



# Thinking outside the box Building services on ExLibris

## Stephen Robinson

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# Welcome!



**STEPHEN ROBINSON**

Digital Developer - Projects & Operations  
Digital Innovation & Research Services  
Library & Learning Development

Cloud Architect / 'DevOps' Engineer / 'AWS Expert'  
IT Partnering & Innovation  
Information Systems Services



[stephenrob.dev](https://stephenrob.dev)  
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## Students

12500+ FTE



## Staff

1200+ FTE Academic  
1600+ FTE Non-Academic



## Worldwide

China, Malaysia, Ghana



Teaching  
Excellence  
Framework





## Digital Innovation & Research Services



### Research Support

Supporting Open Access publishing, Research Data Management and Citation Analysis



### Unique & Distinctive Collections

Increasing discoverability of our unique and distinctive collections making them available to all.



### Manage All Library Systems

Ensuring availability of all library systems that support teaching, learning & research.



### Build Innovative Services

Using technology and data to build new services that aim to improve and augment the user experience.

# Information Systems Services

5

## IT Partnering & Innovation



### Purpose built computer centre

The ISS building houses the majority of ISS staff alongside one of our on-premise data centers.



### IT Partnering

Working with departments and professional services to enable them to get the best use out of technology.



### Institutional Mobile App

Built on top of CampusM, iLancaster is our leading mobile app for students, staff and the community.



### Everything Else

If it doesn't fit within the standard business as usual functionality of IT services.



# ExLibris Products

At Lancaster University

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**Alma**



**Primo**



**Leganto**



**CampusM**

# Innovation

.....  
Curating innovation in the library and across the institution

# Our Vision

Digital Innovation & Research Services

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**Great Service**



**Great User Experience**

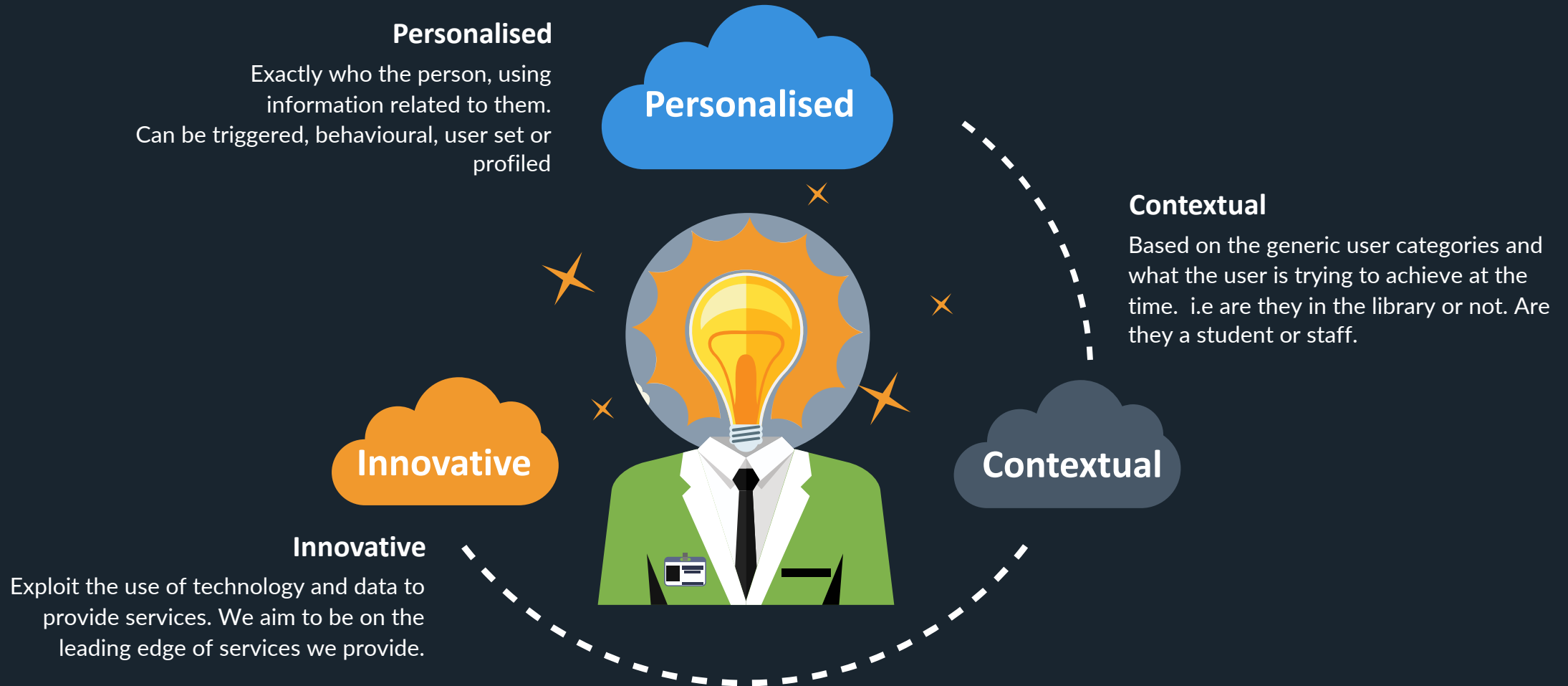


**Great Staff**



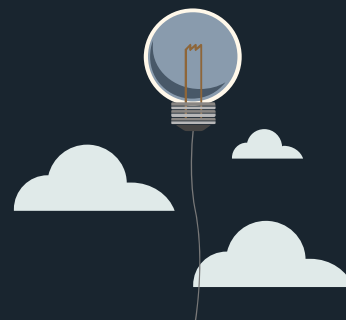
# Intelligent User Services

Services at the **point of need**



## Choosing A Good Idea ◀

But where do we start?



## ▶ Good Idea

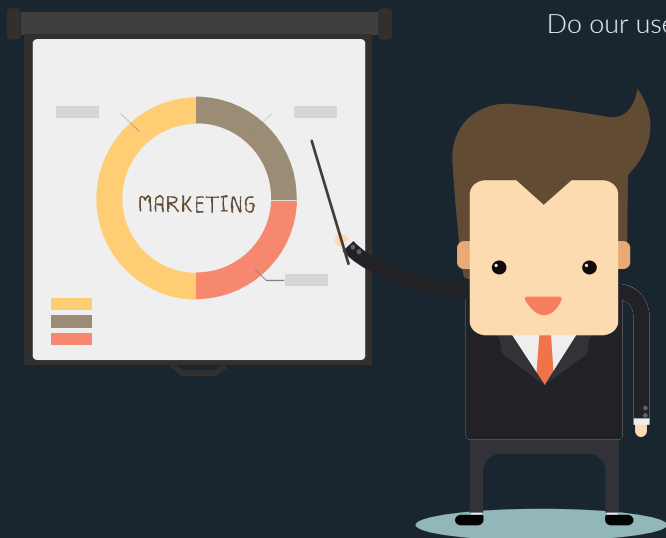
The base of any innovation



# INNOVATION

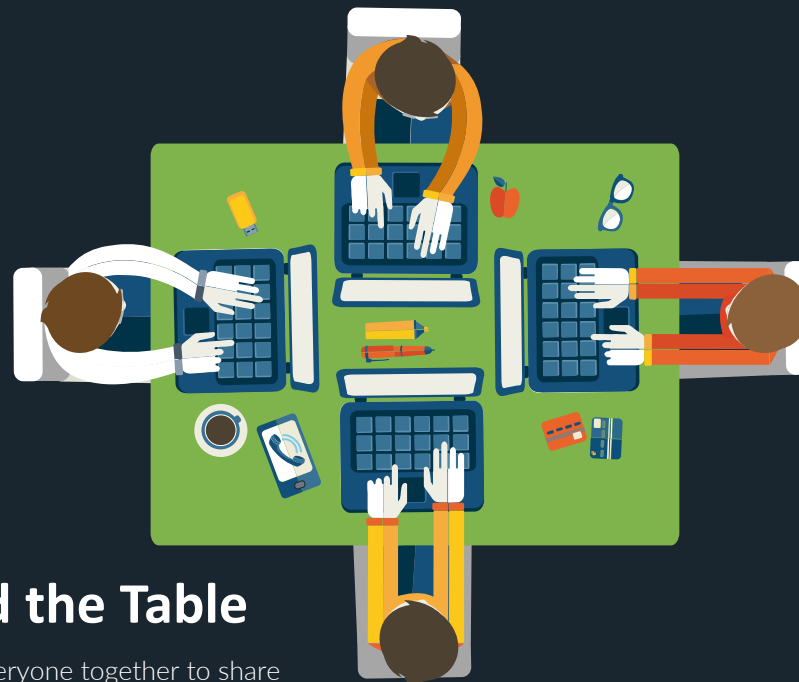
## Is this valuable? ◀

Does this provide value?  
Do our users really want this?



## ▶ Round the Table

Bringing everyone together to share  
thoughts and ideas









# **JOLT** *THE* **LIBRARY**

Library

Lancaster  
University



KICKSTARTED BY THE  
**INNOVATION  
HUB**

**WIN £1000  
SUBMIT YOUR INNOVATION  
IDEA FOR THE LIBRARY**

**CLOSING DATE 30TH JANUARY 2015**

**[jolt.lancaster.ac.uk](http://jolt.lancaster.ac.uk)**

**#lujolt**

# Library Innovation Workshop

Exploring new ideas

## 3 Amazing Ideas

- Auto class marking of eresources
- Helping people find study space in the library
- Intelligent suggestions of reading material



01

### Diverse Colleagues

From across the library service

02

### IT Partnering

Bringing together it partnering and digital Lancaster

03

### New Ideas

Looking for new ways of applying technology in the library

# My First Assignment

Scenarios of use

## Essay #1

Due Next Friday



### OneSearch

Finding some resources  
to help myself on  
OneSearch



### Classmark

This seems important  
and seems to tell me  
where it is



### Confusion

Where exactly is this  
item in the library. Can  
you help me find it?



# Time To Experiment

## 20% TIME

Giving our developers time to try out random things

## UNUSUAL

Not business as usual projects  
Something different ... and generally fun

## PROTECTED

Time is protected in each developers week to work on this together

## FAIL FAST

Quick proof of concepts that allow us to fail fast





# Quick Wins

Just do it !

—  
**LET'S  
DO  
THIS**  
—



## HIGH IMPACT

Showing we are responding to user suggestions and acting on them



## OPENING HOURS

Showing the current day and weeks library opening hours on the website



## NO BRAINER

Why aren't we already doing this



## DISCOVERY MAPS

Helping users find things in our collection

# OneSearch Maps

Maps embedded on **Primo**

The screenshot displays the OneSearch Maps interface. On the left is a sidebar with navigation links: TOP, SEND TO, FIND AND REQUEST, DETAILS, LINKS, TAGS, and VIRTUAL BROWSE. The main content area shows a book record for 'The Turing test' by Stuart M. Shieber. Below the record is a 'View On Map' section featuring a floor map of 'Floor A' with a red location pin. The map includes zoom controls and a legend.

**Book Record Details:**

1 - 1 of 1 Records			
BARCODE	TYPE	LENGTH OF LOAN	STATUS
64062104	Book	Log in to view	Item in place

**Details:**

- Title:** The Turing test : verbal behavior as the hallmark of intelligence
- Author/Creator:** edited by Stuart M. Shieber.
- Publisher:** Cambridge, Mass. : Mit Press
- Creation date:** 2004
- Description:** Includes bibliographical references and index.
- Physical description:** xi, 346 p. ; 23 cm.
- General note:** "A Bradford book."
- Subjects:** Turing test >
- Author:** Stuart M Shieber >
- Language:** English
- Identifier:** ISBN 0262692937 (pbk. : alk. paper)
- Source record number:** 2167563550001221

**View On Map:**

The map shows 'Floor A' with a red location pin indicating the book's location. The map includes zoom controls and a legend.

Summer 2017

## Student Internship Project

Our first attempt of helping students navigate to library items within Primo.

→ Navigation

→ User Services

# Evaluating Success

Did we make a difference?



## Surveys

Qualitative data from our users



## Time

Are processes simpler and easier to do



## User Behaviour

How are users interacting with the new system or process

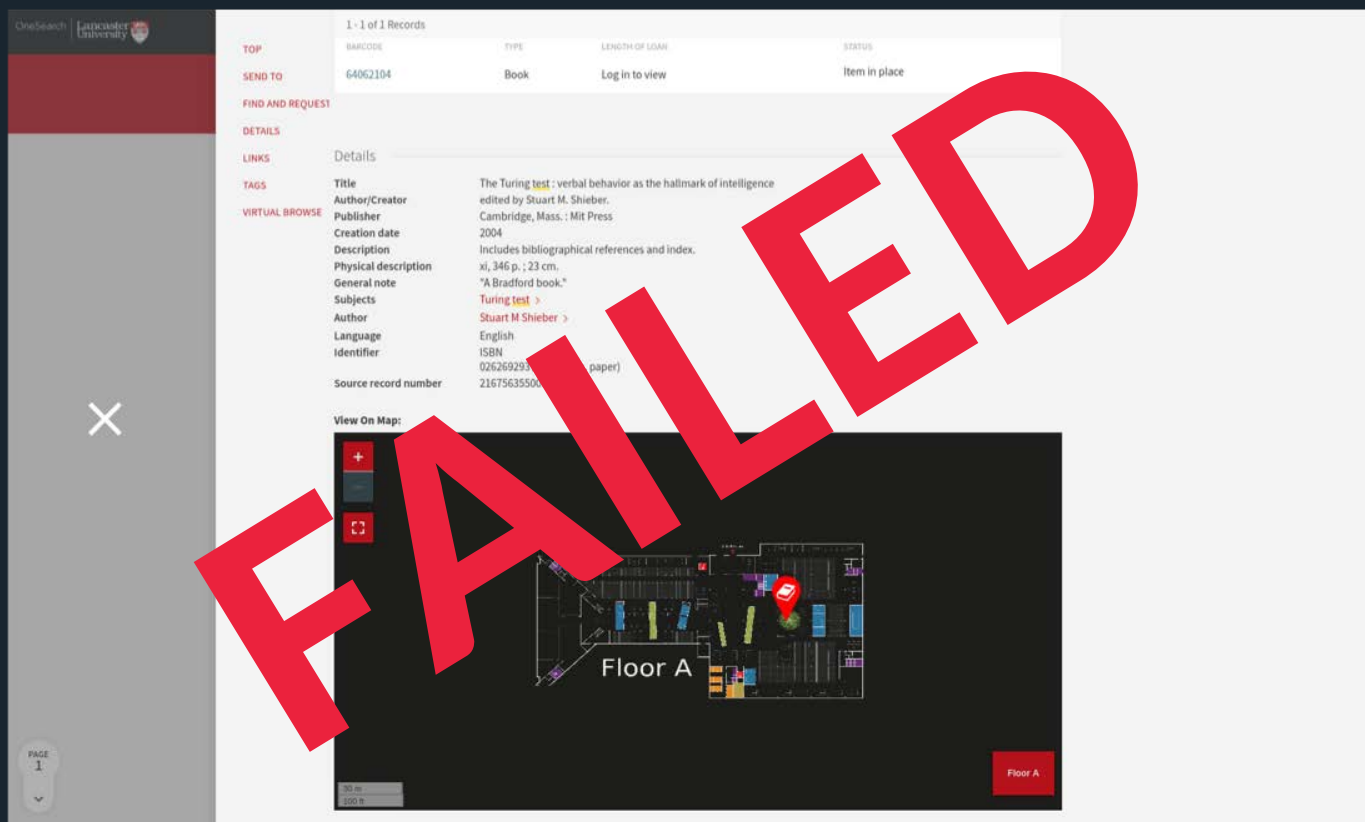


## Expectations

Have we met or exceeded what our users want

# OneSearch Maps

Maps embedded on **Primo**



Summer 2017

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# Championing Failure

## ACCEPTANCE

Accepting that failure happens  
and it is okay to do this

## UNDERSTANDING

What caused us to fail?

## LEARNING

What can we do differently?  
Are there parts of this we can re  
use?

## SHARING KNOWLEDGE

Disseminating knowledge across  
the library team and wider

# Lessons Learned

What did failure teach us?



Navigation is Hard



Data Handling



Vendor Platforms



Try Again

# Accessing Library Services

.....  
Looking at new ways our users can access what we provide

# Library Alexa Skill

Intelligent user services with [Amazon Web Services](#)



July 2018

## Digital Innovation & Research Services

Our first attempt of building an Alexa Skill.  
Using our API to provide an MVP of a Library  
Alexa Skill.

Makes use of AWS to provide the execution  
environment for the skill logic.

→ Voice Technology

→ User Services



# iLancaster Voice

Moving forward with **across the institution**



September 2018

## IT Partnering & Innovation

Developing a 'Personal Digital Assistant' to support students with their studies and social life whilst at university. Providing personalised, contextual and intelligent information to the user at the point of need through voice and chat interfaces.

- ➔ AWS Native Services
- ➔ Institution Wide Project

# Ask L.U.

Your digital companion



Find out more at [lancaster.ac.uk/AskLU](https://lancaster.ac.uk/AskLU)



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# Ask L.U.

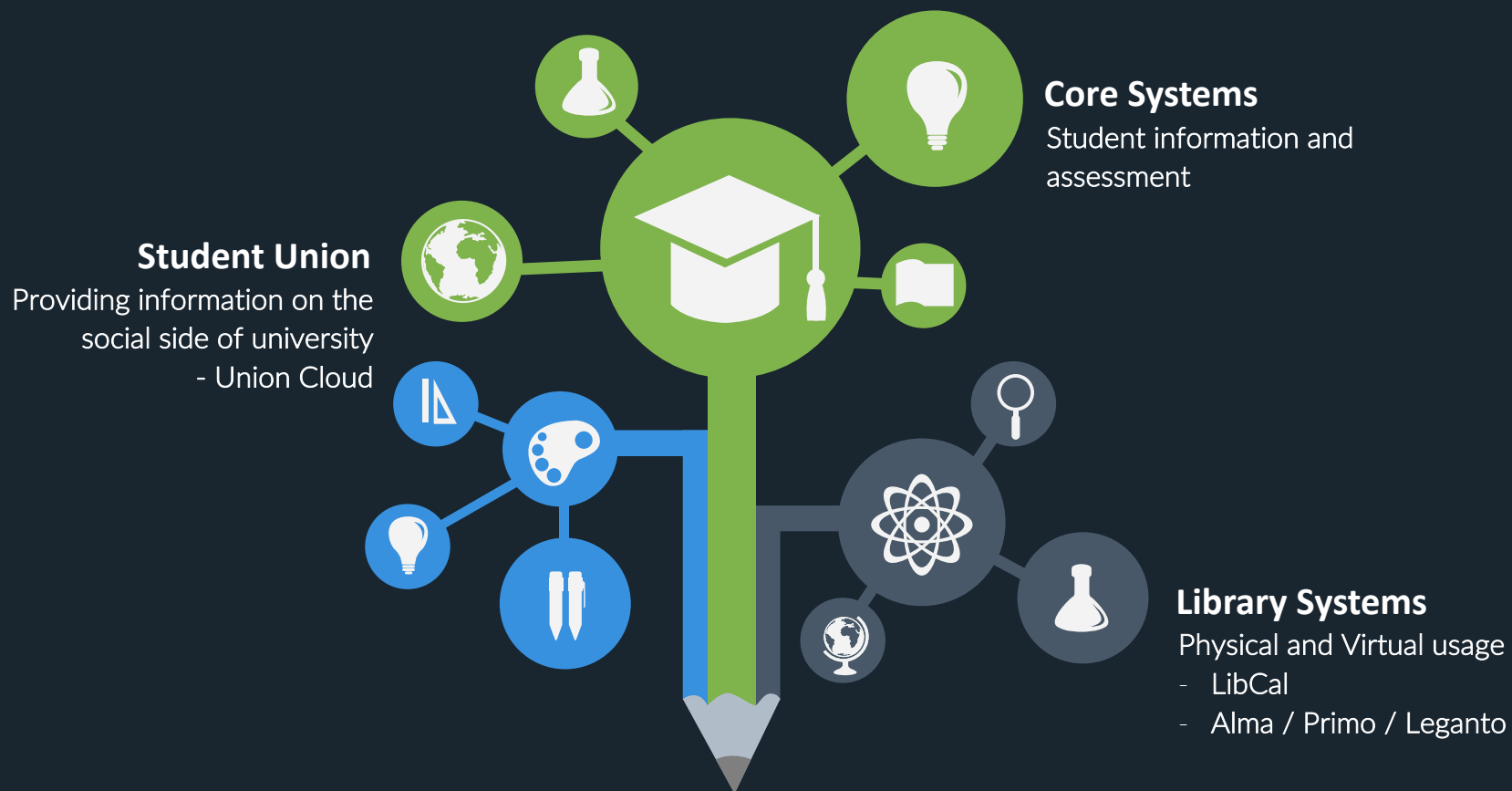
Your digital companion



Find out more at [lancaster.ac.uk/AskLU](https://lancaster.ac.uk/AskLU)

# Across the Institution

Combining data to provide a complete experience



# Alexa ... Ask LU

How many loans  
do I have?

.....



# Alexa ... Ask LU

Are there any group  
study rooms free?

.....



# Alexa ... Ask LU

Can I book a group  
study room?

.....





# The Future

Where's Ask LU going next?



# Where next?

Ask L.U. and [the library](#)



## RENEWALS

Renewing books that are due  
back soon



## FINE PAYMENT

Paying library fines through  
in-skill purchasing



## SEARCHING

Discovering new items  
through our discovery service

# Alexa ... Ask LU

To suggest me  
something to read?



# Thinking about suggestions

Questions raised

1

## Knowledge

How do we know what to suggest to the user?

2

## Relevance

Are we going to make a relevant suggestion to them?

3

## Reliability

How do we build trust in the suggestions we make?

4

## Display

Where do we display the suggestions we have generated for a user?

5

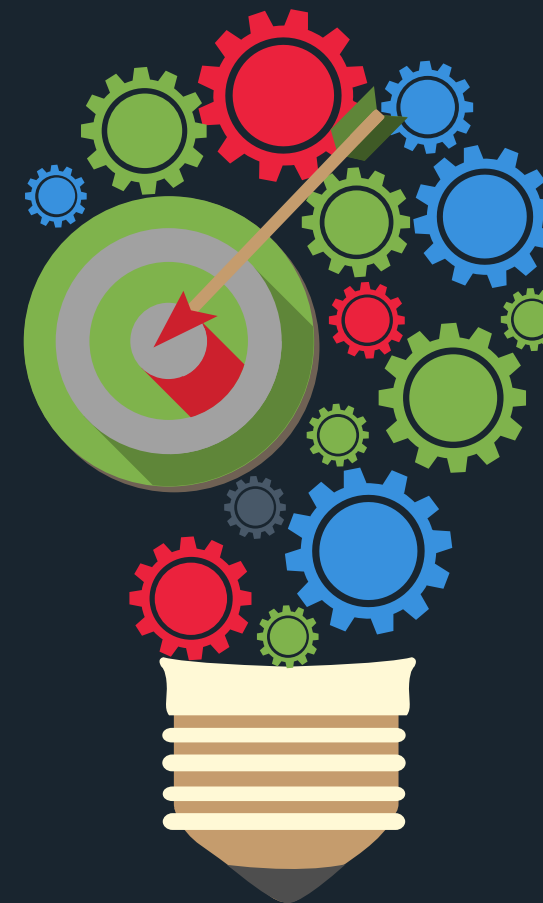
## Auditing

How do we keep tracking of the suggestions?

6

## Approval & Buy in

What is needed to get approval and buy in from library and academic staff?





**It is impossible to live without failing at something, unless you live so cautiously that you might as well not have lived at all, in which case you have failed by default.**

—J.K. Rowling



Thank You

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