

Background Research: Museum Comparative Analysis

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Executive Summary

Art students face significant challenges when they visit museums such as the Art Gallery of Ontario (AGO), where they struggle to locate relevant exhibitions and have access to information that would support their academic endeavors. Currently, students continue to rely on confusing resources such as basic museum websites, broad art and culture apps, and physical/digital static maps, which fail to address their research and academic contexts. By exploring museum-catered applications and websites, I found three prime examples of existing museum digital solutions that have significant gaps in their ability to assist art students' academic needs. Current platforms like Smartify and Google Arts & Culture allow effective artwork identification, artist biography, and virtual speaking tours, but they fail to address the intersection of proper navigation to current/ongoing exhibitions and artworks, and academic research that students would require. Smartify does not even contain any information on the AGO, one of the most distinguished art museums in North America (Art Gallery of Ontario, 2025). Another large art museum like AGO in New York, the Museum of Modern Art (MoMA), demonstrate strong exhibition information but lack the comprehensive navigation and academic support tools necessary for student success. These findings confirm that students exploring the AGO would benefit from solutions that would provide navigation assistance to specific artworks and academic resources. This competitive analysis will focus on digital solutions that will help with museum navigation and academic research – addressing the needs for wayfinding and information access during visits.

Competitive Analysis

	Target Users	Core Value Proposition	Key UX Strengths	Key UX Weaknesses
Smartify	<ul style="list-style-type: none">• Museum visitors• Art and culture enthusiasts• Young Adults (MuseumNext, 2025)	To allow a platform for art lovers to discover, explore, and engage with content in realtime.	<ul style="list-style-type: none">• Responsiveness• Personalized features• Accessibility built in	<ul style="list-style-type: none">• Load times• Poor offline experience, every feature needs to be downloaded.• Poor wayfinding• Search function messy• Copyrighted Material
Google Arts & Culture	<ul style="list-style-type: none">• Educators• Students• Art and culture enthusiasts (Google, 2021)	To preserve and bring the world's art and culture online so it's accessible to anyone, anywhere	<ul style="list-style-type: none">• Clear layout consistency• Visual/image grouping• Placeholder	<ul style="list-style-type: none">• Load times• App crashes• Information Overload• Bloated app with useless features (Studio + Play which are AI image filters).
MOMA/ moma.org	<ul style="list-style-type: none">• Art enthusiasts• Students/Academia• Museum Visitors (Fiona Romeo, 2016)	To connect people from around the world to the art of our time	<ul style="list-style-type: none">• Great mobile/web cross platform consistency• Clear and effective typography• Clear primary navigation with logical content categorization	<ul style="list-style-type: none">• Dense content• Content overload, slow loading.

SWOT Analysis

Positive

Negative

Strengths

- Market has strong artwork ID and catalogue
- Strong user base exists
- Demand for art/culture apps
- Established design for art apps
- Multi modal content delivery

Weaknesses

- Lack of academic features
- Large art student market
- Many missing Toronto museums, lack of data.
- Poor offline functionality
- Lack of content personalization for different user types - all too general.

Opportunities

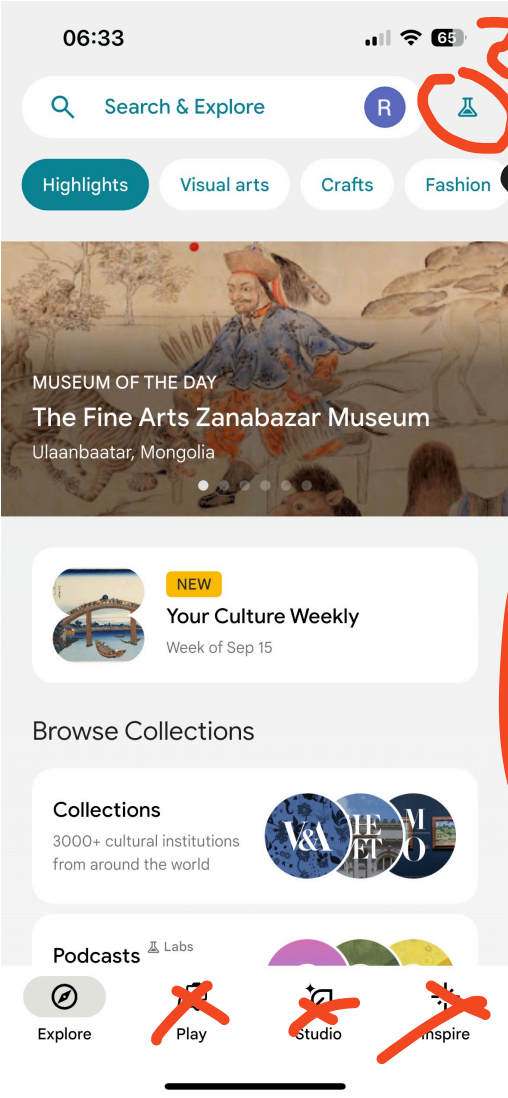
- No AGO specific solution
- Lack of academic integration
- Lack of navigation consistency
- Partnership with school/ university
- Real time wayfinding

Threats

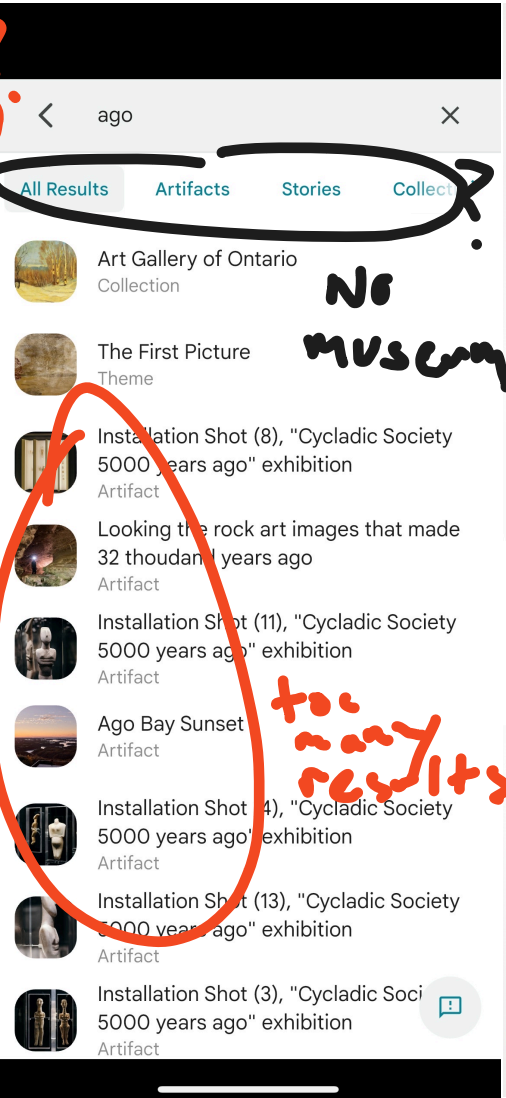
- Google's app monopolizing the market
- Museums developing their webpages to substitute apps
- Too many specialized apps
- Copyright, licensing and privacy restrictions on artworks and information.

Google Arts & Culture

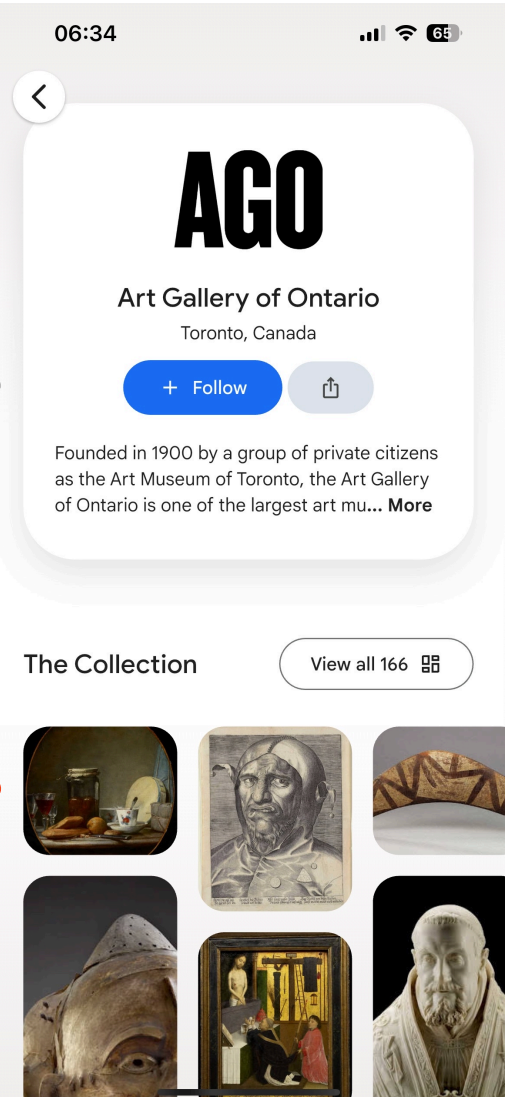
Landing



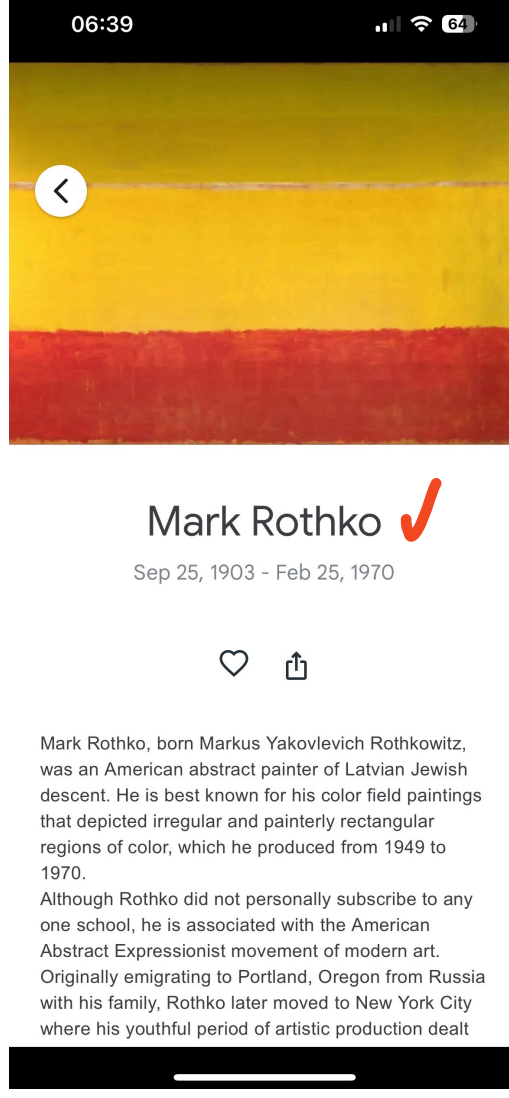
Search



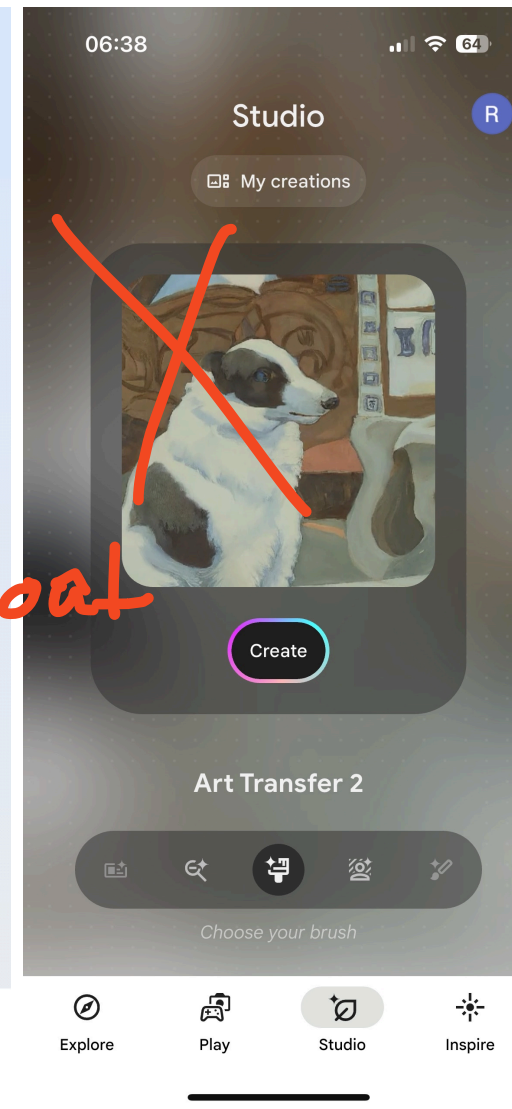
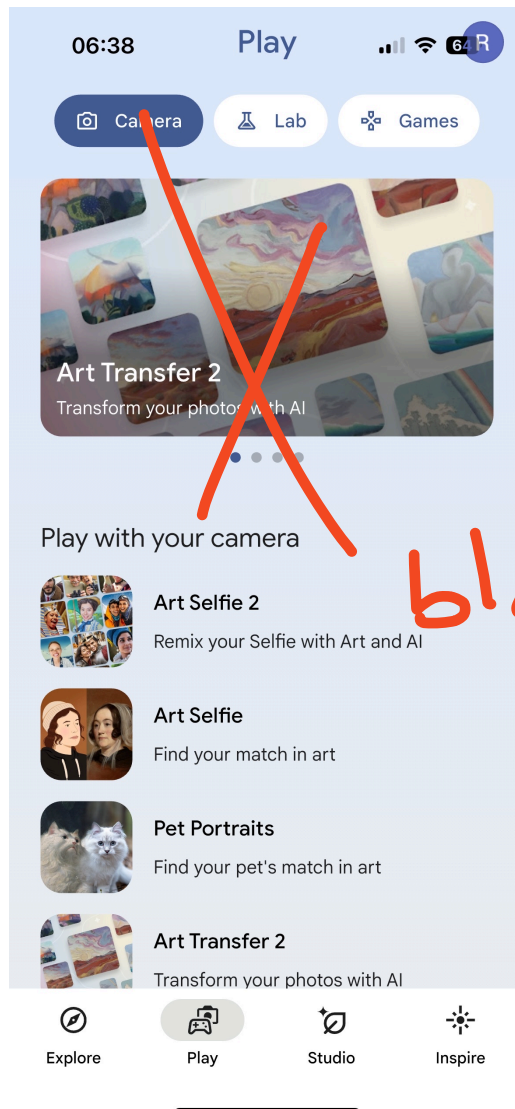
Gallery/Museum Bio



Artist Bio

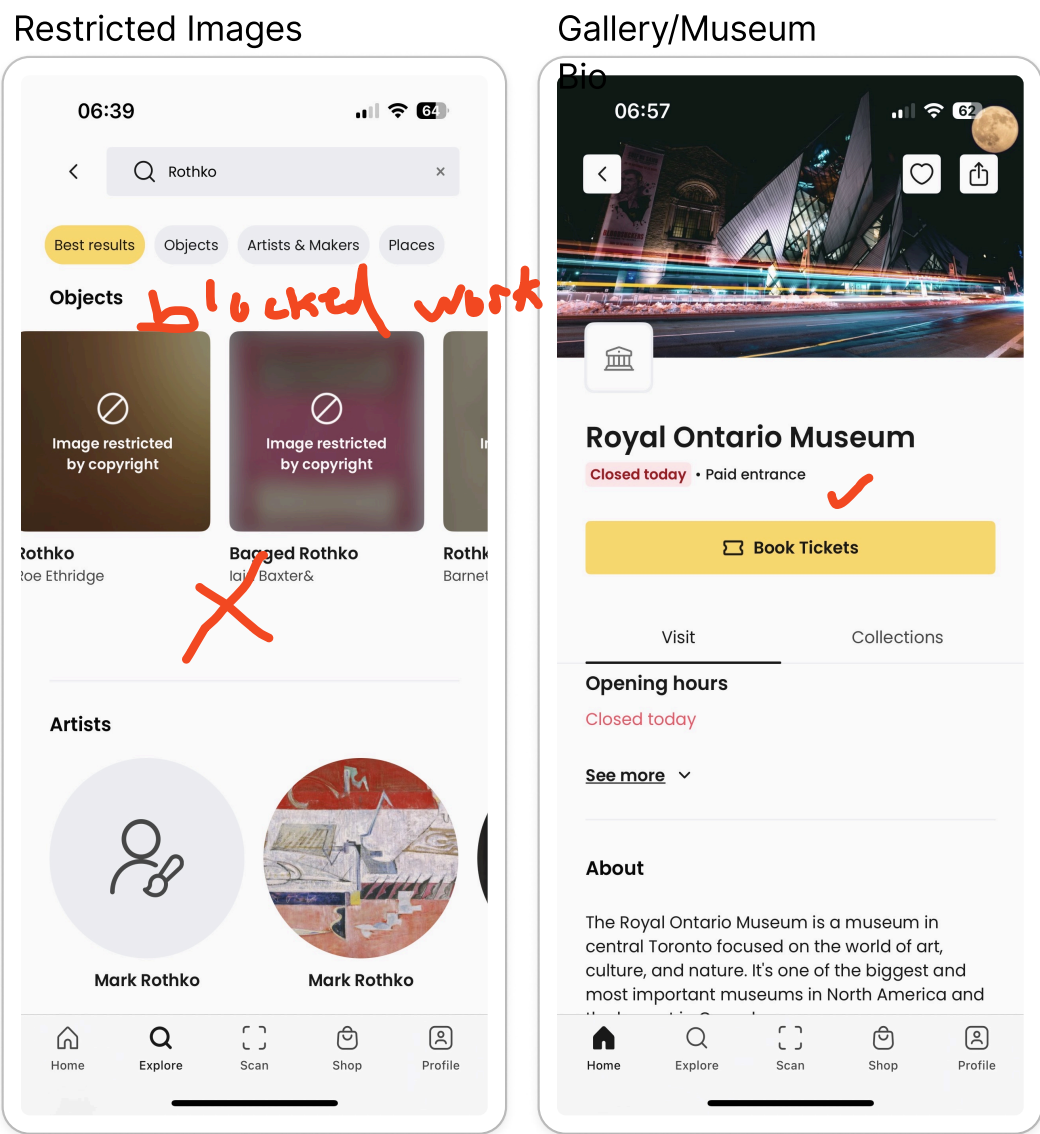
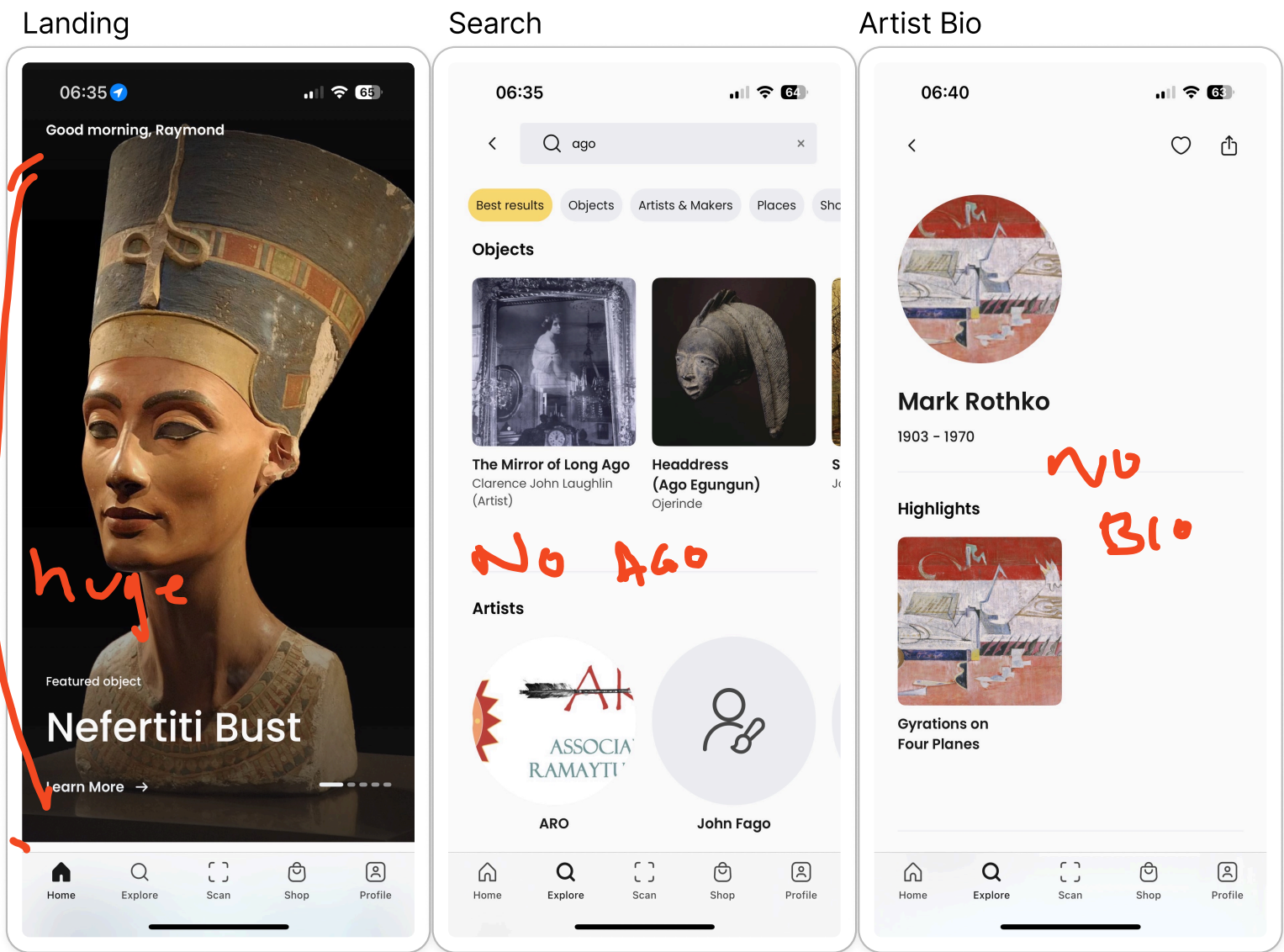


Play/Studio Feature



Notes: Google Arts & Culture provides extensive information on biographies and details, but it has too many features that are confusing for a museum app. The play and studio can be standalone apps, but they have combined them all together. The search function is unsorted and provides too many undesired results. Images are high quality, and the interface is overall decent to navigate.

Smartify

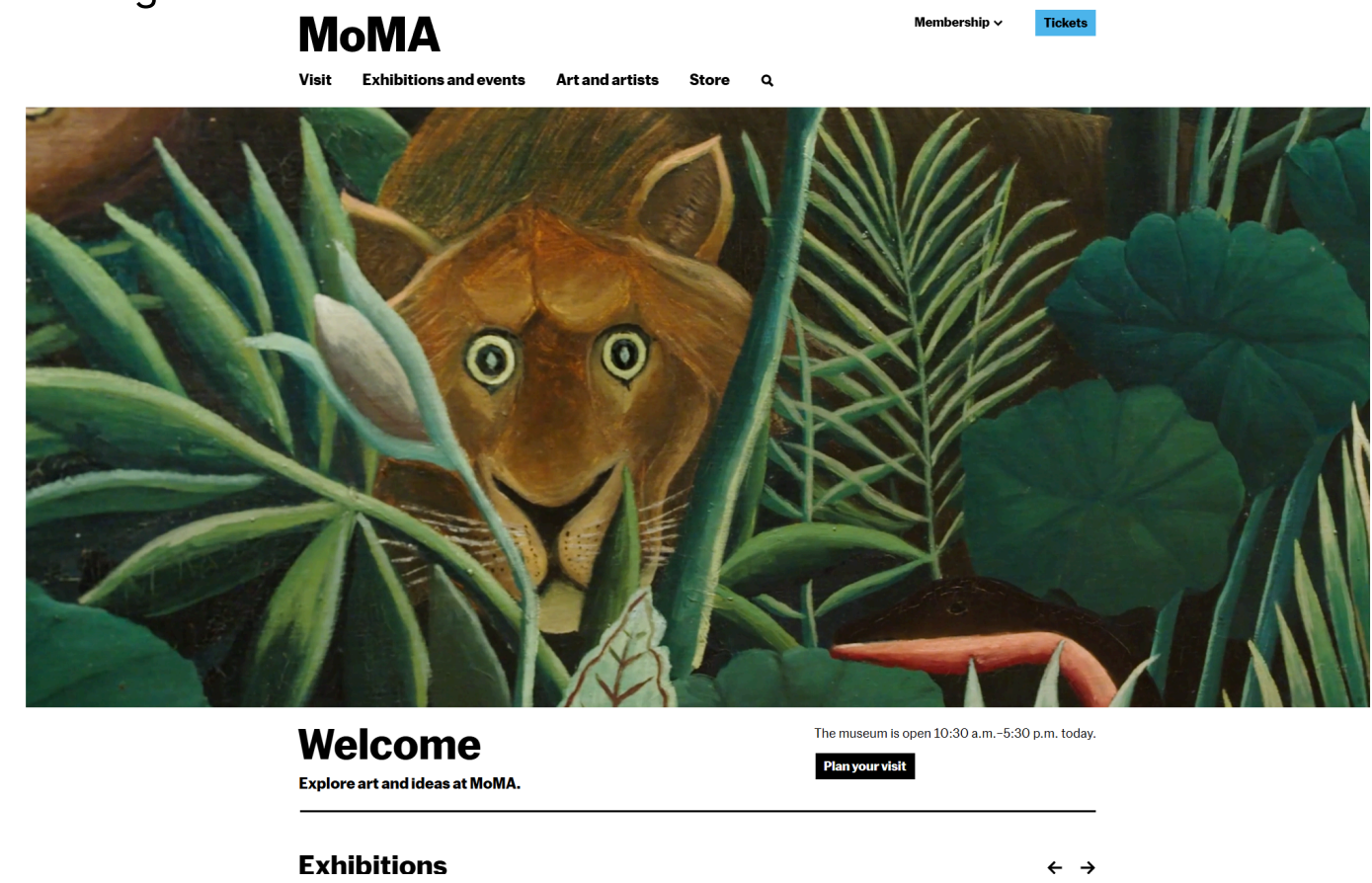


Notes: Smartify has almost no details on artworks and artists, with many photos being taken down for copyright due to web scraping. Their ability to link to museum sites is well done, with extensive information provided for available museums.

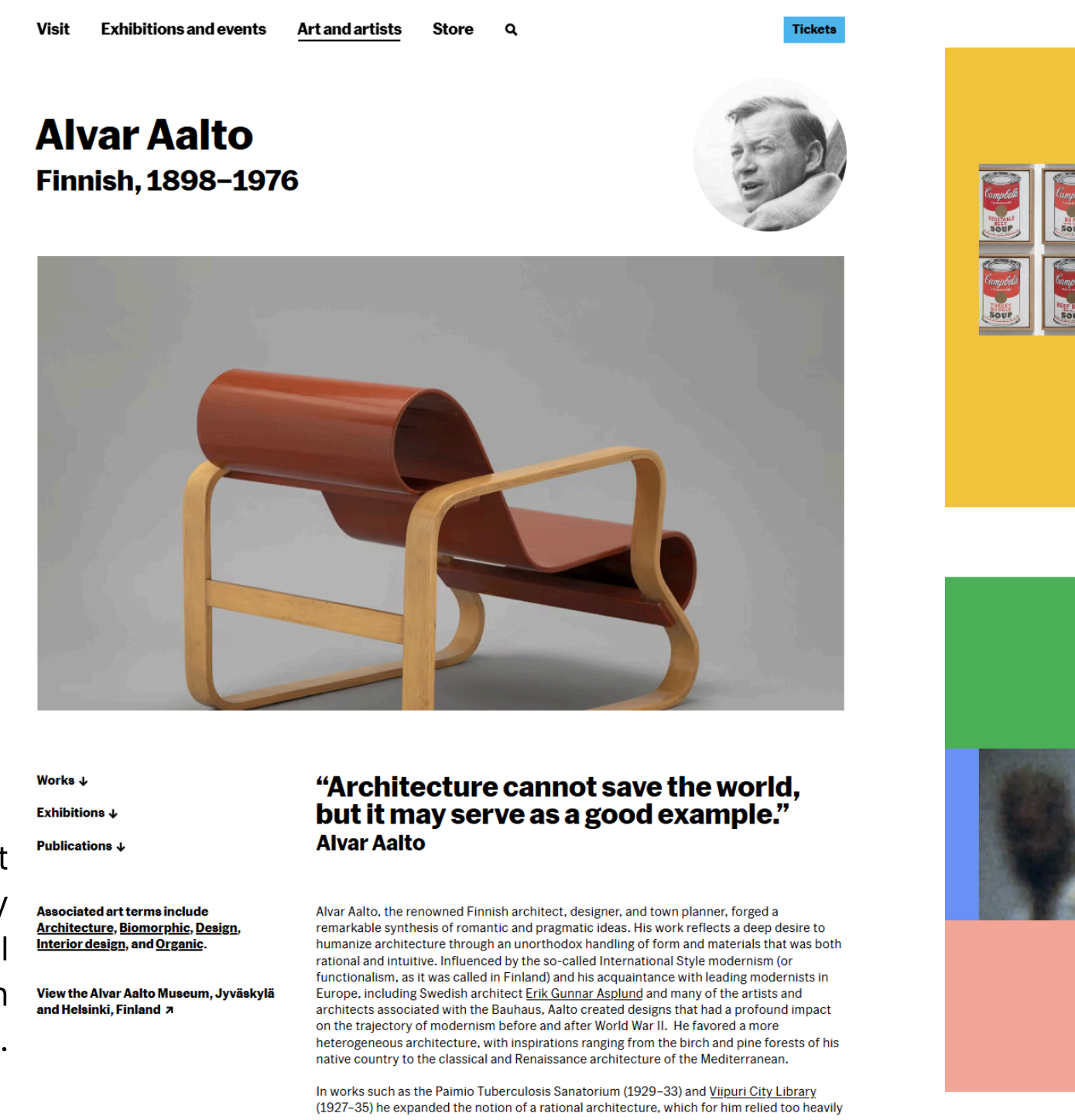
Notes: MoMA's webpage was the most informative and extensive, with details on every selected artwork/artist. It has a great graphical design and typography layouts with accessibility built in.

MoMA/moma.org

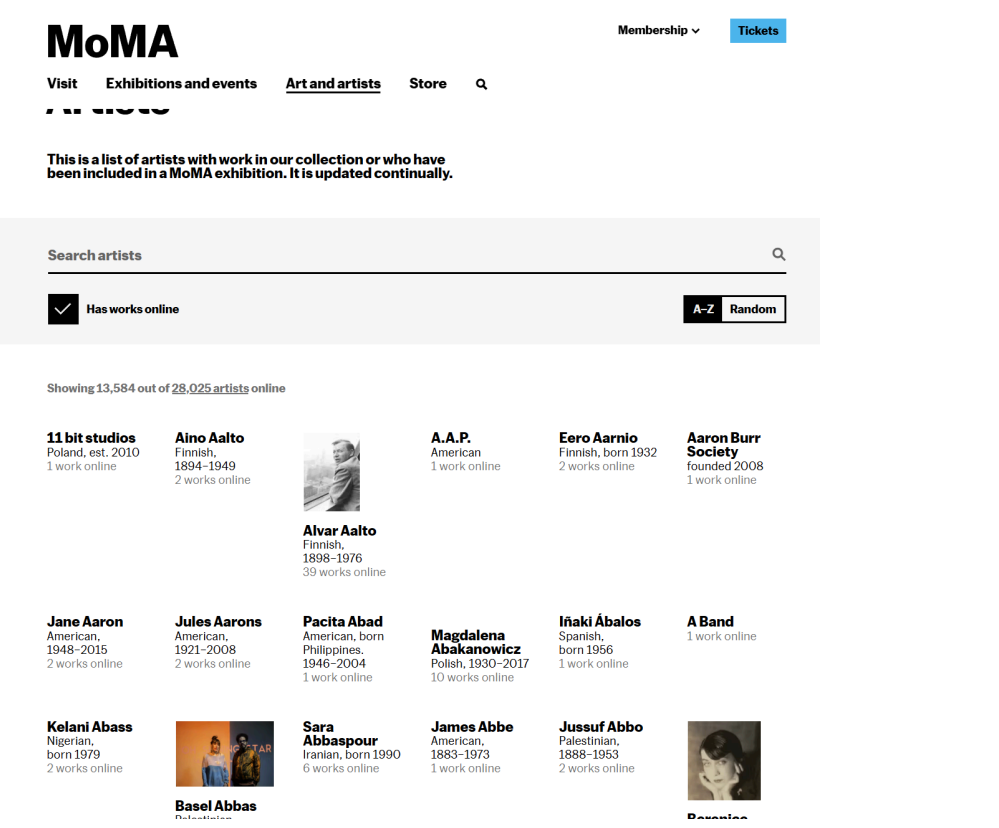
Landing



Artist Bio



Search



Artist Bio



Design & Research Implications

Key insights that will help guide/influence the design include a successful landing page that leads users to the desired information. MoMA's webpage is the most successful in my research, where artists and galleries are all linked together. Keeping it more minimalistic, like MoMA, prevents the overcrowding seen in the Google and Smartify applications. The applications did not offer navigation support, which is something that will help guide the design.

There is a giant gap in academic features, where there is little to no support for those who are utilizing these services for academia. Primary research should investigate what academic tasks students perform during these museum visits for implementation. There also needs to be primary research done to explore where and how art students interact with navigation, and how wayfinding can be implemented in the application. There should also be research done to survey accessibility needs in academics, and real-time information on pain points.

User investigation can be done by observing how students navigate the AGO, what they bring, and what they look for. We can investigate how students document notes at museums, in their sketches, photos, and notes. Moreover, the AGO can be surveyed and analyzed for its layout and collection/collection turnaround rate.

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