UP Library vision: To be a research library, which is internationally recognised for redefining academic librarianship, thereby to realise the UP 2025 strategic plan

Our identity: The reason for our existence is to contribute to our clients’ success, in the context of the knowledge and information environment, through redefined librarianship
• UP core functions
• UP 2015 institutional plan
• Impact of technology on teaching and learning
• Impact of technology on research libraries
• Top trends in research libraries
• Shaping a framework for research libraries
• Gartner’s top technology trends 2015
• Gartner top 10 business trends impacting education in 2015
• Gartner top 10 strategic technologies impacting education in 2015
• UP Library alignment
• UP Library re-design?

Content
UP core functions

Teaching and Learning  

Research
• Goal 1: To be a leading research-intensive university in Africa
• Goal 2: To strengthen the University’s international profile and visibility
• Goal 3: To strengthen the University’s impact on South Africa’s economic and social development
• Goal 4: To pursue excellence in teaching and learning
• Goal 5: To increase access, throughput and diversity

UP 2015 Institutional Plan
Overall, the University has identified the priorities listed below as the key drivers for increasing the desired speed of change and placing the University on a firm footing to meet and exceed its targets.

- Attaining significantly higher levels of visibility through high impact research and scholarly endeavours
- Developing UP’s internationalisation strategy focusing on Africa, its people and the environment
- Implementing concrete strategies to accelerate our transformational imperatives on equity and diversity at the student and academic staff levels
- Transforming the current teaching model into a more hybrid model with a focus on online and blended learning methodologies
- Reviewing the undergraduate curriculum in relation to breadth, depth and programme mix
- Improving pass rates and throughput of students at all levels
- Developing infrastructure and future facilities in line with the strategic goals of the University
- Clustering disciplines/departments (including support departments) in order to achieve critical mass and efficiencies
- Complying with enrolment targets in steering the ‘shape and size’ in line with UP’s objective to significantly contribute to graduate output in scarce-skills areas while maintaining its research identity.
Goal 1: To be a leading research-intensive university in Africa

- UP 2025 Strategic Plan identified several IRTs that reflect both our established areas of research strength and potential impact on society. Overall, through focusing the University’s research enterprise on central issues such as genomics, food, nutrition and well-being, energy, urbanisation and its impact on the environment, and animal- and human health research, including zoonotic diseases, all of which align strongly with national and global priorities, UP intends to build world-class research capacity that will enhance the profile of the University, and more importantly, produce knowledge that is of critical importance to the future of our country and the African continent.

- UP has research strength in several areas. Several disciplines have the potential to attain global excellence and the appropriate strategies will be implemented to achieve this goal.

UP 2015 Institutional Plan
Goal 2: To strengthen the University’s international profile and visibility

• The central focus of UP’s internationalisation strategy is Africa. An important vehicle for driving UP’s Africa focus internationalisation strategy will be the Future Africa initiative, which will be implemented in 2015. This initiative will seek mainly to develop leadership in trans disciplinary research in Africa. It is designed to become a cutting-edge ‘campus’ dedicated to fostering outcomes-oriented trans disciplinary research, targeted at high-profile African scholars, postdoctoral fellows and postgraduate students (mainly doctoral and research master’s level).
Goal 4: To pursue excellence in teaching and learning

- The pursuit of excellence in teaching and learning at UP is integral to the research-intensive identity and the international profile the University continues to pursue. Our goal is to create a learning experience in which teaching and research interact to promote discovery, creativity and innovation.

- UP plans to extend and deepen research literacy and skills as a key foundational element of its key undergraduate programmes.

- Implementing a system-wide hybrid delivery model that includes face-to-face teaching, learning and assessment in a blended mode; traditional distance education and online programmes.

UP 2015 Institutional Plan
• Important **Developments** in Educational Technology for Higher Education
  
  • Time-to-Adoption Horizon: One Year or Less
    • > Bring Your Own Device (BYOD)
    • > Flipped Classroom
  
  • Time-to-Adoption Horizon: Two to Three Years
    • > Makerspaces
    • > Wearable Technology
  
  • Time-to-Adoption Horizon: Four to Five Years
    • > Adaptive Learning Technologies
    • > The Internet of Things (IoT) ([Horizon report for Higher Education 2015](http://cdn.nmc.org/media/2015-nmc-horizon-report-HE-EN.pdf))

Impact of technology on teaching and learning
Key Trends **Accelerating** Technology Adoption in Higher Education

- **Long-Term Trends:** Driving Ed Tech adoption in higher education for five or more years
  - > Advancing Cultures of Change and Innovation
  - > Increasing Cross-Institution Collaboration
- **Mid-Term Trends:** Driving Ed Tech adoption in higher education for three to five years
  - > Growing Focus on Measuring Learning
  - > Proliferation of Open Educational Resources
- **Short-Term Trends:** Driving Ed Tech adoption in higher education for the next one to two years
  - > Increasing Use of Blended Learning

Impact of technology on teaching and learning
Significant Challenges Impeding Technology Adoption in Higher Education

- **Solvable Challenges**: Those that we understand and know how to solve
  - > Blending Formal and Informal Learning
  - > Improving Digital Literacy
- **Difficult Challenges**: Those we understand but for which solutions are elusive
  - > Personalizing Learning
  - > Teaching Complex Thinking
- **Wicked Challenges**: Those that are complex to even define, much less address
  - > Competing Models of Education
Important **Developments** in Technology for Academic and Research Libraries

- **Time-to-Adoption Horizon: One Year or Less**
  - Electronic Publishing
  - Mobile Apps

- **Time-to-Adoption Horizon: Two to Three Years**
  - Bibliometrics and Citation Technologies
  - Open Content

- **Time-to-Adoption Horizon: Four to Five Years**
  - The Internet of Things

**Impact of technology on research libraries**
The Beatles

Rock band

The Beatles were an English rock band that formed in Liverpool in 1960. With members John Lennon, Paul McCartney, George Harrison and Ringo Starr, they became widely regarded as the greatest and most influential act of the rock era. Wikipedia

Active from: 1960

Albums: Abbey Road, Let It Be, Revolver, The White Album, Love, more


Songs

Hey Jude 1968
Let It Be 1970
Yesterday 1965
Here Comes the Sun 1969
Strawberry Fields Forever 1968

Top 10 Beatles Albums - Ultimate Classic Rock

Dec 2, 2012 - We've pared those down to the Top 10 Beatles Albums. 10 ... final album, which was actually recorded before 'Abbey Road' but released after, was mired in confusion. After the sprawling and tension-filled sessions for 'The White Album,' in ... 6 on our list of the Top 10 Beatles Albums), 'Rubber Soul' made it ...

Google Knowledge Graph

Google Knowledge Graph - Wikipedia, the free encyclopedia

Most of the Beatles' albums were released in both mono and stereo. ... their final two albums—Abbey Road and Let It Be—were mixed and released in stereo only. ... "Hey Jude" and the album The Beatles (better known as the "White Album"), ...

Please Please Me - Magical Mystery Tour - Introducing... The Beatles - Beatlemanial

 Albums - Explore | The Beatles

www.thebeatles.com/explore?type=story_album

Rubber Soul. album. 28 45... Sgt. Pepper's Lonely Hearts Club Band. album. 27 38... Abbey Road. album. 26 76... Let It Be. album. 15 10...

The Beatles' albums | The Beatles Bible

www.beatlesbible.com/albums/

Sep 11, 2014 - Index of the main albums released by The Beatles during their career, with links to articles and songs, on the Beatles Bible website.

The Beatles Albums (by Date)

www.jpgr.co.uk/i_beatleslp_date.html
Trends **Accelerating** Technology Adoption in Academic and Research Libraries

- **Fast Trends**: Driving technology adoption in academic and research libraries over the next one to two years
  - > Increasing Focus on Research Data Management for Publications
  - > Prioritization of Mobile Content and Delivery
- **Mid-Range Trends**: Driving technology adoption in academic and research libraries within three to five years
  - > Evolving Nature of the Scholarly Record
  - > Increasing Accessibility of Research Content
- **Long-Range Trends**: Driving technology adoption in academic and research libraries in five or more years
  - > Continual Progress in Technology, Standards, and Infrastructure

Impact of technology on research libraries
Challenges Impeding Technology Adoption in Academic and Research Libraries

- **Solvable Challenges**: Those that we understand and know how to solve
  - > Embedding Academic and Research Libraries in the Curriculum
  - > Rethinking the Roles and Skills of Librarians

- **Difficult Challenges**: Those that we understand but for which solutions are elusive
  - > Capturing and Archiving the Digital Outputs of Research as Collection Material
  - > Competition from Alternative Avenues of Discovery

- **Wicked Challenges**: Those that are complex to even define, much less address
  - > Embracing the Need for Radical Change

Impact of technology on research libraries
It's real!

An emerging ecosystem of services and standards

- Figshare.com
- Sci-starter.com
- Runmycode.org
- ArXiv.org
- Roar.eprints.org
- Impact Story
- Altmetric.com
- Mendeley.com
- Researchgate.com
- Academia.edu
- Myexperiment.org
- Datadryad.org
- Openannotation.org
- Sci-starter.com
- Data-intensive
- Citizens science
- Open code
- Pre-print
- Open workflows
- Alternative Reputation systems
- Open data
- Open access
- Open annotation
- Data gathering
- Publication
- Review
- Conceptualisation
- Scientific blogs
- Collaborative bibliographies
- Scientific blogs
- Data-intensive
- Citizens science
- Open code
- Pre-print
- Open workflows
- Alternative Reputation systems
- Open data
- Open access
- Open annotation
- Data gathering
- Publication
- Review
- Conceptualisation
- Scientific blogs
- Collaborative bibliographies
- An emerging ecosystem of services and standards
- It's real!
Opening up scientific information in Horizon 2020 and beyond

• Celina Ramjoué
  • Head of Sector, OA to scientific publications and data
  • European Commission
  • DG Communications Networks, Content and Technology (CONNECT) - Digital Science Unit

• Conference on Open Access Scholarly Publishing (COASP)

• Paris, 18 September 2014
Top trends in research libraries (College & Research Libraries Committee: 2014)

- Unifying theme for current trends: **Deeper Collaboration**;
- Data
- Device neutral digital service
- Evolving openness in higher education
- Student success initiatives
- Competency-based learning,
- Altmetrics
- Digital Humanities ([http://crln.acrl.org/content/75/6/294.full](http://crln.acrl.org/content/75/6/294.full))
• **Vision:** In 2033, the research library will have shifted from its role as a knowledge service provider within the university to become a collaborative partner within a rich and diverse learning and research ecosystem

  • Research libraries are intimately engaged in and support the full life cycle of knowledge discovery, use, preservation, and sharing in diverse contexts of the university’s mission.

  • Within two decades, the research library will have transitioned its focus from its role as a knowledge service provider within a single university to become a collaborative partner within the broader ecosystem of higher education.


Shaping a framework for research libraries (American Research Libraries: 2014)
Gartner’s top ten technology trends 2015

• Student Success
• Reinventing Credits
• Global Competition for Students
• Rethinking Business Models
• Retreating Political Responsibility
• Competency-Based Education
• Learning Analytics
• Data-Driven Decisions
• Consumerised Expectations
• E-Research (https://www.gartner.com/doc/2928417?srcId=1-3132930171)
Adaptive Learning (Adaptive learning is an educational method which uses computers as interactive teaching devices. Computers adapt the presentation of educational material according to students' learning needs, as indicated by their responses to questions and tasks [http://en.wikipedia.org/wiki/Computerized_adaptive_testing](http://en.wikipedia.org/wiki/Computerized_adaptive_testing))

Adaptive E-Textbooks (Adaptive e-textbooks are probably closer to learning applications than textbooks. As a student reads an adaptive e-textbook, he or she is presented with questions or quizzes. Based on the answers, the smart-book presents different passages for subsequent reading or re-reading, thus "adapting" to the student's mastery of the subject, and presenting a personalized learning path. [https://hypecycle.umn.edu/hype-cycle-technologies/adaptive-e-textbooks](https://hypecycle.umn.edu/hype-cycle-technologies/adaptive-e-textbooks))

- CRM
- Big Data
- Sourcing Strategies
- Open Micro credentials
- Digital Assessment
- Mobile
UP Library alignment

- Teaching and Learning
  - Library-specific
    - Open educational resources
    - Research literacy & skills
    - Makerspaces
    - Online & blended learning
    - Digital literacy
    - Learning analytics
    - Adaptive textbooks
    - Social learning
- Research
  - Research & delivery
    - Scholarly record is changing
    - Research content more accessible
    - RDM for publications
    - Mobile content & delivery
    - semantically linked data
    - Big data
    - E-Research
    - IRTs & disciplines with potential
    - Future Africa initiative
- Development and future facilities
  - UP goals
  - Knowledge domain
  - Academic Publishing
  - Mobile apps
  - E-Research
  - Bibliometrics & Citation technologies
  - Open Content, IOT, Semantic web & Linked data
  - IRTs & disciplines with potential
- International profile and visibility
  - Embracing competition from alternative avenues of discovery
  - Research content more accessible, Embracing the need for radical change
  - Embedding Libraries in the curriculum, Rethinking the roles & skills of librarians, Capturing and archiving digital outputs of research
  - Capturing the roles & skills of librarians, Embedding Libraries in the curriculum, Rethinking the roles & skills of librarians, Capturing and archiving digital outputs of research
  - Deeper collaboration: data, openness, altmetrics, digital humanities, student success
UP library re-design challenge?

Teaching and Learning enablement focus

Research enablement focus
UP library re-design challenge

Teaching and Learning enablement focus
- Teaching & Learning librarians
- Reserved collection
- Makerspace
- Learning centre
- Blended learning
- Digital literacy
- Open educational resources
- Learning spaces (social learning)
- Learning analytics
- Adaptive textbooks

Research enablement focus
- Research librarians
- Access & visibility
- Research collection
- Research focus areas
- Research commons
- Research data management
- Bibliometrics & altmetrics
- Digital Humanities
- Research literacy
- Africa First campus / initiative
- Open Scholarship / Science
- Repositories (all digital outputs from research)
- Digitisation & preservation
- Engage & support full life cycle of knowledge
Links between Library and rest of UP

Teaching and Learning enablement focus

Research enablement focus

Faculties

ITS

EI

DRIS
Vision
Inspiring, enabling and enhancing world class research, teaching and learning through our expertise, collections, facilities and services.

Mission
The mission of the University of Cambridge is to contribute to society through the pursuit of education, learning, and research at the highest international levels of excellence. The University Library and its affiliated libraries will contribute to the delivery of this mission by enhancing the research life cycle and student experience.

Strategic Priorities
The Library’s top priorities are leading information provision and discovery for Cambridge and the global academic community and to forge partnerships with scholars to advance transformative research and learning.

- We will add value to key areas of teaching and research by driving forward and embedding library innovation.
- We will maximise the visibility and impact of the University’s research output through the Library’s Office of Scholarly Communication.
- We will work in partnership to enhance the communication, dissemination and preservation of the University’s research outputs.
- We will extend and consolidate the affiliated libraries network to deliver the highest standards of academic, teaching and research support services.
- We will deliver enhanced discovery and access to the print and electronic resources held across the libraries at Cambridge.
- We will grow, promote and exploit our unique and distinctive collections, making them more visible and more central to research, teaching and learning.
- We will engage with academic partners to advance Digital Humanities.
- We will collaborate with local, national and international strategic partners to leverage economies of scale and participate in global initiatives.
- We will re-imagine existing library spaces and develop information and research hubs to create inspiring environments which meet the changing needs of all our library users.
- We will diversify our income streams and grow philanthropic support.