

Conference Abstract

User-Centred Design for Maximum Impact: The ALA Story So Far

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Abstract

The [Atlas of Living Australia](#) (ALA) has undertaken several user surveys since 2008. These ranged from user needs analyses, functional reviews, user polls and user satisfaction surveys.

Following each of these surveys, successive improvements to the ALA's web presence and functionality have been made. There are still, however, several pain points that our stakeholders are identifying, which we can improve by refining our user experience and user interface (UX/UI).

ALA recently consolidated previous findings and undertook additional stakeholder engagement regarding the current look-and-feel of the ALA's web presence. Peer review of similar sites including the [Global Biodiversity Information Facility](#) (GBIF), and their approaches to design were included in this review, which culminated in a report summarising the perceptions and pain points of our users and provided recommendations to address these.

Users perceptions of the ALA website are generally positive: users trust our website and there is no other resource in Australia, which consolidates such a large amount of biodiversity data. Despite this, it was clear that users still find navigating the different ALA

services frustrating, and more complex than is needed. Users sometimes find it hard to locate the information they need and to understand what other questions ALA can be used to answer. There is also a disparity between the look and feel of ALA applications and the main website, with some applications requiring updating to use current ALA style.

A set of user personas for ALA was developed (Suppl. material 1) as part of this review process, which informed user journeys, requirements and user stories for the species pages, home page and basic search designs.

Work commenced in August 2023, focussing on designs for ALA species pages, home page, and basic search. With this UX/UI project, ALA staff collaborated with a design company to build and enhance in-house skills, reducing reliance on outsourcing for design needs and incorporating user considerations more effectively into our product designs. These designs have now been finalised and delivered, and work is in progress to implement them on the ALA's website.

Comprehensive user testing was part of this process, which included validating low-fidelity and high-fidelity designs with users, incorporating changes and addressing identified pain points. This was a new approach to design for the ALA.

The design project was a great success, and will result in a more modern site, which is much simpler and clearer for users to navigate and use. Focussing on external user feedback and input throughout the design project, rather than relying solely on feedback from within ALA, was key to this success.

Consecutive to the UX/UI project, a program to update and improve compilation and management of ALA's taxonomy was undertaken to address many issues with the ALA's taxonomic backbone. Three main issues were identified:

- The merged, composite nature of the taxonomy used in the ALA created duplications, misplacements and simple errors, exacerbated by flaws in name-matching data
- The static nature of the taxonomy (taxonomic changes in the system at the time required the entire ALA to be reindexed, making editing very difficult and time intensive)
- A subset of intractable geographically based taxonomic changes that cannot be handled by the current system including identification of populations and geographic splits

This exercise to update the taxonomic backbone has improved the species pages by removing duplicate pages, increasing the accuracy of linking taxa to correct conservation status, and other content. ALA's taxonomy is fundamental master data that underpins the majority of applications and services that the ALA provides. Improving this greatly enhances the user experience and provides greater transparency regarding how the taxonomy was compiled.

For the species pages, we were able to identify changes to the current page design and content to improve the quality and completeness of the content on them e.g., removing duplicate/irrelevant literature links, implementing the ability to be able to select focal images, removing unnecessary/superfluous content. Sources of authoritative descriptive information and images were sourced and approval to re-publish content negotiated with data providers. This provides benefits not only to our users but also to the content providers, as it will increase traffic to and discoverability of their website content as well.

Once we have implemented new designs, we will monitor our support tickets, test the designs with users, and analyse our website metrics to see if there has been a significant change in visitation to or use of our website.

Keywords

user-centered design, content improvement, user experience, user interface

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Conflicts of interest

The authors have declared that no competing interests exist.

Supplementary material

Suppl. material 1: ALA User Personas v1.5 [doi](#)

Authors: ALA

Data type: Report

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