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Friday 26 June 2020 | 3pm - 4pm



## Digitalisation: Behavioural Insights in the Digital Landscape

Dr Joanne Yoong  
Senior Economist and Director  
Center for Economic and Social Research, University of South California

### ABOUT THE FIRESIDE CHAT

The COVID-19 pandemic has seen a surge in online activity by many organisations and businesses. As a result, audiences are now faced with even more decisions to make in their consumption of culture, commodities, and information. Museums are consequently faced with the challenge of competing in an increasingly crowded online environment. This phenomenon raises the need for a more targeted approach toward designing digital strategies based on an understanding of online behaviour, so that museums can successfully meet their goals. This fireside chat will focus on questions programmers should ask before embarking on digitalisation, and discuss key obstacles that museums might anticipate when going digital.

### ABOUT THE SPEAKER

Joanne is an applied economist working at the intersection of behavioural economics, health and financial decision making for the well-being of vulnerable populations. She is Senior Economist at the University of Southern California, where she directs the offices of the USC Center for Economic and Social Research in Singapore and Washington, D.C. She is also a principal member of the USC Behavioral Economics Studio.

### ABOUT THE MODERATOR



Jervais Choo  
Deputy Director (Organisational Design and Innovation)  
National Heritage Board

Jervais is the Programme Director for DigiMuse. Launched in 2017 by the National Museum of Singapore, DigiMuse aims to advance digital innovation in the cultural sector. As Deputy Director for Organisational Design and Innovation, Jervais leads the digital transformation efforts of the National Heritage Board.

What are  
Behavioral  
Insights?

Dr Joanne Yoong  
USC/NUS/Research for Impact



User experience

Design

# The brain works in dual, simultaneous process

<b>System 1 (Fast)</b>	<b>System 2 (Slow)</b>
Fast	Slow
Constant, automatic	Effortful, deliberate
Subconscious	Self Aware
Reflexive, Associative	Rational, logical

# Choices are therefore often not “rational”

Individual **preferences and values** are often inconsistent, unstable and influenced by context

Individuals form **biased beliefs** about self and surroundings and selectively filter information

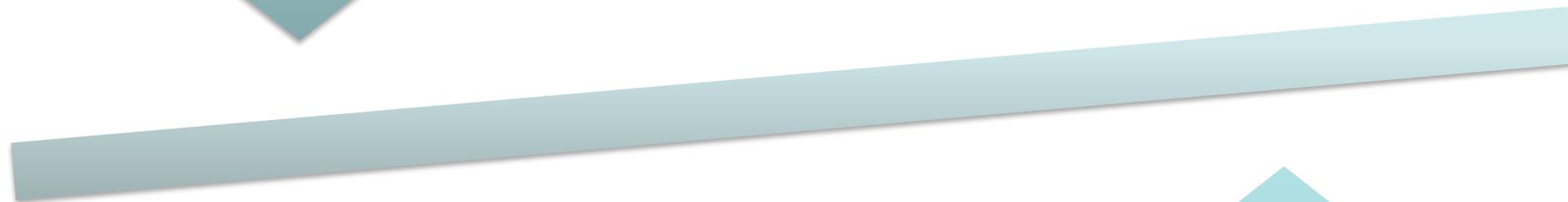
Decisions are often based on **rules of thumb**, subject to processing constraints and **external triggers including emotion and stress**

# 1: Our future selves are “better”



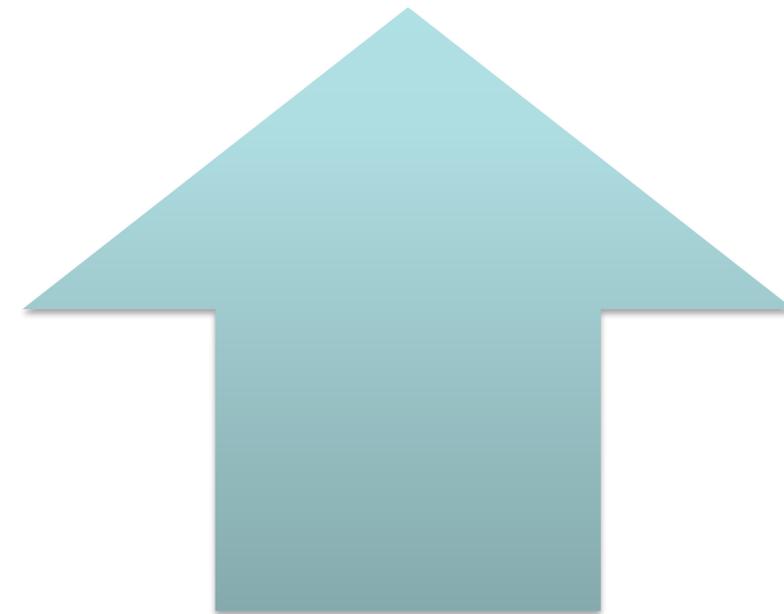
## Long-term patient

- Aspirational
- Desire to meet long-term goals



## Short term Impatient

- Give into immediate gratification (immediate benefits)
- Procrastinate over unpleasant or uninteresting tasks (immediate costs)



# Short-term wants beat long-term shoulds

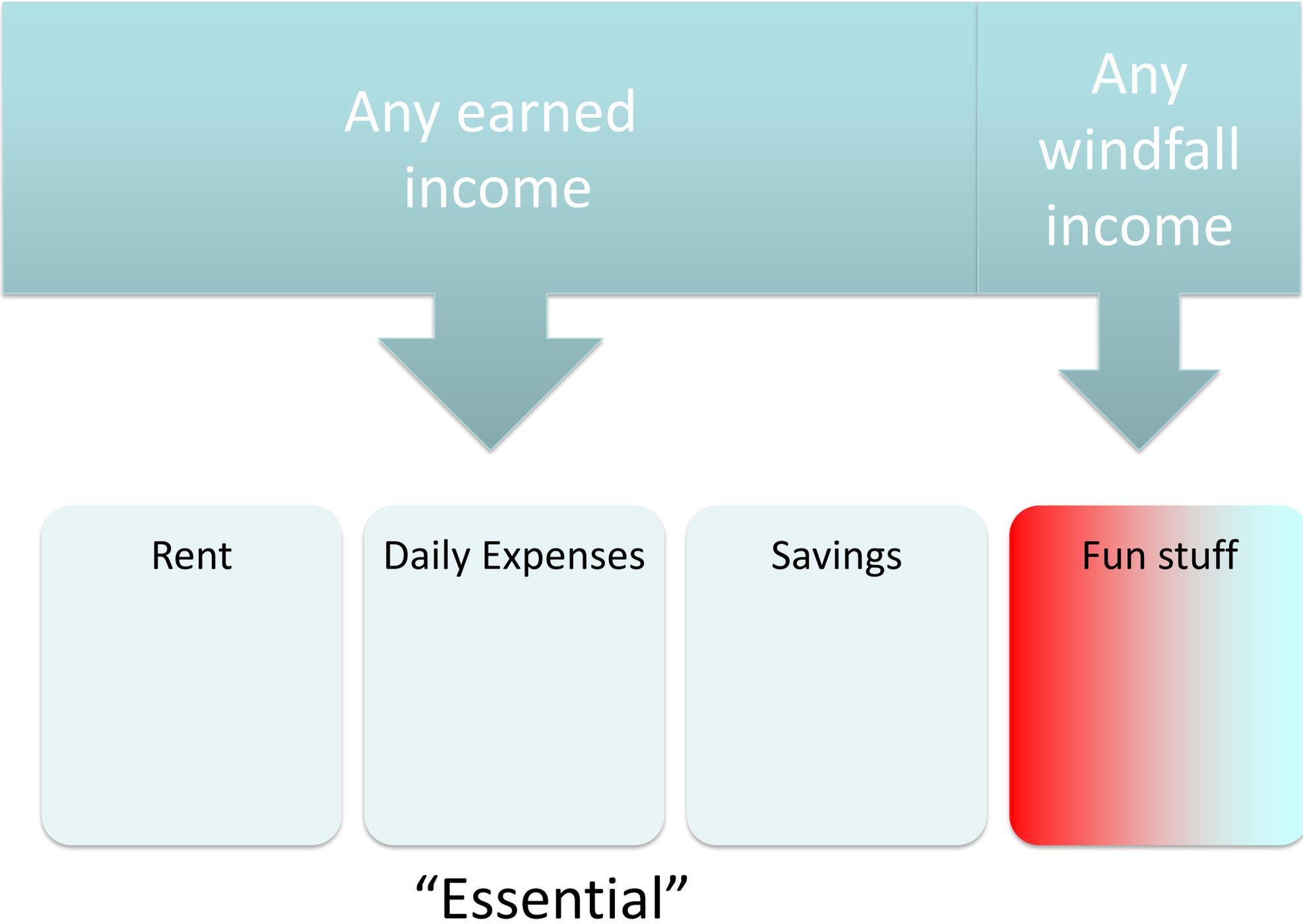


# Defaults and small frictions matter

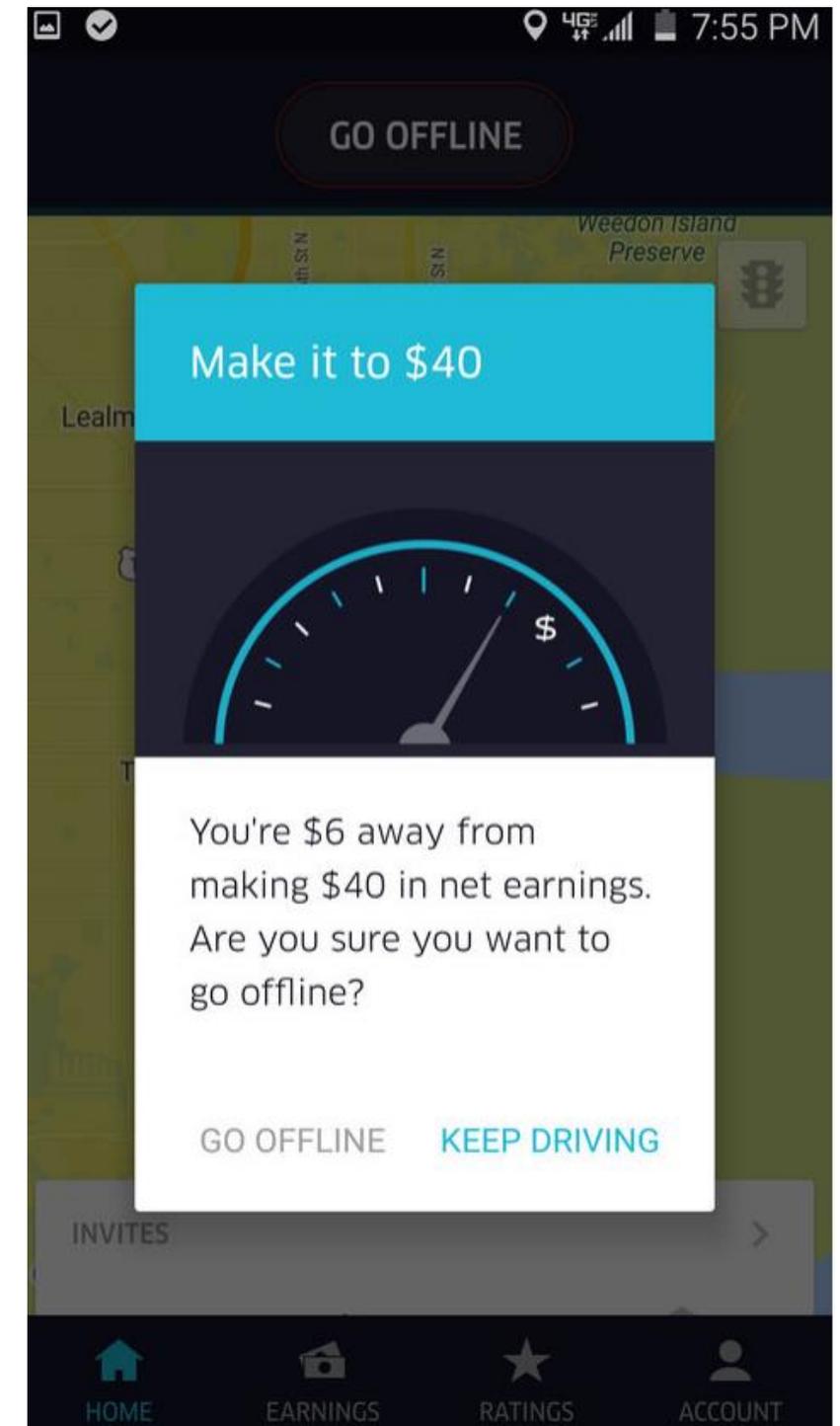


Next episode in **8 seconds**  
Friends S1:E2 "The One with the

# #2: Frames affect our “mental accounting”



# We respond to scarcity and FOMO



# #3 Social instincts are strong



# Halo effects color judgements



# Reciprocity means giving first can help



# #4 Attention is limited and degrades quickly

System 2 is overloaded or System 1 is triggered

Become more myopic and pay attention only to the most salient features

Apply shortcuts and “rules of thumb”

Avoid choice altogether and go with the default



# Less can be more

## Choice Avoidance

- 30 percent of consumers offered six-flavors of jam bought a jar, while only 3 percent of those offered 24-flavors made a purchase
- More jam = more visitors, but fewer jams = more purchases

## Reduced Satisfaction

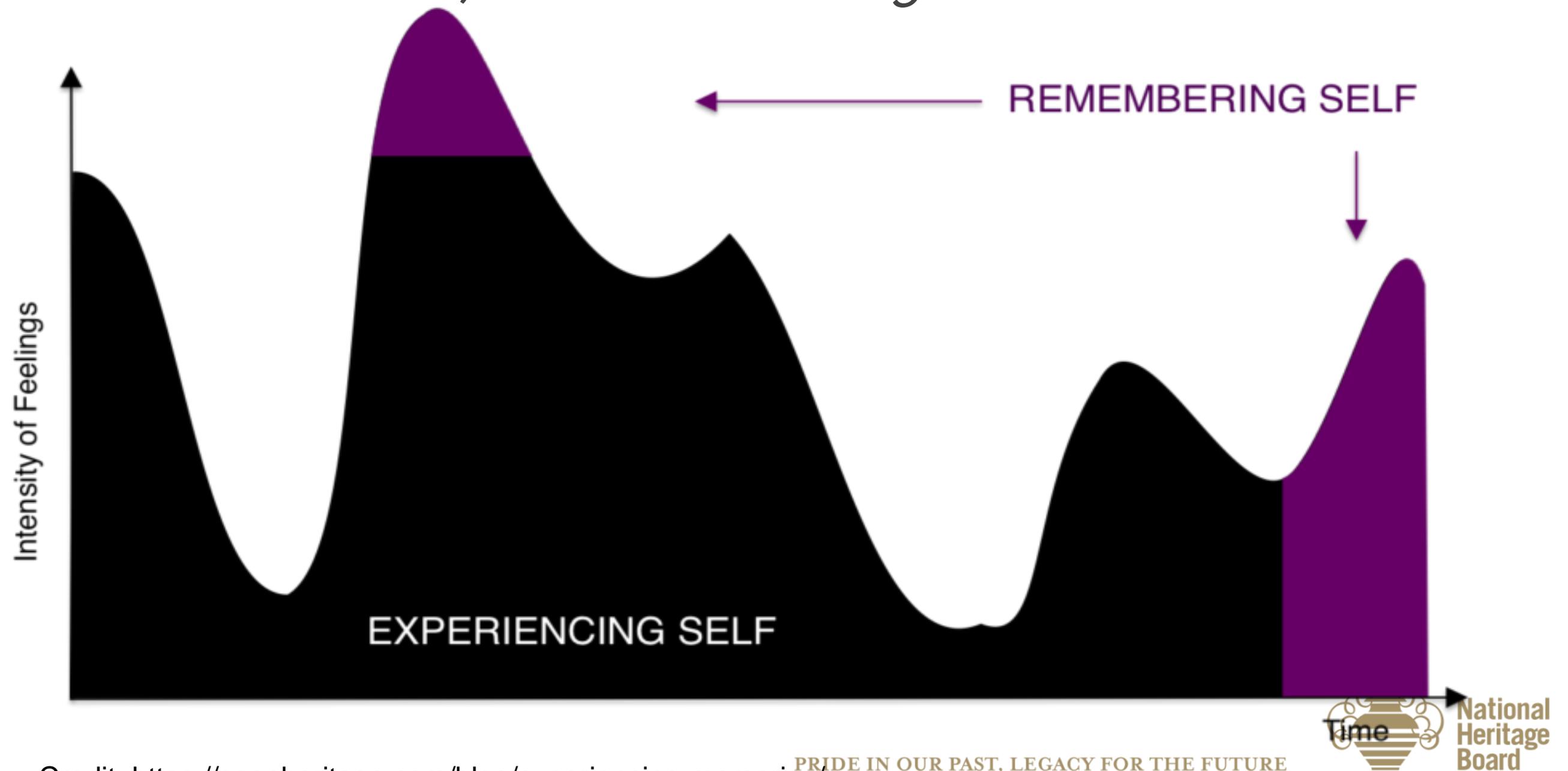
- Subjects asked to pick from among six types of Godiva chocolate were more satisfied that another group choosing from among 30 varieties

# Control has value



# #5 Experience Is Not Memory

“The *experiencing self* does all the living by going through a succession of moments while the *remembering self* is the one that gets to keep the memories. When people make decisions, the *remembering self* is in control”



# Seven Implications for Experience Design

Seamless experiences

Short-term incentives, long term aspirations

Set defaults and primes

Social context and levers

Selectivity and saliency

Sense of purpose/control

Strong finish

1. How can I leverage on BI to reach new audiences, or better engage with the under-served communities?

2. With limited knowledge and technical know-how, how can we get started and how can I include BI principles upfront for the project?

3. With limited or no budget, how can we best market our offerings and make it go 'viral'? How can BI help?

4. What would be some meaningful indicators for museums, arts and culture professionals to measure?



**National  
Heritage  
Board**

# **BI in the Digital Environment**

Jervais Choo

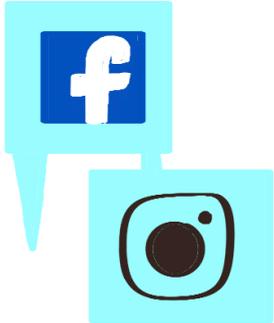
Deputy Director

Organisational Design and Innovation

National Heritage Board

# What if we could change the way we engage with our visitors

LET'S CREATE OUR HERITAGE ID SO THAT WE CAN ENJOY MORE BENEFITS.



**TRIP PLANNING**  
Visitors from all over the world can find out about our museum offerings. They can also experience a virtual tour of exhibitions such part of trip planning.

## QR SEARCH TO FIND OUT WHAT'S ON

Visitors scan QR codes located around the museum to find out more about the museum's offerings for the day.

EVENTS  
EXHIBITIONS  
TOURS  
PROGRAMMES

## PERSONALISED WAYFINDING

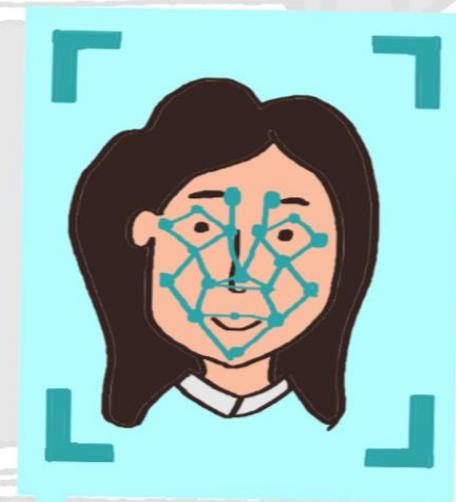
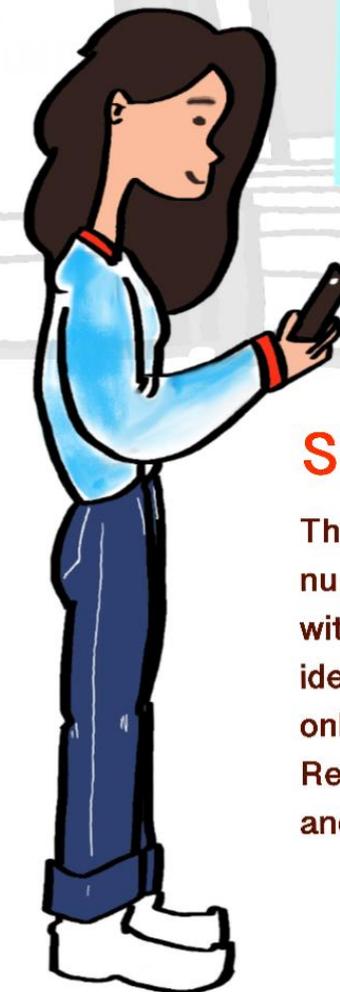
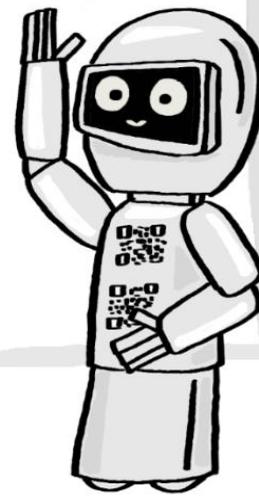
Personalised routes created based on the visitor's interests and duration he intends to spend in the museum.

HELLO EVE,  
I AM HERE TO SHOW  
YOU AROUND BASED  
ON YOUR INTERESTS

## VISITOR COUNT

## SEAMLESS ADMISSIONS

The Heritage ID is a unique identifying number. Creation of the Heritage ID with facial recognition function helps identify visitors who have bought an online ticket for the visit. Repeated visitors can also be identified and tracked.

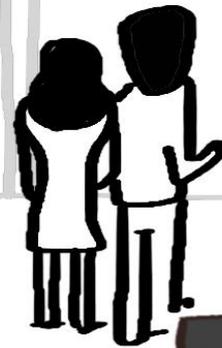


## ENHANCED ACCESSIBILITY

Language selection for digital tours and information on the museum made available online allows more visitors to opt for museums as their destination of choice.

SELECT A SPECIFIC LANGUAGE FOR DIGITAL TOUR.

PRE-SEARCHING ONLINE ON WHERE THE NURSING ROOM IS REALLY REDUCES THE STRESS ON ME DURING MY VISIT.



## WIFI-BASED LOCATION TRACKING

Besides allowing visitors to navigate the museum at ease, capturing of their dwell time could translate into valuable data points.



HOVER SMART DEVICE OVER AR OR QR CODE TO KNOW MORE ABOUT THIS DOOR

## PERSONALISED CONTENT BASED ON INTERESTS

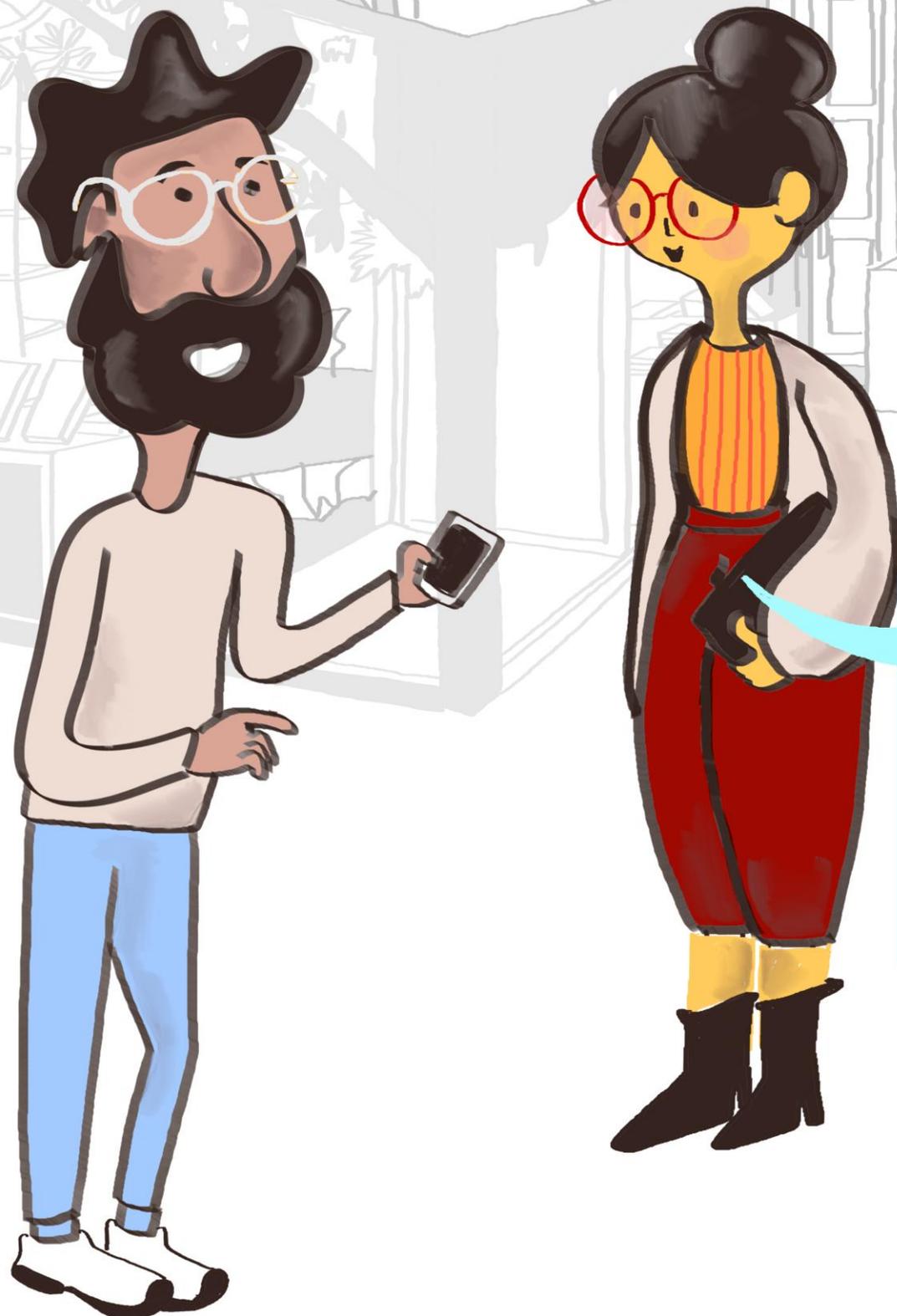
Knowing visitors' favourite content improves curation for future exhibitions. It also allows recommendations to be pushed to visitors based on their preferences.

## TELEPRESENCE ROBOT

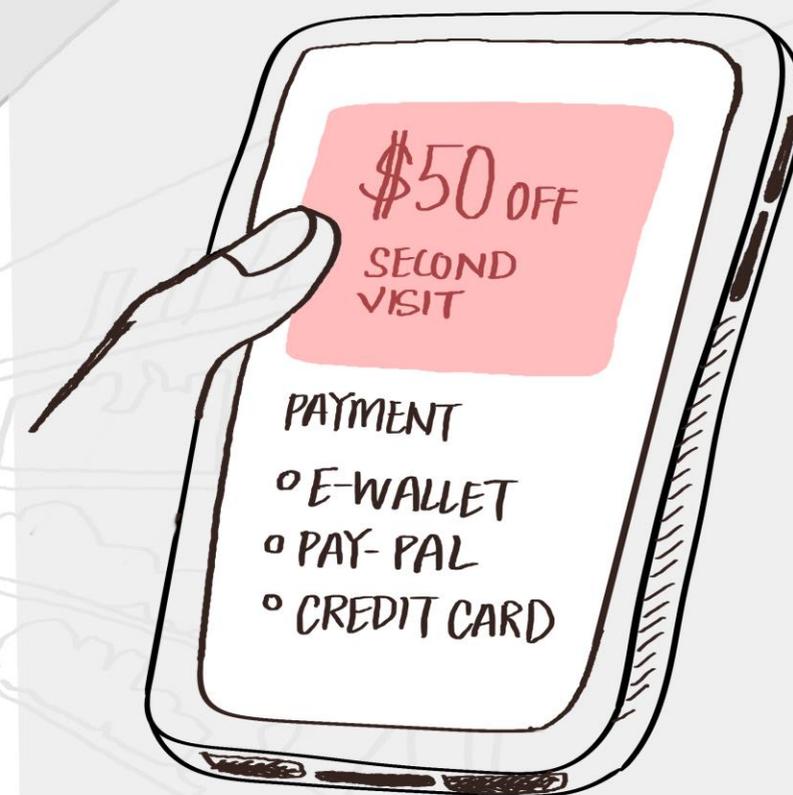
Extends the reach of the museum beyond physical presence of the visitor.

## ENHANCED VISITOR SERVICES

Visitor service officers will be able to recognise and know individual visitor's preferences through the information captured in the visitor service database. This translates to personalised services for every individual visitor.



**JACQUE**  
INTERESTED  
IN ASIAN  
CULTURE &  
HISTORY.  
LIKES READING  
LIGHT-HEARTED  
NOVELS  
BASED ON  
HISTORICAL  
EVENTS

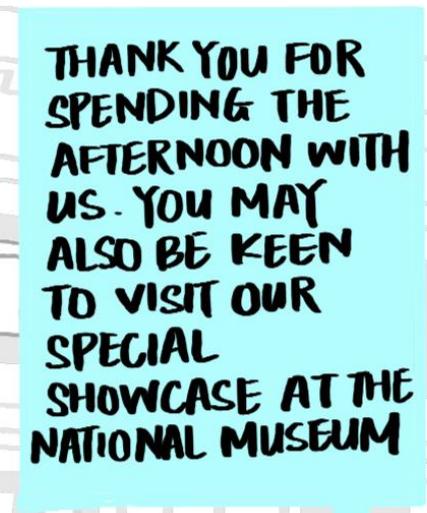


## SECURE E-PAYMENT EXPERIENCE

Visitors can choose to use electronic payment modes when making purchases of tickets, merchandises and when spending at F&B outlets. Their spending preferences would be captured as data, to help us understand their buying preferences.

## SATISFACTION SURVEY AND CROSS-MARKETING

An online survey will be pushed to the visitors at the end of their visit. Visitors will also receive recommendations on other exhibitions based on their interests.



# GAMIFICATION

The heritage account platform is designed with gamification features. Exclusive discounts and benefits would be available as they unlock levels.



# Thank You

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