OCLC Research
Works in Progress Webinar: Deakin Genie

Deakin University Library
eSolutions – Deakin University
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About Deakin University

• Established in 1974 in Geelong, Victoria with a specialisation in distance education
• In 2019 Deakin
  • is ranked in the top 1% of Universities globally
  • has physical campuses at Geelong (2), Burwood and Warrnambool
  • retains its commitment to flexible and distance learning via its Cloud Campus
  • has a strong learning teaching and research focus in a range of areas including health sciences, exercise science, creative arts, law, information technology and education.
• Deakin is regarded as a being at the forefront of digital innovation in education both nationally and internationally
“Deakin is one of a new breed of global universities - agile, dynamic and innovative.”

PROFESSOR JANE DEN HOLLANDER AO
DEAKIN UNIVERSITY VICE-CHANCELLOR
About Deakin University Library

• Four directorates report to the University Librarian, Dr Craig Anderson
  • Client Services
  • Collections, Copyright and Licensing,
  • Digital Libraries and Repositories
  • Information and Records Services
• Four highly used physical campus library spaces with collections increasingly based on electronic resources.
• Deakin Library shares the University’s commitment to digital innovation
• The Genie project is an opportunity for the Library to collaborate on an important strategic initiative
About Genie

• Launched in 2017
• A smart phone based virtual assistant offering personalised information and resources to student
• Utilises a combination of natural language, voice recognition and machine learning to build “conversations”
• Industry leading and recognised as such with a number of awards including:
  • iTnews Benchmark Awards 2018
  • Reimagine Education Awards, by QS and Wharton Business School
  • IDG Communications Announces Digital Edge 50 Awards Winners
  • 2018 iAwards Victoria – Artificial Intelligence or Machine Learning Innovation of the Year
  • Victoria OpenGov Leadership Forum – Recognition of Excellence Award.
Why Deakin Genie?
Specialist digital assistants

**Penny**
Your personal finance coach

**Pana**
Your virtual travel agent

**Lark**
Your weight loss coach
Specialist digital assistants

**Trov**
Personal insurance

- Hi Jon, how can we help?
- My laptop was stolen.
- Oh, no! When and where did it happen?
- Yesterday, from my car at 6 Stark Avenue.
- Don't worry we're on it.

**Do not pay**
Assesses parking ticket validity

**Ghostbot**
Dating avoidance texts

- Hey you
- Hi.
- Are you free this week to grab a drink?
- Sorry, I'm slammed with work this week
- Want to try next week?
- I'll let you know how my schedule looks
The online world in 2016

- Search
- Maps & Wayfinding
- Video streaming
- Digital Assistants
- Zero-friction transactions
- Extreme personalisation

Apps

Web pages
The online world emerging now

- Search
- Maps & Wayfinding
- Video streaming
- Digital Assistants
- Zero-friction transactions
- Extreme personalisation

Digital assistant

Apps

Web pages
The digital assistant arms race

- Samsung
- Amazon Alexa
- Siri
- Facebook M
- Google Assistant
- Microsoft Cortana

• Search
• Maps & Wayfinding
• Video streaming
• Digital Assistants
• Zero-friction transactions
• Extreme personalisation
Beyond questions and answers

Value

- Accommodation
- Enrolment
- Progression
- Human Support
- Questions and Answers
- Confirmations
- Jargon Busting
- Amusement

Volume

- Learning Support
- Data-Driven Insights
- Organisation Uplift
- Skills Development
- Personalised Services
- Reminders
- Motivation
- News
- Service Discovery
The smart personal assistant here to help students succeed
LEARNING SUPPORT

Offering learning materials and support on each student’s terms.
TIMETABLE AND IMPORTANT DATES

Finding classes and meeting deadlines is so much easier.
ORIENTATION

Easing the transition from school to University

First experiences of Genie and University

Smart Briefing

Orientation Itinerary

Personalised Tasks

Orientation calendar events

Creating a custom itinerary

Planning O-Week
CHAT AND MESSAGING

Recognising the limits of AI and facilitating conversations with the right support staff

Connecting People
Messages within Deakin

Messaging with peers and staff

AI-Human support

Mentor support

Peer-to-peer conversations

Integrated staff support

Clear links to wayfinding
QUICK ASK
Prompting discovery of high value services

What can I ask Genie?
Suggestions and shortcuts.

Help is always available

Discovery is made easy

Personalised disambiguation
SMART BRIEFING
Making personal organisation and time management straightforward

Swipe for an actionable briefing
Smart personal assistance
CHECKLISTS AND TASKS

Reducing anxiety and overload about what needs to be done

Things to do and help doing them
Short checklists linked to Genie help

Task details link to support
A sense of completion
Smart reminders

Recommended checklists & tasks
Checklist previews
Class News
“It's easy to understand”
“It's very efficient”
“That’s so much easier”
“It's simple, it's easy to use”
“That's smart - that's good, that's easy”

Sending messages has become a natural, learned behaviour on mobile: the user interface and interaction model is easy to use and feels simple to users.
CONVERSATIONAL USER INTERFACE

“It’s like having Siri, but a Siri that organises your life”

The conversational interface immediately resonates with users, who find this form of interaction natural and intuitive.
INFORMATION DISCOVERY

“It’s given me information that I didn’t even know about, so it’s really useful”

Genie uncovers organisational information, support services and resources (physical and human), at the time when it is most useful.
MOBILE OPTIMISATION

“I like that it just comes up: I don't have to click on something - it's just there”

Three steps on a computer can feel like ten on mobile. Users are impressed by the directness and ease with which they can summon resources, tools and information.
CLARITY AND SIMPLICITY

“It has less information which is nicer – it’s not clouded by too much information”
“That’s so good! It’s clear and simple”

Genie provides **brevity**, **consistency** and **clarity** when delivering information. This is extremely well-received by users.
How does Genie work?

Level 1 – Genie conversations
• Handcrafted, personalised responses to common requests
• Rich with conversational elements, media and microservices

Level 2 – Genie Q&A
• AI-curated answers sourced from our web and knowledge bases
• Answers reference a student’s context to ensure relevancy

Level 3 – Human support
• Genie offers contextualised handovers to staff for support
How are you settling in to study?

You might find this useful if you're thinking about changing units.
Modelling conversations
Genie uptake and usage

CONVERSATIONS & NEW USERS PER DAY SINCE GENIE LAUNCH

Current users:
10,677 students
541 staff
Conversational commerce

Business Chat
A whole new way to talk to companies.

Now you can ask for information, schedule appointments, and even make purchases right in Messages on your iPhone or iPad. Which makes connecting with your favorite companies as easy as texting your favorite people.
Genie as a commercial product

In 2019 we’re partnering with alpha customers in

- Financial services
- Health
- Government
Library and Genie: evolution, not revolution
Q1 2017
• Early project interactions

Q2 – Q3 2018
• UAT and 1st release

Q4 2018 – Q1 2019
• Reading lists

Q2 2019 and beyond
• Current usage, iterative improvement, operationalisation and future-gazing
Early project interactions

- Holds
- Loans
- Search
UAT and 1st release

- Conversations
- Integrations
Library conversations

• Conversation uplift
• ....using online chat logs
• ....to understand what students wanted and how they asked for it
EXISTING CONVERSATION UPLIFT

- How do I contact the library?
- Who is my liaison librarian?
- How do I write a literature review?
- Can I borrow from another library?
- What is Endnote?
- How do I access full-text articles in Google Scholar?
- Why can’t I access any databases?
- I’ve lost my library card
- Is Burwood campus library open today?
- Do you deliver books?
Most people use common triggers to initiate a conversation.
Loans

Hello. How can I help you this afternoon?

What do I have on loan?

Your current loans

DUE: THURSDAY 21ST OF MARCH 2019
Introduction To Microbiology
View Search Results

Would you like to see if you have items on hold?

Yes No thanks What is a hold?

Holds

Deakin Genie

DUSA Student Booklist
View the books required for your units

Your current holds

NOT AVAILABLE
Public Sociology : An Introduction To Australian
View Search Results

Type a question
Library search

• Conversation

• Integration
The original Genie interface attempted to simplify the search experience for students, but in doing so risked over-simplifying the search process.

This was not only unhelpful, but at odds with our role in championing the growth of digitally literate, search-confident students.
Managing expectation through conversation
How do I search the library?

Original

I can help you with quick searches of the library.

Just ask me "search the library for...." and then the term you'd like to search for.

For example, "search the library for global warming"

Current

You can use me to start your search for library resources.

Type or say "search the library for..." and then the keywords you'd like to start with.

Once you’ve started your search with me, refine your results in the library search interface to find what you need.

Would you like to watch a video on searching for library resources?
Deakin Genie

How do I search the library?

You can use me to start your search for library resources.

Type or say "search the library for..." and then the keywords you'd like to start with.

Once you've started your search with me, refine your results in the library search interface to find what you need.

Would you like to watch a video on searching for library resources?

Yes

Great. Please tap on the link below to access your video.

Digital Library experience

Search for Digital Library Resources and
Search the library for

Original

Search the library for global warming

Here's what I found in the library for global warming.....

Result 1
Click placard to view record in EDS

Result 2
Click placard to view record in EDS

You see can full results at the library website

Can I help you with something else to do with the library?

Current

Search the library for global warming

Here's what I found in the library for global warming.....

Results link
Click placard to view results list in EDS

Can I help you with any other library services?
Prescribed texts in Genie

- Support access to prescribed texts for undergraduate students
- Demonstrate and build Library capability to innovate and lead in this space
Usage data (July 2018 – Feb 2019)

• Over 85,000 conversations in total
• Library specific: around 5000 conversations...
• ....excluding several hundred conversations related to prescribed texts and textbooks that as of March 2019 direct students to a library conversation
Usage data (July 2018 – Feb 2019)

Most popular conversations

• Booking library study rooms and booths
• Viewing loans
• Availability of library computers
• Library opening hours
• Library search

• Initiated by ‘common’ triggers
2019 and beyond

- Operationalisation
- Iterative improvement
- Future gazing....
- ...what does academic searching look like in a conversation-activated, mobile and IoT world?
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