3-2022

Implementing a copyright chatbot at SMU libraries: Technology, challenge and user experience

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SMU
SINGAPORE MANAGEMENT UNIVERSITY

Implementing a Copyright Chatbot at SMU Libraries :
Technology, Challenge and User Experience

Meet the Speaker

From Singapore Management University (SMU)

Nazimah Ram Nath
Lead, Teaching Resources & Copyright

Singapore Management University: Schools and research areas

School of Accountancy

- Corporate Reporting & Disclosure
- Corporate Governance, Auditing & Risk Management
- Financial Intermediation & Information
- Financial Performance Analysis
- Accounting Information System

Lee Kong Chian School of Business

- Organisational Behavior & Human Resources
- Strategy & Organization
- Finance
- Quantitative Finance
- Operations Management
- Marketing
- Corporate Communication

School of Law

- Asian and Comparative Legal Systems
- Public International Law, Regional and Trade Law
- Corporate Finance and Securities Law
- Private Law
- Innovation, Technology and the Law
- Dispute Resolution
- Legal Theory, Ethics and Legal Education
- Public Interest Law, Community and Social Justice
- Public Law

School of Social Sciences

- Sociology
- Political Science
- Psychology
- Humanities

School of Economics

- Economics Theory
- Econometrics
- Applied Microeconomics
- International Economics
- Macroeconomics

School of Information Systems

- Data Science & Engineering
- Cybersecurity
- Information Systems & Management
- Intelligent Systems & Optimization
- Software & Cyberphysical Systems

The Copyright Chatbot Story : Motivations and Project Plan

Business Case:

- Improve user's experience in accessing answers to copyright queries

- Facilitate ready access to copyright information in teaching/learning activities to increase legislative compliance

- Encourage and sustain an innovative mindset and contributed towards digital transformation of information in SMU.

- Creation of a **Prototype** will help understand user needs and assess user responses, without a huge investment in initial technology

Copyright Research Guide:
An Assessment

https://researchguides.smu.edu.sg/copyright

User engagement with the Copyright Research Guide indicated that there is a substantial level of interest amongst users to learn about copyright issues
(2369 views in 14 months)

1 guides, 2369 views, 14 months

Guide ID	Guide Name	2020-01	2020-02	2020-03	2020-04	2020-05	2020-06	2020-07	2020-08	2020-09	2020-10	2020-11	2020-12	2021-01	2021-02	Total Views
627035	Guide To Copyright	144	140	147	112	154	162	197	272	211	167	189	144	227	103	2369
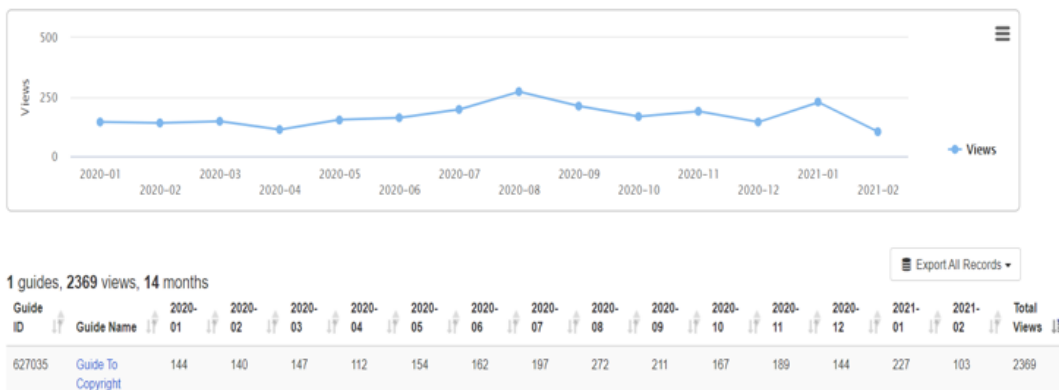
User traffic indicates that the top 3 areas of interest are:
- Copyright basics
- FAQ about Copyright and Distribution
- Resources in Public Domain and Creative Common Resources

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Project Summary

What
- A Proof-Of-Concept Prototype for a Copyright Chatbot
- An Evaluation Report

When

Aug 2020 to Mar 2021

Why
- Offer library users a resource to assist with copyright queries
- Gain insight into user behaviors and expectations
- Gather information on user preferences when seeking answers
- Use the information gathered to plan for relevant outcomes

How

Used "LANDBOT"
Intuitive No-code Conversational Chatbot Builder

Project Methodology

- **Content Creation** : A total of 50 commonly asked questions by Faculty, Postgraduate and Undergraduate students were collated

- **Content Mapping**: Studied capabilities of system, drafted content layout, and planned navigation structure

- **User Testing** : Total of 18 users were approached to test the system. They comprised of a mixed group. Questions were both qualitative and quantitative in nature

- **Prototype Evaluation**: User feedback and experience informed the value and usability of system. It also provided insights on how to take it forward

Landbot

- No-Code Chatbot Builder

- Automated Conversations

- Engaging the audience naturally — through conversations

- Intuitive Drag-and-Drop Interface for Conversations

- Shorter learning curve for non-technical staff to map content
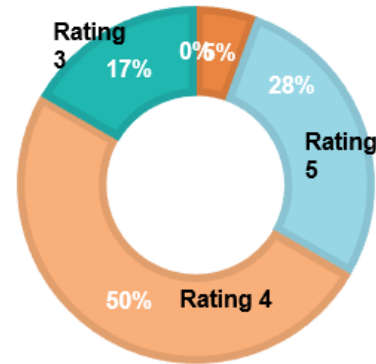
Mapping Content on Landbot
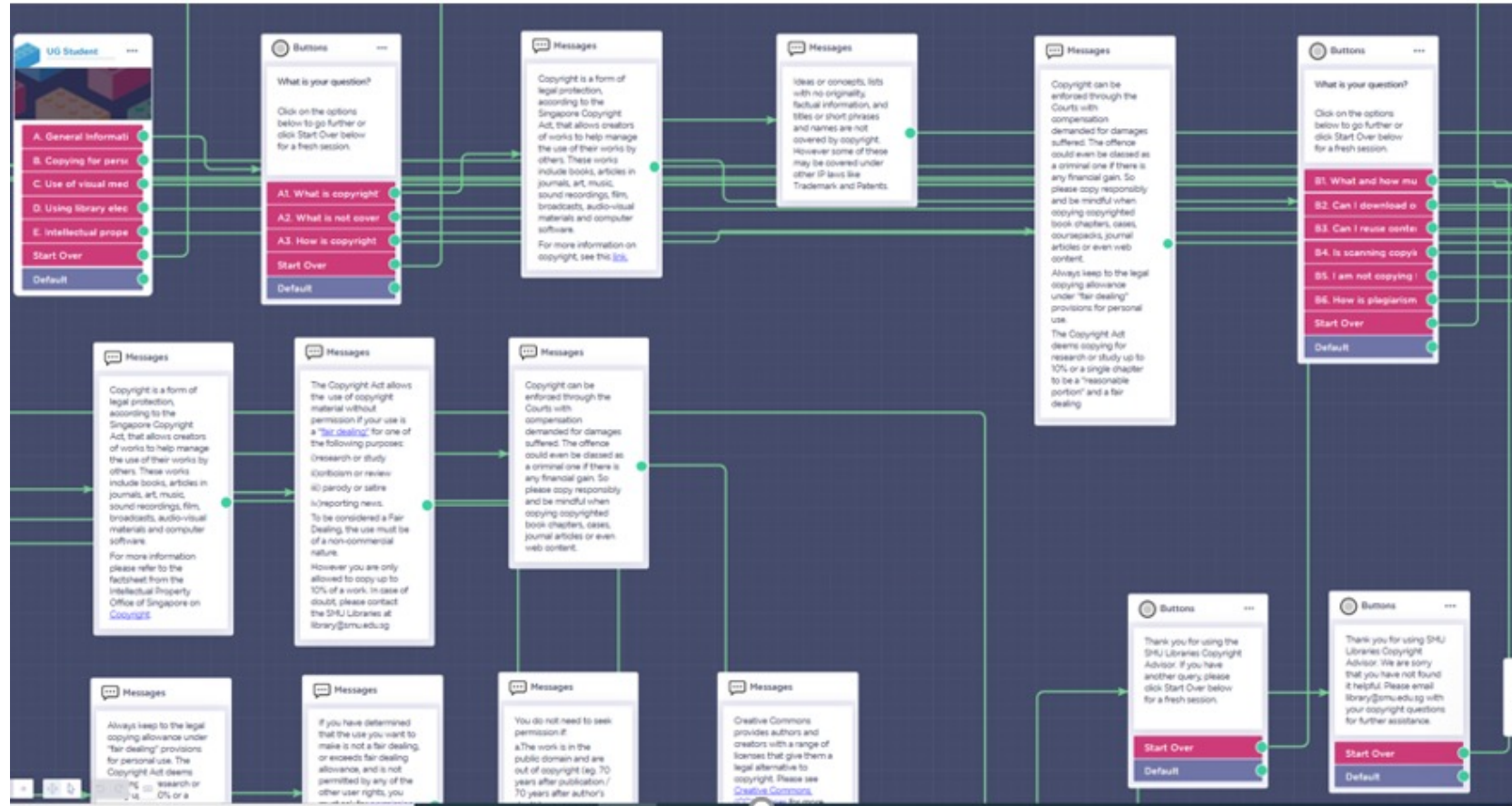
User Testing : Findings
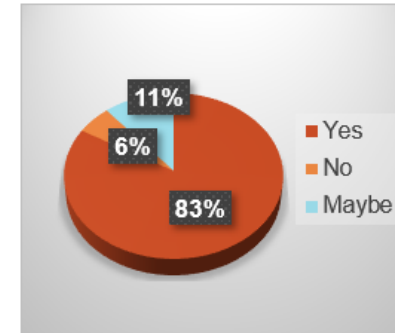
Quantitative Data

Q1: How Would You Rate Your Experience?

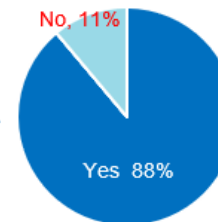A majority of those polled rated their experience highly

Q2: Would you use the chatbot again?
15 out of 18 respondents said they will use the chatbot again

Q5: Would you recommend this chatbot to others?
16 out of 18 respondents said they will recommend the use of the chatbot to others

User Testing : Findings

Qualitative Data

CONTENT

- Include information on citations, **Citation Guides** and reference tools
- Include plagiarism checker
- Phrasing to be short and succinct
- Include information on academic integrity
- Include links to open-source sites for free graphics, music etc
- Incorporate information on using others' content in in teaching resources
- Include information on open access publication and publishing
- Enhance the content base to include more questions and varied scenarios

NAVIGATION

- Enable a **search function**
- Enable a free text query instead of guided questions
- Enable an option to chat with a human operator or link to library's chat service
- Enable **a BACK** button to go back a few steps instead of starting over
- A written guide / FAQ site will be more useful to users
- Navigating chatbot for answers is tedious, although content is useful
- Ability to submit own questions
- Need to browse all options and all questions at a glance without having to select the various options
- Make the "**BACK button**" more prominent

Key Concerns

Content to cover broader areas of interests in related areas

- Include content on citation and references, plagiarism, academic integrity and provide links to open sources
- Information to be phrased in short, simple sentences

Navigation to be made simpler

- Decision tree/ guided thematic structure tends to be tedious to some users, preferring a written guide
- Ability to browse through all questions will be helpful
- There is a need to ask own questions and be able to reach out to a human operator
- Technical constraints prevented users from going a few steps back in their query

Limitations of Prototype

SYSTEM LIMITATIONS

- Inherent limitations of the system, could not support much customization

    E.g. not able to link to chat service, unable to make the BACK button more visible, and having to "Start Over" for every query instead on going back a few steps.

- A more sophisticated system needed to better manage use expectations

CONTENT LIMITATIONS

- Protype was largely focused on copyright information within a few focus areas only.

- Users are seeking other related information as well:

    - *E.g. Citation and Referencing,*

    - *More information on areas within the copyright landscape*

    - *Links to open resources*

Learning Points from UAT and Assessments

i.   A copyright advisory resource is <u>helpful</u> and of <u>value</u> to users for navigating the copyright landscape

ii. For a chatbot to be effective – it has to be easy to use and navigate

iii. Content on copyright has to be presented together with information on citations, plagiarism, academic integrity as well.

iv.   Users also want access to a human operator to ask their own questions

v.   A written guide is useful for those looking for an alternative

Recommendation for Action

Improved Copyright Research Guide

- Allow for a more straightforward presentation of answers to copyright queries in FAQ page and browsing of questions and answers
- Boost content to address more areas of interest to Faculty, Students and Staff
- More suitable platform than a chatbot to address questions with lengthier answers

SMU Libraries Chatbot on Copyright – as Phase II Project

- A full fledged chatbot with more information on new copyright regulations, citations, references and plagiarism
- Assess chatbots by other departments and use the improved technology and user feedback to build SMU Libraries chatbot

Soft Launch of Beta version

- Explore placement of the current chatbot on various library sites to determine real usage

The SMU Libraries Copyright Advisor
[hover on screen for option to play video]

Click here to try the Chatbot

Thank You

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