

FRANKLY

green

+ WEBB



- The Trailhead to Utah is a digital ecosystem at the Natural History Museum of Utah consisting of touchscreen kiosks, a mobile guide, and a web portal for post-visit exploration.
- Since launching, the Trailhead to Utah system has suffered from low usage.
- NHMU wanted to understand why the service (in particular its mobile/smartphone element) was underused, and how it could be changed to offer a better visitor experience.
- In scoping the project, one key research question emerged: Was the underuse of the Trailhead system a result of...
 - Inappropriate marketing of the service?
 - The Trailhead itself being an inappropriate service for visitors?
 - Or, a combination of these two factors?

RESEARCH

Our research has been completed in two phases, comprising:

Phase 1 – Desk Research

- Initial review of relevant existing data, including:
 - NHMU Time and Motion Study (Serrell and Associates 2013)
 - Available NHMU web analytics
 - FG+W NHMU Talkback Research
 - FG+W Trailhead to Utah Beta Testing
 - FG+W Science Museum (London) Mobile Audiences Survey (2013)
- The findings from this review suggested areas for further on-site research, and informed the design of an evaluation framework for the Trailhead.

RESEARCH

Phase 2 - On-Site Research

- 35 qualitative interviews with NHMU visitors, addressing:
 - Visitor motivation
 - Visitor readiness for mobile engagement
 - Visitor appetite for deeper/further information
 - Awareness / Perception of the Trailhead system
 - Value perception of the 'Go Further' proposition
- User testing with 16 participants, each asked to access the Trailhead system via NHMU Wi-Fi. This was in order to understand:
 - Any technical barriers to Trailhead use
 - Perception of / value communicated by Trailhead landing page

RESEARCH

Phase 2 - On-Site Research

- Stakeholder interviews with:
 - Jim Breitingner (Director of Marketing);
 - Mark Ingalls (IT Manager);
 - Becky Menlove (Associate Director for Visitor Experience);
 - Nika Short (Visitor Services Coordinator);
 - Stephanie Smith (Interactive Marketing Manager),
 - Matt Whitaker (Community Outreach Coordinator)
- Public-facing visitor services staff

RESEARCH

Why do qualitative research?

Several factors made qualitative research the right tool for this project. Most importantly:

- Low take up of the Trailhead service meant there would have been insufficient numbers of natural users for a quantitative assessment of the experience the Trailhead delivers
- To get deep into visitors' perception of the Trailhead, it would have been inappropriate to limit their responses by using a quantitative methodology
- We wanted to give visitors space to describe their understanding of the Trailhead in their own terms, rather than boxing them into a range of pre-set options

Our Sample

- Our sample closely matched the visitor breakdown in Serrell and Associates Time and Motion Study
- It included:
 - 48% first time visitors
 - 22% NHMU members
 - 54% family visits

Findings

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Audience

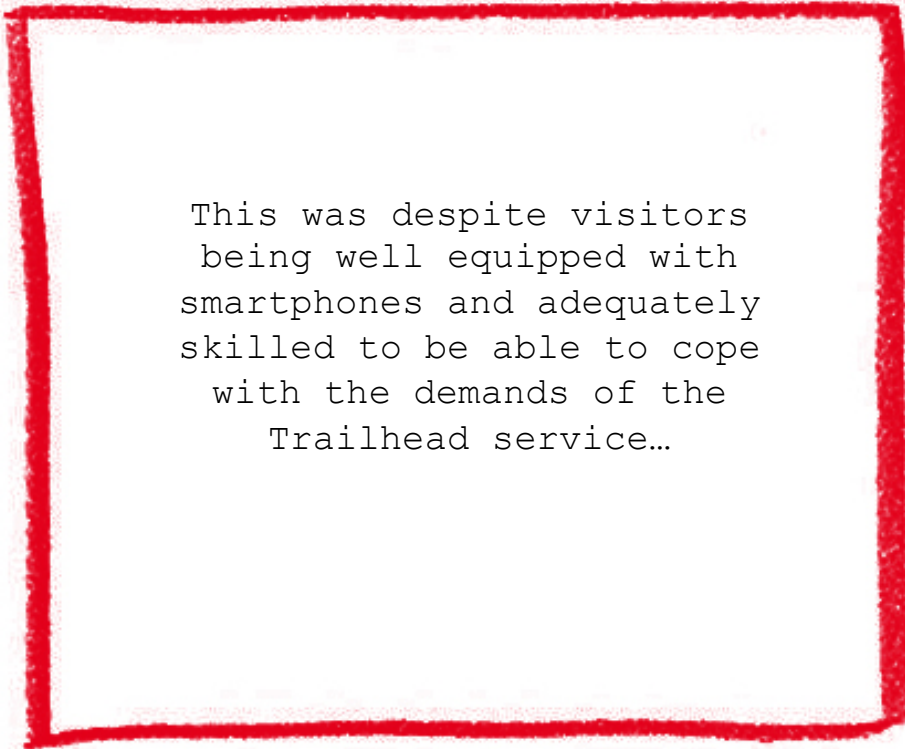
The current Trailhead system is not being used by visitors

- Of 50 respondents across qualitative interviews and user testing, none had used the Trailhead during their visit
- Informal conversations with visitor services staff suggested that perhaps 1 - 2 visitor groups per day enquired about about the service

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**research participants
using the Trailhead
service**

N = 50



This was despite visitors
being well equipped with
smartphones and adequately
skilled to be able to cope
with the demands of the
Trailhead service..

NHMU visitors are well equipped for using a smartphone whilst at the Museum.

94%
**smartphone
penetration**

N = 50

NHMU visitors are well equipped for using a smartphone whilst at the Museum.

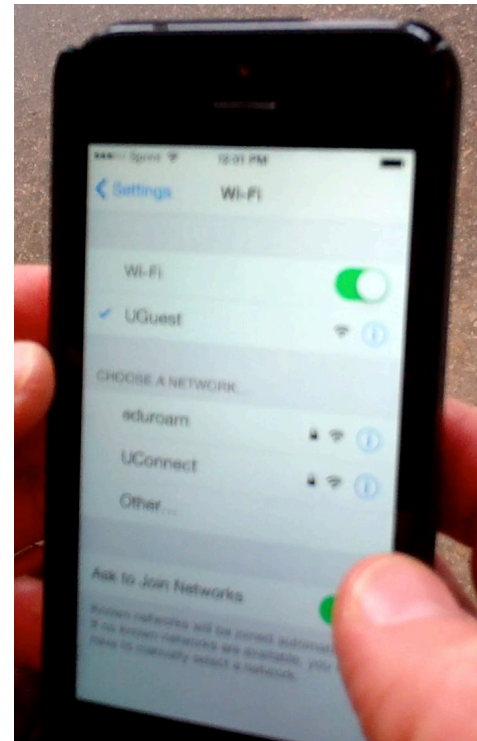
98%

**of smartphone
owners had their
phones with them**

N = 47

Visitors are largely skilled and experienced smartphone users

- 15/16 user testers participants had no difficulty
 - Logging into WiFi
 - Accessing and navigating their web browsers



Visitors use their phones for a range of activities regardless of age

Across age groups, visitors use phones in diverse ways - gaming, social media, information searches and planning were all common behaviours

I'm a little technology challenged. I have to rely on my kids. But I'm pretty good. I spend a lot of time doing the Facebook and hitching the Internet, so I use it a lot.

Randy, 66

I'm taking hundreds of pictures on my iPhone. I'll be sending out pictures to people saying, look we're here, we're playing; tagging people on Instagram.

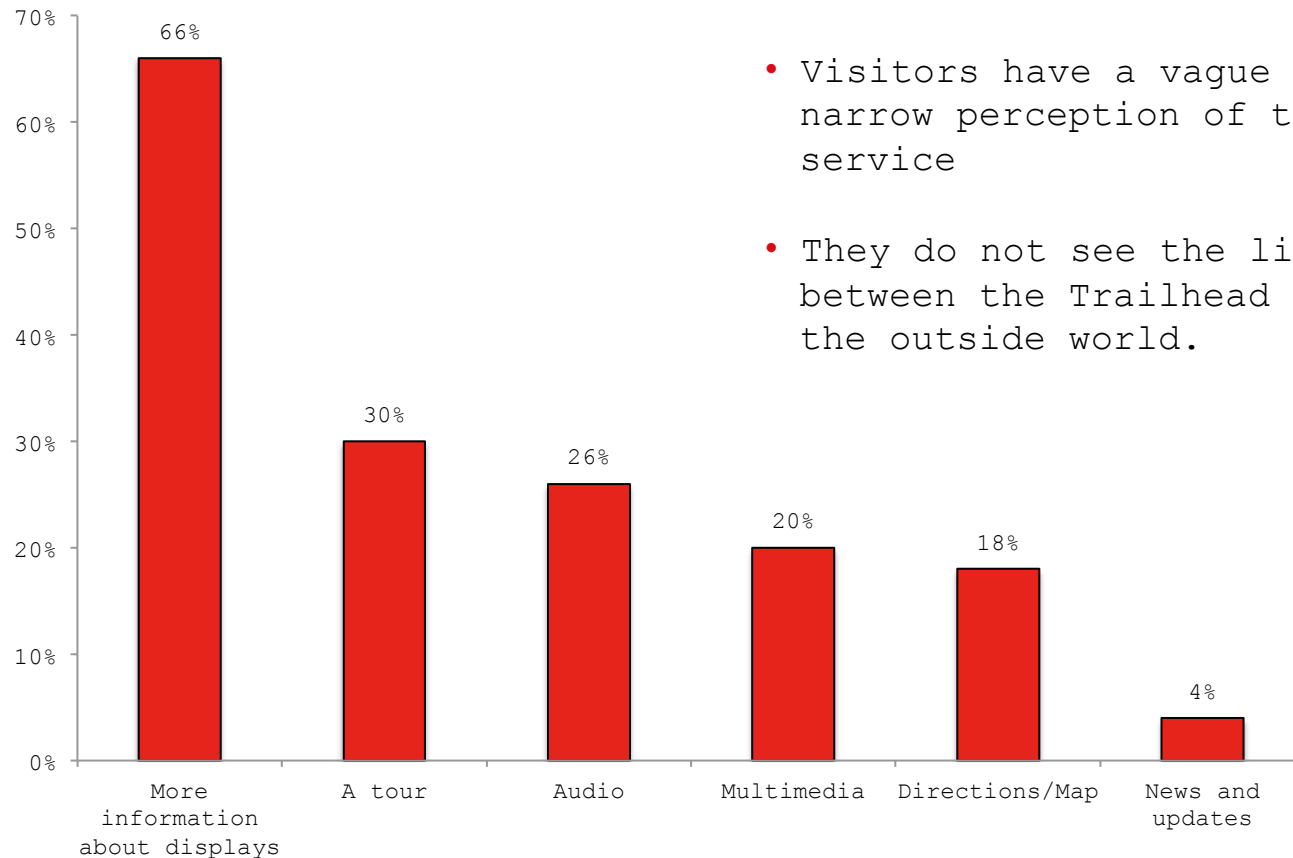
Lara, 31

Findings

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Concept

The current Trailhead to Utah concept is too complex for visitors to see its value



- Visitors have a vague and narrow perception of the service
- They do not see the link between the Trailhead and the outside world.

NB. Visitors' qualitative responses were coded to create this chart. More than one response per visitor was noted where applicable. E.g. If a visitor described the Trailhead as a joint map and information service.

**Staff, too, are unable to provide a
consistent definition of the Trailhead or
its value to visitors**

- The Trailhead comprises too many different functions, which fight against one another
- It is difficult to sum up its value in a concise way
- This problem impacts senior staff who have conflicting views of the service
- It impacts visitor facing staff who are at a loss to explain the Trailhead's value to visitors

An opportunity to have a self-guided tour; highlights of the museum; more informative than what's in the exhibit.

An additional layer of user interactivity to enhance the visitor experience

A guide to enhance a visit, for people who want to know more, to personalize a visit, and to connect people

The big sell to visitors is 'using technology to enhance the visit'

One of its biggest selling points is getting people out. That's what it should do. All about engaging them in the natural habitat before they leave.

Staff have mixed perceptions of the Trailhead offer to the visitor

Findings

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More information

Visitors are very satisfied with the
in-gallery offer at NHMU

- NHMU is doing a great job with its gallery displays
- There were no instances where a lack of information had been the cause of a negative visitor experience
- Only 3 visitors expressed a clear desire for more information
- But those 3 were all pleased with the current offer

100%

of visitors felt NHMU
provided an
appropriate level of
information

N = 35

For most visitors, the motivation for visiting NHMU centers on leisure, family or friends, and fun. Learning is secondary

It's enough to give you the information, but it's not overwhelming, so you don't get bogged down with not understanding what the whole exhibits are about. There's a good balance of just the right amount of information.

Leanne, 41

I'm still absorbing everything [...] And we were chatting about it all too. We're with our friends. If we talk it through we make sure we understand what we're reading!

Bonnie, 45

It's perfect. We read a lot, and for them, the games. But we didn't need more - I think they're still too young to ask for more.

Mary, 44

A lot of times if you go to a museum you have to read too much, you get lazy and you don't do it. The descriptions and the little plaques along the way gave just a little snippet of information that caught my attention and made me go to the next one.

Randy, 63

Even visitors with a deep interest in natural history felt their was an appropriate level of information at NHMU

I'd say if you took the time, it's probably an appropriate level of information [...] It's a hard balance I think to find for anyone. I think they're doing a really good job.[...] If I want to go deeper, I know how to go deeper.[...] I would know where to go to find out more information.

Adam, 29 - Microbiologist at the University of Utah

- Specialists accept and value the role that the Museum has in providing science for everyone
- They are happy with the present offer and show no expectation of / demand for additional layers of information

This is not unusual

In a similarly interactive environment at the Science Museum (London) only 5% of visitors look online for more information about exhibits despite high levels of smartphone usage and free WiFi access.

There, visitors want help to make exhibits more meaningful, but are not concerned with simply increasing the volume of data they can access.

Source: Frankly Green + Webb research for the Science Museum, 2013

Overall...

- The museum has successfully launched an engaging exhibition design that is working for visitors
- Visitors do not see a need for an additional level of content
- This means the current Trailhead offer is inappropriate

Looking to the
Future

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A new product

OPPORTUNITIES

During interview, research participants were asked if they knew about the Go Further aspect of the Trailhead service

None were aware of it

However, having had the Go Further concept explained, the majority responded positively...

Visitors are enthusiastic about finding ways
to explore Utah further

- 21 of 35 interviewees could see themselves realistically using a service based on exploring Utah

60%
**keen to
Go Further**

N = 35

The Go Further concept tests well and marries with visitors' real interest in seeing more of Utah

I can definitely see myself using that.

Lisel, 23

I love to go to the different parks and things in the state. If you could see where a certain fossil is from [...] that would be something of interest to me, to go and see it in person. We'll go to Arches, down to Goblin Valley[...]. There's so much to see in the state.

Jerry, 50

That sounds great.
I'd like to go and see those things. We were saying that about the Cleveland Lloyd, where all the bones are together. We were thinking it would be cool to know more about that place.

Jeff, 41

Oh, nice! It absolutely appeals. As I said my husband is a rock collector.

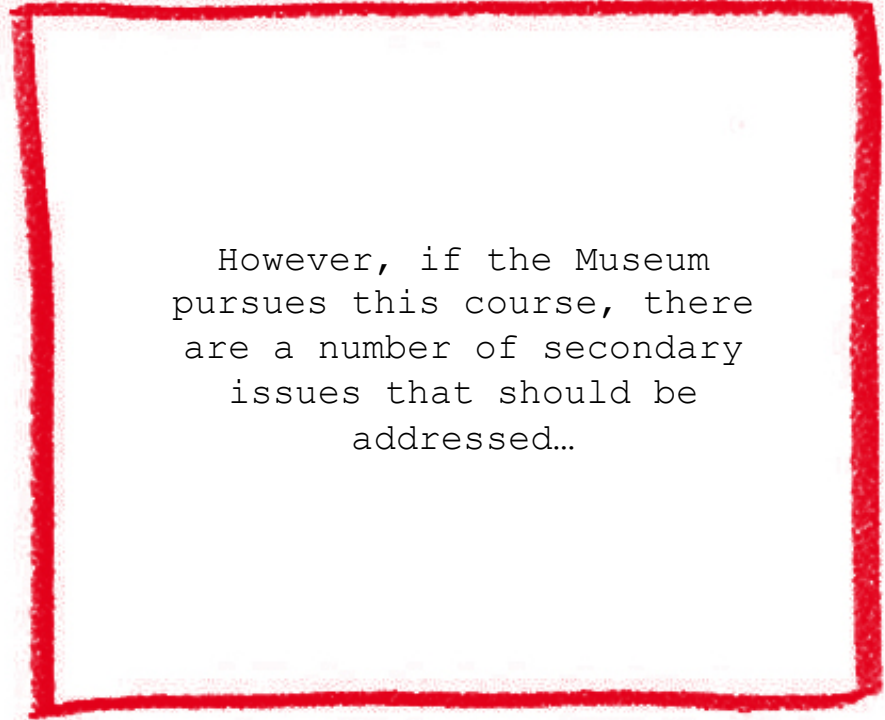
Lesley, 50

OPPORTUNITIES

NHMU visitors are:

- highly engaged with the museum, and with the state beyond
- using mobile to explore Utah is a popular concept

There is a opportunity to develop a new mobile product based solely around the concept of exploring Utah



However, if the Museum
pursues this course, there
are a number of secondary
issues that should be
addressed..

Findings

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Awareness

**We found low overall awareness of the
Trailhead system**

- Mobile services are by their nature invisible
- To achieve good take-up of any service, it is necessary to market it clearly and proactively

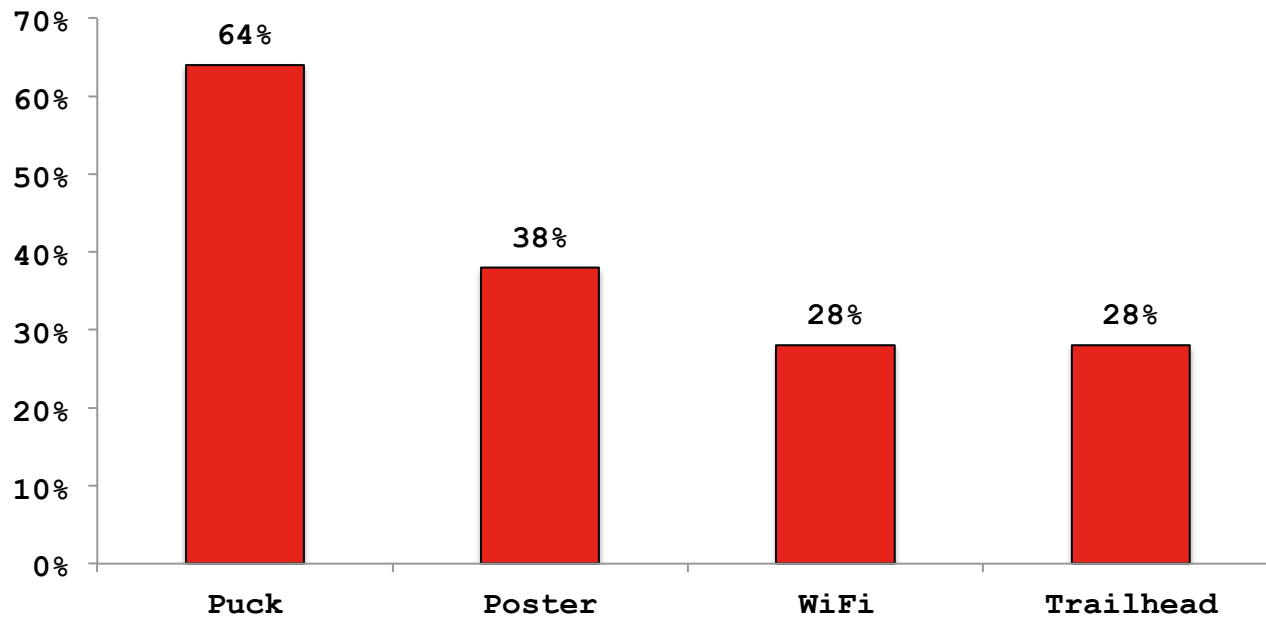
28%

**of visitors are
aware of the
Trailhead**

N = 50

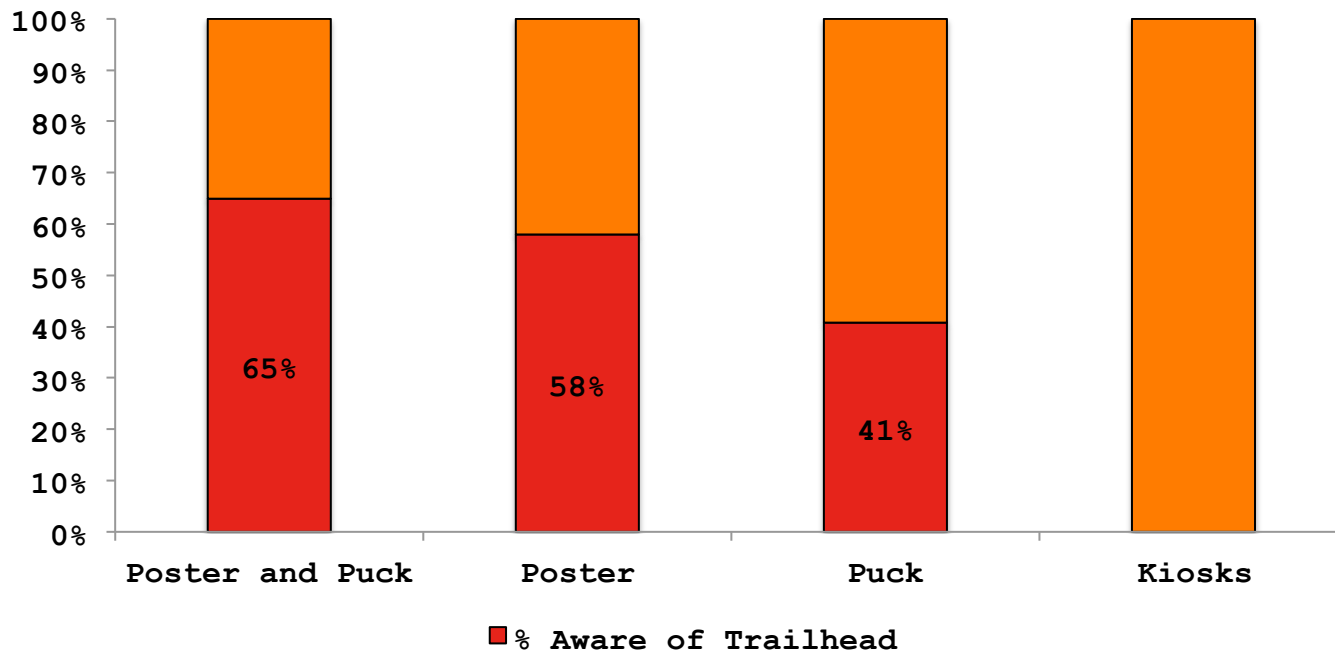
At present, Trailhead marketing is not grabbing visitors' attention or communicating what the service is

Visitor awareness of...



N = 50

Awareness of the different Trailhead marketing materials does not convert to awareness of the Trailhead itself



Sample sizes: Poster and Puck 17 aware / 50 respondents; Poster 19/50;
Puck 32/50; Kiosks 8/21

**A combination of more and clearer signage, and
staff talking about the service will help
increase take-up**

[I saw it] in passing.
Well, it looks like a little
iPhone, but I don't know what
it's for? Does it mean WiFi? Is
it for an app? It would probably
elaborate on the exhibit. I had
to think about it.

Candice, 32

I haven't (noticed
any of those)... I think
what would be helpful is
if we were informed
about that the desk on
the way in.

Robert, 75

I have seen one. I
wondered what it was. I
just glanced at it and
ignored. I wondered what
it was but I didn't care
enough to find out

Tanner, 21

I would say that I have
But I've taken more notice of the
circle ones. It didn't get my
attention... maybe it's just not
prominent enough you know.
Especially when I've got kids on
my mind you know. I've kind of got
tunnel vision.

Lara, 31

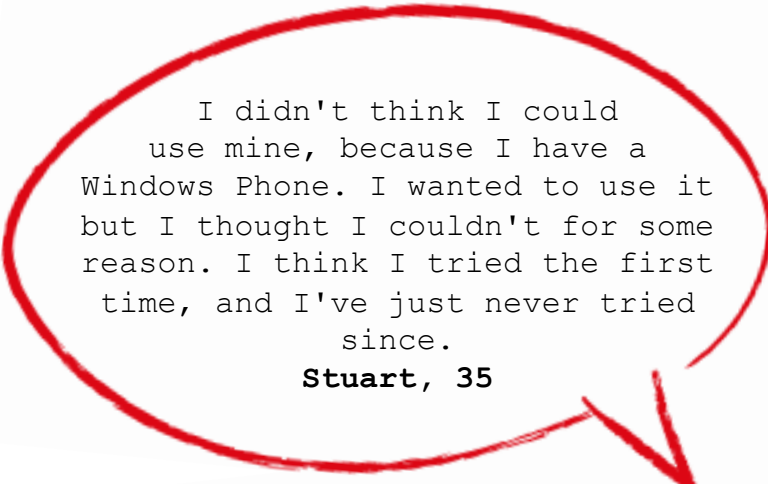
Findings

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Access

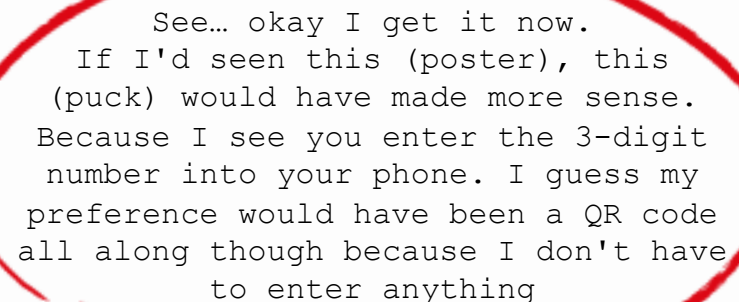
It should be possible to access a digital service the moment you encounter it

- A number of visitors encountered Trailhead marker pucks but were unable to access it since the pucks give no instruction for new users
- In future products, visitors should be able to use a service whenever they first notice it



I didn't think I could use mine, because I have a Windows Phone. I wanted to use it but I thought I couldn't for some reason. I think I tried the first time, and I've just never tried since.

Stuart, 35



See... okay I get it now. If I'd seen this (poster), this (puck) would have made more sense. Because I see you enter the 3-digit number into your phone. I guess my preference would have been a QR code all along though because I don't have to enter anything

Gary, 47

Findings

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User Experience

Users found the site unintuitive. Having accessed the Trailhead, it still wasn't clear what value it delivered

It's kind of a lot to process. I don't know... Register? Do I have to login to use it? I don't know

Candice 32

I find it a little bit clunky. It's not quite screen-prompting.

Dieter 42

It's not very clear right away what is is, but I guess... restrooms and exits, a map of the museum and stuff..

Melissa 28

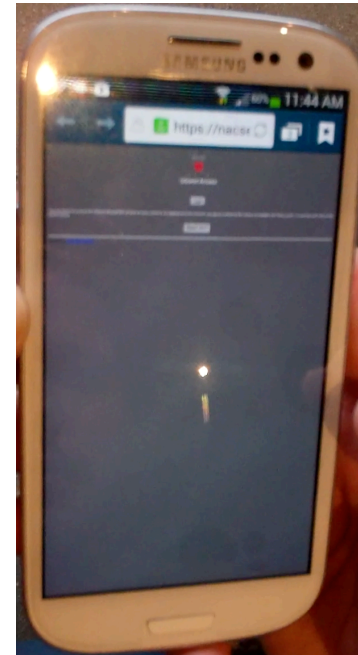
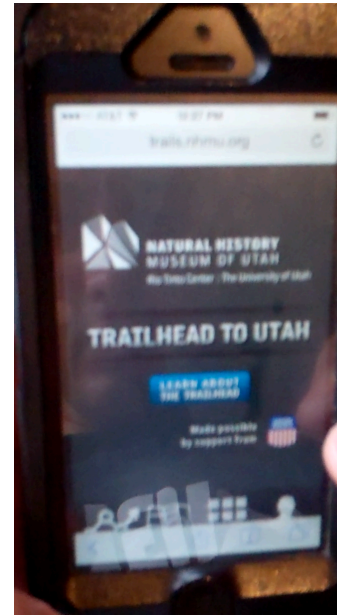
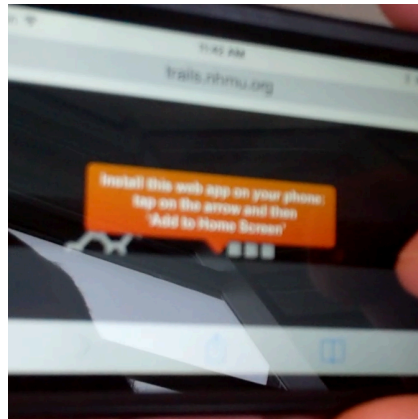
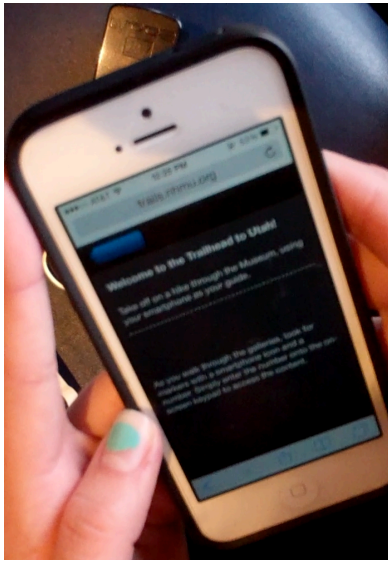
It's kind of just a boring landing page. I mean obviously it's to help you tour things in the museum. But not very exciting.

Samantha 28

I guess I'm kind of confused. It's not very intuitive. I'm still thinking it's like a guide. It says to enter a 3 digit code somewhere, but I don't really know where. Do I have to register?

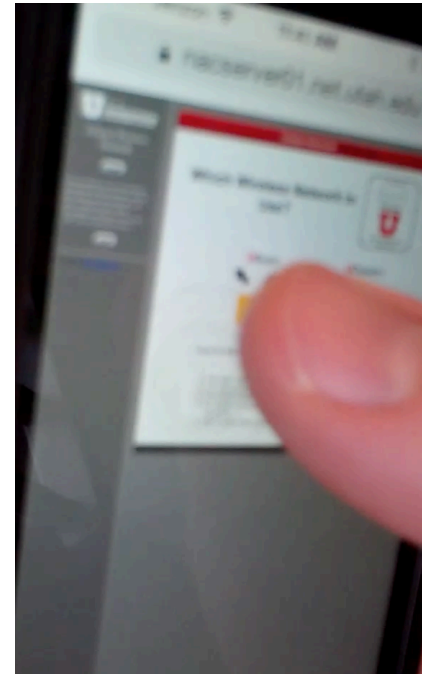
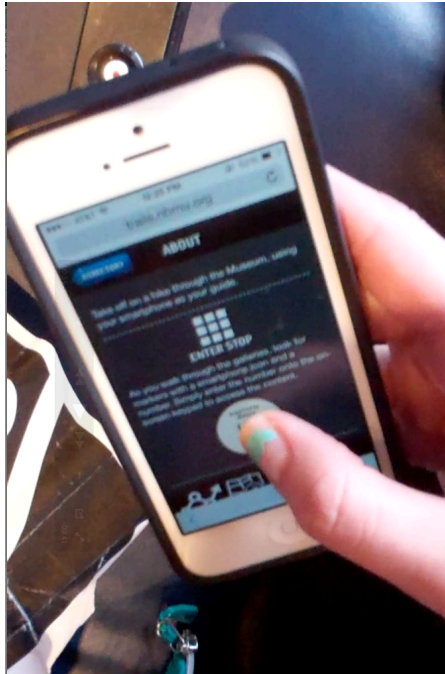
Lindsey, 21

In the majority of cases, the experience was undermined by poor display quality



- There was significant inconsistency in the way the site displayed.
- Most commonly, users could not see or access a useable bottom menu
- This reduced the navigability of the site, and made it harder to understand what to do next upon arriving at the site.

Users expected to be able to tap large icons for navigation



- Users tended to try to skip the long 'Learn More' text by clicking icons
- When the bottom menu failed to display correctly, this seemed like the only obvious way to navigate

When it comes to access and user experience, first impressions are all important

The first time I came to this museum was a long time ago, and I think I tried the first time, and I've just never tried since.

I really was under the impression you had to get something. I didn't figure it out the first time.

Stuart, 30

It was there, when the museum was new and we were just trying all the features. But I haven't used the app much the last year, mainly because I couldn't get it to work. It wasn't connecting like it used to, and I didn't know that [it had a url]

Robert, 40

- Once put off using a service, visitors are unlikely to consider giving it another go.
- A new product will need rigorous testing across multiple platforms prior to launch.

Findings

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Staff Engagement

There was universal agreement at NHMU that the Trailhead is unloved by staff

The service is not subject to any regular management

It is not considered a priority activity for staff

A new product will need full buy-in and dedicated governance to succeed.



THANK-YOU