

# Visitors, Museums, and Mobiles

December 11, 2017



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(Dawson, Samios, Ward, 2016.)

# Acknowledgement of Land

We acknowledge the Traditional Owners of the land on which we are meeting. We pay our respects to their Elders, past and present, and the Elders from other communities who may be here today.

# Project Goal

The goal of this project is to assess visitor interest in expanding the use of mobile technologies in the Melbourne Museum and present recommendations to Museums Victoria for the further development of mobile technology to enhance the visitor experience.

Melbourne Museum



(Museums Victoria, n.d.)

# Project Objectives

1. Establish a database of current electronic device usage and visitor behavior in the Melbourne Museum
2. Define expectations and appeal of mobile technology for enhancing the visitor experience in museums.
3. Evaluate visitors' initial responses and engagement with an upcoming museum exhibition.

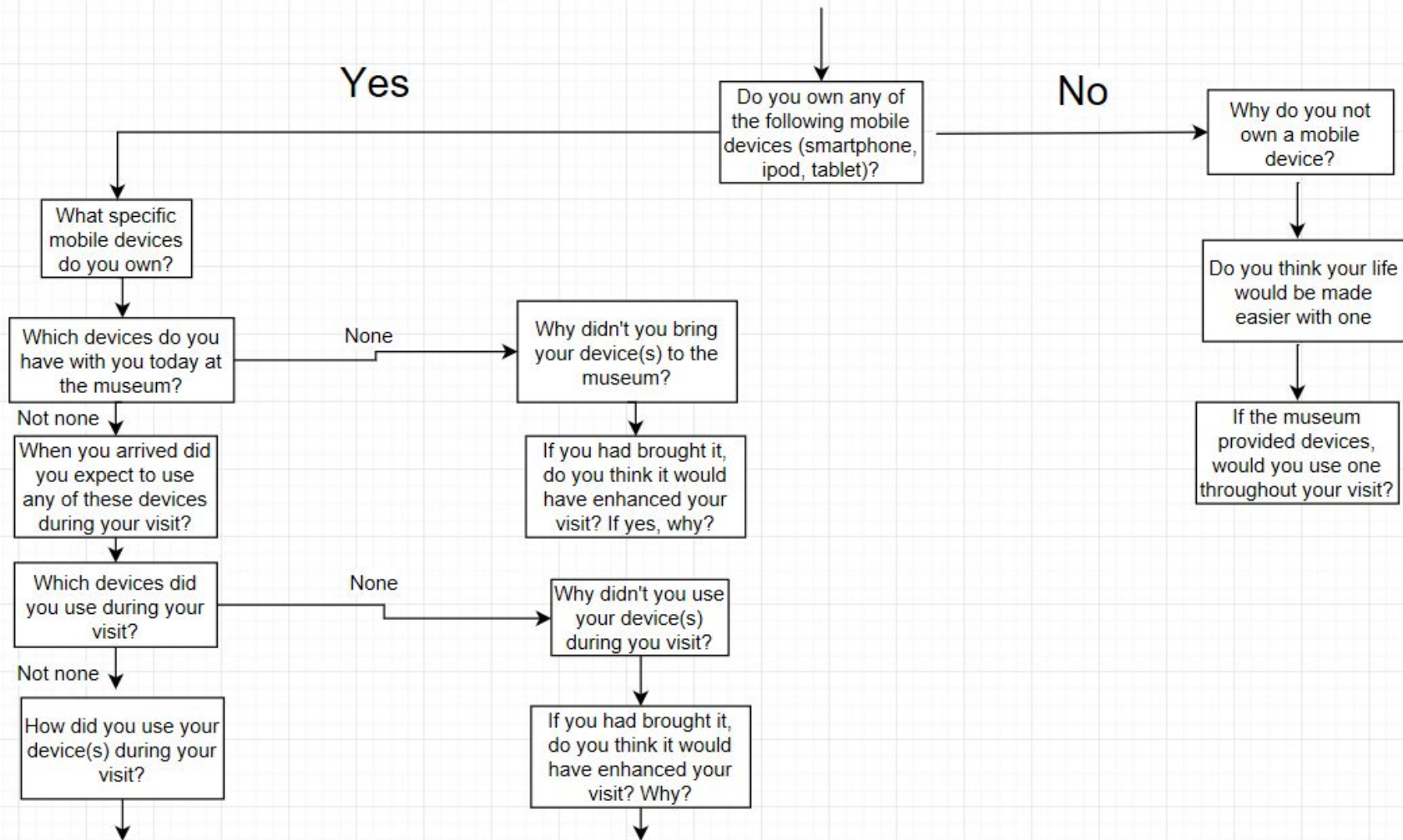
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# We surveyed 150 visitors to gather information on current mobile device usage

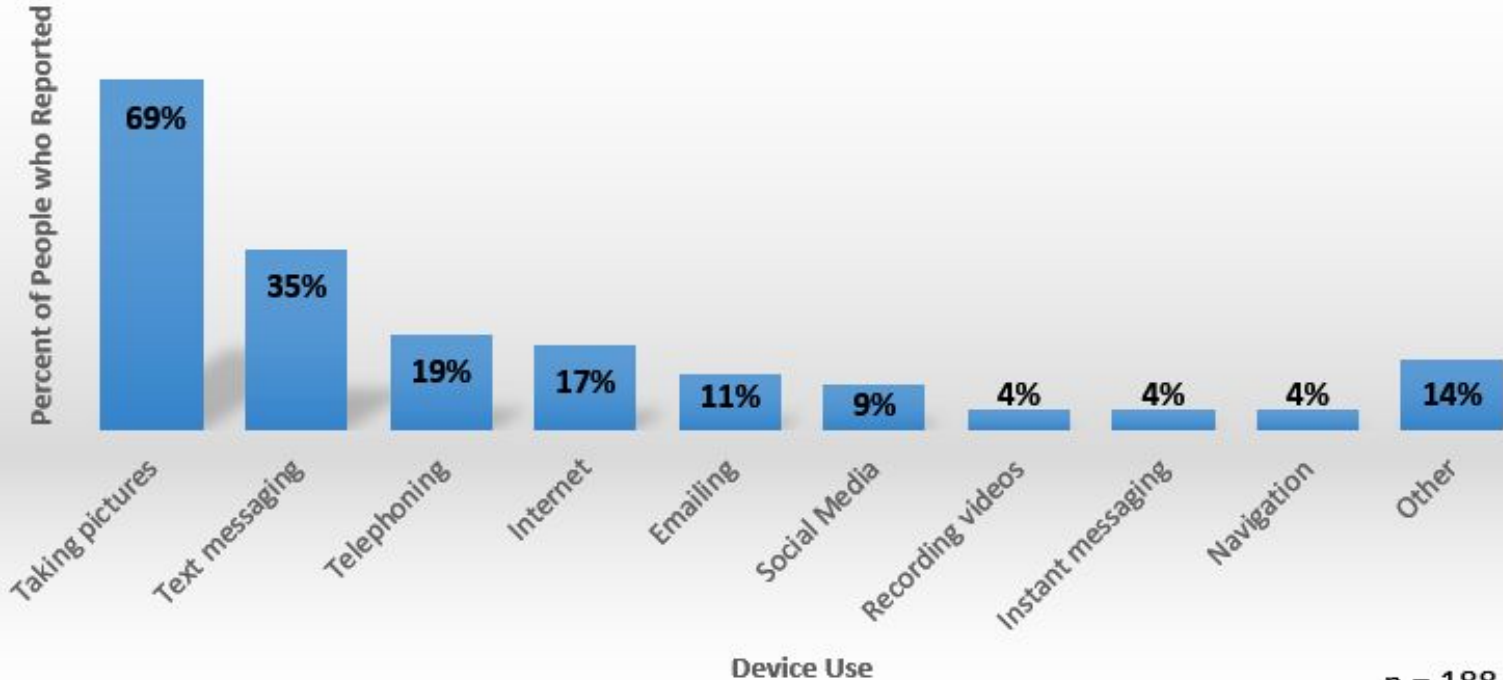


(Mobile Surveys, n.d.)



# Survey Results

## Device Uses Reported by Survey Participants



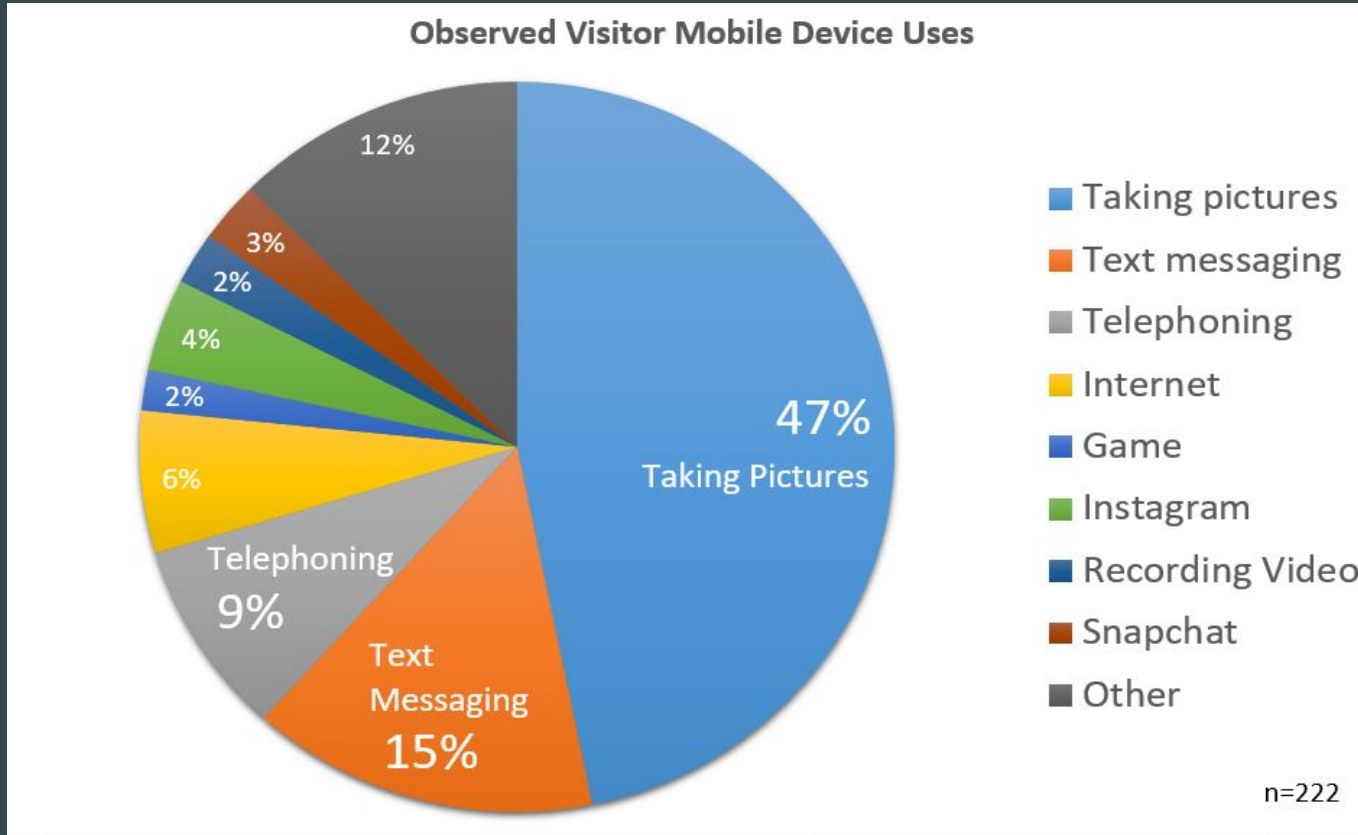
n = 188



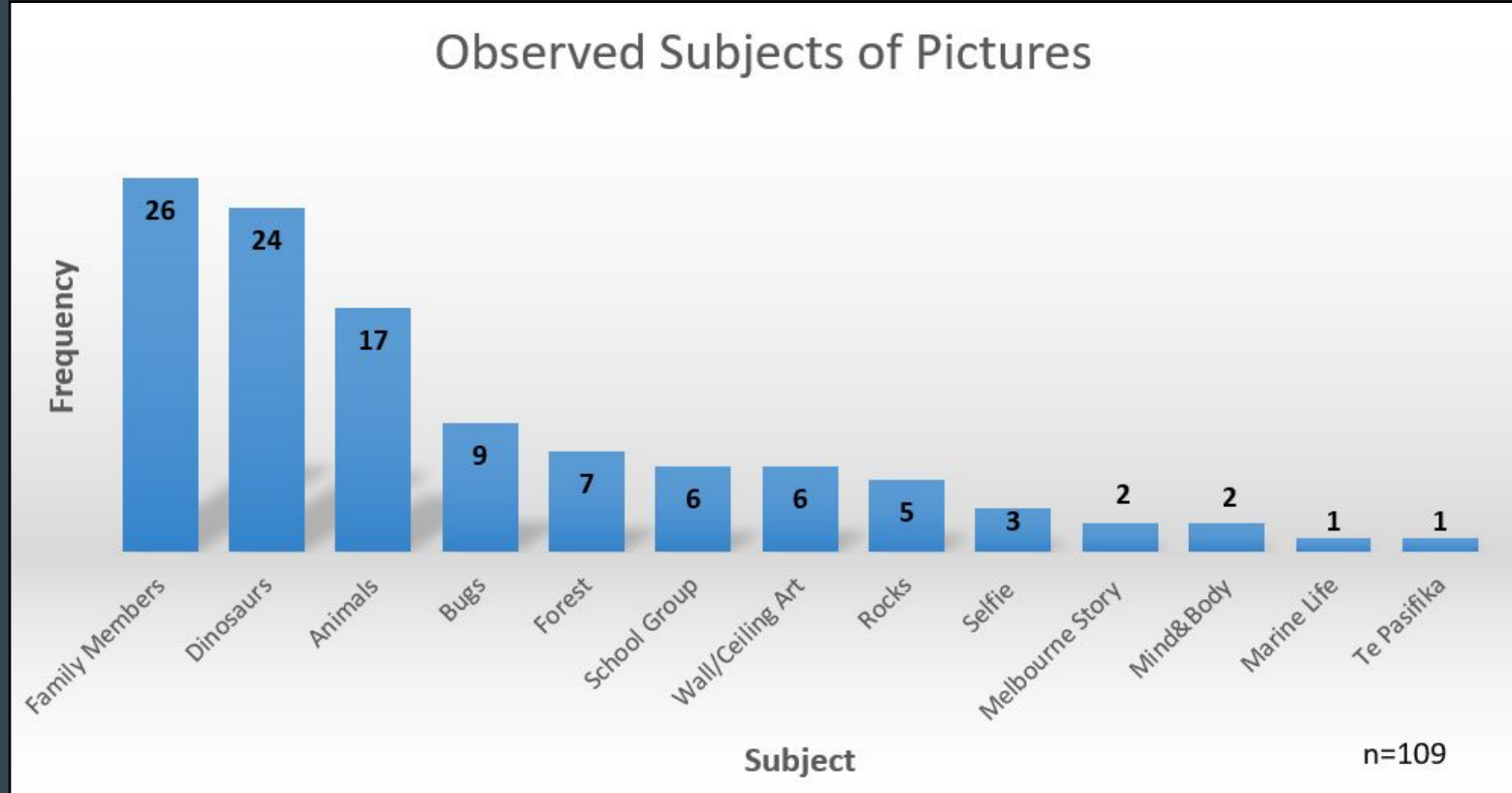
# Observations allowed us to determine how visitors are currently using their mobile devices throughout the museum

Observation Survey						
Gender (circle one):		Approx. Age (circle one):				
Male	Female	20-30	30-40	40-50	50-60	60+
Gallery (circle one):			Type of Device (circle one):		Gallery Density (circle one):	
Forest Gallery	Mind & Body	Bunjilaka	iPhone	iPad	Low	
Dinosaurs	Evolution Gallery	Museum Cafe	Android phone	Android tablet	Medium	
Children's Gallery	Te Pasifika	Foyer	iPod	Mp3 player	High	
Geology Gallery	Marine Life	Bugs Alive				
Love and Sorrow	Circulation Spaces					
Mobile Device Uses	Check if observed		Mobile Device Uses	Check if observed		
Texting			Instagram			
Taking Picture			Snapchat			
Recording Video			Email			
Telephoning			Translation			
Internet			Other:			
Facebook			Other:			
Twitter			Other:			

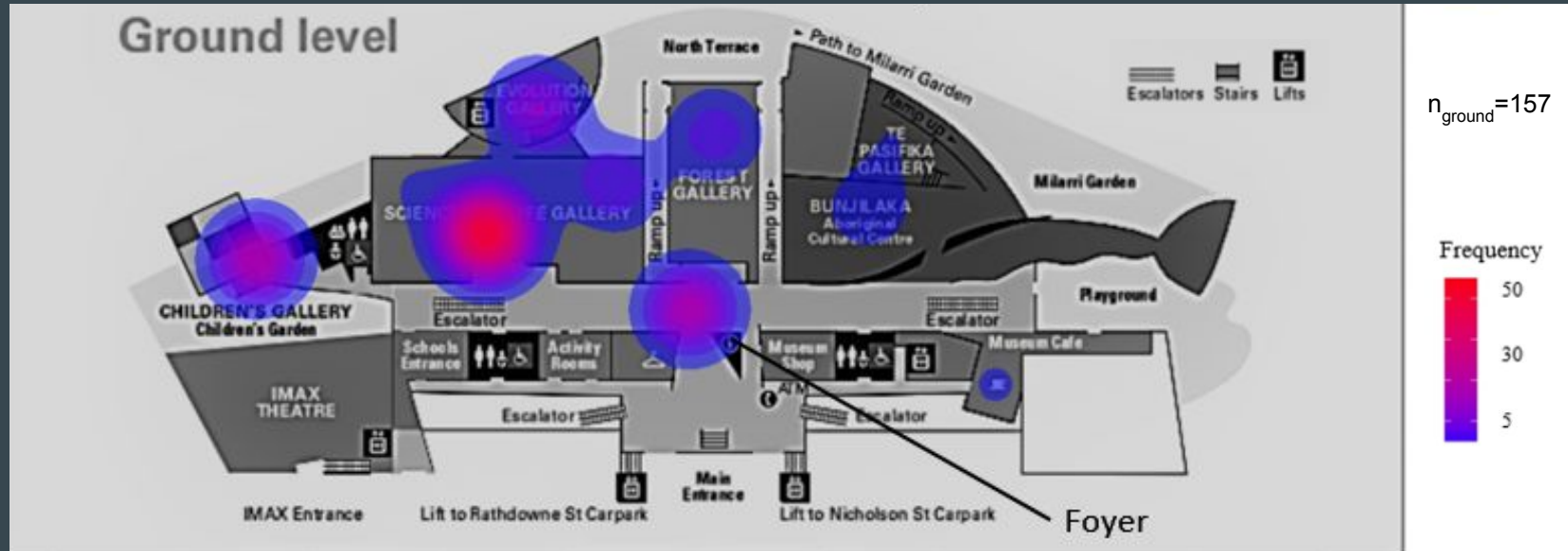
# Observation data shows that most people were using iPhones and the most common use was taking pictures



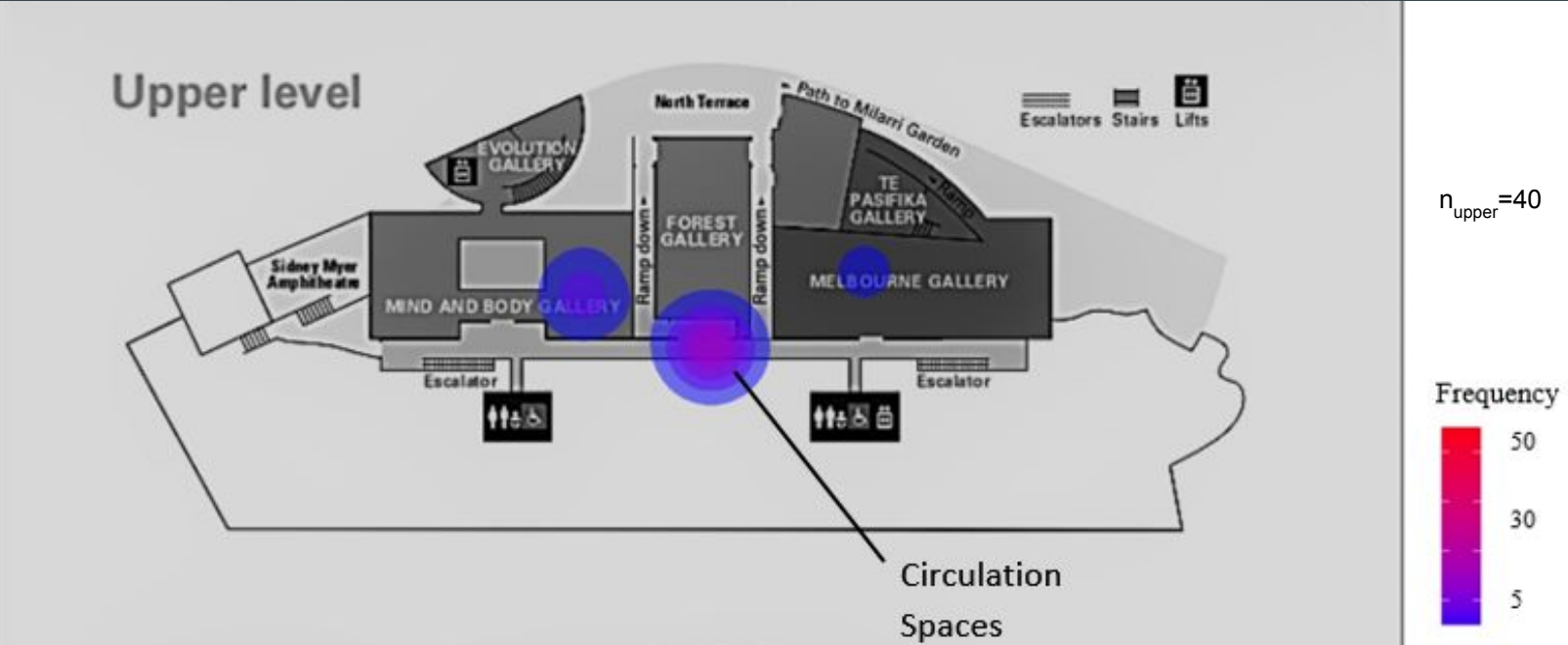
# Visitor observations also revealed that most people take pictures of their family members or the dinosaurs



A heat map displays that the majority of observed mobile device usage was in the west wing of the museum.



# Circulation Spaces



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Site visits provided us with a general understanding of visitor profiles at each of the Museums Victoria sites.



(Jayne, 2014)

Scienceworks



(Worcester Magazine, 2016)

Worcester Art Museum



(Museums Victoria, *n.d.*)

Melbourne Museum



(Immigration Museum, *n.d.*)

Immigration Museum

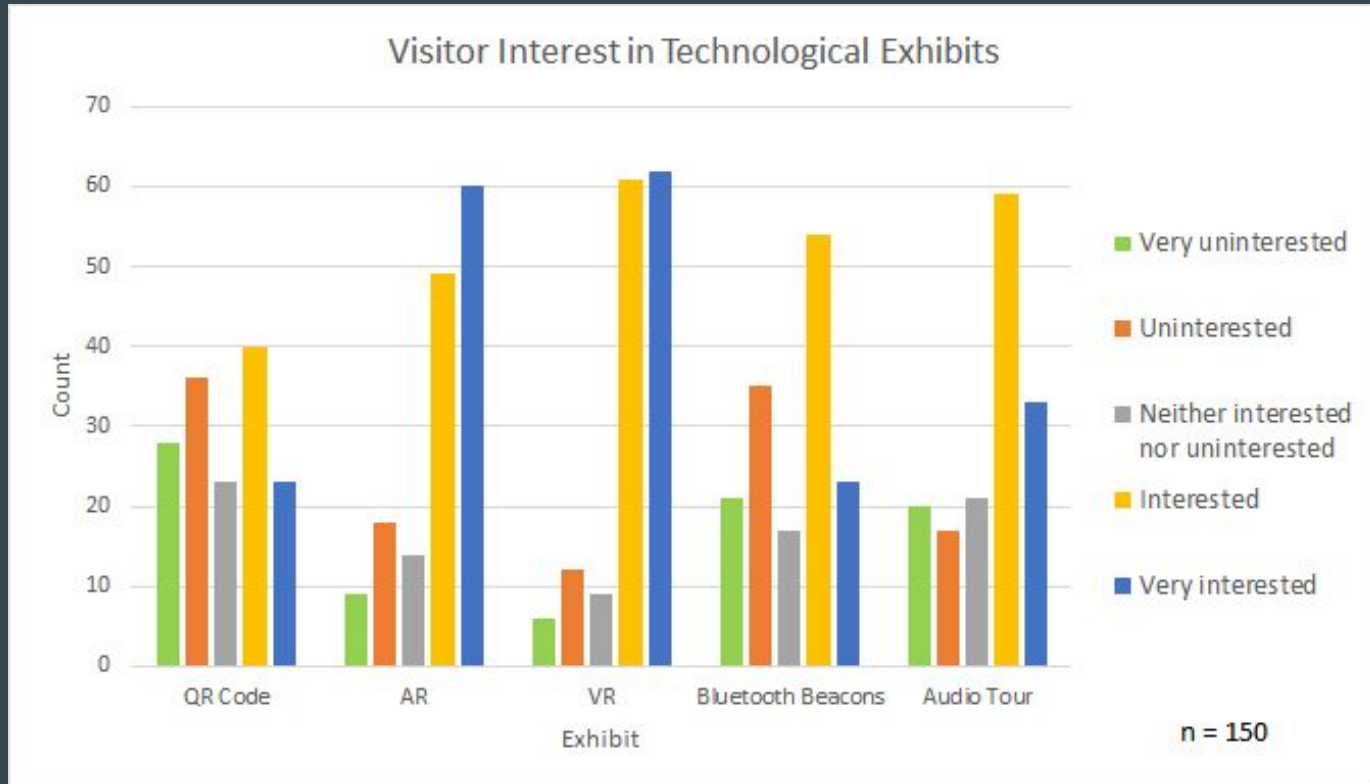


# An exhibit rating exercise assessed visitor interest in various mobile technologies

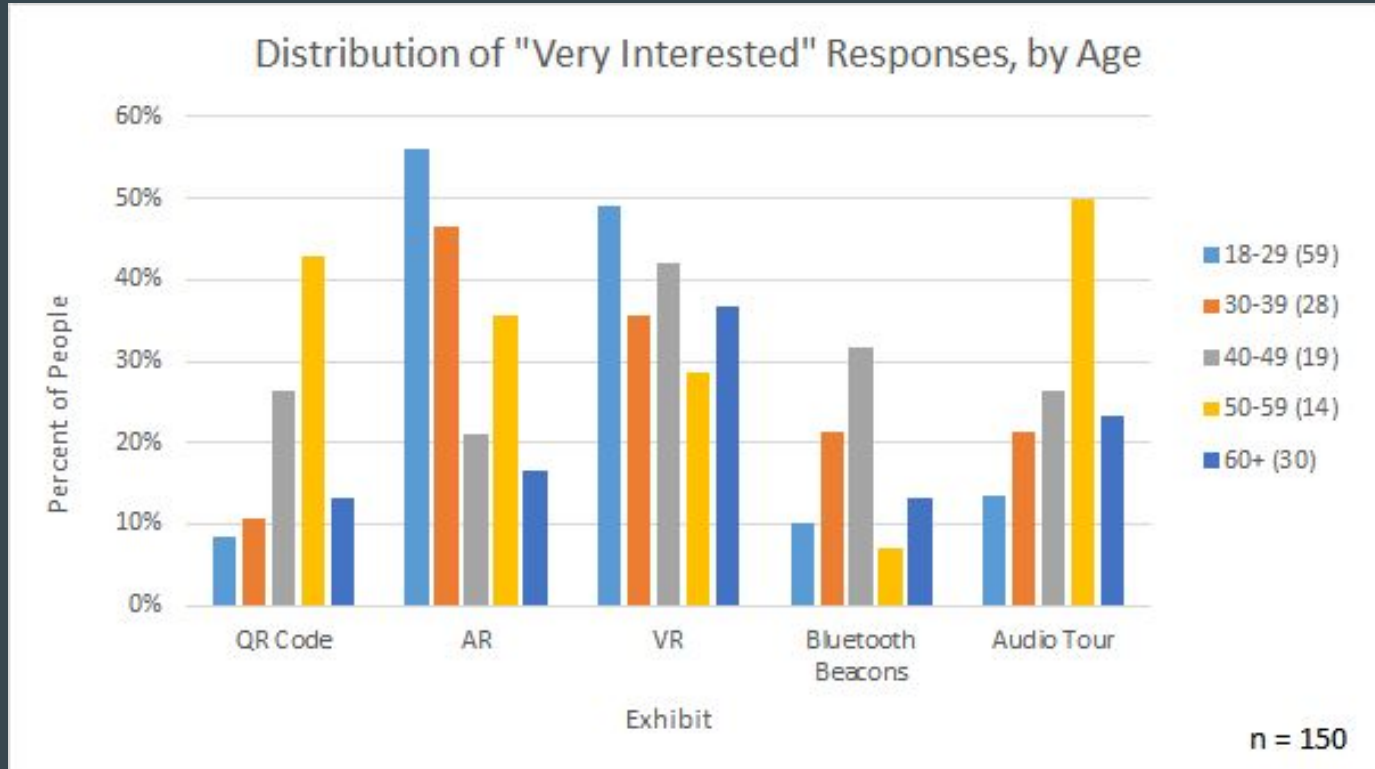
	Very interested	Interested	Neither interested nor uninterested	Uninterested	Very uninterested
An app that sends additional information to your smartphone about the exhibit that you are currently viewing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An exhibit that gives realistic 360 degree views of various environments, such as space shuttles or a rainforest	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A self-guided audio tour on your mobile device or a device provided by the museum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scanning a QR code located next to an exhibit for more information on the exhibit's topic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An exhibit in which you can hold your mobile device up to dinosaur bones to see what the living dinosaur might have looked like	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



# The data shows that visitors found virtual and augmented reality to be the most interesting technological exhibits



# Younger audiences were often more interested in using technology, but not always



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*Inside Out* testing allowed us to experience the methods involved in museum studies.



# Students' pilot testing of *Inside Out* testing aided the exhibition designers

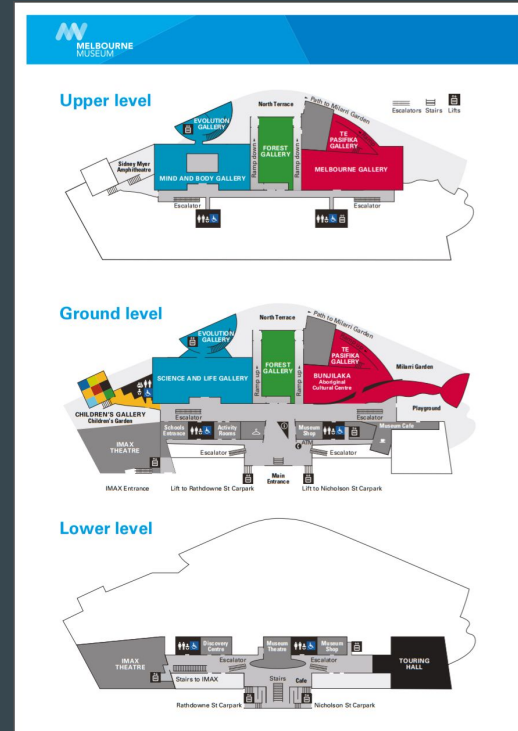
Pros	Cons
<ul style="list-style-type: none"><li>● Limited text, mostly audio tracks appeal to younger generation</li><li>● Various engaging displays, such as animals, rocks, and a large polar bear</li></ul>	<ul style="list-style-type: none"><li>● Personal device must be an iPhone</li><li>● New iPhone versions don't have headphone jack</li><li>● Flaws with the Detour application</li><li>● Audio cues indicating when to move were unclear.</li><li>● Stories to accompany the displays were confusing</li></ul>

# Recommendations

# Implement an interactive digital map that can be accessed on mobile devices to enhance visitor museum experience



(Munich airport digital mapping, 2016)

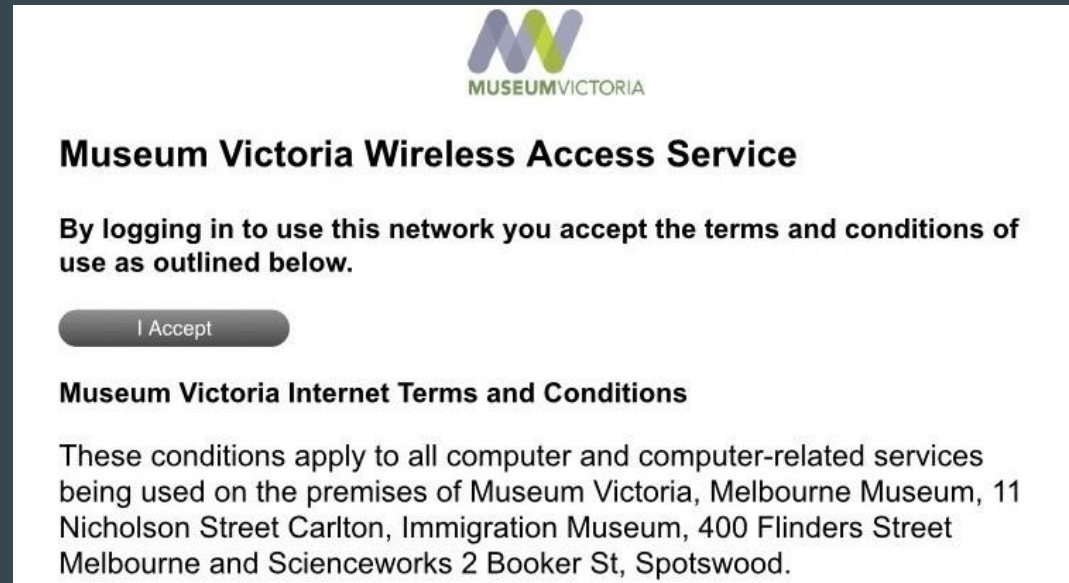


(Melbourne museum visitor map, n.d)

# Advertise the availability of the free Wi-Fi with instructions on how to connect to it to increase mobile device usage in the museum



(Free Wifi Signs, 2016)



**Museum Victoria**

## Museum Victoria Wireless Access Service

By logging in to use this network you accept the terms and conditions of use as outlined below.

I Accept

### Museum Victoria Internet Terms and Conditions

These conditions apply to all computer and computer-related services being used on the premises of Museum Victoria, Melbourne Museum, 11 Nicholson Street Carlton, Immigration Museum, 400 Flinders Street Melbourne and Scienceworks 2 Booker St, Spotswood.

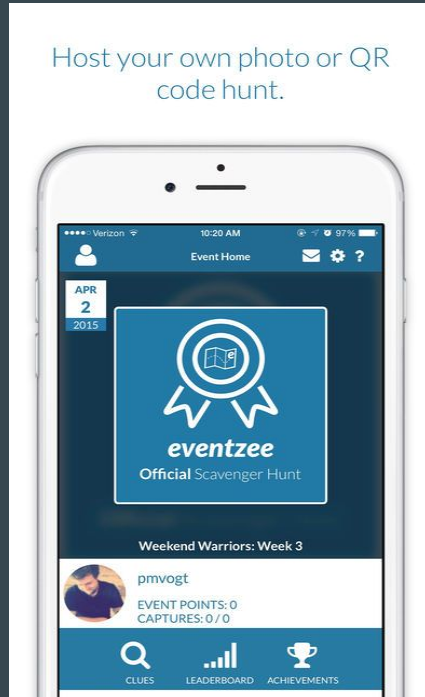


# Incorporate an augmented reality photo station near the Dinosaur Walk exhibit



(Rieland, 2012)

# Research methods of implementing a scavenger hunt application that would enhance visitor engagement



(Munzee Inc, 2017)



(STÄDEL APP, 2017)

# Take Home Thoughts

- Devices were most commonly used for taking pictures
- Younger visitors were generally more willing to use their devices inside the museum
- Visitors in general were interested in technological experiences in the museum
- Provided Museums Victoria with a benchmark study
  - Captured a picture of current mobile device use
  - Provided a point of comparison for a future where mobile devices within a visiting experience might become more significant

# Acknowledgements

We would like to thank...

- Our sponsor, Museums Victoria
- Carolyn Meehan, Carla English and the rest of the Audience Insights team
- Our advisors, Fred Looft and Karen Oates
- Worcester Polytechnic Institute
- Our fellow students in Melbourne
- Professor Ingrid Shockey

Questions?