Created for:
National Gallery, London

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AIM

Post Museum opening it quickly became apparent that the Canyon Kiosks, Life and Land Talkback experiences were not meeting their original objectives. The aim of this research was to identify the issues impacting their success and subsequently develop design recommendations to improve their success. In particular the research focussed on :

• Audience needs and behaviour in the exhibition space

• Technical requirements of the organization

• Technical limitations of the current hardware

• Museum learning/experience objectives

• Fits within the context of the current exhibition design/visitor experience

RESEARCH

For the two Talkback stations the methodology included:

- A detailed review of installations by FGW

- Interviews with stakeholders

- Observation of visitor interactions

- Structured interviews with visitors after they concluded their visit in each of the two galleries (Life & Land)

For the Canyon Kiosks the methodology included:

- A detailed review of installations by FGW

- Interviews with stakeholders

- Observation of visitor interactions

- Structured interviews with visitors in the Canyon

Canyon Kiosks

AIM

The original aims of the Canyon Kiosk were to:

- Personalise the visitor experience by offering information of trails and programming

- Promote use of the smartphone guide and associated Trailhead eco-system

- Encourage repeat visitors by highlighting the range of activities on offer
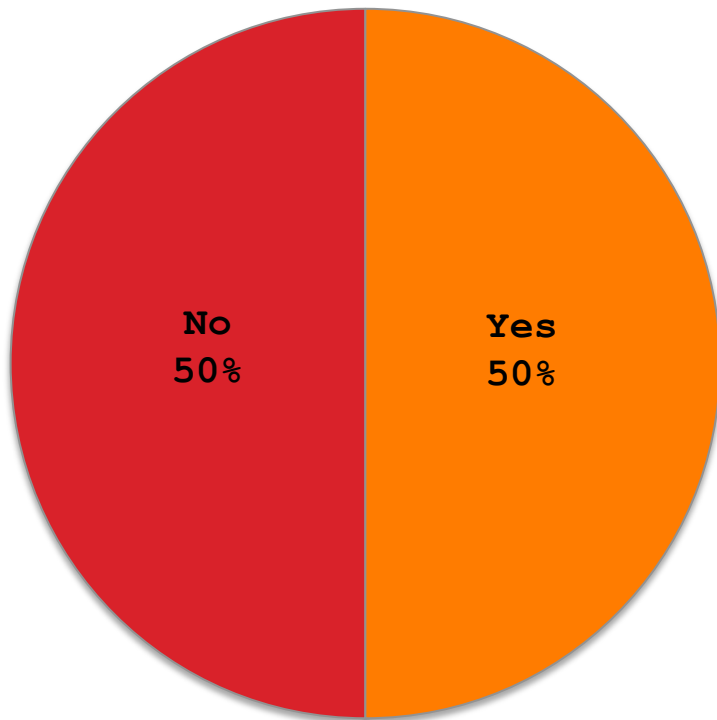
Finding: More than half of visitors interviewed expressed a need for help and/or information whilst in the Canyon
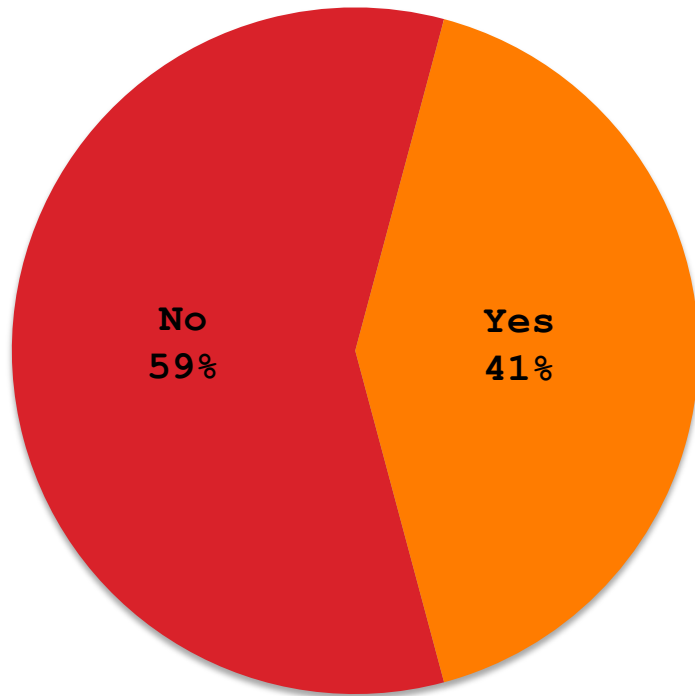
No
59%

Yes
41%

Q: During your time in this area did you realize at any point that you needed/wanted additional help or information?

**Finding: But the Kiosks are insufficiently visible…**

Despite there being six screens in the space, only half of adult visitors realised there were screens there

No
50%

Yes
50%

Q: Did you see the screens in this space?

Finding: The visual impact of the Canyon focusses visitors' gaze upwards and away from the kiosks…

The kiosks are set at a low level and discreetly integrated into the furnishings – visually they simply can't compete with the 'wow' factor of the Canyon.

Q: Can you describe your impression of this space today?

Finding: The kiosks are insufficiently attractive to the adult visitors surveyed…
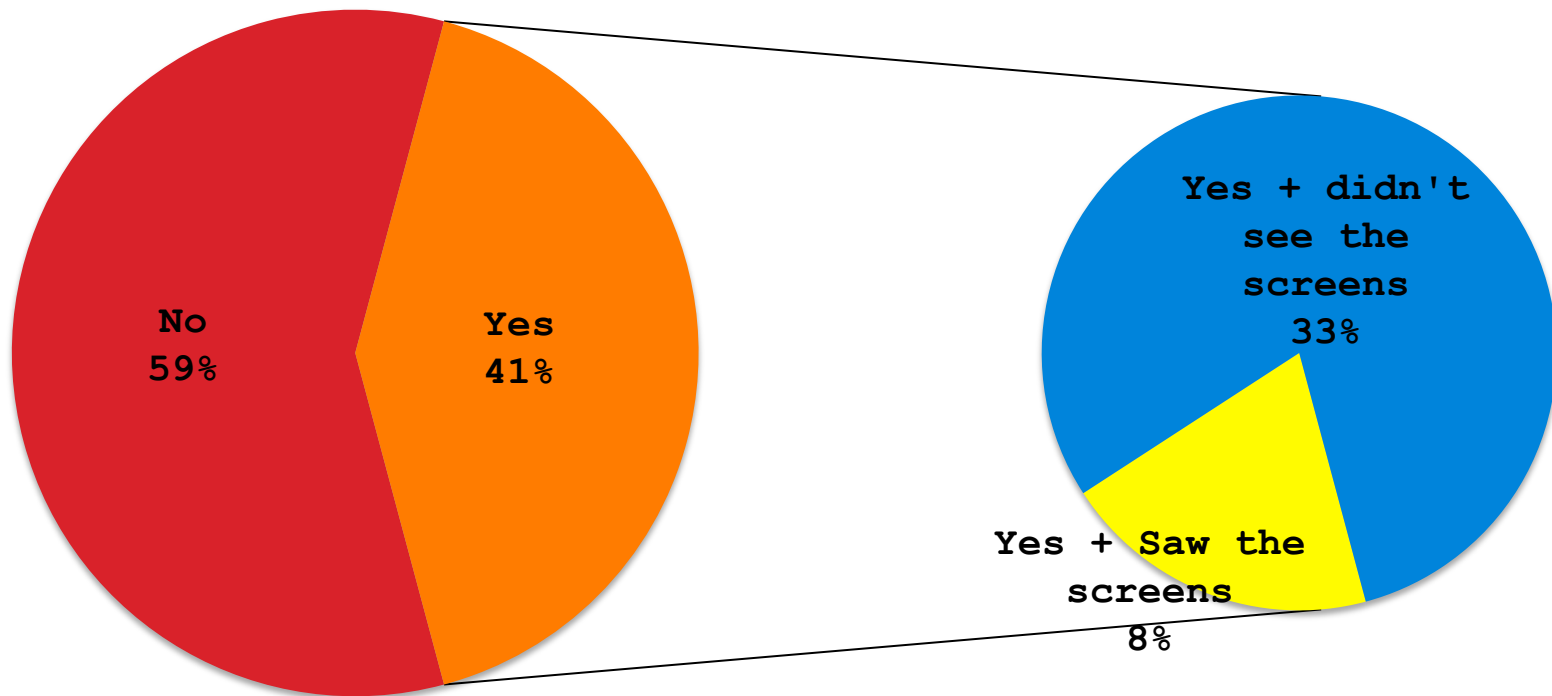
Where visitors do spot them, only a minority gone on to use them
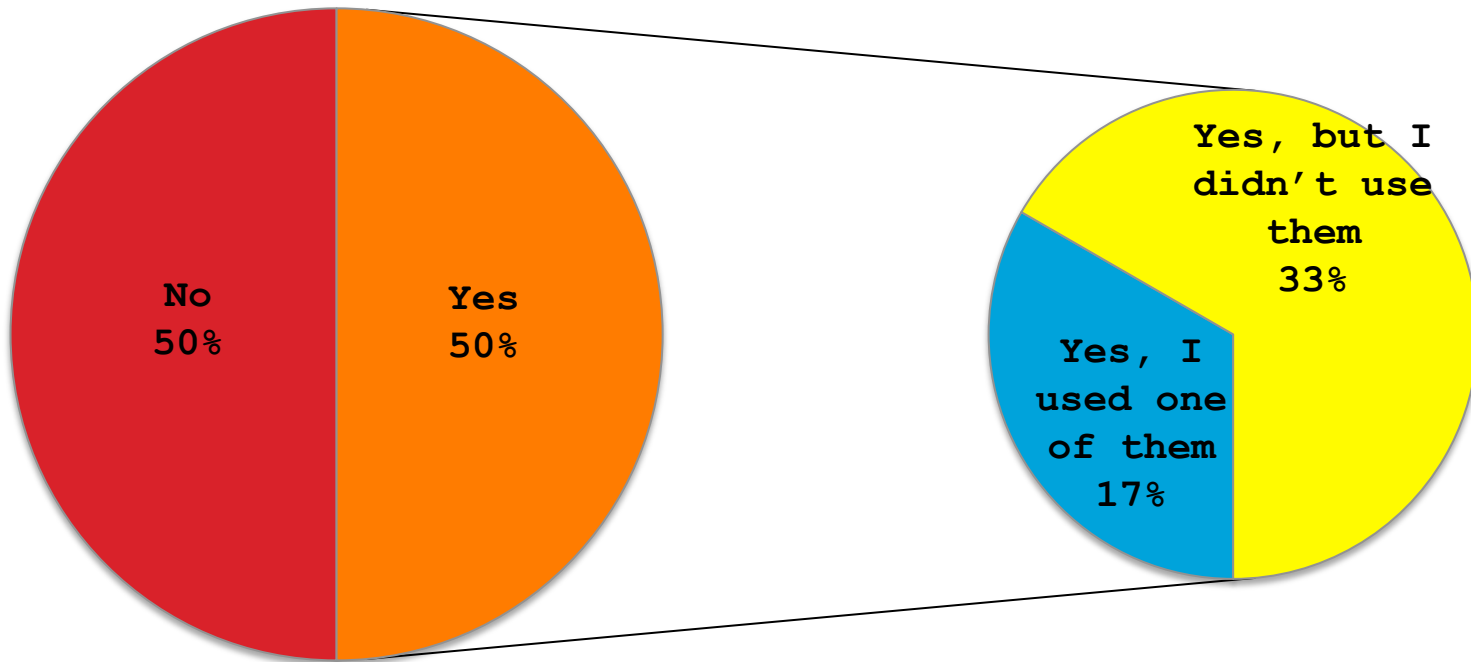
Q: Did you see the screens in this space?

Finding: Adults needing help/information are even less likely to spot the kiosks…

Fewer than one in ten visitors who needs help spots the kiosks

No
59%

Yes
41%

Yes + didn't see the screens
33%

Yes + Saw the screens
8%

Q: During your time in this area did you realize at any point that you needed/wanted additional help or information?

Finding: There is an opportunity to create an experience for younger visitors and families by creating a child led experience

- Observation suggests that Children are more likely to see the screens and be attracted to them.

- Their smaller stature means that the screens make a far bigger visual impact on them and they are more likely to be attracted to a digital experience.

- Stay time study report suggests repeat visitors were more likely to be adult-child groups than adult only groups.

- Children frequently encourage their peers (when in a school group) or their family members to look at/ interact with kiosks

Case Studies

We interviewed two visitors who had used the screens during their visit. They give some insight into the experiences we observed…

Dan (25-34)

Just entered museum, with his partner (17 – 24). Looking for a map as they wanted to see something specific.

What motivated you to use the screen today? *Just curious about it*

Did it provide what you hoped? No

What was missing/why not? *Read about tours but didnt want one. Boring*

Has your experience using the screens today had any effect on what you plan to do next? *No – Didn't give what [I] wanted*

Case Studies

We interviewed two visitors who had used the screens during their visit. They give some insight into the experience…

Jared (25-34)

Just entered museum, with his son (under 11). Weren't looking for any information but as regular visitors to the museum his son enjoys playing with the screens.

What motivated you to use the screen today? *Son likes images and moving thro touch screens*

Did it provide what you hoped? Son likes touch screens

What was missing/why not? *Content is not for children*

Has your experience using the screens today had any effect on what you plan to do next? *Use them to familiarise*

Finding: Staff are aware that the kiosks are not meeting the visitor needs and as a result lack motivation to tackle some of the operational issues…

Interviews with staff

- The information is not being kept up to date as the workflow is too time consuming and resources are limited

- The use of Firefox in kiosk mode and the process of updating remotely has not been successfully implemented

Useful insights from Stay Time Study Report

The report makes the following main observations

1. A roughly 2-hour stay-time seems to be fairly typical, and a realistic expectation for the Museum.

2. First-time visitors could use more support in understanding their options for where to begin and what the Museum's intentions are.

3. Visitor behavior among all demographic segments suggests special interests in dinosaurs, Native Americans, and gems, as well learning labs and other interactive activities.

Conclusions:

- Given that just half of adults *see* the kiosk and even fewer perceive it as having the potential to address their needs we do not recommend attempting a re-design targeted solely or mainly at adults.

- The kiosks are more likely to appeal to and be able to support children and families particularly in the context of repeat visits.

- There are some clear observed patterns of behaviour amongst children that can inform the experience design

- Adult visitors do still have some unmet needs. If a section of the system were design specifically to meet those needs staff might feel more confident in directing adults to it or using it to support their conversations with adult visitors.

Design Idea: The Random Adventure Generator

Idea in a nutshell: The kiosk randomly generates suggestions for family adventures in the Museum. Users can select some broad parameters for their adventure… "I like adventures with water…" but the random generation maintains an element of surprise. Each suggestion gives a location and an activity. The activity might be one already offered in the Museum (make your own earthquake) but it could equally be a simple add-on – spotting, counting, write a story, write and send a postcard…

User journey:

1. Dad Brian, Son Mark (9) and daughter Anne (5)arrive at the Museum. They live in Salt Lake City and are regular visitors to the museum

2. The children run up the stairs and to the screens. They've used them before and want to try them out again.

3. Mark chooses 'I like water'

4. Four options appear on screen

5. Mark chooses the 'Triops' exhibits. The option directs them to the Land Gallery on level 4 via the lift.

6. Brian reads the science related observation activity and notes what they have to do.

7. The adventure unfolds…

Fundamentals:

- Could be used on both web and mobile to address pre-planning and in-gallery experiences

- Could include current live programming however is not dependent on this data

- Can include themes/trails from the mobile guide

- Designed to support short intense interaction

- Primarily driven by images with only brief and to-the-point text – easy to use for a wide range of ages

- Could include brief advice for parents (this activity is great for children under x years…)

- The 'I like…' options are:

  ✓ Founded on visitor motivations

  ✓ Activity driven

  ✓ Designed around interactive exhibits, objects or current live programming

  ✓ Include simple orientation information and an activity suggestion

  ✓ A set of labels that can be tagged to any uploaded 'exhibit' – easy to change/ update/add to

  ✓ Activities can be switched on and off easily through the content management system making maintenance more straightforward

Talkback Stations

**Finding: The data suggests we need to treat the detailed analysis of the two talk back stations differently**…

For example we can se a significant difference in the number of comments for each location and the proportion of engaged comments and spam/duplicates
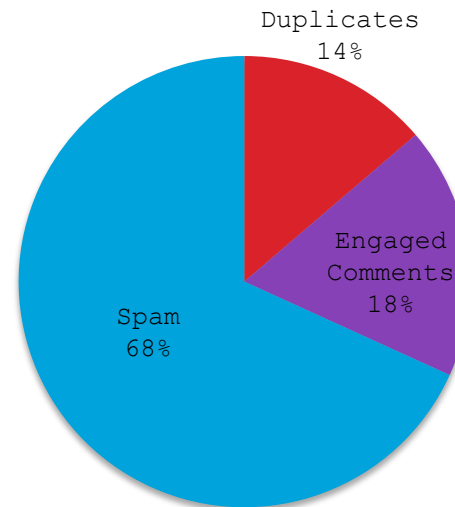

■ Duplicate Comments   ■ Engaged comments   ■ Spam Comments
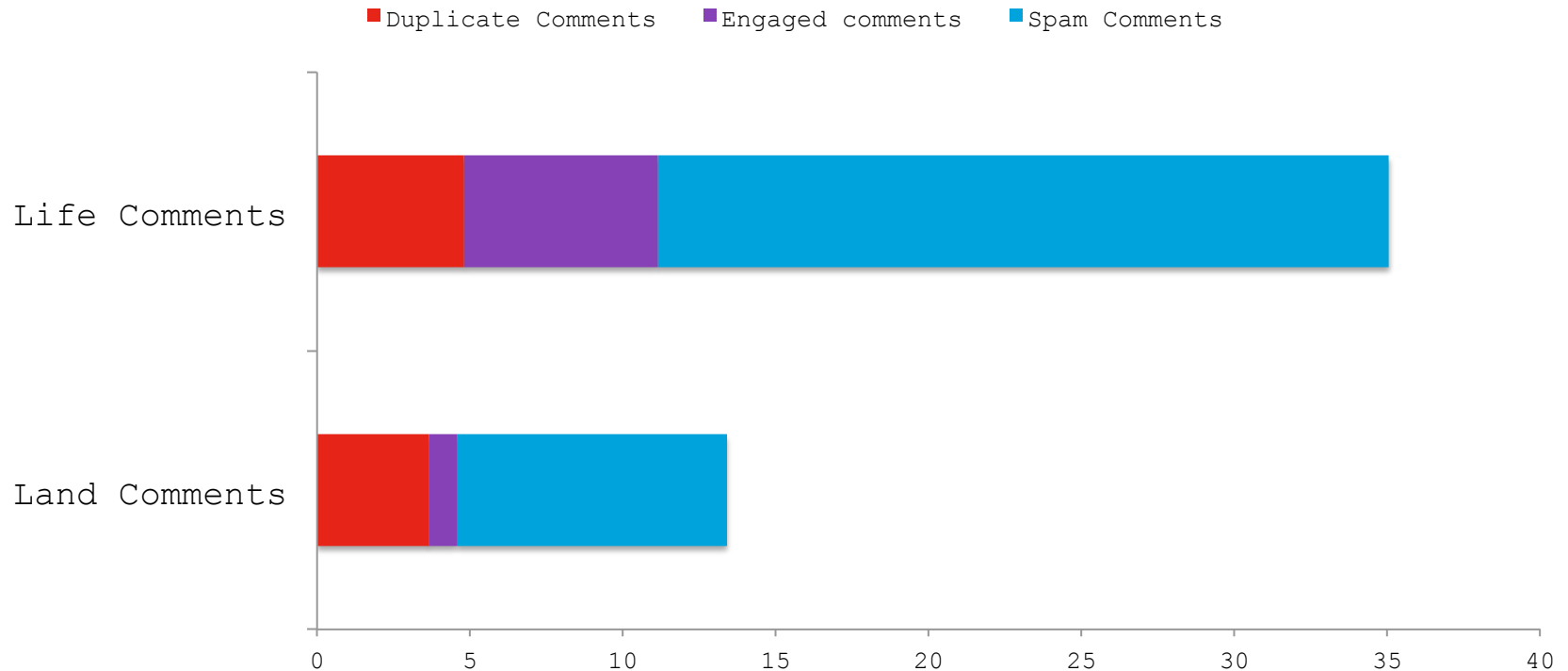
Finding: However, neither is performing well in terms of prompting engaged visitor comments

Life receives more than twice the proportion of engaged comments as Land.

Land Comments

Duplicates
27%

Engaged
Comments
7%

Spam
66%

Life Comments

Duplicates
14%

Engaged
Comments
18%

Spam
68%
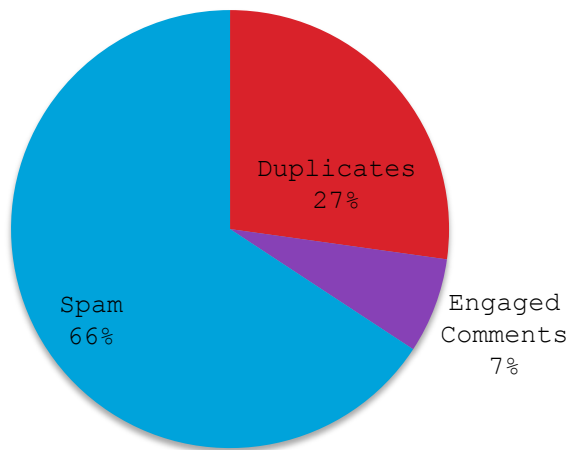
Context: The Imperial War Museum, London ran a similar project in 2012 and received on average 10% engaged comments. However, they too have decided to revise the kiosks due to the high level of maintenance and the low level of engaged responses.

Life

Talkback Station

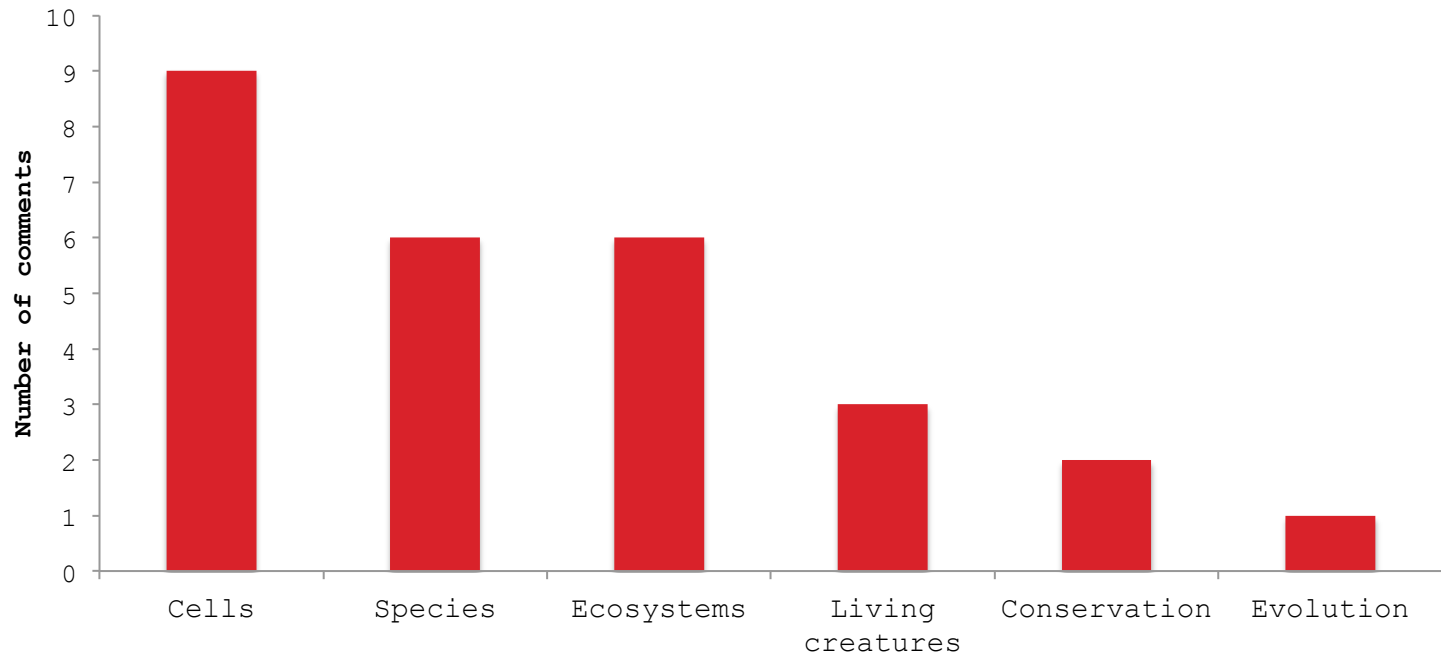**Finding: The Life talkback station is neither visible nor attractive to visitors**

Only a third of the visitors interviewed saw the screen and less than 10% chose to use it.

No 64%

Yes 36%

Yes – but I didn't use it 25%

Yes – I used it 11%
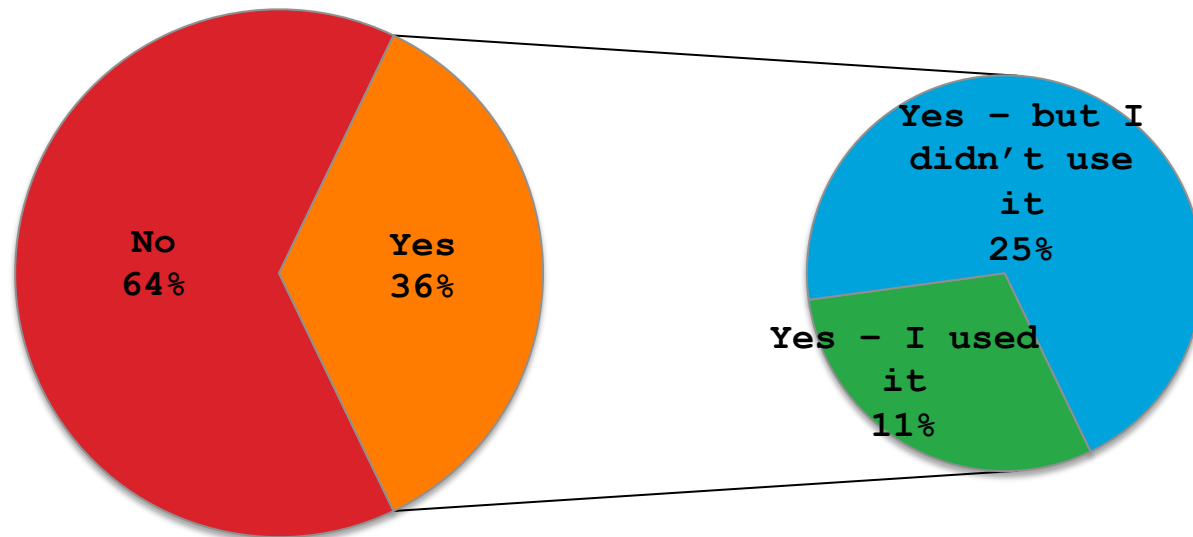
There were no stand out characteristics distinguishing those who noticed or used the Life Talkback compared to those that didn't notice or use the Life Talkback

Q11. Did you see the screen with a keyboard in this exhibit?

Finding: The talkback station content focussed on conservation but participants didn't see this as a strong theme of the Gallery

Number of comments (y-axis: 0 to 10)

Categories (x-axis):
- Cells: 9
- Species: 6
- Ecosystems: 6
- Living creatures: 3
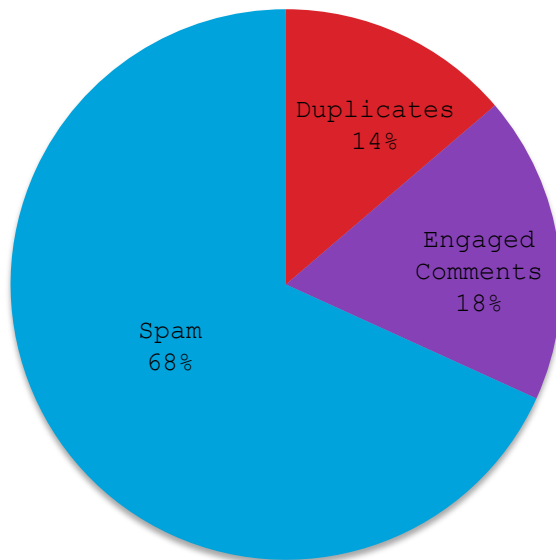- Conservation: 2
- Evolution: 1

Q7: Walking through this gallery today, did you see or discover anything new? (A fact, an idea, or something you saw)
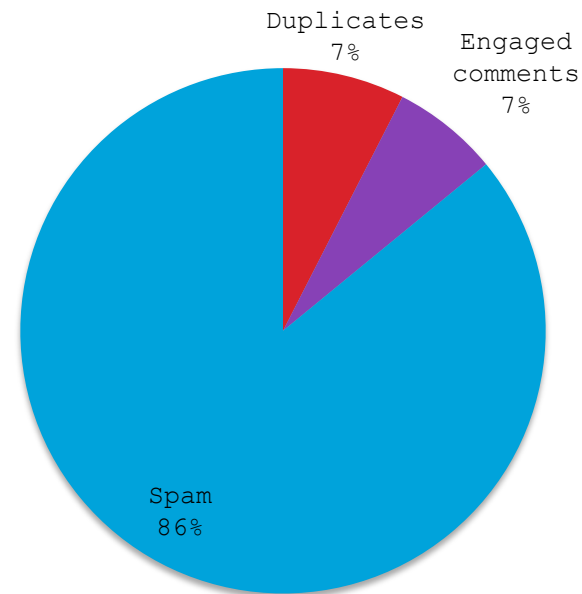
Finding: Increasing the number and nature of the questions to better align with visitor perceptions of themes failed to improve engagement.

In fact November to May shows a greater number of 'one-word' engaged responses. The complexity of the questions for June – July shows fewer more in-depth responses.

Nov to May

Duplicates
14%

Engaged
Comments
18%

Spam
68%

June - July

Duplicates
7%

Engaged
comments
7%

Spam
86%

Finding: While the Life talkback lacks appeal for adults it does attract children including those on school visits. However they aren't engaged in the current experience.

Due to the research methodology we were unable to interview school children but observation suggested:

- School groups congregate in the area following a visit to the Life Exhibit or nearby Lab area

- Interactions tend to follow a common pattern

1. One child moves from the dioramas to the screen

2. They sit or stand in front of the screen and click a few of the options

3. They then try typing – playing with the key and the mouse.

4. Other children from the group gravitate to them and the group will start to encourage each other to write

5. A review of comments shows that they quickly spiral into writing nonsense as they egg each other on competing and performing
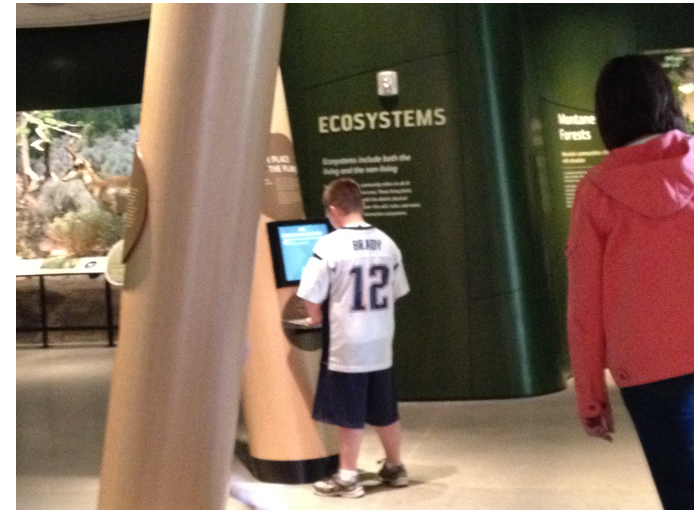
Finding: The physical gallery context would make it difficult to re-design for adult visitors

The space where the talkback is located is a natural pause point for school groups and they collect here in large numbers.

After an intense learning experience in the gallery this area acts as a 'decompression' zone.

The size and number of school groups, particularly during week days, make it difficult for other visitors to see or use the screen.

The physical ook and location the screen is set in would need to change for the screen to appeal more to independent visitors. However, from the results of the Land Talkback we don't believe this would lead to a significantly higher number of engaged users.

Comments could be 'gardened' daily to remove inappropriate comments (either spam or visitor book type) however this would require a significant amount of resource on the part of NHMU for little return.
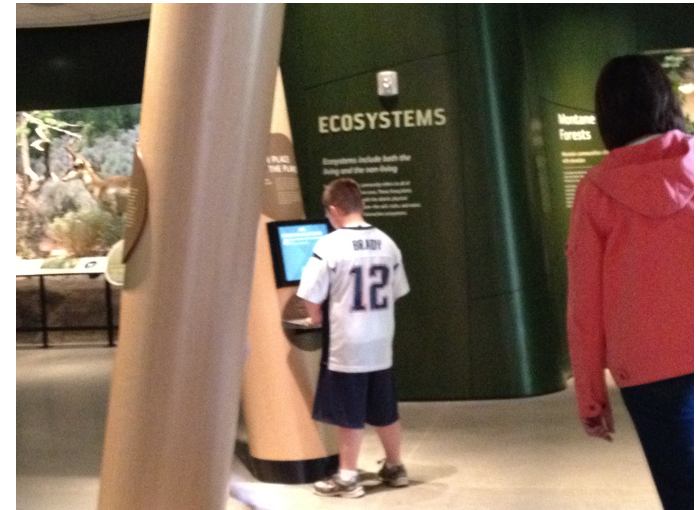
Conclusion:

- It would be difficult to transform the physical installation in such a way as to attract the adult audience.

- The question/visitor response format seems unlikely to succeed with the audience the kiosks attract.

- There is an opportunity to develop a new experience targeted at younger audiences who are naturally attracted to the screens.

We recommend using the screen to:

- Harness the children's competitive/show off behaviours to by creating a multi-player competitive experience.

- Take a more playful approach to the serious topics covered in the galler that allows kids to decompress whilst underscoring their learning.

- Create an experience that re-enforces some of the learning in the nearby eco-system exhibits.
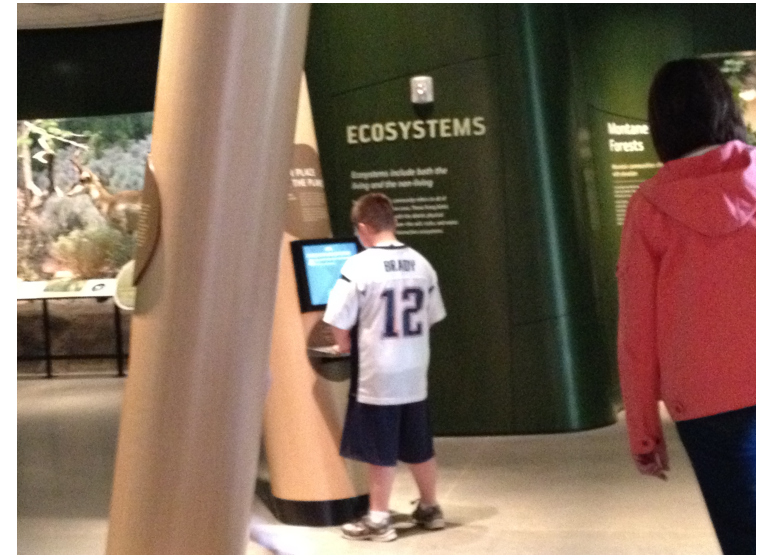
Concept:

A simple game that be used by two visitors sitting next to each other.

1.The users choose an ecosystem.

2.Cards feature the different species seen in that the Eco-systems of Utah.

3.Each card features an animal or plant-life with a series of criteria - each criteria is scored on how useful it is in the chosen eco system.

4.The first visitor plays a card and chooses a criteria they think scores highly.

5.The second visitor turns over their card. Whoever has the highest score on the criteria – wins that round
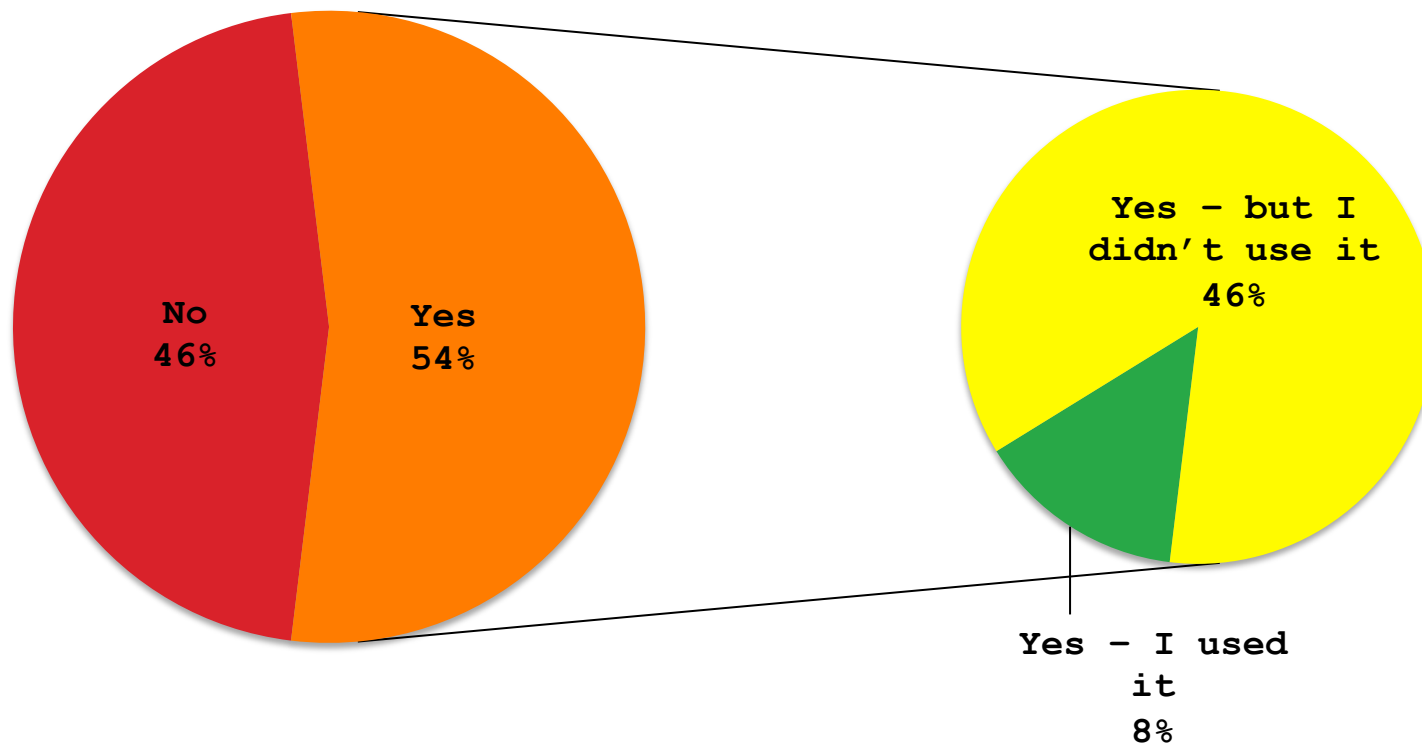
Land

Talkback Station

Finding: The talkback stations is hard to spot and fails to attract visitors to use it
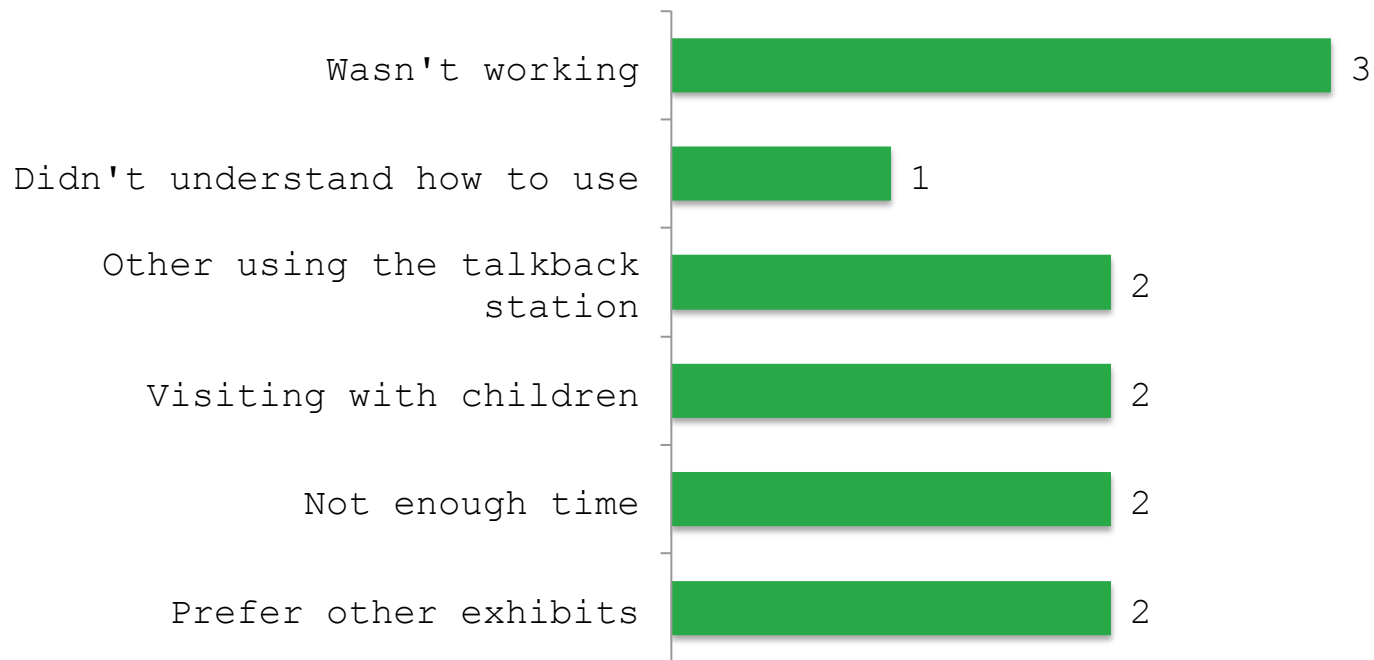
Just over half the visitors saw the screen but under 10% chose to use it.

No
46%

Yes
54%

Yes – but I didn't use it
46%

Yes – I used it
8%

Q11. Did you see the screen with a keyboard in this exhibit?

Finding: The talkback stations does not offer a clear experience that meets visitor needs/motivations

A wide number of reasons were given for not using the talkback including technical problems. None dominate suggesting it simply doesn't appear to be compelling to the visitors.

Reason	Count
Wasn't working	3
Didn't understand how to use	1
Other using the talkback station	2
Visiting with children	2
Not enough time	2
Prefer other exhibits	2

Q23: Can you tell me a little about why you didn't use the screen

Finding: The rich interactive experience offered in this gallery are more compelling to visitors and meets visitor needs and interests well:

- Groups spent most time with the gallery interactives (the erosion table, earthquake generator etc.)

- These interactives produced the most discussion and sharing of stories

- All visitors interacted with one or more of the sniffing experiences

- Only one visitor using the video camera interacted with the Land Talkback and only for 3 seconds

- Twenty per-cent of visitors interacted with the photography books though these were clustered in the older age group

- Visitors travelling up through the Museum were more likely to see the talkback and to interact with the photography books.

Finding: Ethe small percentage of engaged comments suggest the visitor is linking the Talkback to the wider themes of the exhibition space but not the exhibits next to the screen

Word cloud generated from 'Real Comments'

Conclusions:

The survey data suggests that the Land talkback attracts less than one in ten adult visitors.

Observation suggests it fails to attract younger visitors either- whether attending with school or family.

Changing this would require some physical re-design (to raise % of visitors spotting it) and experience design.

Recommendation Option 1: Remove the Land Talkback station

Removing the Land Talkback would:

- Have little if any negative impact on the visitor experience

- Reduce the amount of IT support required

Recommendation – Option 2: Repurpose the Land talkback station to create a display space

The screen could be used to display content generated by outreach or community engagement projects. These could include:

•Local photography groups

•Facebook competitions

•Inspired by Utah landscape outreach programmes (i.e. poetry/drawing/painting)

This would be in keeping with the original goal of the project to share and encourage active participation though the participation would not be gallery based.

The best results are likely to happen where:

•The content works for the audience already attracted to the photography books exhibit.

•The content is visual, bright and attractive.

•Requires a minimum of effort to maintain.