

EVALUATION REPORT CARDS

June 14, 2018

Presented by:

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UNPACK-A-PICTURE

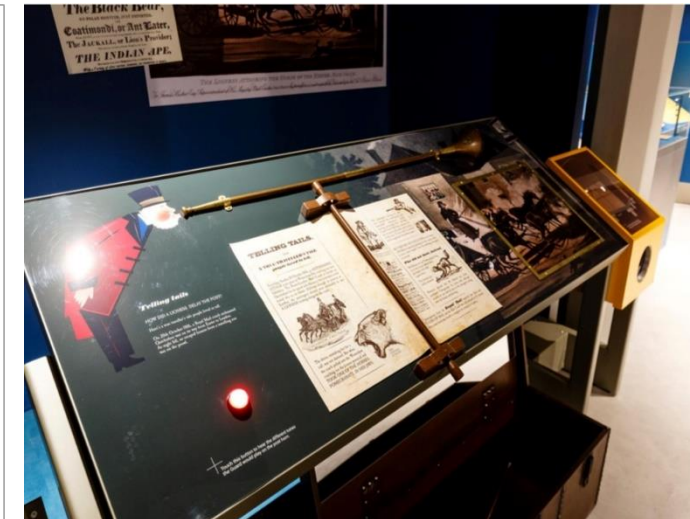
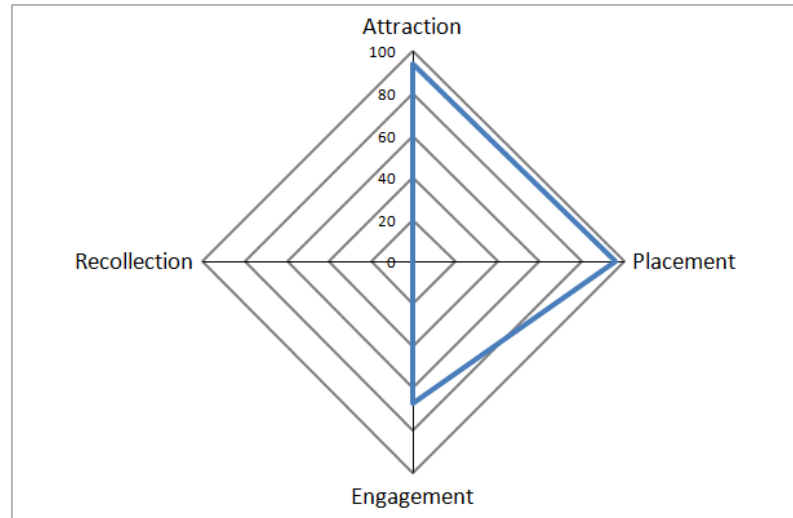


Good at:

- ✓ Fair attractiveness
 - ✓ Multiple assess point for visitors to interactive with the exhibit
- ✓ Good location
 - ✓ Visitors are more likely to try more interactives early in exhibition

Improvement Needed:

- Low dwell time
 - The physical part of the interactive can be completed quickly. People don't always stay and read
- Not memorable
 - Visitors tend to forget early exhibits that don't immediately "wow" them or may due the fact that this is the first exhibit the visitors encounter



Conclusion and Recommendation

This exhibit receives a lot of attention and traffic flow. However, visitors do not tend to remember interacting with it. Visitors are also able to complete only individual parts of the interactive very easily.

For long-term modification, our observation shows a higher satisfaction with hands-on interaction. Multi-stage and multi-sensory interaction, such as having visitors blow into the horn rather than pressing a button, can increase visitor engagement and especially recollection with this exhibit.

PACKET SHIPS AND PIRATES

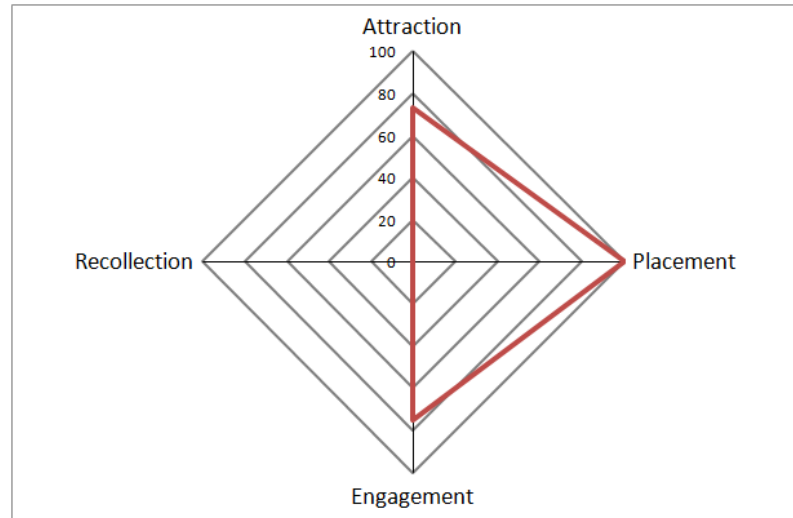


Good at:

- ✓ Great placement
 - ✓ Located in open area where visitors tend to walk directly towards or follow along outside
- ✓ Fair engagement
 - ✓ Visitors tend to complete all three portholes once they start

Improvement Needed:

- Not intuitive
 - Buttons are sometimes neglected and visitors will try to look in without the being lit up which causes confusion
- Poor accessibility
 - Height of portholes is too short for adults



Conclusion and Recommendation

This exhibit suffers from unclear instruction. Using written instructions for use may not be unnecessary. However, the intention of using the buttons is not obvious.

For immediate changes, we recommend modifying the appearance of the buttons to those that are easier to distinguish as buttons. Light-up arcade-style buttons would work well to attract attention and can withstand extensive usage.

As for long-term changes, we would recommend further study to determine if the learning objectives can be met with how the interactive is currently set up.

JOURNEY OF A MAIL COACH GAME

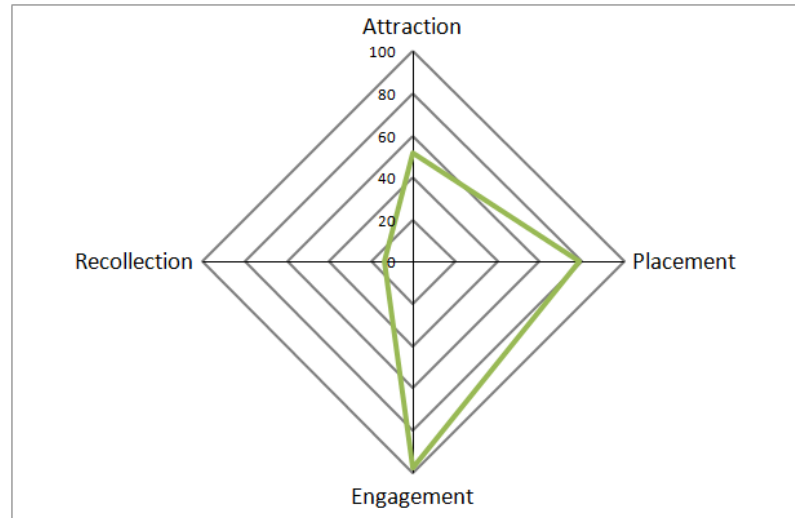


Good at:

- ✓ Good informative potency
 - ✓ Visitors are able to learn a lot from going through entire journey
- ✓ Good engagement
 - ✓ Visitors tend to be willing to finish it once they interacted

Improvement Needed:

- Poor attraction
 - Visitors would rather have a more physical or hands-on experience
- Poor location
 - Visitors sometimes miss the exhibit due to it being more to their side when they walk through the exhibition



Conclusion and Recommendation

This exhibit mainly suffers from the long story that users must go through using only touching a screen. As it is not too exciting, visitors do not flock to the exhibit too much and often skip by it entirely as they do not face it head-on.

For immediate changes, we recommend making the area around the screen more attractive and eye-catching. Doing so could get visitors more interested.

For a long-term modification, we would recommend adding a more tactile way for visitors to make the choices in the game. This could include things like buttons, rather than touching the screen. Arcade-style buttons have repeatedly been recommended in being robust options for use in museum exhibits.

RISE OF SOCIAL MAIL

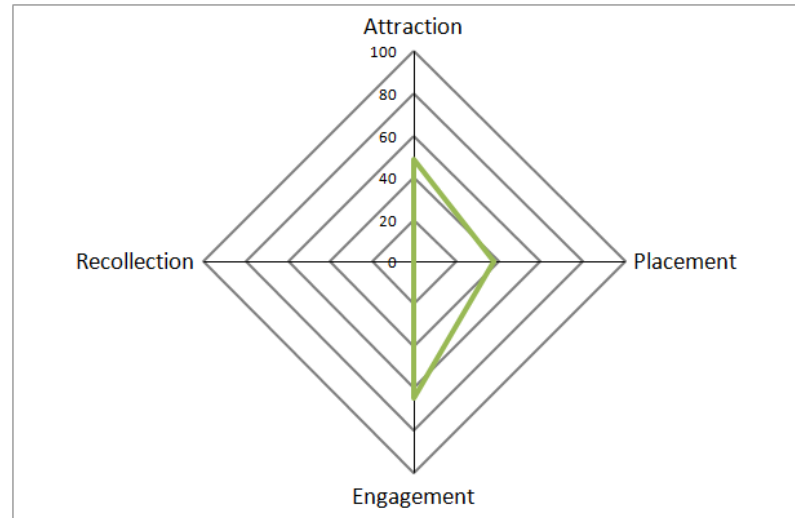


Good at:

- ✓ Fair attractiveness
 - ✓ Only interactive in often-skipped section in Zone 2 and has bright screens
- ✓ Good engagement
 - ✓ Visitors tend to look at multiple pieces of mail on the screens once they start engaging

Improvement Needed:

- Poorly located
 - Visitors often tend to miss this section of the exhibition entirely and walk towards the bicycle once they finish Zone 1
- Not memorable
 - visitors tend to recall less on Digital Interactives in general



Conclusion and Recommendation

This exhibit mainly suffers from its poor placement; it resides in an area where most visitors pass by and are seeming not to notice it is a part of the gallery

For immediate changes, we recommend adding arrows on the floor, or similar method, to get more visitors entering this “hidden” area.

For a long-term modification, we recommend adding some physical elements to the exhibit. Doing so can include, for example, buttons around the screens to be the method in which visitors can choose the type of social mail about which they would like to look at and learn more. After pressing the desired button, they can use the touchscreen to look at the different examples.

LSV – NEW SERVICES

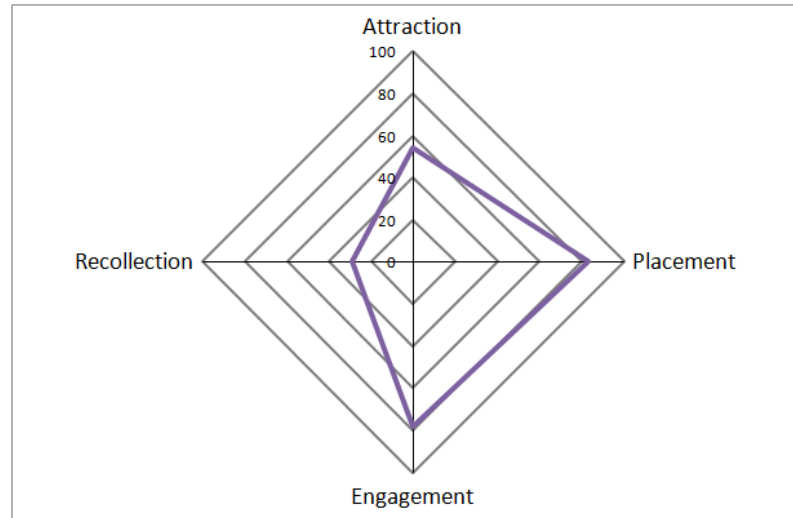


Good at:

- ✓ Good placement
 - ✓ Locating near a across point increases use as visitors are more willing to interact
- ✓ Fair Engagement
 - ✓ Visitors tend to look at all slides once they start

Improvement Needed :

- Poor attraction
 - Visitors sometimes skip this exhibit to go directly to the pneumatic tube as it nearby and is more attractive
- Lack of content
 - This exhibit has potential to tell more extensive stories



Conclusion and Recommendation

This exhibit mainly suffers from poor recollection. Not many people remember this exhibit fondly as it contains little content relative to other displays and does not get them too involved.

For immediate changes, we recommend finding some way to make the slider a little bit easier to move. Solutions may consist solely of adding oil or a lubricant to the slider rails on a regular basis to improve ease of sliding.

For a long-term fix, we recommend adding more content to the exhibit, such as incorporate stories or information as audio about each slide. It may also be interesting to renew slides regularly a while so visitors can have something new to look at if they return to the museum.

TELEGRAM INTERACTIVE

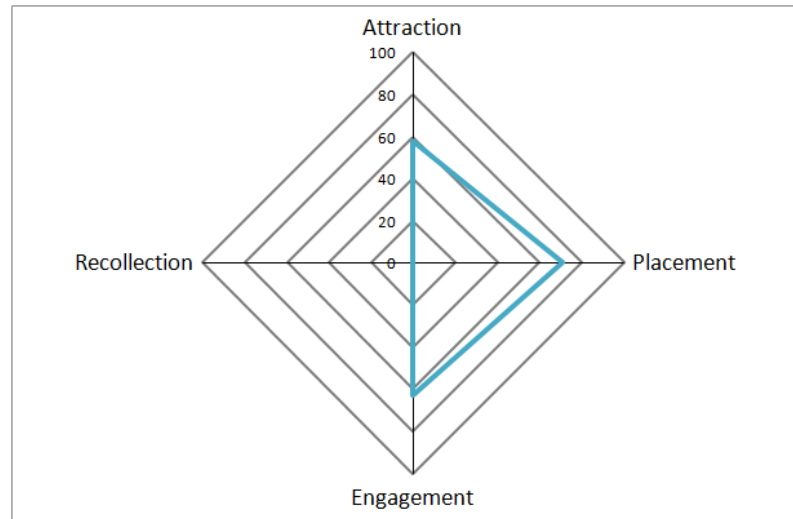


Good at:

- ✓ Fair attractiveness
 - ✓ Visitors find it generally interesting to look at
- ✓ Fair Engagement
 - ✓ visitor tend to be willing to finish it once they interacted

Improvement Needed :

- Accessibility
 - People may not be able to collaborate well with one telephone receiver
- Not memorable
 - Visitors tend to remember the pneumatic tube better out of the two that are together



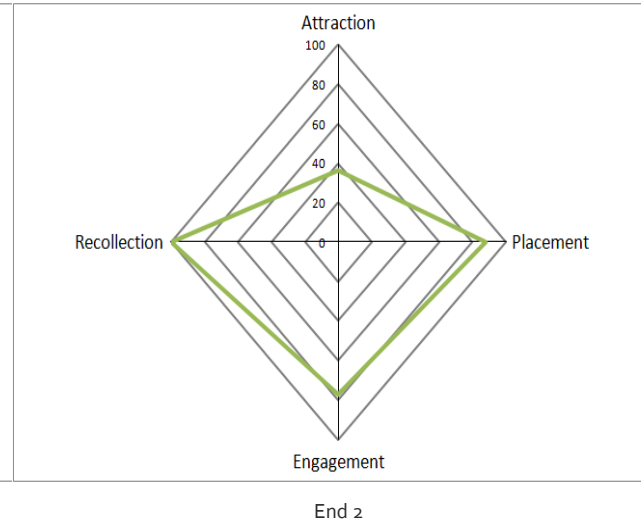
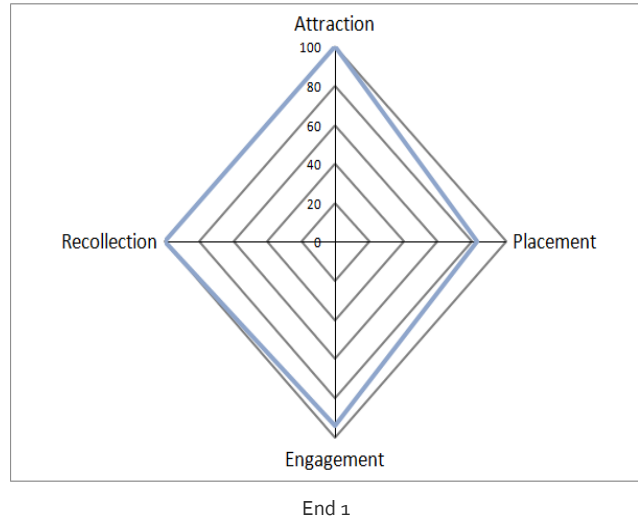
Conclusion and Recommendation

One main drawback to this interactive is that it tends to “reset” while visitors are still using it, and they seem to believe it is nonfunctional if they take too long between listening to the first code and hearing the answer.

For immediate changes, we recommend lengthening the interval between when a visitor presses the button and the interactive “resets,” so that they can push the answer button freely.

For a long-term modification, we recommend relocating this exhibit away from the pneumatic tube. Visitors seem interested in using this exhibit, yet tend to be more interested in the exhibit directly next to it.

PNEUMATIC TUBE



Good at:

- ✓ Great recollection
 - ✓ Visitors remember using the pneumatic tube fondly
- ✓ Good engagement
 - ✓ Visitors tend to try to finish sending the tube, trying multiple ways to get it to send

Improvement Needed :

- Breaks often
 - Visitors are often unable to use the interactive, and sometimes unable to tell if it's under maintenance.
- Poor attraction (End 2)
 - Visitors tend to send messages only from End 1

Conclusion and Recommendation

This exhibit mainly suffers from being broken very often and having little attraction to End 2. Visitors do not usually use the pneumatic tube towards the end of the exhibition.

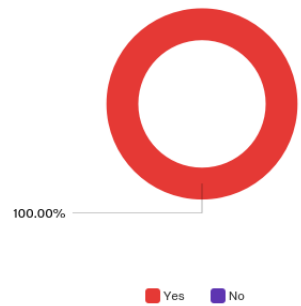
For immediate changes, we recommend adding a sign that instructs visitors clearly that the tube will end up at another machine towards the end of the exhibition and that they can send messages back and forth between the two ends. Additionally, it would be very beneficial to determine precisely why the interactive will stop working.

For a long-term fix, we recommend adding light indicators along the lengths of the tubes to show all visitors when a message is being sent.

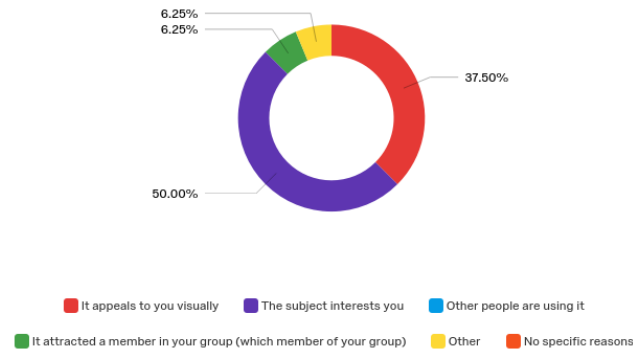
IN-DEPTH – PNEUMATIC TUBE

General

Read Instruction

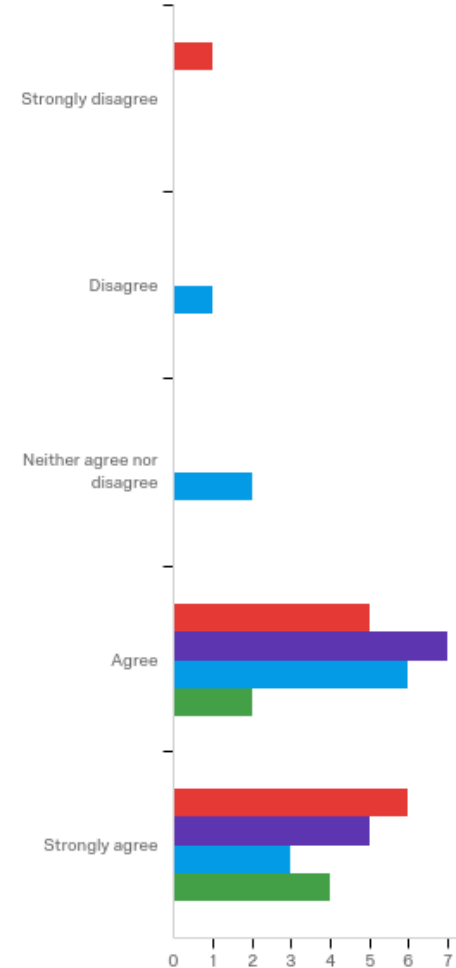


What caught your eye about this interactive?



Visitor Experience

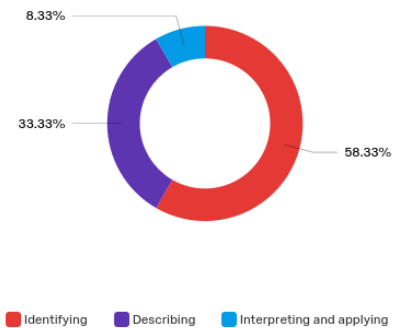
What did you enjoy the most about this exhibit?



- You find this exhibit easy to use
- You understand the purpose of the exhibit
- You learned something new from the exhibit
- You and your group can easily cluster around the exhibit

Learning Outcomes

Level of Understanding



What did visitor tell about the subject matter?



N = 12

HAVE YOU GOT WHAT IT TAKES – DRESSING UP

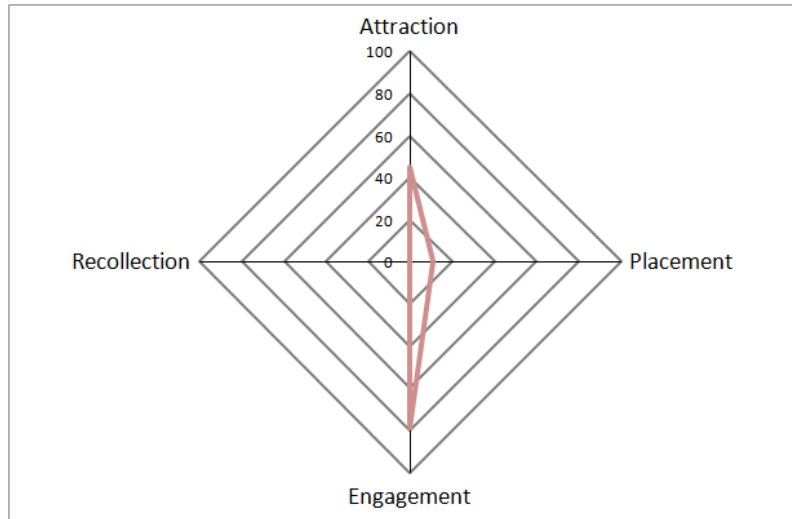


Good at:

- ✓ Fair attractiveness
 - ✓ Mostly younger visitors enjoy being able to dress up
- ✓ Fair Engagement
 - ✓ Visitors tend to enjoy dressing up and often will walk through the exhibition dressed up

Improvement Needed :

- Poorly located
 - Visitors often miss the exhibit as they interact with the exhibit on the opposite wall
- Not memorable
 - Not many visitors remember this exhibit as very few interact with it



Conclusion and Recommendation

This exhibit mainly suffers from its poor placement; it is placed opposite to the Pneumatic Tube, the most popular exhibit in the gallery, and just around a corner, so many visitors do not even notice it is there.

For immediate changes, we recommend something more flashy around the display to catch visitors' attention more.

For a long-term fix, we recommend moving the dress up area to somewhere away from such a popular exhibit, such as the pneumatic tube. Having clothes to dress up seems to work well and be well-received, yet the exhibit does not get much attention as it is across from the most popular interactive in the exhibition.

K₂ TELEPHONE KIOSK

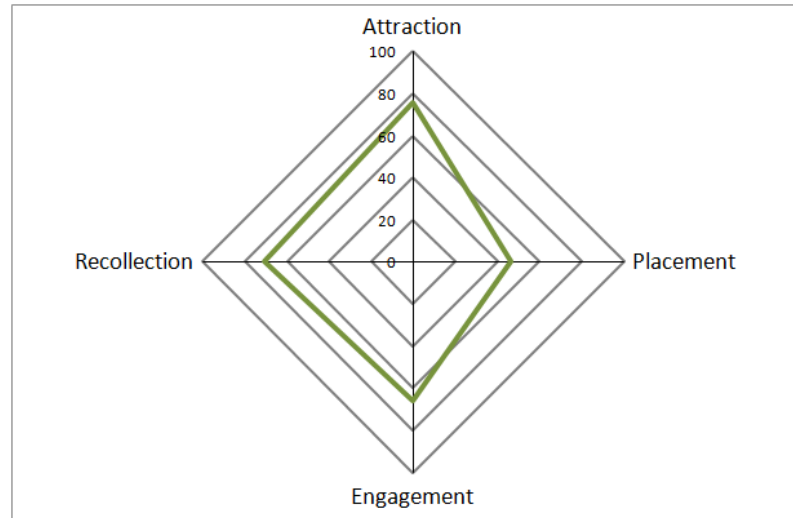


Good at:

- ✓ Fair attractiveness
 - ✓ visitors seem to be attracted by the antique-looking phone
- ✓ Fair Engagement
 - ✓ visitors tend to spend time figuring out how to work the phone
- ✓ Memorable
 - ✓ Visitors, especially elders and children remembers this interactive well

Improvement Needed :

- Poor location
 - Entrance in opposite direction of general travel does not encourage usage



Conclusion and Recommendation

This exhibit mainly suffers from lack of understanding. Most adult visitors have an idea how to dial the phone inside, but few of them look at the card containing the numbers the produce a response. Additionally, the telephone placed off to the side is used far more frequently than the one inside the box. Visitors are now well informed regarding how they can interact with the kiosk. Despite the footprint sticker on the ground, visitors also often skip entering the booth, as they see its side and move on, assuming it is just a static exhibit.

For immediate changes, we recommend making the list of numbers more visible, so that visitors are aware the exhibit will respond to use. Making instruction for use much clearer. An attractive sign simulating the general use of a phone kiosk that can instruct visitors on how they can use it would likely increase visitor use.

For a long-term fix, we recommend making the telephone box itself more attractive, as visitors are more likely to use the other telephone. A potential solution is to rotate the kiosk 90 degrees to face the walking path to guide more visitors into it since the visitors currently must move in the opposite direction of their travel to enter the kiosk.

LSV – POST OFFICE IN CONFLICT



Good at:

✓ Good Placement

- ✓ Placed in a high traffic area where visitor tend to drift after the Telephone Kiosk and Pneumatic Tube

✓ Fair Engagement

- ✓ visitor tend to be willing to finish it once they interacted

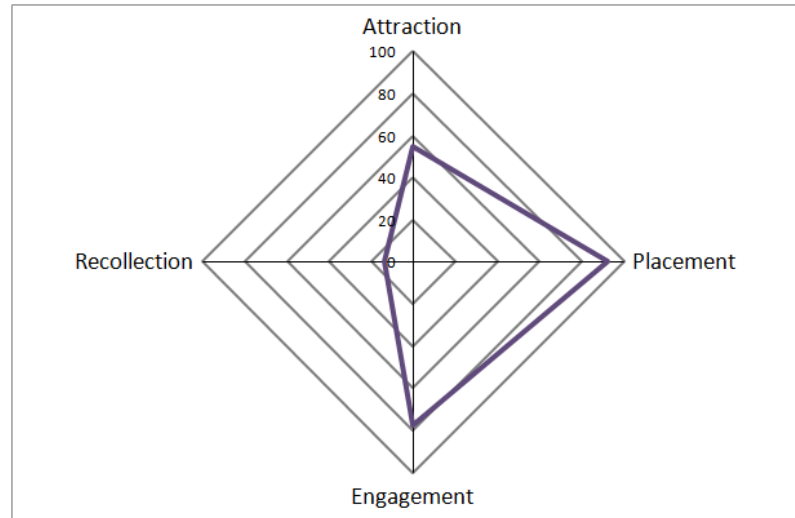
Improvement Needed :

○ Medium attractiveness

- Being one of the two lantern slide viewer. Some visitors may loss interest on the second one.

○ Lack of Content

- This exhibit has potential to tell more extensive stories



Conclusion and Recommendation

This exhibit mainly suffers from poor recollection. Not many people remember this exhibit fondly as it contains little content relative to other exhibits and does not get them too involved.

For immediate changes, we recommend finding some way to make the slider a little bit easier to move. This may consist solely of adding oil or a lubricant to the slider rails on a regular basis to improve ease of sliding.

For a long-term fix, we recommend adding more content to the exhibit, such as stories or information about each slide. It may also be interesting to change up the slides every once in a while so visitors can have something new to look at if they return to the museum.

MULTIUSER TOUCHTABLE

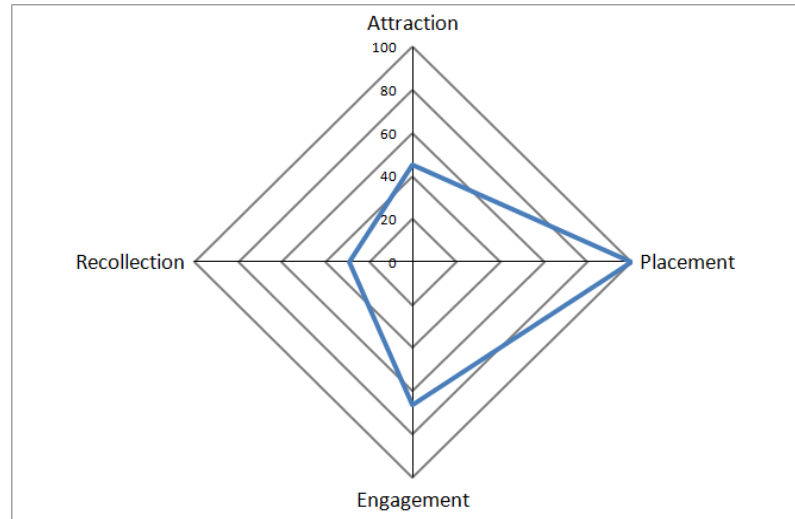


Good at:

- ✓ Great location
 - ✓ Located in the middle of a corridor that all visitors must walk past
- ✓ Fair engagement
 - ✓ Visitors tend to look at multiple items on the screen once they begin

Improvement Needed :

- Poor attraction
 - Visitors often skip the exhibit because it is not too colorful and eye-catching
- Not memorable
 - visitors tend to recall less on digital interactives in general



Conclusion and Recommendation

This exhibit is prone to visitors not being attracted to the screen itself. All visitors must walk past the exhibit, and will often walk past multiple sides if they take the far route, but very few attempt to use it.

For a long-term modification, we recommend adding more eye-catching content to the touchtable. There are relatively few items on the screen, and they are static until users move them. It would help, according to our research, to have the background of the display more colorful and put dynamic elements in before visitors start interacting. Additionally, consider reorganizing the lighting nearby because they can blur the screen.

DESIGN-A-STAMP

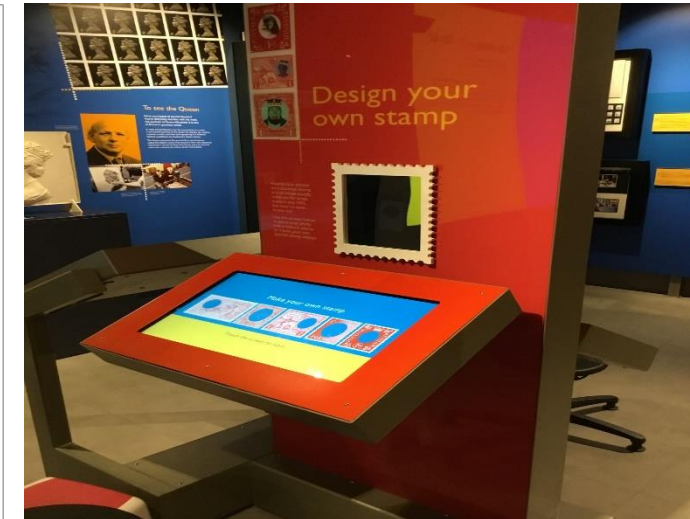
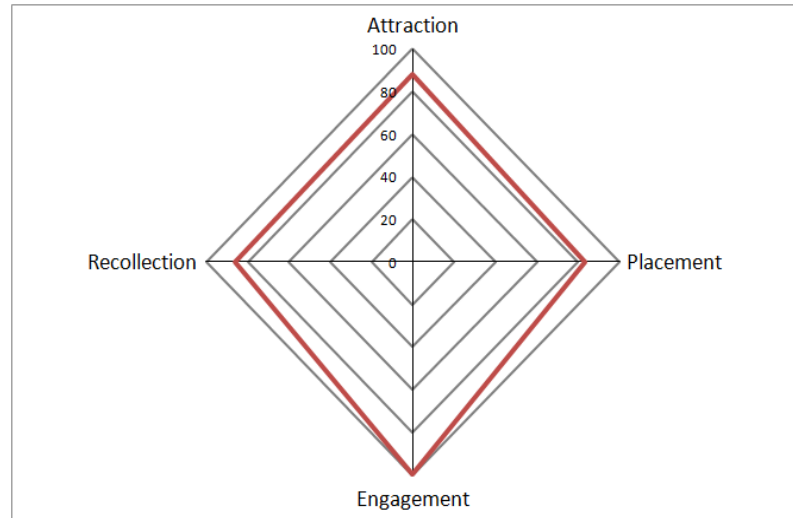


Good at:

- ✓ Good attractiveness
 - ✓ Parents with children are very interested in creating something together
- ✓ Great engagement
 - ✓ Visitors always finish creating at least one stamp once they begin
- ✓ Great recollection
 - ✓ Visitor recall more involving interactives such as this one better

Improvement Needed :

- Placement affecting other exhibits
 - Visitors often will skip End 2 of the pneumatic tube after using



Conclusion and Recommendation

This exhibit performs very well but suffers slightly from the amount of time required to use the exhibit to its fullest extent (dwell time), which increases the occupied time and prevents other visitors from using it. Additionally, its proximity to the second end of the pneumatic tube causes some visitors to ignore one interactive in favor of the other.

For this exhibit, we recommend looking for a way to increase the number of visitors that can use this interactive in a given period; this may be reducing the amount of time taken to complete use or adding more screens to allow more visitors to use it at once.

Moreover, to prevent popular interactives from affecting each other negatively, we recommend the museum takes the special relationship between popular exhibits into account when redesigning the gallery.

K8 TELEPHONE KIOSK



Good at:

✓ Fair Placement

- ✓ The footprint at this interactive prove to be more effective, possibly due to the fact that K8's entrance is along visitor's path whereas K2's is against it

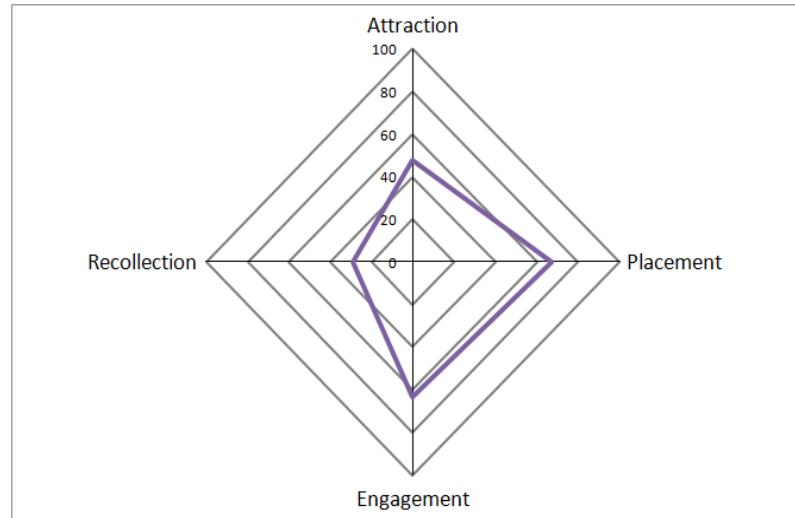
✓ Fair Engagement

- ✓ Visitors are willing to invest their time to work out the telephones

Improvement Needed :

○ Neither attractive nor memorable

- Visitor seem to not appreciate the design improvement between the two models of Telephone kiosk in the gallery, causing this one to be neglected



Conclusion and Recommendation

Similar to its predecessor - K2 Kiosk. This exhibit mainly suffers from lack of understanding.

Additionally, it seems that visitors do not realize the changes between these two models.

We recommend the museum show information about the update in designs near the kiosks or provide pictures of earlier models so that visitors can identify the difference. Additionally, it may be helpful to state at the K2 booth 'you will encounter an later model in the gallery, see if you can find the difference.' Doing so could prevent visitors getting the impression of this interactive as 'just another telephone stand.'

POST BUS GAME

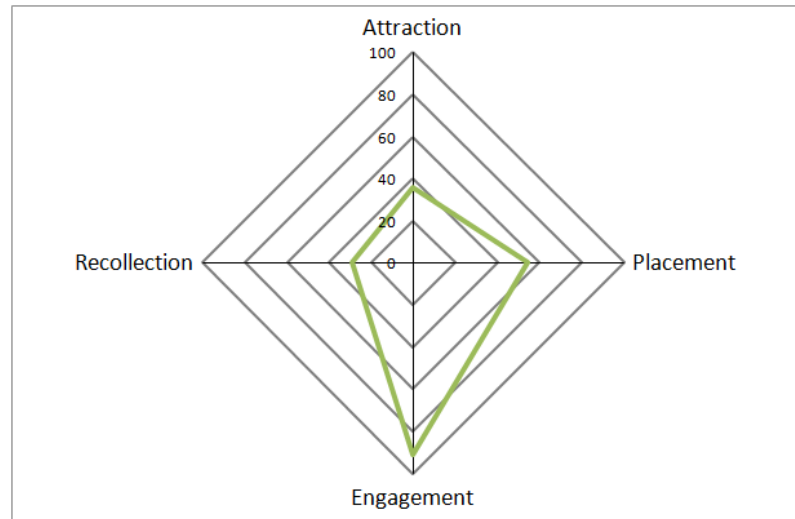


Good at:

- ✓ Fair attractiveness
 - ✓ visitors tend to stay once they get into it
- ✓ Fair Engagement
 - ✓ Visitors tend to be willing to finish it once they interacted

Improvement Needed :

- Poorly located
 - visitors often do not notice it until they have passed it already
- Not memorable
 - visitors tend to recall less on Digital Interactives in general



Conclusion and Recommendation

This exhibit mainly suffers from its poor placement; it directly faces an open area with other attractions and visitors do not always orient themselves where to notice what is behind them (see *Report* section 4.3.1 for more detail).

For immediate changes, the core of this interactive is well-designed and does not require extensive changes.

For a long-term modification, we recommend moving this exhibit so that it faces zone 4 (the K8 telephone interactive) where there is a heavier traffic flow.

TIMESCOPE

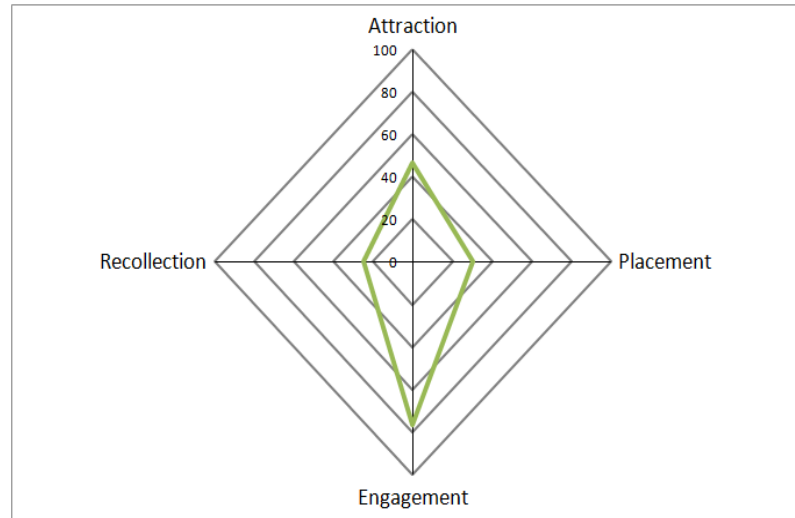


Good at:

- ✓ Fair Engagement
 - ✓ Visitors are willing to try the controls

Improvement Needed :

- Poorly located
 - Visitors tend to completely miss the exhibit as they turn right and navigate facing away this exhibit
- Poor attractiveness
 - Visitors sometimes don't notice that the screen is interactive
- Not Immediately Intuitive
 - Visitor may mistaken the screen as a touchscreen and try to tap on it, and not everyone would have the patients to try different controls after the first few failed attempts



Conclusion and Recommendation

This exhibit mainly suffers from its poor location and confusion because there is no room for instruction. The visitors that notice the screen often will not realize that it is interactive or will try to use it as a touchscreen, and leave when they find out that it is not.

For immediate changes, we recommend adding direction pointers, on the floor of the exhibition to guide more visitors toward the Timescope when first entering.

For a long-term fix, we recommend modifying the inactive state of this exhibit. One potential change is to let the default screen show up before interaction to show instructions on the use of the interactive.

PNEUMATIC TRAINS

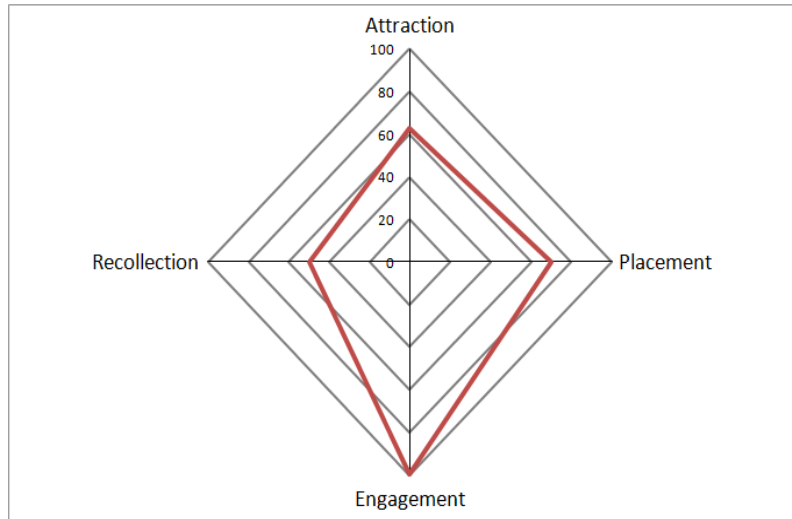


Good at:

- ✓ Good placement and attractiveness
 - ✓ As an early exhibit that is both competitive and colorful, this interactive attracts visitor well (and surprisingly effective on older visitors)
- ✓ Great engagement
 - ✓ Visitors almost always complete the race once they begin

Improvement Needed :

- Not memorable
 - Visitors seem to not recall this exhibit well despite its remarkable performance on other aspects



Conclusion and Recommendation

This exhibit is very engaging, but with certain flaws; the crank wheels are very loud and squeaky when turning. Also, the trains' speed is limited to a certain extent, so visitors could be turning the wheel quickly without the train moving any faster, and the trains take a relatively long time to reset to their default position. Additionally, we've noticed more than once that a member in a group would try to turn the wheel to see what it does first and then realizing it is supposed to be a race, they would wait until one side to reset to race each other. This fact may induce unwanted waiting time.

For immediate changes, we recommend the museum consider a way to reduce the noise made by the crank wheels, unless the exhibit is designed to emit such sounds.

For a long-term fix, we recommend modifying the trains so that they increase speed in relation to the speed of the crank wheel, and reset to their default state more quickly.

ELECTRIC TRAINS

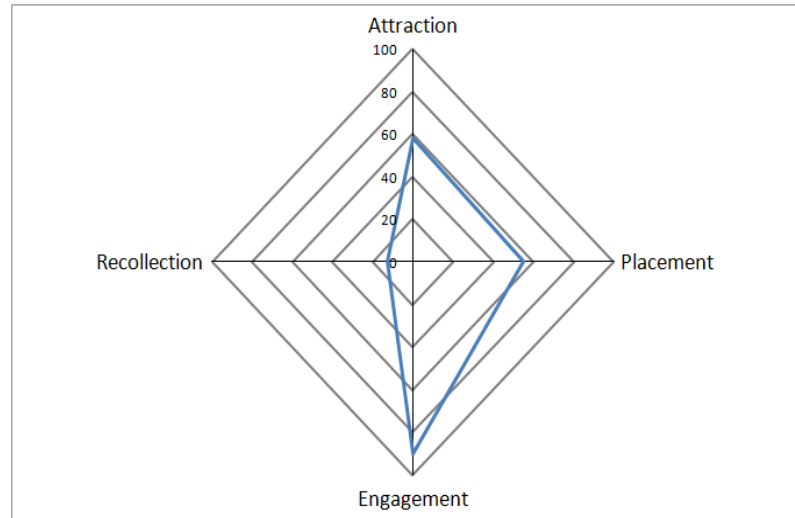


Good at:

- ✓ Fair attractiveness
 - ✓ visitors tend to stay once they get into it
- ✓ Great Engagement
 - ✓ visitor tend to be willing to finish it once they interacted
- ✓ Fair Placement
 - ✓ Since the middle four exhibits at MR (all but Timescope and MR Network Explorer) are placed linearly, they all receive a fairly good traffic flow

Improvement Needed :

- Not memorable
 - Visitor tend to recall more involving interactives such as the Switchframe or the TPO Carriage



Conclusion and Recommendation

This exhibit mainly suffers from difficulty understanding and abuse by visitors, especially younger ones. Most visitors take several seconds reading the instructions to understand how to use the two control levers, while many children merely slam them back and forth, potentially damaging the mechanism within, as in the case of the 'Frankenstein Lever', and since the power switch is constantly active, visitors seldom get the chance to use it when a “power outage” happens.

For immediate changes, we recommend adding a visual component to the instructions, showing how the two levers should be positioned to use the exhibit.

For a long-term fix, we recommend modifying the power switch so that it sets itself into the “off” position so that visitors can use it when a “power outage” does occur.

SWITCHFRAME

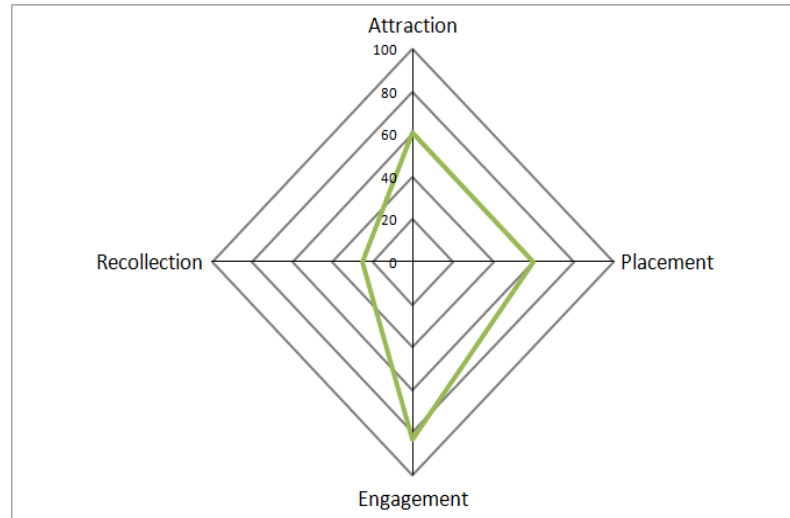


Good at:

- ✓ Fair attractiveness
 - ✓ The design reflects the real Switchframe which is on a poster to the right. Therefore it attracts visitors visually
- ✓ Fair Engagement
 - ✓ Most visitor would choose to complete the tasks
- ✓ Fair Placement
 - ✓ Since the middle four exhibits at MR (all but Timescope and MR Network Explorer) are placed linearly, they all receive a fairly good traffic flow.

Improvement Needed :

- Long dwell time
 - Visitors must spend a long time to complete the interactive



Conclusion and Recommendation

This exhibit mainly suffers from the difficulty in getting started (initial understanding). Visitors who first approach this exhibit often try to use the telephone on the right-hand side first, without noticing the “start” button on the left-hand side. Once visitors begin using the interactive and understand how to use the levers, the length of time required to fully complete all three stages of the interactive prevents other visitors from being able to use it.

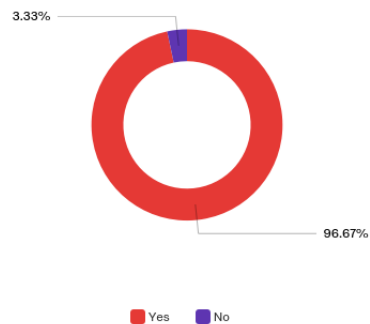
For immediate changes, we recommend making this interactive more appealing while it is in use, to keep visitors from leaving partway through. One suggestion is to add some sound effect to keep visitors interested while the “trains” are moving.

For a long-term fix, we recommend switching the locations of the telephone and the “start” button, as most visitors approach this interactive from the right.

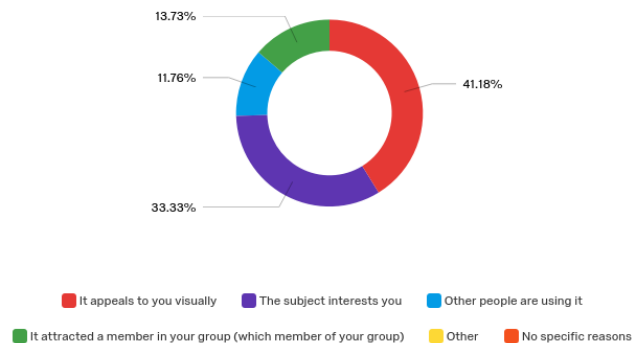
IN-DEPTH – SWITCHFRAME

General

Read Instruction

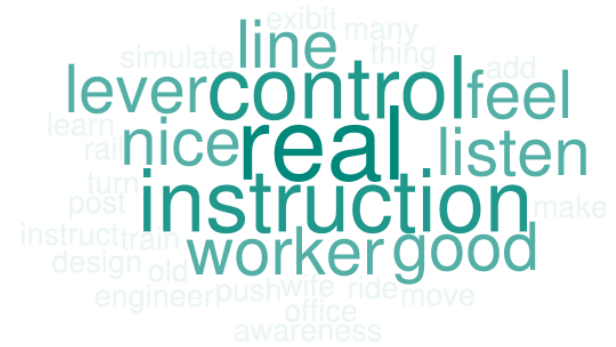
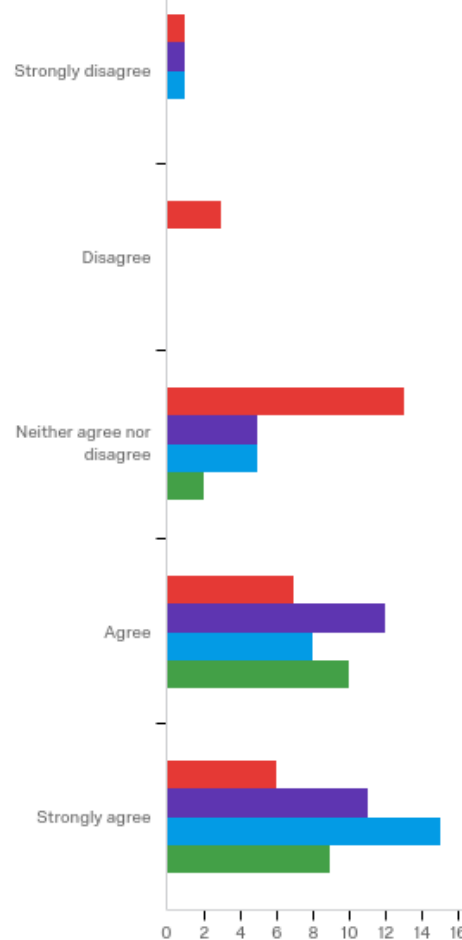


What caught your eye about this interactive?



Visitor Experience

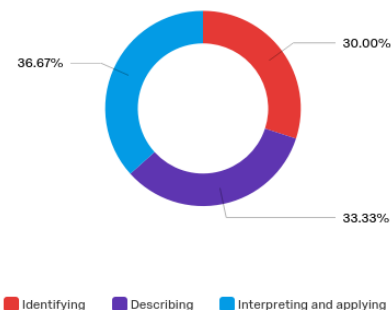
What did you enjoy the most about this exhibit?



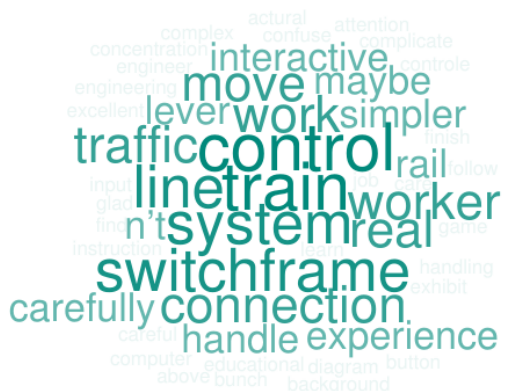
- You find this exhibit easy to use
- You understand the purpose of the exhibit
- You learned something new from the exhibit
- You and your group can easily cluster around the exhibit

Learning Outcomes

Level of Understanding



What did visitor tell about the subject matter?



N = 30

TPO CARRIAGE

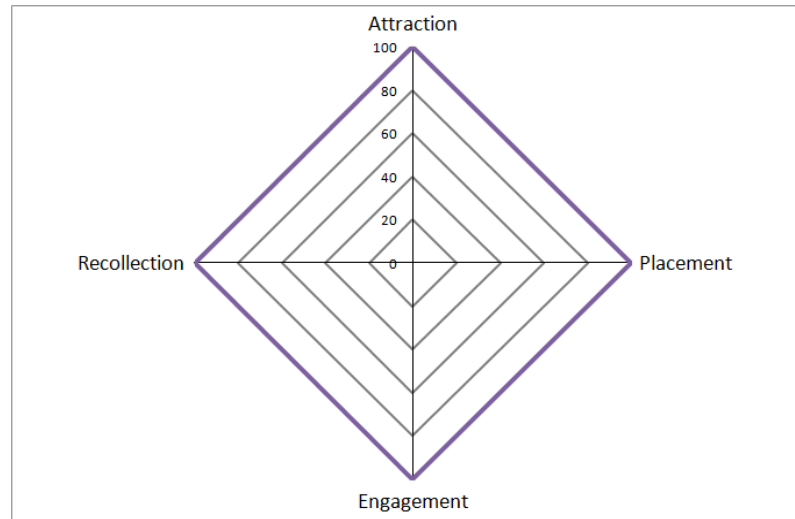


Good at:

- ✓ Great attraction
 - ✓ Visitors are very interested in entering the carriage
- ✓ Great engagement
 - ✓ Visitors almost always complete the entire interactive as it is competition and there is something for them to complete
- ✓ Great recollection
 - ✓ Visitors tend to remember the carriage as it is often the last thing they use and they enjoy it

Improvement Needed :

- Loud letter drop
 - Visitors may not enjoy how loud the letters are when they drop. They also may hit visitors hands if they are in the trays



Conclusion and Recommendation

This exhibit is the best-performing interactive of both locations, according to the standards set in our data analysis. Visitors seem to enjoy the hands-on activity and competition, and the Carriage is definitely engaging enough to encourage visitors to enter and interact

For immediate changes, we recommend using softer objects for the letters or placing a more elastic material in the bottom trays. When the letters drop, it is loud having the hard 'planks' hit each other. Doing so can also reduce the amount of damage caused by hard objects hitting each other.

For a long-term modification, the only thing that we can recommend is to place it as the final interactive. Doing so can ensure further that a more significant number of the interactives will get used as it seems no one wants to skip the TPO Carriage, yet many look past the Network Explorer as it is not extremely attractive as the final exhibit.

MR NETWORK EXPLORER



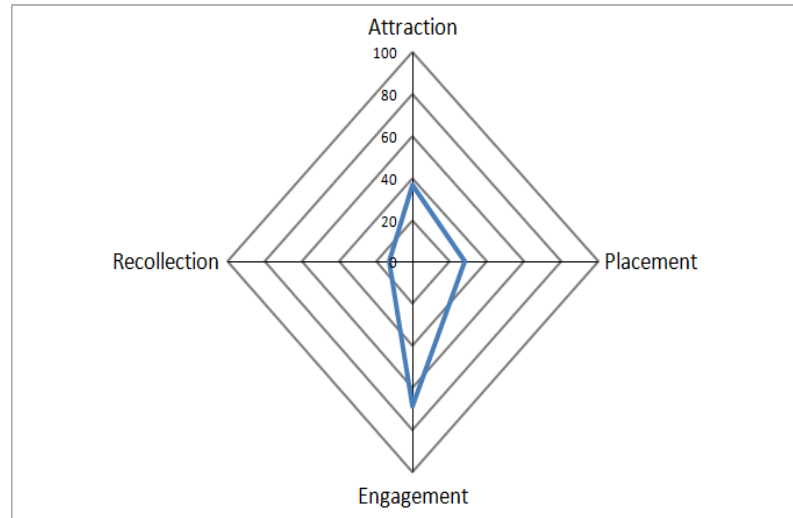
Good at:

✓ Fair Engagement

- ✓ Visitors tend to look at multiple areas once they get past the rather long introduction

Improvement Needed :

- Partial completion
 - A good portion of visitors tend to neglect the projected screen, sometimes even when they are aware of its presence
- Poorly located
 - Visitors tend to skip the last exhibit, especially if it is not as visually attractive as a more physical interactive
- Not memorable
 - Visitors tend to recall less on Digital Interactives in general



Conclusion and Recommendation

This exhibit mainly suffers from its poor placement; it is located on the side of an open area, which may contribute to visitors' inability to notice it well. However, it also suffers from the occasional error where the touchscreen stops being responsive (possibly due to memory shortage).

For immediate changes, we recommend increasing the brightness of the projection on the wall and dimming the lights slightly more. Doing so can increase the visibility of the screen and projection.

For a long-term fix, we recommend adding some audio response such as narratives or sound effects to the 3D models to make it more attractive and engaging, as multi-sensory exhibits have mostly proven to be more effective.