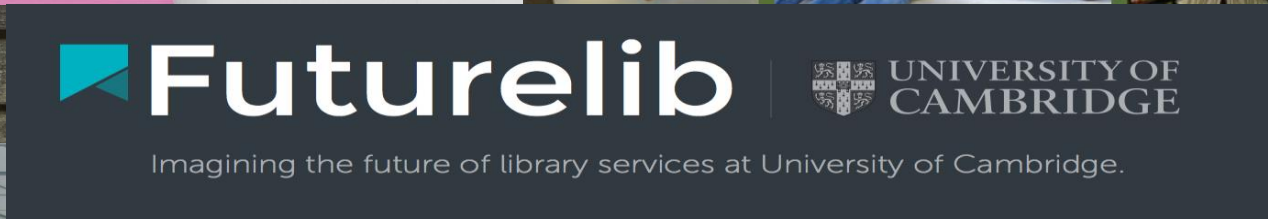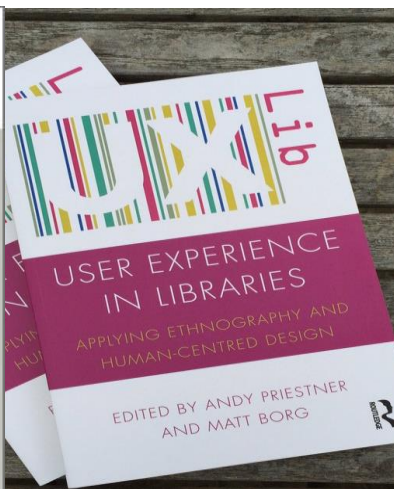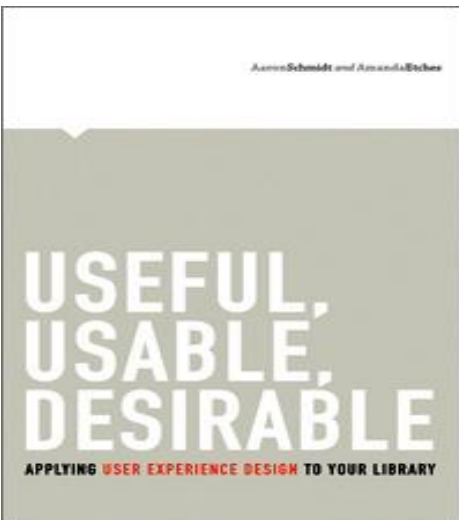
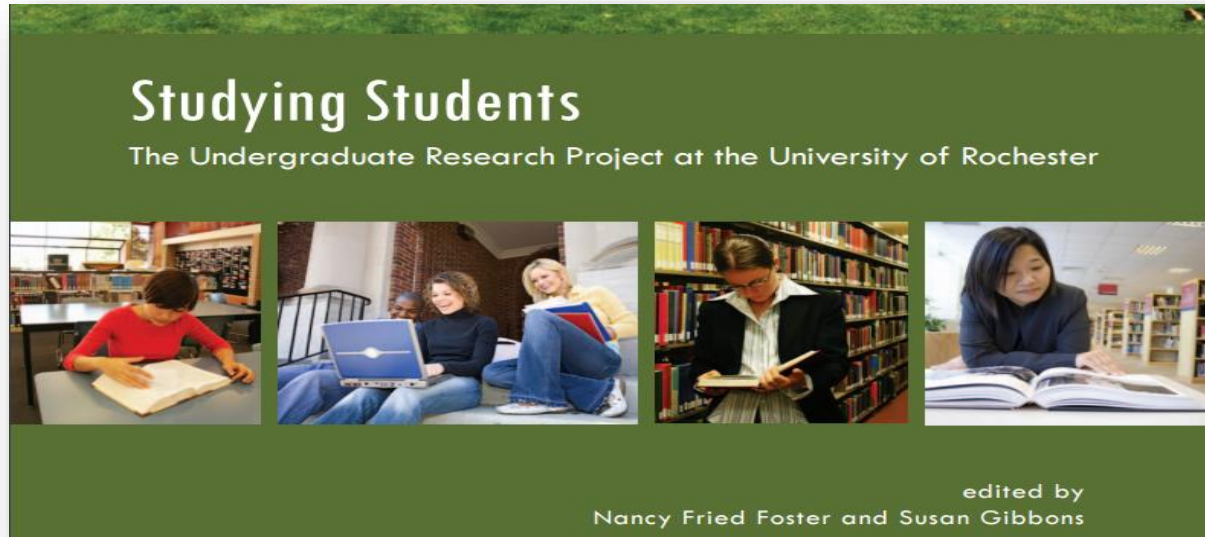**FutureLib at Cambridge University**
（http://www.lib.cam.ac.uk/research/futurelib-innovation-programme）
• Explores the future of academic libraries at Cambridge
• Uses ethnographic research methods and human-centred design techniques
• Examines current user experience (UX) of the libraries

Eye-tracking experiments at Cambridge University Libraries in 2016

Studying Students
The Undergraduate Research Project at the University of Rochester

edited by
Nancy Fried Foster and Susan Gibbons

Ethnographic research on University of Rochester (USA) library users, published in 2007

Research question: "What do students really do when they write their research papers?"
• Interviewed faculty and students
• Research sub-streams included: successful and unsuccessful research strategies, library and non-library resources that students commonly use
• Data gathered through interviews with photos and maps as prompts
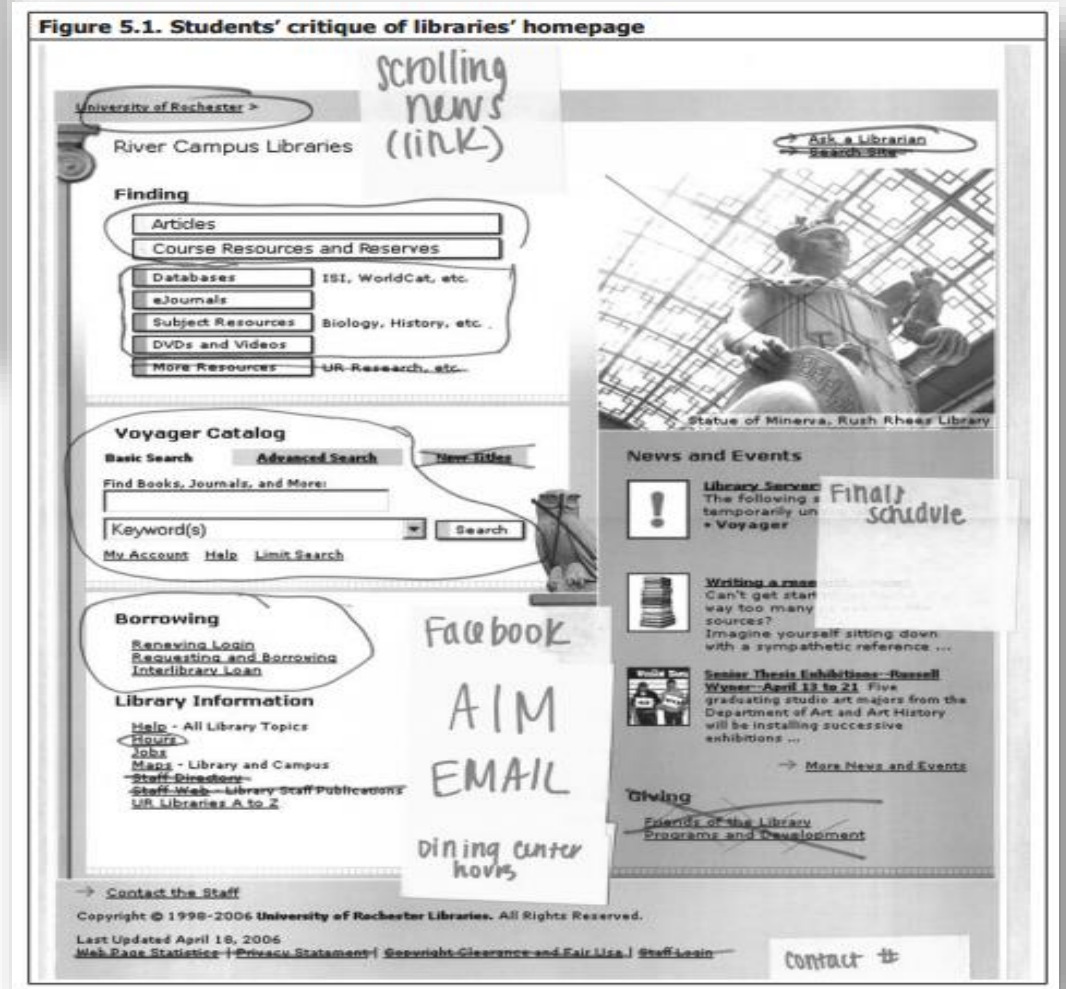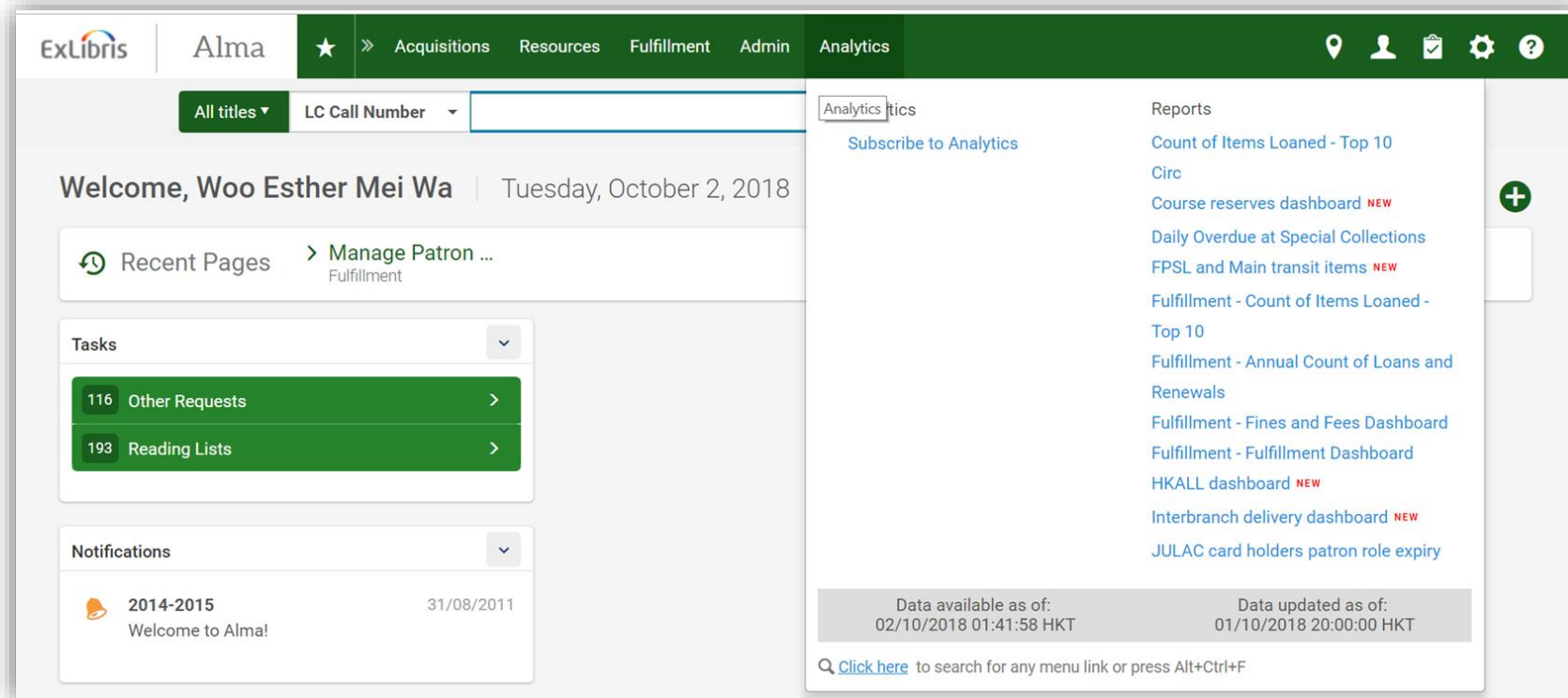
http://www.ala.org/acrl/sites/ala.org.acrl/files/content/publications/booksanddigitalresources/digital/Foster-Gibbons_cmpd.pdf

Figure 5.1. Students' critique of libraries' homepage

2016年前香港大学图书馆进行的用户体验研究

一般收集質量數據的渠道

- 年度藏書統計
- 年度服務及設施用量
- 課程評估
- 用戶調查（每兩年）
- 讀者意見和提議

UX
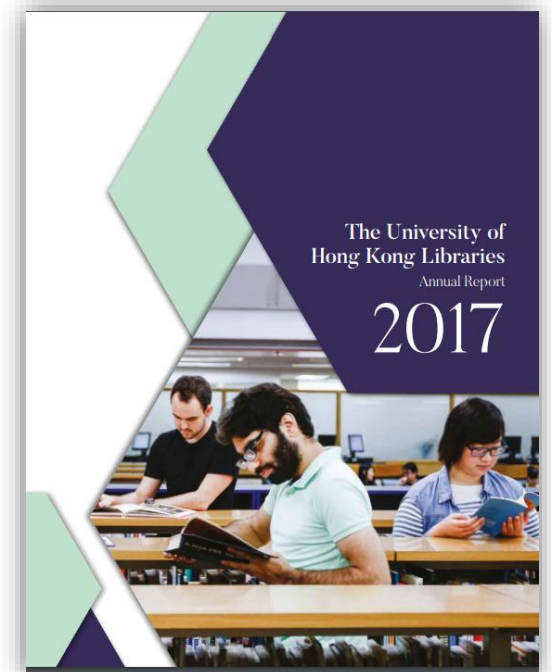
2016

Patron Experience Librarian
Melissa Man

Plus interested staff and library school student interns

UX

- Track **user behaviours, needs and trends** by :
    - Compiling and analyzing usage statistics, comments and suggestions from patrons
    - Conducting qualitative and quantitative user needs/usability studies
    - Consulting groups representing various library stakeholders.
- Utilize user input to collaborate on and contribute to the creation, development and implementation of **innovative activities, projects, services** and facilities that enhance user experience.
- Anticipate and keep **library staff** abreast of patrons' needs, preference and trends
- Coordinate the Libraries' **web presence**.
- Suggest ideas for design, contents, location of **library signage**.

研究伦理道德Ethical Concerns

http://www.rss.hku.hk/integrity/ethics-compliance/hrec

Approval required:

- HREC reviews "any research protocols involving human participants"
- Observation is a form of "collection of new data from human participants"
- Waiver of informed consent received

已完成的項目
Projects completed

- **2/F new library entrance and user behaviours**
- **OCLC Digital Visitors & Residents**
- User survey 2017
- **Level 3 (Library commons) review**
- **Design of new learning spaces on G/F & 2/F Main Library**
- **Medical Library's standing workstations**
- **Education Library's shelving area**
- **Webpage revamp** (To be continued)
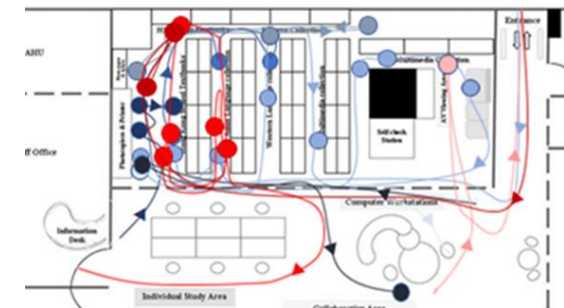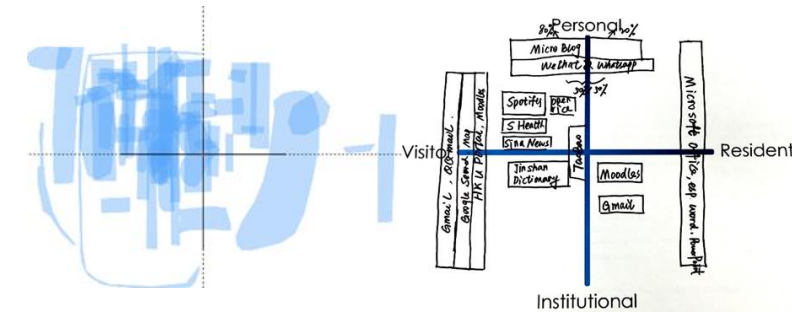
Behavioural Mapping
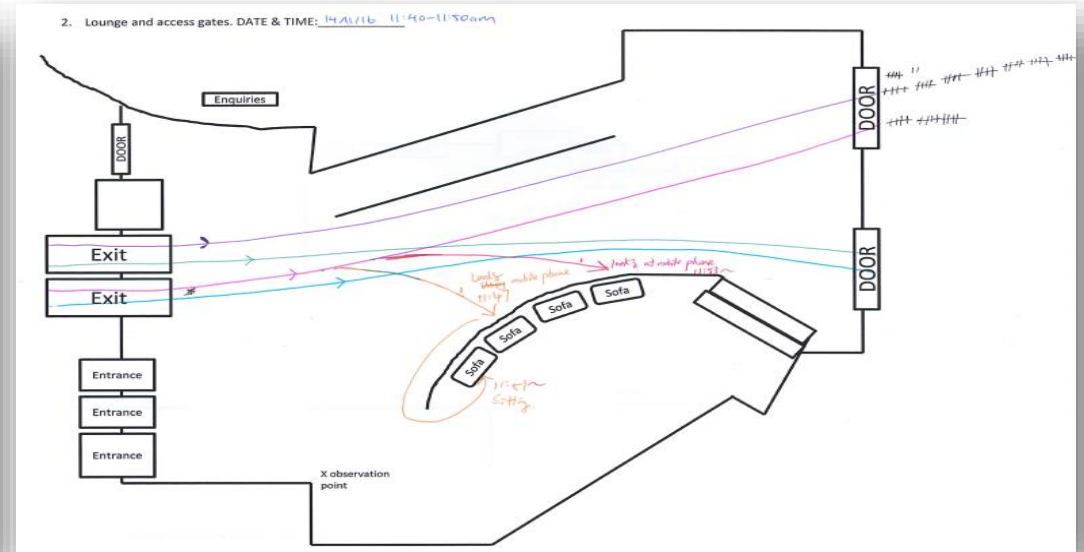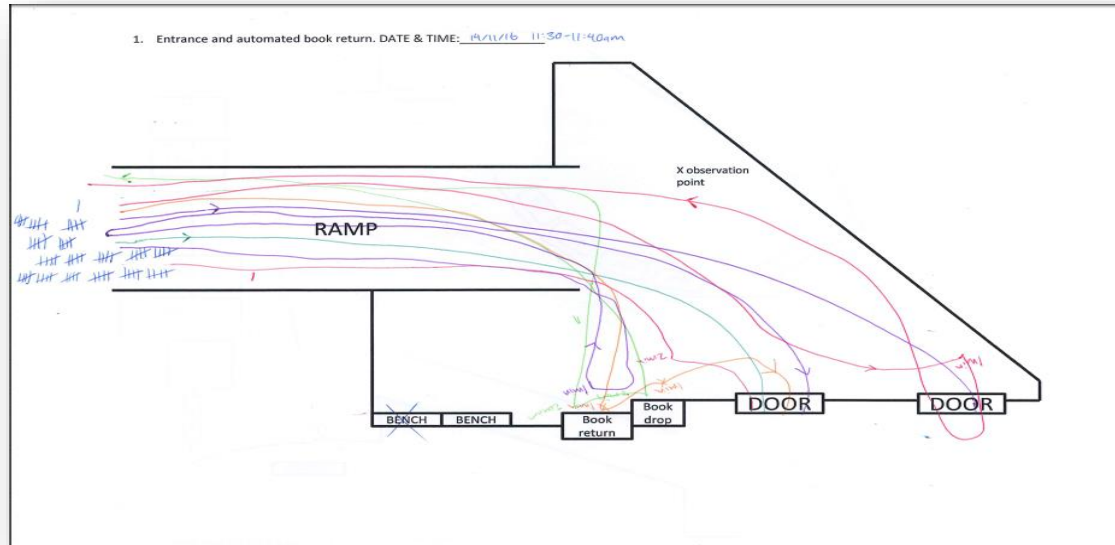
- 230 minutes of data collected in 2016
- From 5 sites in Main Library: 1) New main entrance 2) Lounge 3) Self-service collection 4) Exhibition area 5) Service counters
- During 11:30am – 12:00pm and 4:30pm – 5:00pm

Non-participant Observation

Location	Date	Time	Direction	Observed Behaviour	Interpretation	Code 1	Code 2	Code 3
1	21-11-16	11:30 - 11:40	Exit	makes phone call while walkin	waited to leave lib to make call	D4		
1	21-11-16	11:30 - 11:40	Exit	notices researchers and reads s	curious	F4		
1	21-11-16	11:30 - 11:40	Exit	stops before getting on ramp t	waited to leave lib to make call	D4		
1	21-11-16	11:30 - 11:40	Exit	texting and walking	habit/ bored	D5		
1	21-11-16	11:30 - 11:40	Exit	reads lecture slides (print) whi	multi-tasking	F7	C4	
1	21-11-16	11:30 - 11:40	Exit	texting and walking	communicating with someone	D5		
1	21-11-16	11:30 - 11:40	Exit	eating apple and walking	multi-tasking	E1		
1	21-11-16	11:30 - 11:40	Exit	pulling suitcase up ramp	travelling somewhere?	C8		
1	21-11-16	11:30 - 11:40	Exit	walks carrying only phone and	left belongings in lib, leaving mom	C6	D3	
1	21-11-16	11:30 - 11:40	Exit	walks holding phone and obse	bored	D3		
1	21-11-16	11:30 - 11:40	Exit	walks carrying just book and ph	leaving momentarily, left things at	D3	C7	
1	21-11-16	11:30 - 11:40	Exit	walks carrying tablet, phone ar	going somewhere, holding essenti	D1	D3	C3
1	21-11-16	11:30 - 11:40	Exit	carrying printed A4 sheets (we	handing in printed assignment or g	C3	C4	
1	21-11-16	11:30 - 11:40	Exit	walks carrying stack of books u	taking borrowed books to locker o	C7	D3	
1	21-11-16	11:30 - 11:40	Exit	half folds a sheet of paper	printed something at the lib?	C7		
1	21-11-16	11:30 - 11:40	Exit	walks slowly, reading folded A	multi-tasking and studying	C7		
1	21-11-16	11:30 - 11:40	Enter	holding a magazine and walk in	bring it inside and read it	C7		
1	21-11-16	11:30 - 11:40	Enter	watching smart phone	patron is bored	D3		
1	21-11-16	11:30 - 11:40	Enter	holding a starbucks coffee and	hungry and think library is a comfo	E1		
1	21-11-16	11:30 - 11:40	Enter	with a carrier/ luggage	need to borrow many books?	C8		
1	21-11-16	11:30 - 11:40	Enter	most patrons enter into the library with a bag on their back	C3		
1	21-11-16	11:30 - 11:40	Enter	some of them with a hand carried bag	C3		

214 observations in 2016 for the new entrance area

Codes assigned to all observations

Codes grouped into categories:
A) Social activities
B) Library services/ facilities
C) Belongings/ objects
D) Technology
E) Food and Drink, and
F) Actions

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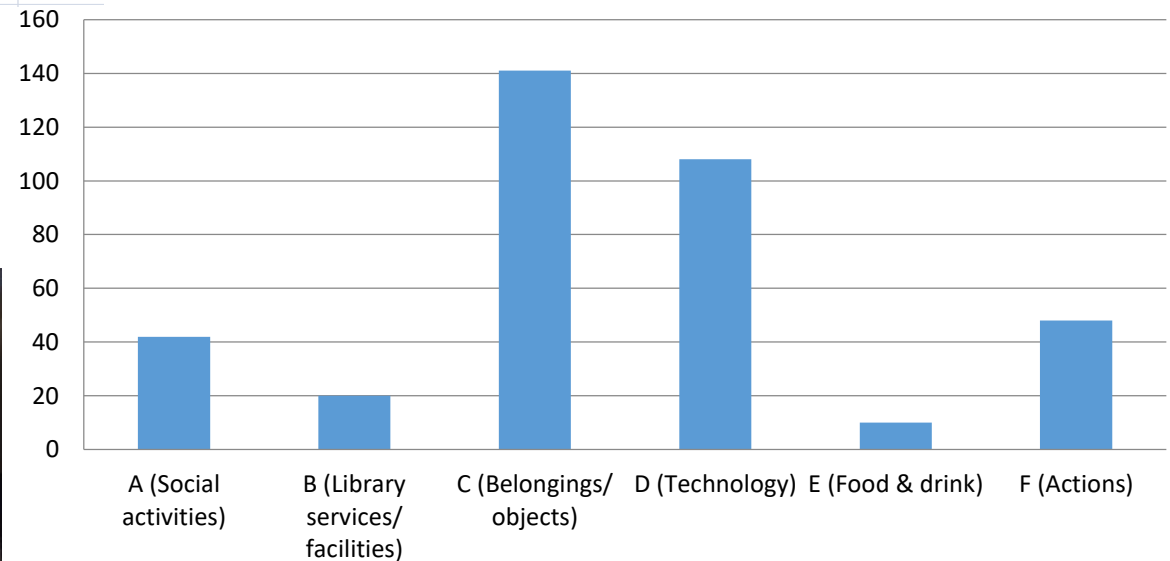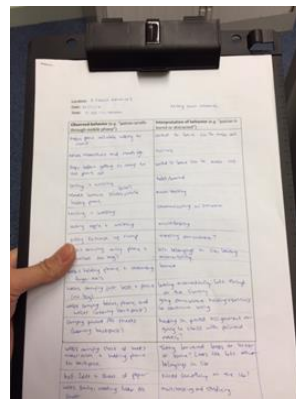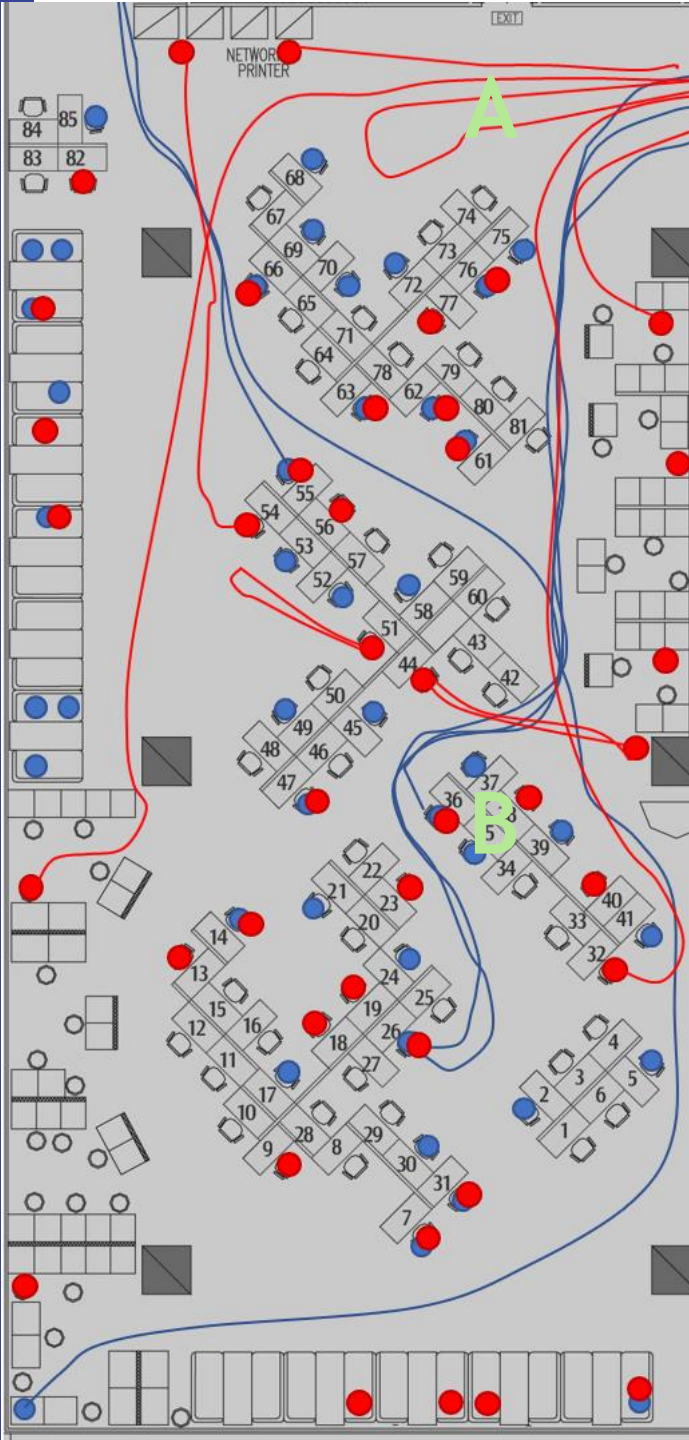
Level 3 - Technology Zone

▶ 55% of users were observed relaxing in the Technology Zone, in which activities like texting, watching videos and playing mobile games were performed.

▶ Among those users who were relaxing, half of them were using the desktop provided, two of them were using their phones and one of them was using own laptop.
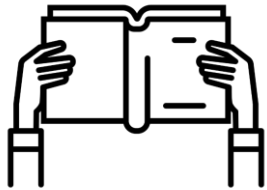
■ 12 Jun 2017 12:45-12:55pm

■ 14 Jun 2017 12:55-1:05pm

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Level 3 – Breakout Zone

▶ Both bar seats and sofa seats were popular

▶ Surprisingly, the express printer high table was also well-used (Area D).

▶ 40% of users were observed reading books and magazines in the Breakout Zone. 30% of users were observed relaxing.

▶ Users were observed eating all around Level 3 except in the Breakout Zone.

■ 12 Jun 2017 1:00-1:10pm
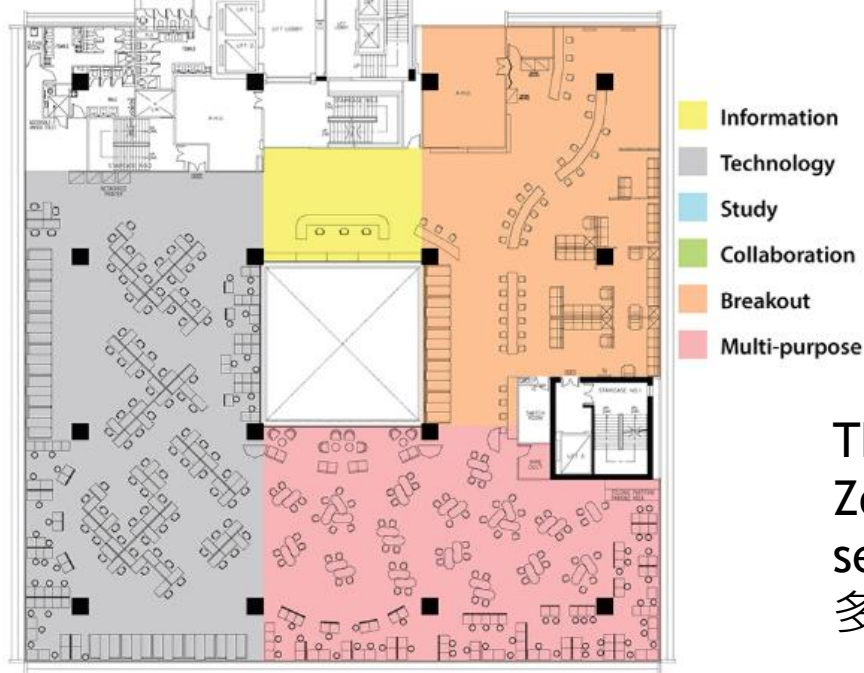
■ 14 Jun 2017 1:05-1:15pm

学习共享空间检讨总结
Level 3 Review Conclusion

The Study Zone was used for serious study
研习区：认真研习

The Technology Zone was used for information search, casual study and relaxation
科技区：搜寻资讯,轻松研习及松弛

The Collaboration Zone was used for discussion and multi-tasking
协作区：讨论及同时处理多项工作

The Breakout Zone was used for reading, relaxing, but not enjoying food
休恬区：阅读,松弛但不会享用食品

The Multi-purpose Zone was used for serious study
多功能区：认真研习

Information
Technology
Study
Collaboration
Breakout
Multi-purpose

图书馆网页使用调研
Library homepage user study

Research Question: "What kind of Library homepage design

Is most appealing and useful to our users?"

1. Determine how users naturally categorize library services and tools so that we can group them thematically on our re-designed homepage.

2. Discover what types of layouts and features users prefer so that we can incorporate appealing features in our re-designed homepage.

Card sorting
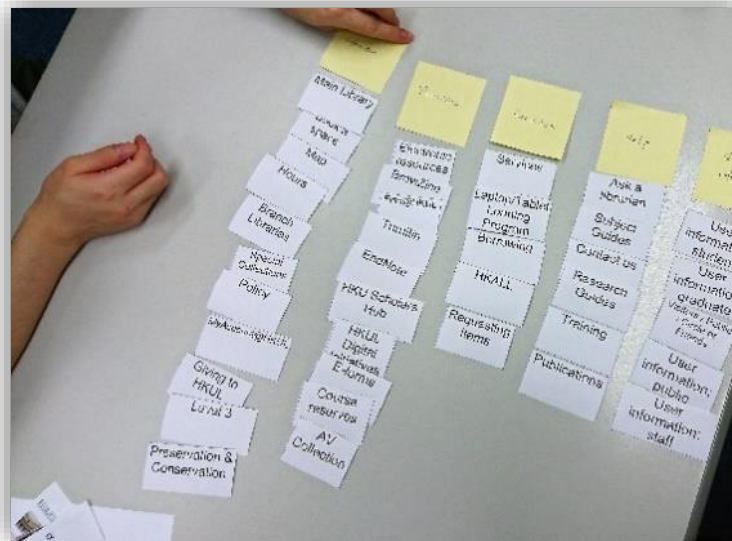
Co-design homepage layout

图书馆网页使用调研
Library homepage user study

- 7 Sep 2018

- $25 coffee coupon as incentive

- Invitation by email and Facebook

- Register to indicate interest AND give consent to participate

- 230 registrants →15 invited → 7 showed up

2 Academic Staff (UMAG and Microbiology)
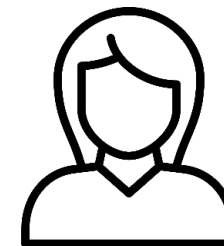
2 Postgraduate Students (Business and Education)

1 Research Staff (Real Estate and Construction)
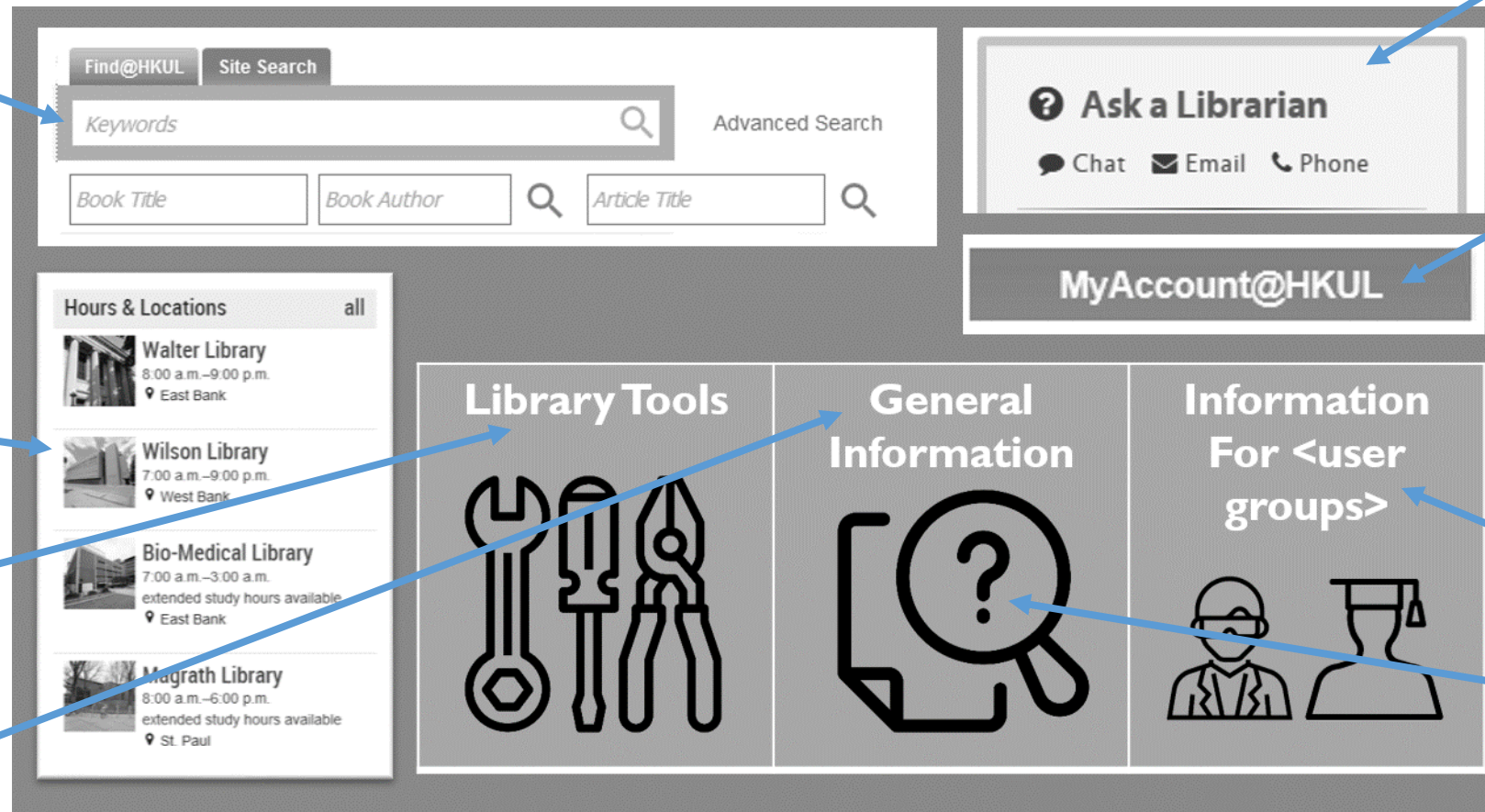

2 Undergraduate Students (Engineering and Business)

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图书馆网页使用调研
Library homepage user study

Ask a Librarian with options at a glance

Prominent search box

Hours and locations at a glance with photo and location

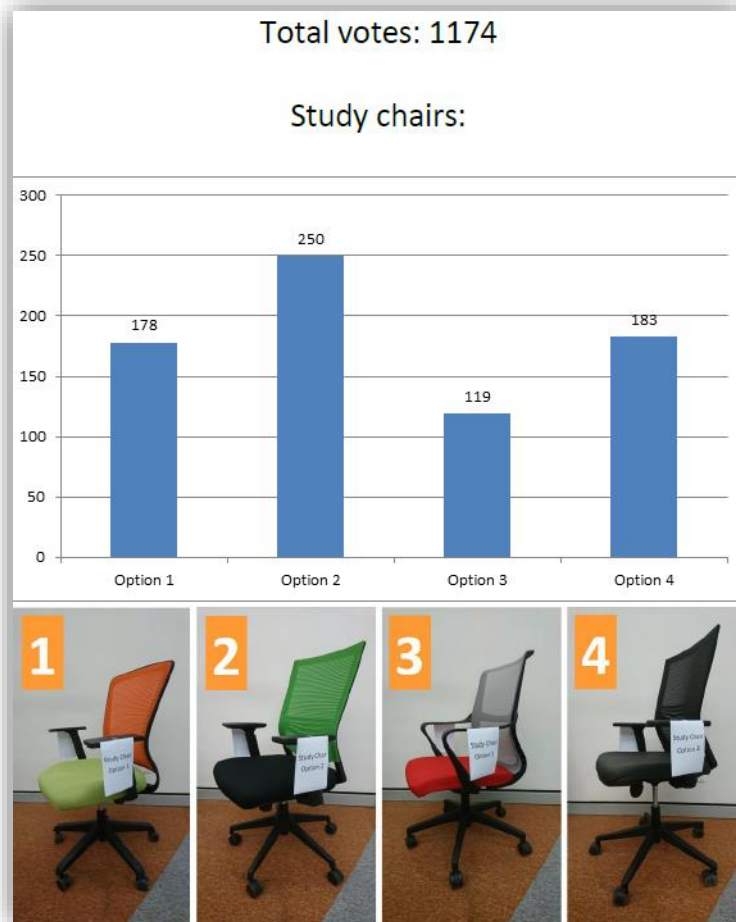Library tools (active) and general information (static)

Prominent MyAccount@HKUL

Information for user groups

Simple infographic

总馆及医科图书馆装修读者资询及坐椅测试
Focus group consultation and furniture trial for the renovations in Main and Medical Libraries
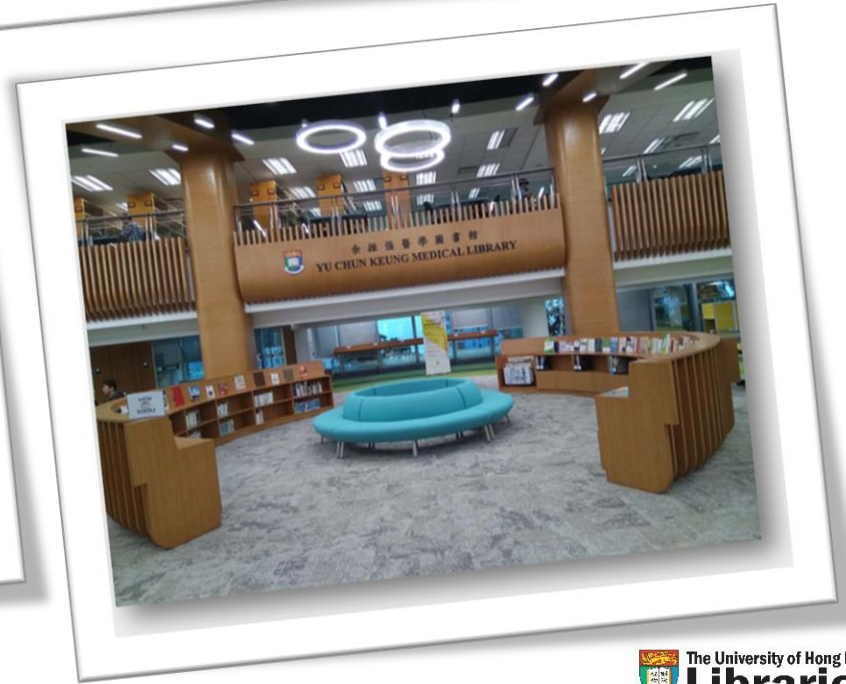

Total votes: 1174

Study chairs:

- Student comments and suggestions on:
  - Seating and zoning
  - Room booking and management
  - Computer H/W & S/W needs
  - Printing services
  - New services such as 3D printing/scanning, studio, editing rooms
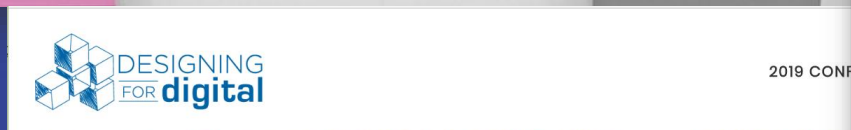 - Furniture & environment

Upcoming UX projects
Signage and self-services for New learning spaces of G/F & 2/F Main Library

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用戶体验交流
UX exchange

提升用户体验相关方法
Methods to enhance UX

Design Thinking 设计思维

https://dschool.stanford.edu/resources-collections/a-virtual-crash-course-in-design-thinking

HCD (Human-Centered Design) 以人为本设计
http://www.designkit.org/human-centered-design

谢谢！
Thank You!