

The PRRLA 2018 Meeting
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KLIB: A new mobile app for reserving and managing library seats and facilities at Korea University

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WHY MOBILE APP

KLIP: WHAT & WHY

KLIP: FUNCTIONS

KLIP: USAGES

SO WHAT? + α

Mobile



(Source: <https://www.motherandbaby.co.uk/reviews-and-shop/playtime/baby-toys-under-12-months/taf-toys-mp3-stereo-cot-mobile>)

Mobile



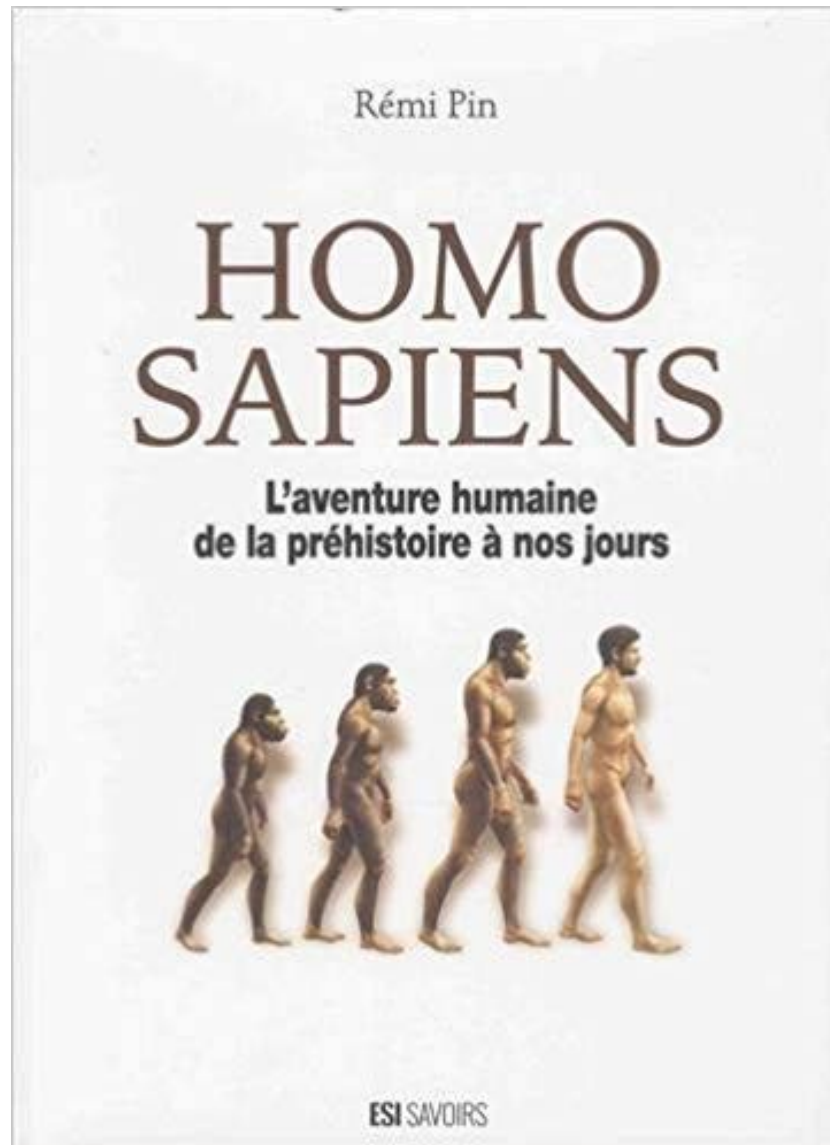
(Source: <https://blog.mozilla.org/blog/2017/03/03/mozilla-browserstack-partner-drive-mobile-testing-real-devices/>)

Mobile



(Source: <https://blog.mozilla.org/blog/2017/03/03/mozilla-browserstack-partner-drive-mobile-testing-real-devices/>)

Homo sapiens



Phono sapiens

Nomophobia is the fear of being out of mobile phone contact. The term, an abbreviation for "no-mobile-phone phobia".

diduknow-facts.com

Image source : blog.doubleslash.de



(Source: <http://diduknow-facts.com/nomophobia/>)

Planet



(Source: <https://www.collinsdictionary.com/dictionary/english/planet>)

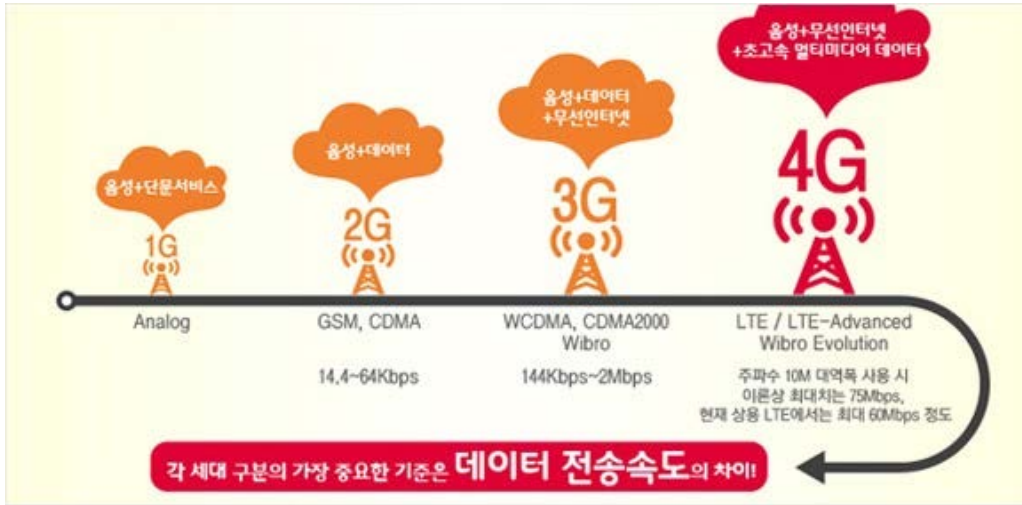
Planet of the phones



Jon Berkeley

(Source: <http://www.economist.com/node/21645180/print>)

Mobile networks and devices



(Source: <http://info-graphics.kr/?p=2859>)



(Source: <http://blog.nskinc.com/it-services-boston/topic/mobile-device-management>)



Mobile media in daily life



(Source: <http://telecomblogs.in/wp-content/uploads/2013/06/Idea-Facebook-Messenger.jpg>)



(Source: <http://planetivy.com/gaming/2590/could-mobile-gaming-be-killing-off-consoles/>)



(Source: <http://www.talkandroid.com/235039-samsungs-milk-music-service-now-accessible-through-the-galaxy-tab-4-and-note-tablets/>)



(Source: <http://www.honestech.com/main/nScreen-Deluxe.asp>)

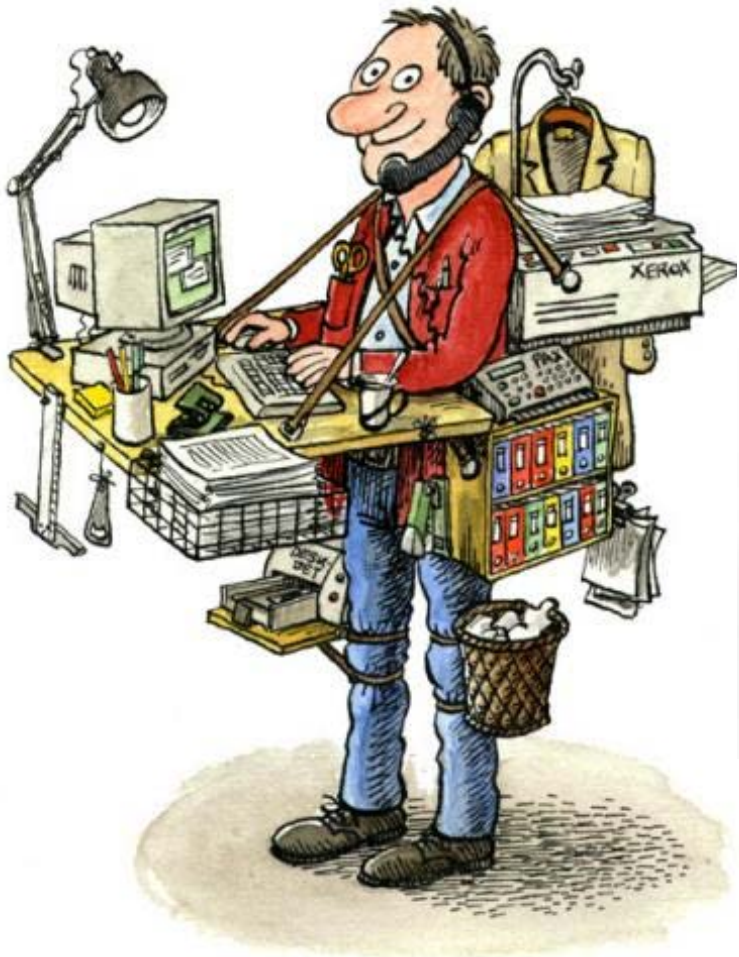


(Source: <http://blogs-images.forbes.com/stevefaktor/files/2013/03/mobile-payments-safe1.jpeg>)



(Source: <http://crackberry.com/foursquare-blackberry-v1-8-2-now-available>)

Mobile users



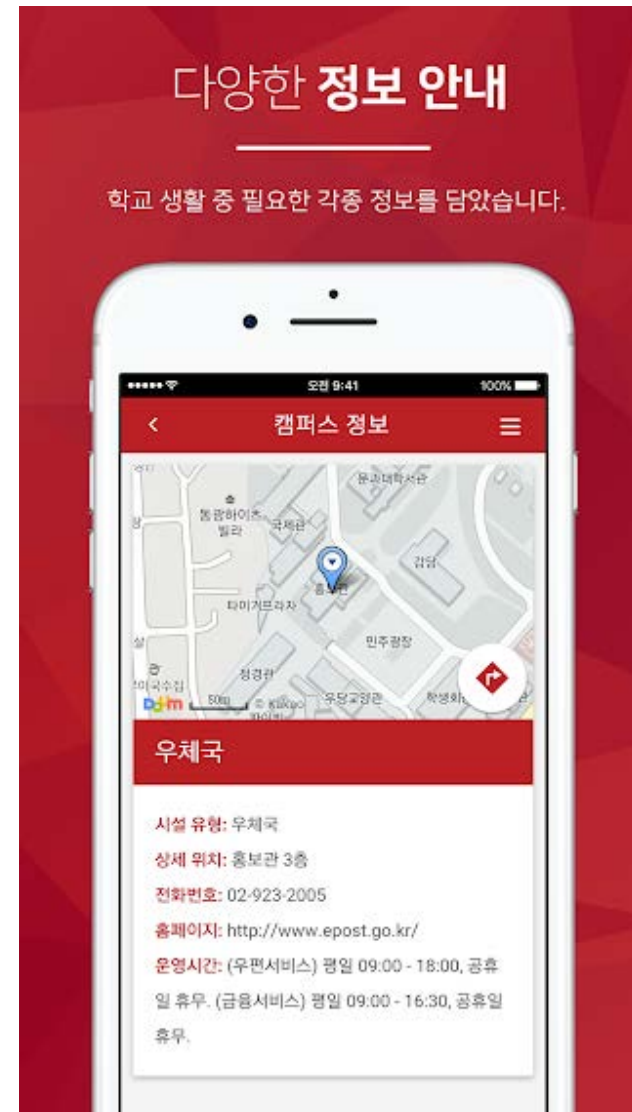
(Source: http://www.toonpool.com/user/250/files/the_mobile_office_19575.jpg)

(Source: <http://www.webdesign.org/web-design-fails.22423.html>)

Korea as mobile power house

- Land: 0.1 Million Km² (U.S.A.: 9.83 Million km²)
- Population: 51.8 Million (U.S.A.: 308 Million)
- 11th largest economy in the world
- Broadband Internet speed: World No.1
- High speed Internet subscribers: 17.2 Million Households (99%)
- 4G LTE mobile phone subscribers: 53.4 Million (more than 100%)
- Smartphone users: 50.1 Million (97%)

Mobile app used by Korea Univ. students



(Source: <https://play.google.com/store/apps/details?id=kr.ac.korea.kupon&hl=ko>)

Then, why not mobile app for library?



for



Why a mobile app for library

- Change from collection to service
- User first

**New wine
(new goal)**

**New bottle
(new tool)**



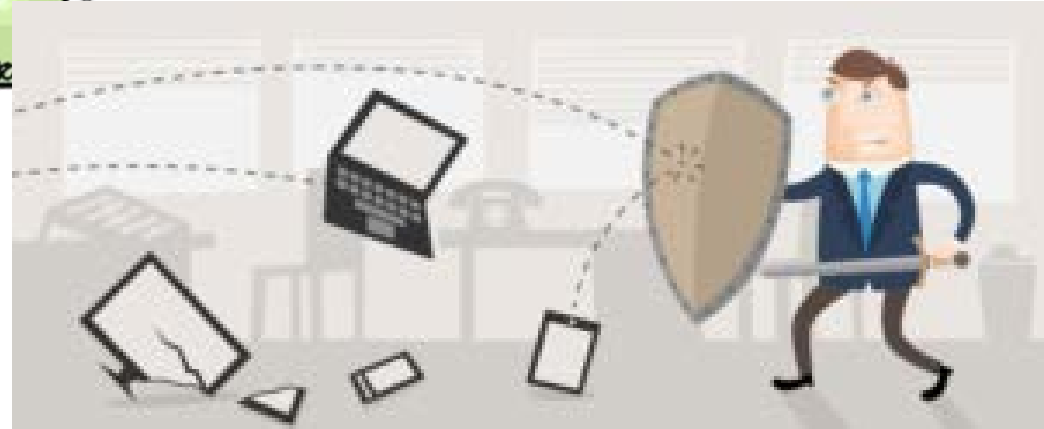
(Source:
<http://www.thegreenhead.com/2015/01/wine2go-foldable-wine-bottle-flask.php>)

- Space renovation: CJ Creator Library
- Mobile technologies replace outdated kiosks

Any hurdle? Resistance to change

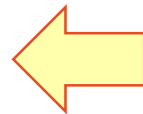


(Source: <http://rachaelseda.com/post/927363235/resistance-to-change>)



(Source: <https://www.loop.co/articles/how-do-we-get-employees-to-adopt-technology-for-learning/tech-resistance/>)

What is KLIB?



It is a **mobile application** for KU Library users with smartphone

A tablet PC displaying the responsive web page for the reservation system. The page has a grey header with the 'KOREA UNIVERSITY LIBRARY' logo and the text '고려대학교 도서관'. A user is logged in as 'FUTURENURI 님이 로그인 하셨습니다.'. Below the header, there is a dashboard with a circular progress chart showing '100% TOTAL' and a video player. The main content area is titled '좌석배정/시설예약시스템' and contains a table for making reservations.

1. 도서관선택	2. 그룹/실 선택	3. 시설선택	4. 날짜선택	5. 시간선택 (3시간까지)
백주년기념 학술정보관(CDL)	1층 영상/사진제작실 예약	108C	2017 8월 8일 / 화	10:30 ~ 11:00
중앙도서관	1층 그룹스터디룸	108D	1일 / 화	11:00 ~ 11:30
과학도서관	2층 그룹스터디룸	108E	2일 / 수	11:30 ~ 12:00
	2층 Theater/ 그룹프리젠테이션룸	108F	3일 / 목	12:00 ~ 12:30
	3층 화상회의실		4일 / 금	12:30 ~ 13:00
	4층 그룹스터디룸		5일 / 토	13:00 ~ 13:30



It is a **responsive web page** for KU Library users with tablet PC

Let's watch KLIP video

What is KLIB?

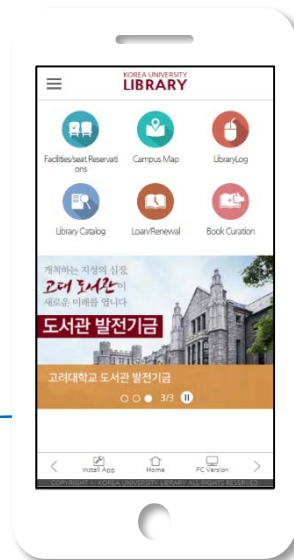
Reserving
seats and
facilities

Library service application

- Personalized
- Curated
- Integrating existing 15 library web services

K O R E A U N I V E R S I T Y L I B R A R Y

Library
user
services

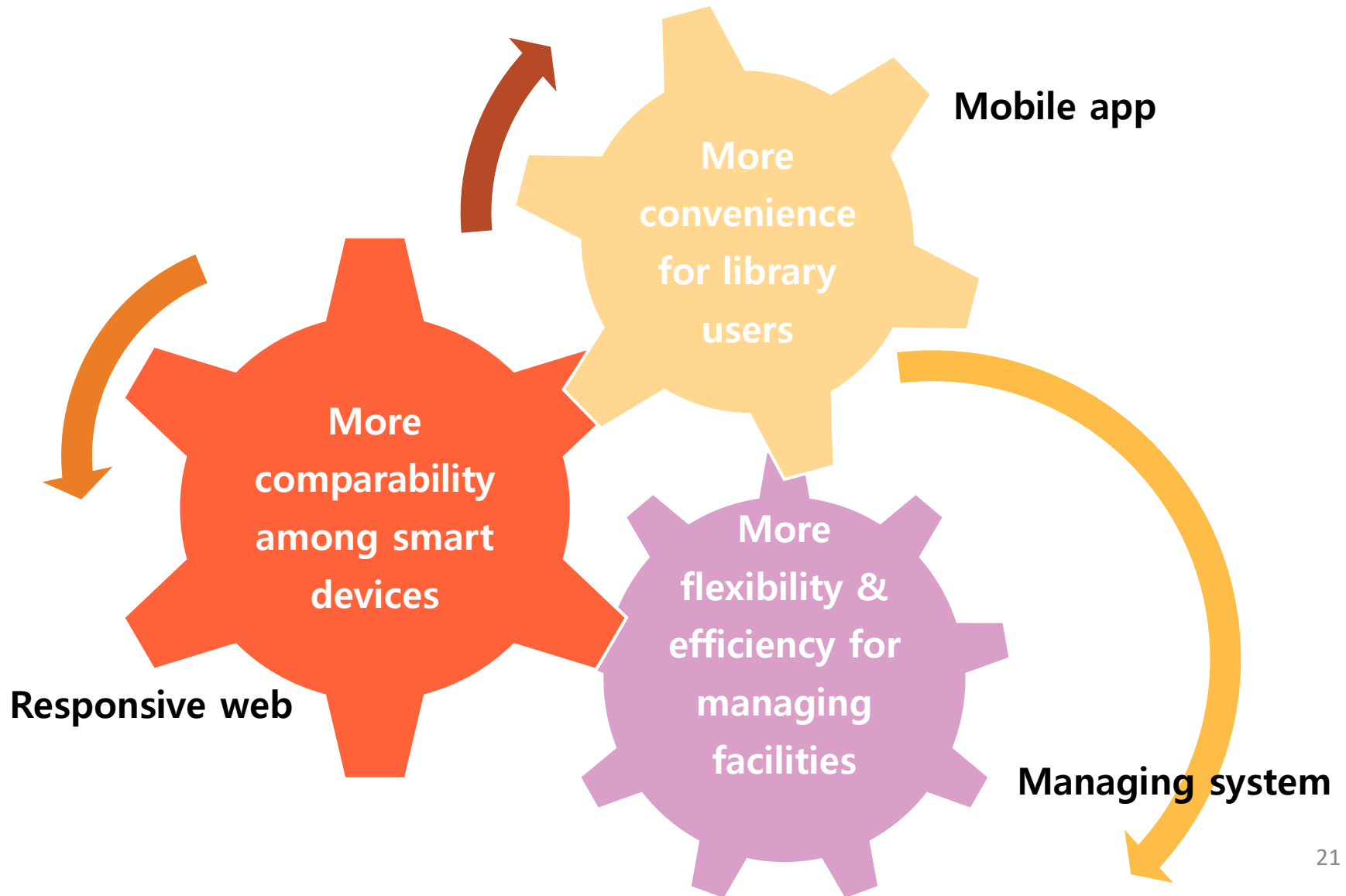


Big
data
driven
services

Development

- Outsourcing (US\$ 160,000)
- June 2017 ~ Sep. 2017 (4 months)

Why KLIB?



Reservations - Library seats and facilities

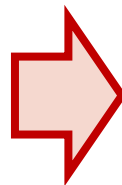
- 5,000 seats in 6 branches
- 70 facilities: group study rooms, studios and conferences rooms



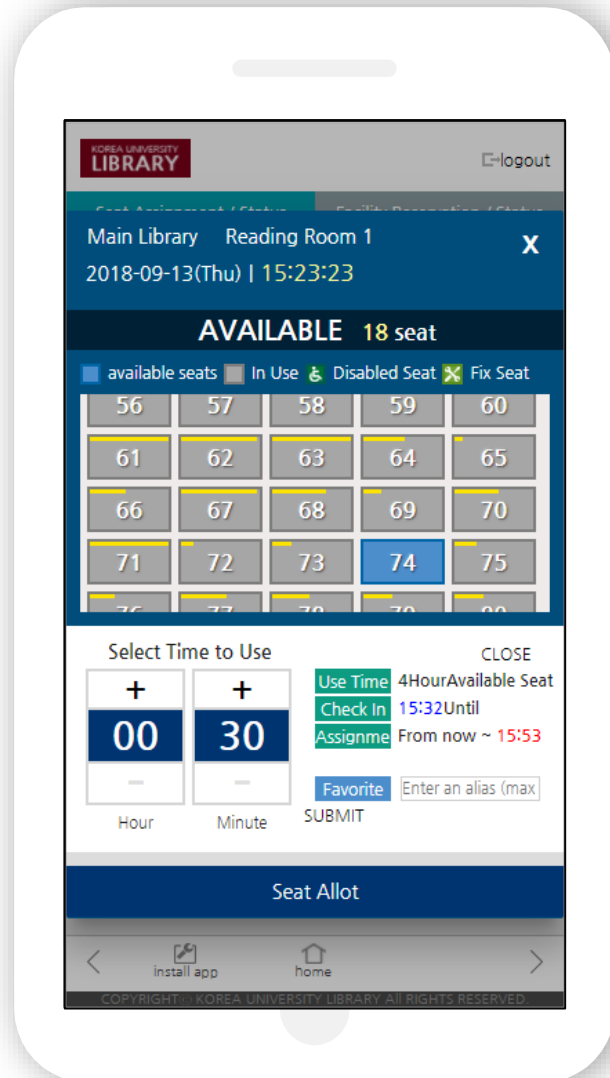
Reservations - Library seats

- Seat assignment at kiosk
- Seat QR code (iOS), NFC (Android) authentication

- App/Web reservation
- Automatic authentication through communication by beacons

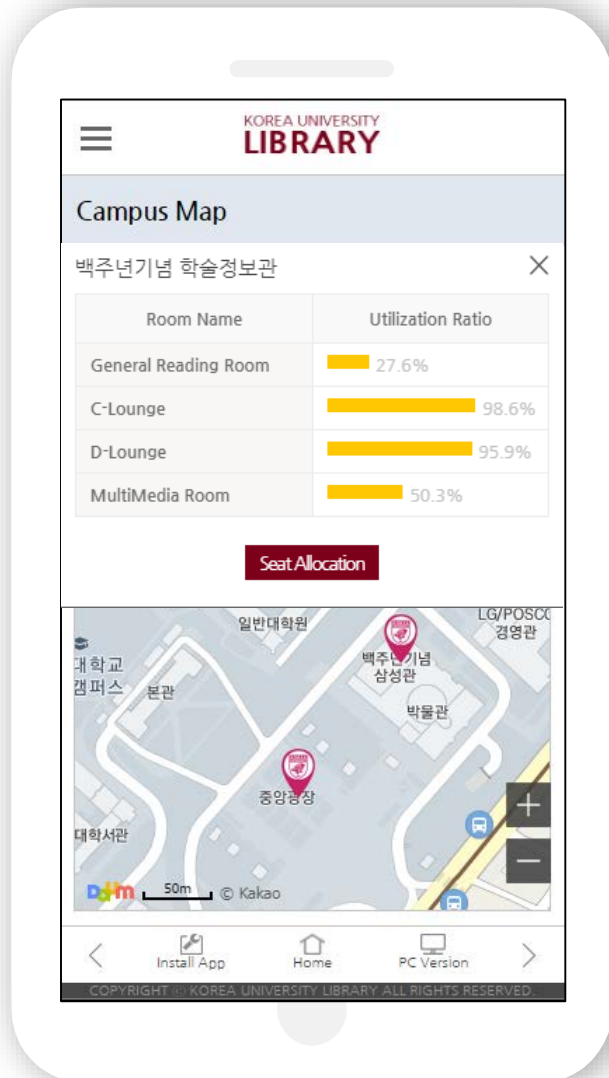


Reservations - Library seats

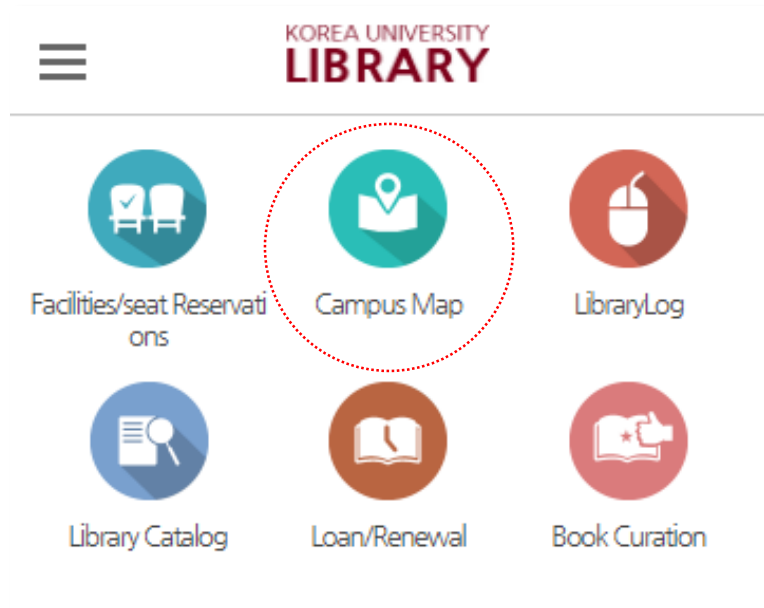


- App or web reservation
- Selecting library
- Selecting room
- Selecting seat
- Selecting time to use
- Authentication (beacon)
- Design of app icons reflect the characteristics of each room and seat

Reservations - Library seats

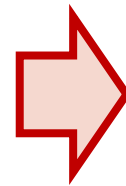


- See campus map based on user's location
- Check real-time usage statistics on near rooms and seats



Reservations - Library facilities

- Web reservation
- Personal authentication at the desk
- Check-out at the desk



- App/Web reservation
- Automatic authentication through communication by beacons



Reservations - Library facilities

The screenshot shows a mobile application interface for making reservations. It includes a time selection field, a participant input section with representative and reservation information, a usage field, and an item rental list with three options. A blue 'Reservation' button is at the bottom right. The footer contains copyright information for Korea University Library.

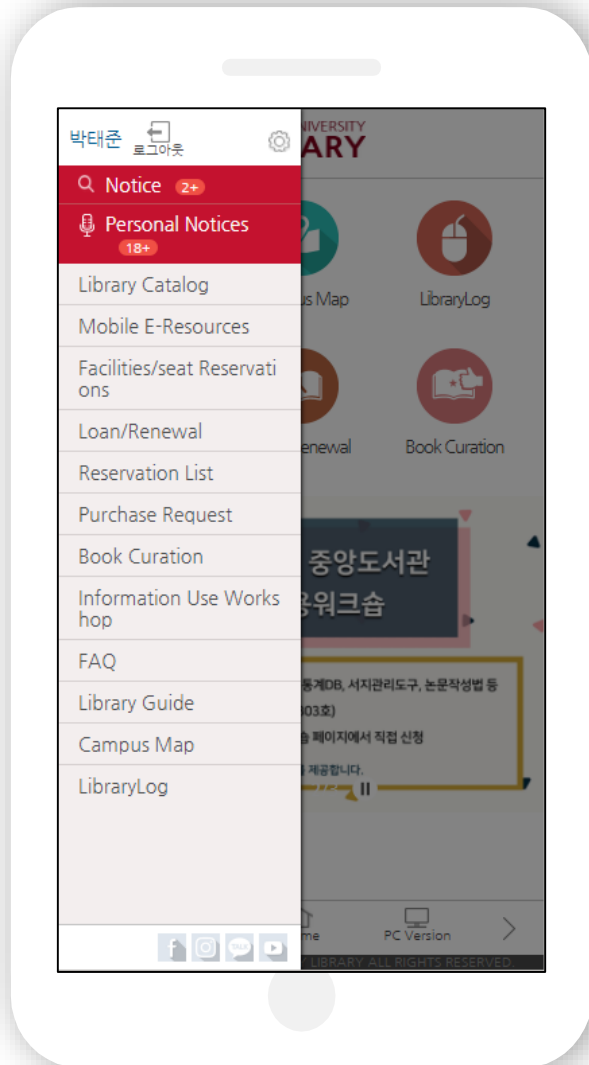
Select Time	11:00 ~ 12:30 (90Minute)
Input Participant	
Representative	박태준(602878)
Reservations Information	Contact If it differs from the current contact, the service may be restricted Portal ID User - edit portal personal information Library ID user - edit library homepage personal information
Usage	<input type="text" value="Please enter the purpose of"/>
Item rental list	
[Notice 1] Most batteries are supplied fully charged and no charger provided, when photographing is over we provided memory card reader for transfer data [Notice 2] You can rental the cables(multi tap, reel cable, HDMI cable), autpole, bracket, clamp and iPad on site	
Option 1	Select
Option 2	Select
Option 3	Select
<input type="button" value="Reservation"/>	

install app home

COPYRIGHT © KOREA UNIVERSITY LIBRARY. ALL RIGHTS RESERVED.

- Selecting the date
- Selecting library
- Selecting facility
- Confirming current reservation status and availability
- Selecting facility and putting time to use
- Authentication (beacon)
 - Design of app icons reflect the characteristics of each facility
 - Special requirements: Notebook computer, beam projector, TV, studio equipment

Library user services



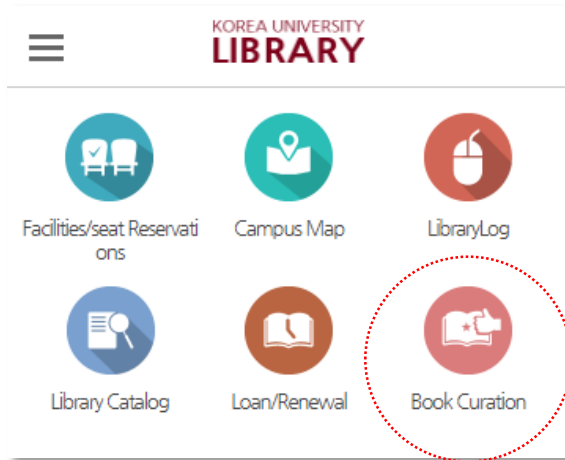
▪ Personalized services

- Searching library catalog (collections and data)
- Using mobile electronic resources
- Loan, renewal
- Reservation list
- Purchase request



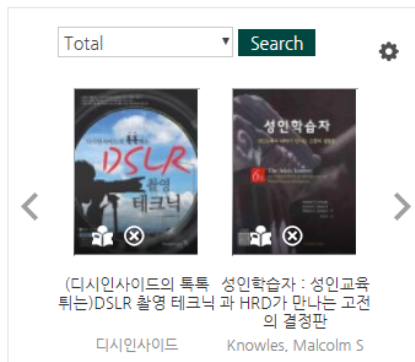
Big data driven services

Book curation service using big data



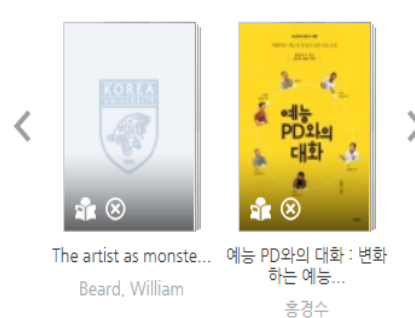
- Personalized recommendation based on 10-year loan data

Recommended contents reflecting reading preference of 박태준. ?



Recommended books

Recommended new arrival in the field of interest to 박태준 has. ?



New books on favorite topics

Recommended new arrival from the author of interest to 박태준. ?

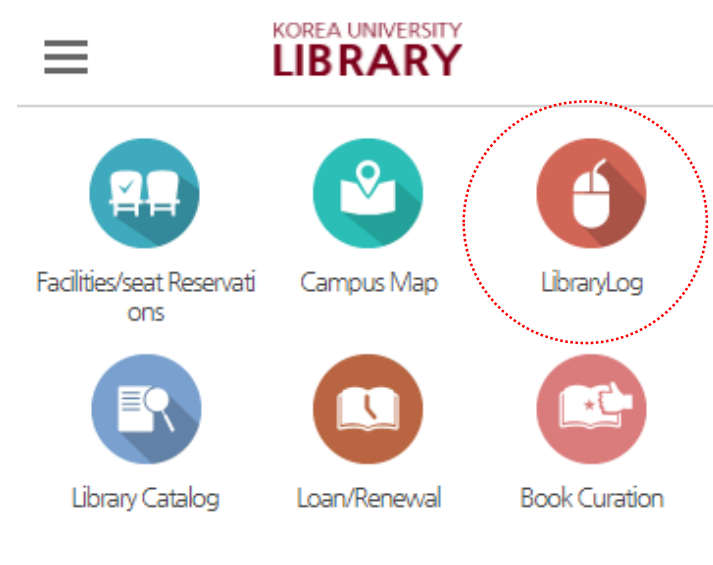
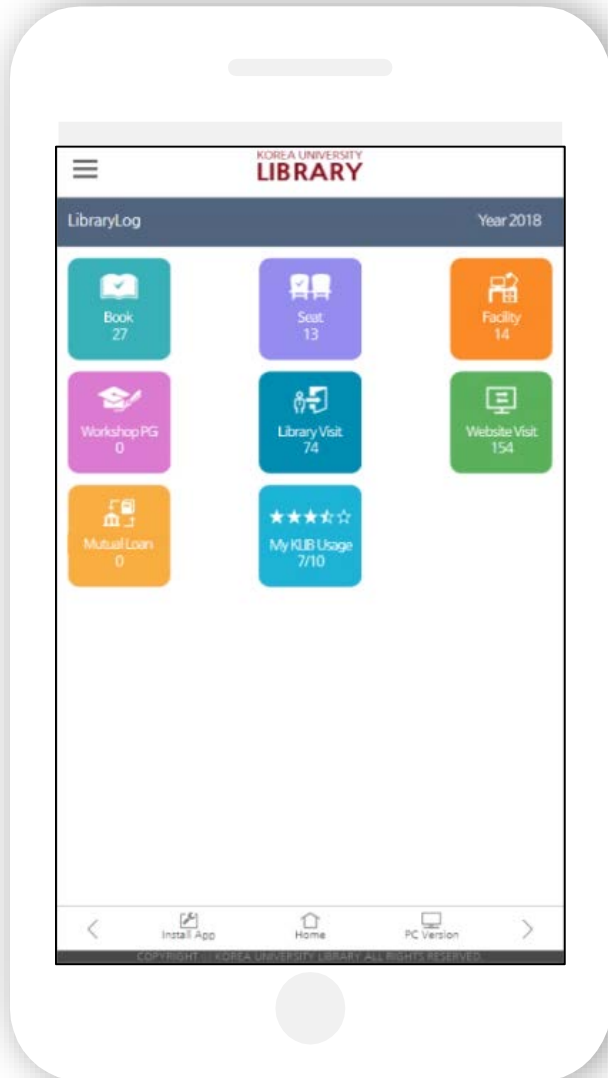


New books on favorite authors

Big data driven services

LibraryLog service using big data

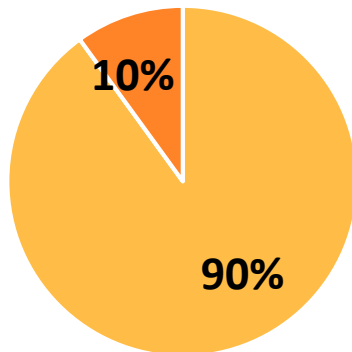
- Usage statistics
 - Loan/seat assignment/facility reservation/workshop/library visit/home page visit/ILL, DDS
 - Statistics on 7 services
- My KLIB Usage
 - Library usage index
 - Relative evaluation score



KLIB usages

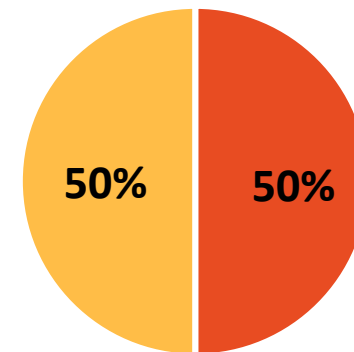
Changes after KLIP (5 months' statistics)

Before KLIP



■ KIOSK ■ WEB

After KLIP



■ APP ■ KIOSK

- Most users are freshmen and sophomores
- High usages among engineering and science students
- The percentage of app access is growing fast

KLIB usages

	# of app downloads	# of app access	# of using facilities
2017-09	5,357	17,373	4,260
2017-10	7,708	90,415	45,064
2017-11	2,320	90,301	49,347
2017-12	2,452	119,975	62,180
2018-01	1,385	60,288	29,098
2018-02	1,595	43,051	20,182
2018-03	4,176	103,847	47,754
2018-04	3,656	186,106	88,099
2018-05	1,358	171,698	59,499
2018-06	1,499	302,897	78,287
2018-07	1,039	109,235	29,702
2018-08	1,185	94,122	25,435
2018-09	970	58,703	17,392
합계	34,700	1,448,011	556,299

KLIB usages

Profile	% of app access	Percentage
Undergraduate students	1,208,852	83.5
Graduate students	214,678	14.8
Faculties/staffs	17,206	1.2
Others	7,275	0.5
	1,448,011	

So what? A few important questions

- **Should university library go mobile?**
 - Yes
 - It's a matter of time
- **Are there clear value propositions for university library to go mobile?**
 - Users: More convenience
 - Technology: More compatibility
 - Service managers (librarians): More flexibility and efficiency
- **Then, how to go mobile?**
 - Benchmark the case of KLIP at Korea University Library
 - Visit Korea University next year

Who we are: KOREA UNIVERSITY

- One of the Top 3 Universities in Korea (SKY club)
 - Seoul National University, Korea University, Yonsei University
 - **Top private university in Korea**
- #16 in QS-Asia University Ranking (2018 QS AUR)
 - **Top private university in Asia**
- #86 in QS-World University Ranking (2018 QS WUR)



Who we are: KOREA UNIV. LIBRARY

- **Korea's Best Academic Library** with tradition and future
 - The oldest academic library in Korea
 - Designated as the Seoul City Historical Relics No. 286
- Holds the most numerous academic materials
 - 3.5 millions books, 419,000 e-books, 70,000 e-journals, lots of digital collections etc.
- Provide high quality facilities and networked resources in 6 branch libraries and online libraries



See you in Seoul

- To be in Seoul or not to be is not the question
- You should come to PRRLA meeting in Seoul
- Please mark “September 2019” on your calendar
- See you at KU next year
- Thank you

