

# Focus Group Interview

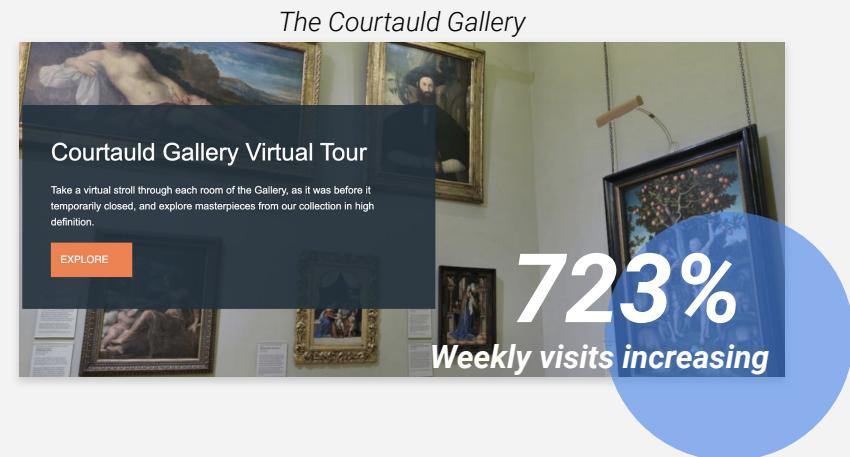
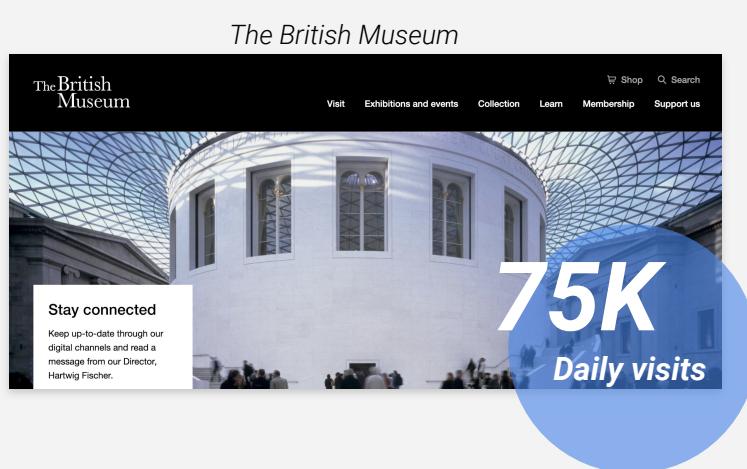
User needs of online museum based on *feedback from exhibition visitors*

Team members

Jini Kim/ Jihoon Choi/ Yoonhoi Jeon/ Qinyue Chen

# Backgrounds

As the coronavirus forces many cultural institutions and spaces to close their doors, **consumer appetite for online experiences is booming.**



Source: <https://www.newstatesman.com/culture/art-design/2020/03/virtual-galleries-art-museums-tours-online>

# Backgrounds

There is a large gap between the Online Museum Experience and the Offline Museum Experience, **people do not have much interest** in the Online Museum Experience.

International Journal of Digital Libraries (2020) 21:75–87  
<https://doi.org/10.1007/s00179-018-0248-8>

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**Characterising online museum users: a study of the National Museums Liverpool museum website**

David Walsh<sup>a,b</sup> · Mark M. Hall<sup>b</sup> · Paul Clough<sup>b</sup> · Jonathan Foster<sup>a</sup>

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**Abstract**  
 Museums are increasing access to their collections and providing richer user experiences via web-based interfaces. However, there still remains a lack of understanding of the type of user who visits a museum website. In order to provide a better understanding of the type of user who visits a museum website, a user survey was conducted. This paper presents the results of a large-scale user survey for the National Museums Liverpool museum website in which data on a wide range of user characteristics were collected regarding their current visit to provide a better understanding of their motivations and needs. The study found that the majority of users (approximately 77%) make up a non-professional general public and non-professional users make up the majority (approximately 77%) of the respondents.

**Keywords** Digital cultural heritage · Museum website · User research · User groups · Survey

**1 Introduction**  
 Museums have expanded their web-based offerings, providing visitors with the ability to explore their collections online, as well as direct access to their holdings. Digitized collections are also displayed on their websites, allowing visitors to explore exhibits. Various studies have explored the role of the web-based resources used by different user types, especially how museums websites are used to connect visitors with the collections [1–3] and the information [4–6]. The provision of web-based resources has opened up museums to wider and more diverse user groups and led to a significant increase in the number of visitors to museum websites [7].

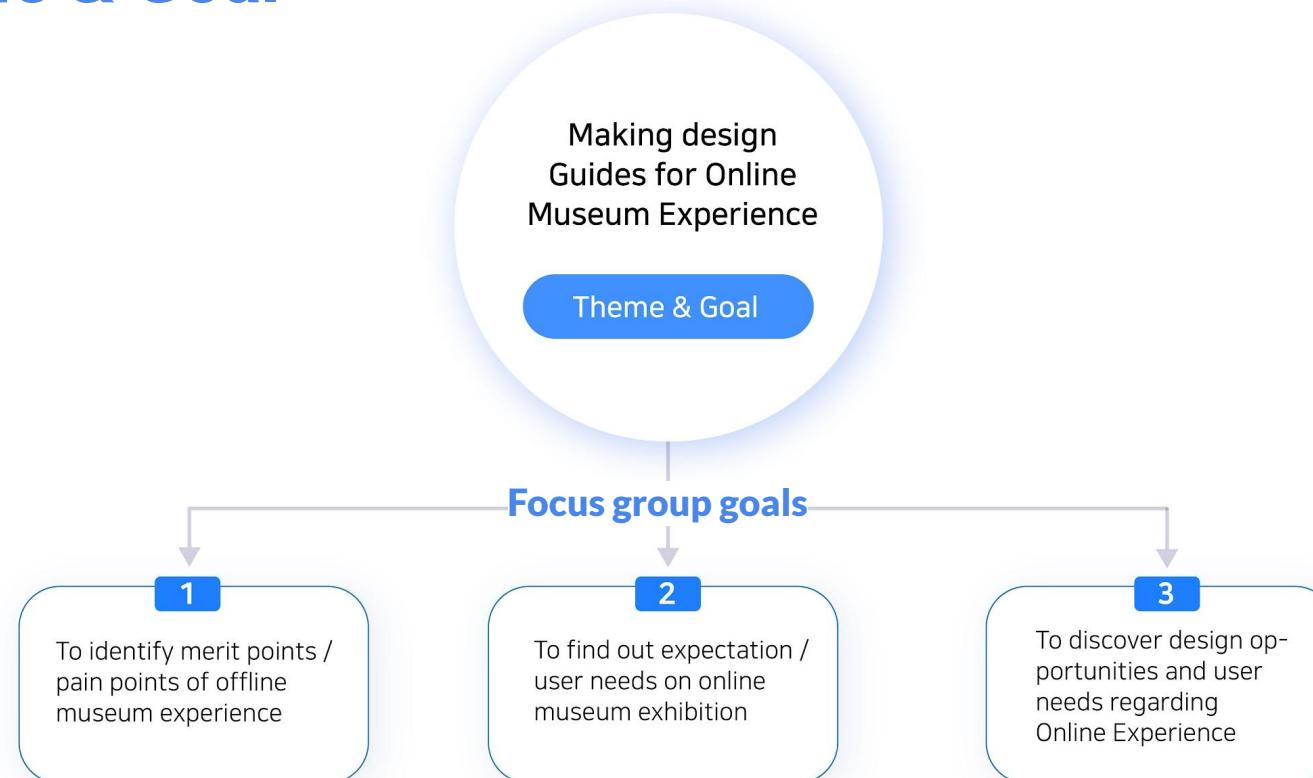
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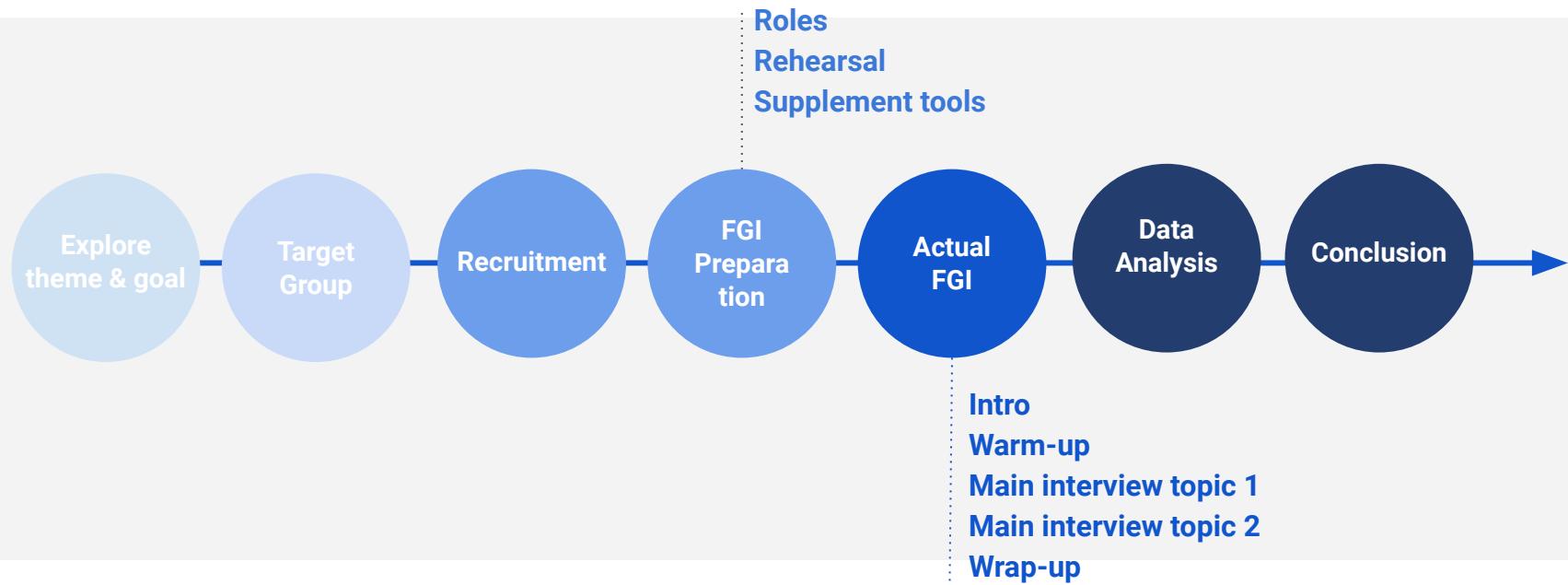
"However, museums have been struggling with **large numbers (often more than 50%) of users** visiting their sites, looking at one or two pages, and then leaving within a very short period of time (generally less than 10 s). These users are often referred to as taking a 'surf-and-dash' approach to better understand their online visitors and engage with them in a meaningful way [1, 2]. Over the years, many studies have sought to determine the diversity of users with respect to age, gender, socio-economic background, motivation, intent and task [7–10]. These studies have shown that users are likely to adapt and evaluate information systems from the perspective of the tasks they are performing. For example, users with a lack of achievement may find it difficult to search, interpret, and contextualise search results effectively [11–13]. Therefore, it is important that systems are designed to support these users. Similarly, users with different backgrounds have different collections with varying goals, tasks and information needs [14]. A consequence of this is the wide variety of information access methods that users may choose to use when considering when designing methods of information access [15, 16]. Increasingly, cultural heritage services are being uti-

Walsh, D., Hall, M. M., Clough, P., & Foster, J. (2018). Characterising online museum users: a study of the National Museums Liverpool museum website. International Journal on Digital Libraries, 1-13.

# Theme & Goal



# Process



# Target group: General Museum Visitors

Based on the literature review, the target group was focused on general museum visitors, which means museum-professionals will be excluded.

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**Characterising online museum users: a study of the National Museums Liverpool museum website**

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**Abstract**  
 Museums are increasing access to their collections and providing richer user experiences via web-based interfaces. However, there is also a need to understand the type of user who visits a museum website. In order to do this, a better understanding of the type of user who visits a museum website is required. Existing models for museum website users have been developed from studies of general public users. This paper presents the results of a large-scale user survey for the National Museums Liverpool museum website in which data on a wide range of user characteristics were collected regarding their current visit to provide a better understanding of their motivations and needs. The results show that approximately 77% of respondents make up a group of predominantly interested general public and non-professional users who make up the majority (approximately 77%) of the respondents.

**Keywords** Digital cultural heritage · Museums website · User research · User groups · Survey

**1 Introduction**  
 Museums have expanded their web-based offerings, providing users with the ability to explore their collections online, as well as direct access to their holdings. Digital collections are also displayed on their websites, and online exhibits. Various studies have explored the role of the web-based resources used by museum visitors, especially exhibits. For example, how museum websites are used to connect visitors with the collections [1–3] and the impact of the provision of web-based resources has opened up museums to wider and more diverse user groups and led to a significant increase in the number of visitors to museum websites [4].

**2.1 Previous work**  
 [5] However, museums have been struggling with large audiences (often more than 70% of users visiting their sites, looking at one or two pages, and then leaving within a very short period of time (generally less than 1 min). The 'bounce rate' is often used as an indicator of a 'browsing culture' approach to better understand their online visitors and recognise the need for further development of their websites [6]. Over the years, many studies have sought to determine the characteristics of museum website visitors, such as age, gender, socio-economic background, motivation, interest and task [7–11]. Such studies have highlighted the diversity of users with respect to age, gender and interests, as well as the fact that users may adapt and evaluate information systems from the perspective of their own needs [12]. For example, users with a lack of achievement may find it difficult to search, interpret and contextualise search results [13–15]. Therefore, it is important to understand the needs of these users and design and implement systems that are able to support these users. Similarly, users with different interests may have different collections with varying goals, tasks and information needs [16]. A consequence of this is the wide variety of information needs of users, which is something that must now be considered when designing methods of information access [20, 44]. Increasingly, cultural heritage services are being uti-

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*"General public users make up the majority (approximately 77%) of the respondents."*



**general users are the major use of online museum**

Walsh, D., Hall, M. M., Clough, P., & Foster, J. (2018). Characterising online museum users: a study of the National Museums Liverpool museum website. International Journal on Digital Libraries, 1–13.

Marty, P. F. (2007). Museum websites and museum visitors: Before and after the museum visit. Museum management and curatorship, 22(4), 337–360.

# Recruitment: pre-questionnaire

Participants were recruited based on the results of pre-questionnaire survey. The pre-questionnaire asked basic information of the participants and their interest about online/offline museum.

**온라인 전시 경험 확장 프로젝트 FGI 참여 신청서**

안녕하세요. 저희는 KAIST 산업디자인학과 석사과정 김진이 심열 전윤희 최지훈입니다.  
사용자 중심 디자인 방법론 프로젝트 일환으로서 FGI 신청자를 모집 중에 있습니다.

목적 : 오프라인 전시 경험을 온라인 전시 경험으로 확장했을 때 보다 몰입감 있는 경험을 주고나, 사용자들의 이야기를 듣고 미래 온라인 전시의 방향성을 제시하고자 합니다.

[실험 참여 안내]

1. 실험일시: 3/28-29 중 추후 공지 예정
2. 실험장소: via zoom(영상채팅 챕) / 마스크 착용하고 토론 가능
3. 실험시간: 1그룹(4인) 약 90분
4. 참가보상: 15,000원
5. 모집대상자:

  - \* 코로나 이전 기준입니다!
  - 오프라인 전시를 자주 관람하시는 분(주로 한 달에 한번 이상)
  - 온라인 전시에 조금이라도 관심이 있으신 분\*
  - 온라인 전시(ex. Google Arts & Culture, MOMA online)를 경험해보신 분

이 중에서 1개 이상 해당하시면 참여 가능하십니다!

실험에 참여하고 싶으신 분은 아래 구글폼 신청서를 작성해주세요.  
참여 희망자 분들의 시간을 고려하여 확정된 실험 시간 및 상세 내용을 개별 안내 해드리겠습니다.

\*\* 임금계좌의 경우, 꼭 본인 명의의 계좌를 기입해주세요.  
\*\* 본 실험에서 작성된 자료는 프로젝트 진행 및 연구의 결과물로서만 활용되며, 절대 외부로 유출되지 않음을 알려드립니다.

\* Required

**Personal information**

이름 (Name) \*

성별 (Gender) \*  
 남  
 여

나이 (Age) \*  
전시 경험 확장 프로젝트 FGI 참여 신청서

휴대폰 번호 (Phone #) \*

보통 한 달에 몇 번 정도 전시를 관람하십니까? \*
How many times you go to museum or gallery?

아주 가끔(Seldom)  
 한 달에 1번 이하(Less than 1 time per month)  
 한 달에 1~2번(1~2 times per month)  
 한 달에 2번 이상(More than 2 times per month)

온라인 박물관/전시를 이용해보신 적이 있으신가요? (ex. Google Arts&Nature, Tate Online) \*  
Have you ever used any online museum/gallery before?

Yes  
 No

평소 온라인 전시에 관심을 가지고 계셨나요? \*
Usually, are you interested in online museum?

Yes  
 No

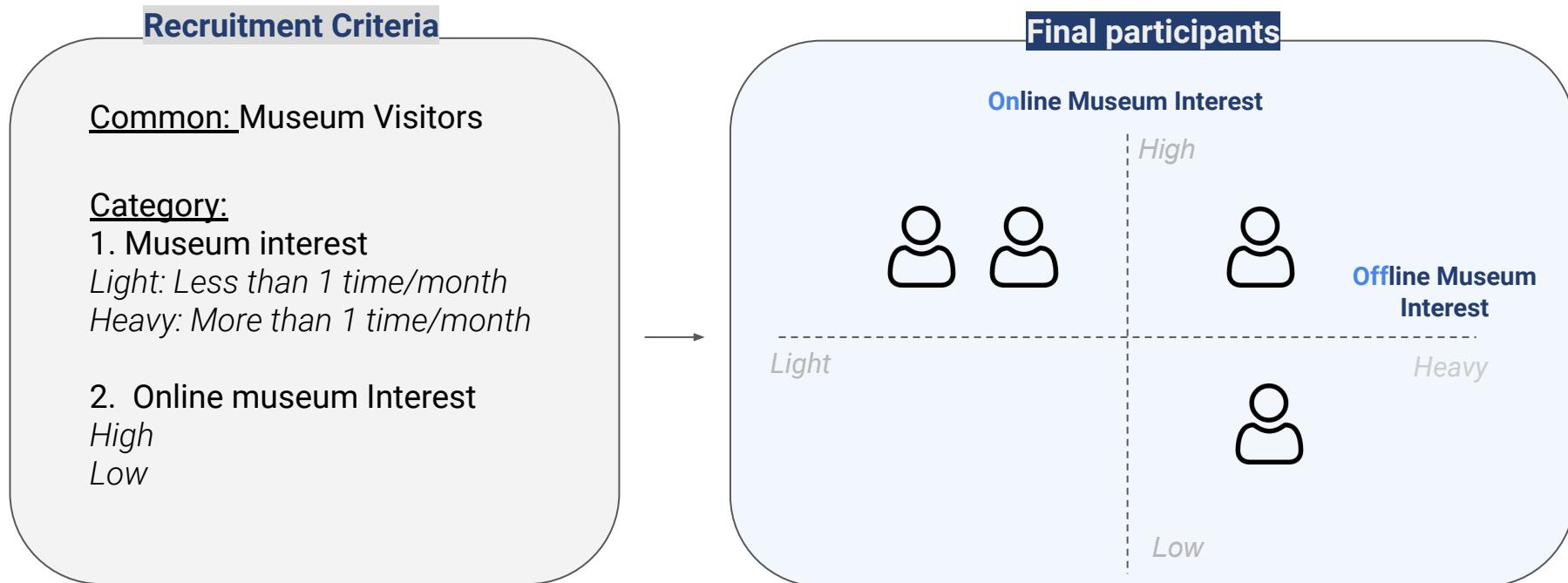
## Categorize/filter target

- Offline Museum interest
- Online museum interest

- Time schedule
- Gender
- Age
- Contact number

# Recruitment

In total, 4 participants were recruited. They were classified into 3 user types.



# Methodology

# Supplements: Preliminary case study

In case the accidents, we searched cases about online FGY via ZOOM and sum up the issues and advice before the actual FGI.

## Papers/articles about online FGI via ZOOM

How to record a focus group for transcription?	The worst place to
A focus group should be conducted in a private room that is quiet and cut off from outside noise.	/ https://www.productiontranscripts.com/how-to-record-a-focus-group.html
Be sure to check for "hidden" sources of noise:	
1) Air conditioning and heating systems are the biggest source of hidden noise	
2) Air compressors or compressors in the building	<b>Solution</b>
3) Close windows	- Prevent: Directed participants to the Help page in the participation information and encouraged participants to log on early.
4) Guitars out come	- If happens: sign out then click the link to rejoin. ("Maybe works")
5) A couple of people talking at once	- Conducted in a private room that is quiet and cut off from outside noise, far away from Recording equipment.
6) Less important group, the rest of the room is silent	- but resolved by asking participants to mute their microphones when they were not speaking.
7) Join leaves	- An alternative may be to ask all participants to use <b>headsets with a microphone</b> .
8) Zoom meeting limit	- Allocated time at the beginning of the focus group to providing a brief tutorial on software
9) Technical issues(Software Use)	- Use KAIST account to host meeting, make a clear meeting room title whenever you're creating a meeting (e.g., "ID508 UCDM team # online focus group interview").
10) Interruptions	- Use local recording
11) Advice	<b>Ref</b>
12) Sent out consent forms in advance, and used Adobe Sign to	<a href="https://helpx.adobe.com/au/acrobat/using/send-for-signature.html">https://helpx.adobe.com/au/acrobat/using/send-for-signature.html</a>
13) Zoom allows for the process of gathering signatures from	<a href="https://www.mentimeter.com/">https://www.mentimeter.com/</a>
participants	<a href="https://support.zoom.us/hc/en-us/articles/203395347-Screen-Sharing-a-PowerPoint-Presentation">https://support.zoom.us/hc/en-us/articles/203395347-Screen-Sharing-a-PowerPoint-Presentation</a>
14) A couple of activities involved online polls that display	<a href="https://support.zoom.us/hc/en-us/articles/115000424286-Sharing-Multiple-Screens-Simultaneously">https://support.zoom.us/hc/en-us/articles/115000424286-Sharing-Multiple-Screens-Simultaneously</a>
people's votes instantly, using Mentimeter	
15) Zoom bring in slide (P1) and "split your screen" (P6) was	
expensive of the screen	
16) Scheduling more time/fewer topics for online focus groups	
than comparable face-to-face groups.	
17) Avoiding a long list of questions is critical to the success of	
the online focus group, 12 to 15 questions is ideal.	
18) In-built speaker	
For both audio and video	
questions as g	
questions	

## Common issues:

- Joining/connecting issues
  - Sound quality issues
  - ZOOM account meeting time limit
  - Privacy issues

## Suggestion.

- Directed participants to the Help page in the participation information and encouraged participants to login on early.
  - Sent out consent forms in advance, and used Adobe Sign to automate the process of gathering signatures from participants.
  - Allocated time at the beginning of the focus group to providing a brief tutorial on software.

# Supplements: Consent form & ZOOM user guideline

## 그룹 인터뷰 안내 및 동의서

# Zoom User Guide

Meeting ID: 000-000-0000

Password: 00000000

## 어떻게 줌 미팅에 참여하나요?

회의 링크를 클릭하거나, 회의 아이디와 비밀번호를 입력하여 회의에 참여할 수 있습니다.

### 회의 참가

회의 ID 또는 개인 ID, 이름

Jin Kim

회의 참가자 목록

14:45:02:237

## 블루투스 헤드셋을 사용할 수 있나요?

네, 사용 가능합니다.

## 어떻게 오디오/비디오를 설정하나요...?

### Meeting Controls

The screenshot shows the Zoom Meeting Controls interface. It includes the following controls:

- Mute/unmute the room microphone
- Start/stop the room video
- Share content from your laptop or mobile device
- Change your video display layout
- Speaker View: switches between participant and Gallery View shows all attendees in grid
- Control PTZ camera settings, presets, or switch to secondary camera
- View and manage the meeting participants
- Leave the meeting or end the meeting if host
- Invite by contact, email, phone, or room system
- Your meeting join info (meeting ID, participant ID, and dial-in)
- Access room settings (requires app lock code)
- Start recording to the cloud
- Adjust room speaker volume

# Supplements: FGI Slides

During the FGI, we shared the screen of this slide to guide and let participants know the whole process and proceedings



**Introduction**

04. 온라인 전시 소개

Online Museum이란,

**Scenario**

04. 온라인 전시 소개

온라인 전시 보고 싶은 상황

무엇을 (전시관련으로) 누구와 언제 어디서(와) (목적) 어떻게(TV, mobile, PC)

05. 온라인 전시 경험

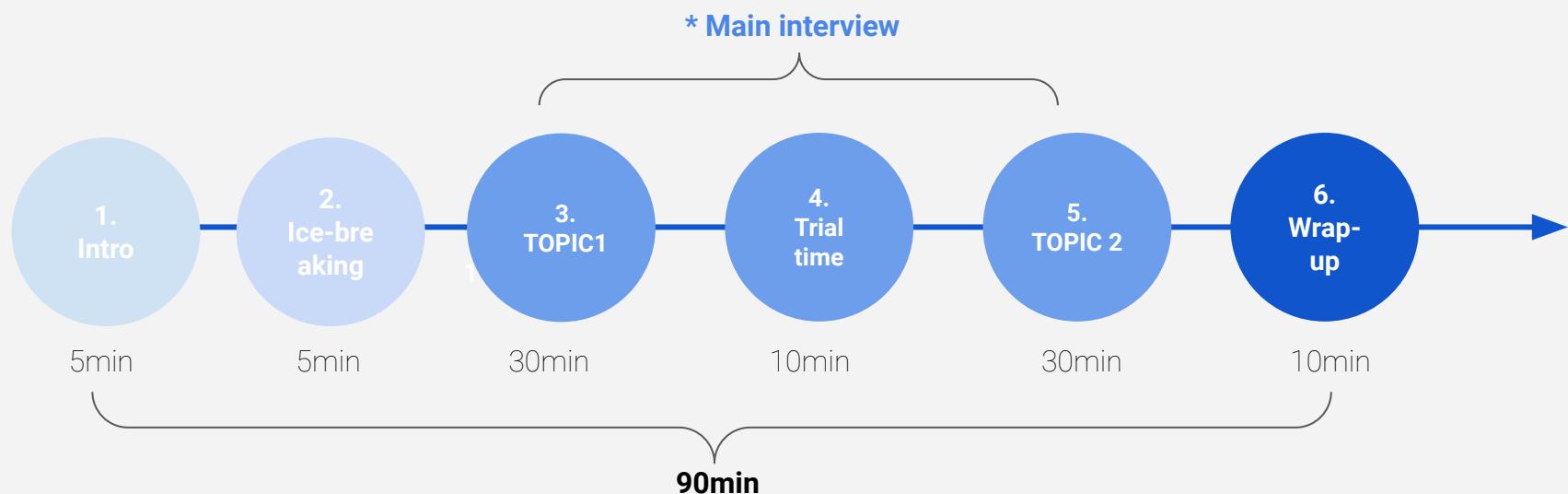
05. 온라인 전시 경험

왜 많이 이용하지 않을까요?

# FGI implementation



# FGI Structure



# 1.Intro & 2.Ice-breaking (10min)

## Welcoming

- Introduction of a moderator and staffs
- To say “Thank you” for participation

## Introduction of the research

- To Introduce the theme and goal of the interview
- To give participants a guideline of focus group interview

## To inform a consent form

- Theme of the interview
- Recording of the interview
- Confidential & Privacy protection issue

## Self-introduction of participants

### 그룹 인터뷰 안내 및 동의서

안녕하세요. 인터뷰에 참여를 희망해주셔서 진심으로 감사드립니다. 아래 사항을 읽으신 후, 모든 내용에 동의하고 인터뷰에 참여하기를 원하시는 경우 동의서 하단에 서명해주시기를 바랍니다.

#### <인터뷰 안내>

본 인터뷰는 KAIST 산업디자인학과 User Centered Design Methodology 수업의 일환으로, **Immersive Exhibition Experience Extensions Project based on Future Prospects and User Research**

프로젝트 진행에 앞서 실제 사용자들의 실황을 파악하기 위한 그룹 인터뷰(Focus Group Interview)입니다. 참가자는 진행자가 제시하는 질문에 따라 자유롭게 의견을 제시하시고 함께 대화에 참여하시면 됩니다. 인터뷰 시간은 약 1시간 30분 정도 소요되며, 전체 인터뷰 과정은 영상으로 기록됩니다.

#### <비밀 유지>

모든 인터뷰 과정에 대한 기록과 결과물, 사전 조사 내용은 피험자의 개인정보와 연관되어 기록되지 않습니다. 연구자들에 의해 연구 분석 용도로만 사용되며, 연구 목적 이외로는 사용되거나 공개되지 않습니다.

#### <참여 관련>

본 인터뷰와 관련된 의문사항은 언제든지 아래 담당자에게 문의하시기 바랍니다.

KAIST 산업디자인학과  
김진이 010-6547-9686  
전운희 010-3536-9270  
최지훈 010-3018-1140  
심열 010-2853-1551

위 모든 사항에 대해 동의하며 인터뷰에 참여하기를 희망합니다.

2020. 03. 29.

성명

서명

### 3. Part A: Offline Museum (30min)

#### Topic

#### Questions[일부발췌]

Orientation

..... What kind of exhibition you usually visit?

Purpose / Motivation of visiting

..... When / why do you go to the exhibitions?

Visiting habits

..... Usually go by yourself? Or go with your friends?  
What is the atmosphere of exhibition? Are you satisfied with it?

Finding habits \*under observation

..... How to watch the exhibition?  
Docent

# 4. Trial time (10min)

## Why & How do we set this part?

- Since all the participants have not experienced online museums, it is necessary to have an introduction time to help participants answer online exhibitions.
- Before trial time, by asking what kind of perceptions they have about online exhibitions, we were able to get various expectations of online exhibition from participants.
- After that, we briefly introduced the online museum and had a 10-minute experience of Google Arts & Culture.

## Why do we choose Google Art & Culture?

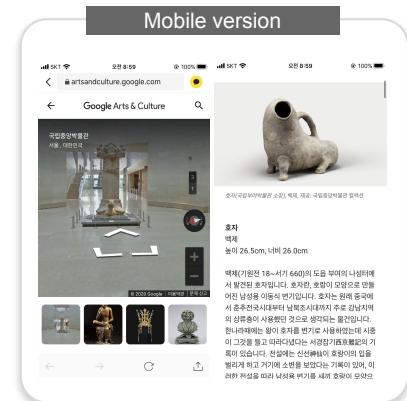
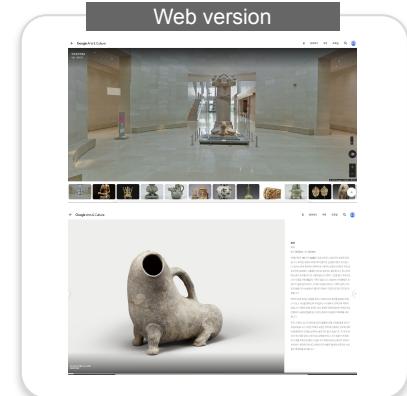
- It is one of most famous and huge online museum.
- select museum that allows them to experience many functions in a short time.

## Why do we set 10 mins?

- Before actual FGI, we asked 2 friends to visit this website without time limitation. Both of them had feedback in 5 minutes. So we think 10 mins is enough for visiting an online exhibition roughly.
- Our goal is to find light experiences, feelings and inconveniences of online.

## Why 2 versions?

- To ask which one was more satisfying between 2 devices in the same exhibition.



## 5. Part 2: Online museum (30min)

### Topic

**Knowledge/Opinions about online museum exhibition**

**Expectation of online museum experience (content, tech etc.)**

**Which form factor is better to use (ex. Online platform etc.)**

**Scenario of using online museum**

### Questions[일부발췌]

..... What did you think of the online museum?

..... What content would you like to have in the online exhibition?

..... Understanding the advantages / limits of the online platform  
How about seeing the exhibition as an online platform?

..... When do you feel like going to an online exhibition?  
Describe the situation in which you would like to use an online museum

# 6. Wrap-up (10min)

## Topic

### Extra-comments

- Questions, ideas
- Comments about the interview



### Expression of gratitude (and giving a reward)



# Data analysis



Just what participants said

ex. 도슨트를 듣고 들으면 너무 몰입하게되서 내 해석을 못하게되나깐 한번 혼자 다니면서 나만의 해석을 해보고 두번째 둘 때 도슨트를 들으면서 돌아다니는데요.

Arrange them without any bias and researcher's opinion

ex. 혼자 전시장을 쭉돌아보며 나만의 해석을 한번한다. 그리고 나서 도슨트를 들으면서 다시 재관점을 한다. 이는 사용자가 도슨트를 먼저 듣고 너무 그 의견에 몰입하면 자신만의 해석을 하기 어려워질 수 있기 때문이다.

Affinity diagram from fact finding

ex. 사용자마다 작품 설명을 제공싶어하는 정도, 제공 순서 및 방식이 다르다.

1) '정보 제공에 대한 선택적 수용' / '제공되는 정보의 양'을 조절한다.  
(ex, 이미지만, 텍스트설명, 영상설명, 도슨트 등)  
2) 설명을 받는 순서 및 방식  
(ex. 이미지만 봤다가 도슨트)  
을 고려한 정보 제공 방식을 구체화해야한다.

# Data analysis - Affinity Diagram

각 row 열이 의미하는 바를 고찰하고, type 1, type 2를 매칭하여 비슷한 인사이트들끼리 그룹핑하고, 사용자가 온라인 전시에 기대하는 바와 니즈들을 정리하고자 했다.

Type 1 : offline/online pain points and merit points

Type 2: Based on the type1, we divided four category to get insights for a systematic analysis of the data

참여자	Raw data	Fact Finding	Analysis	Type 1	Type 2	Insight
				ON pain	4	4
D	장- 아가 일원인 만족도에 만족하는 것 같아요. 군인하고 노릴 수 있고, 실제 활동을 했다는 느낌이 있어서는 확신히 만족도를 보았어요. 가령 실제 활동을 보았다는 느낌이 잘 안드는 것 같아요.	온라인 상에서의 작품을 감상함으로써 공간감을 찾을 수 있어서 실제 작품을 보았다고는 느끼지 못합니다.	온라인 전시는 접 칭이나 품입을 하기 어려운 요소들이 존재한다.	ON pain	4	4
A	안- 비슷한 느낌이 있긴 험에, 구글 이미지 서치에서 다른 사람들의 찍어놓은 사진을 보고 그런 느낌이에요.	온라인 전시에서 본 작품을 구글 이미지 검색을 통해 한 작품 이미지를 본 것과 비슷하게 느낀다.	<오프라인 전시> - 시각적 경험을 통해 작품을 감상하는 것과는 다른 경험을 제공하는 것 - 풍경의 크기 - 소품의 정체 - 조명 - 배경음악의 세부 등	ON pain	1	1
A	위례 작품에서 느껴지는 아우라, 감성이 안 느껴지는 거 같구요. 이게 온라인이다 보니까 꾀지지 않아. 형태가 아무것도 없잖아요. 그	온라인 전시에서는 예술 작품에 대한 관심을 놓거나 작품에 대한 감정을 아우러지거나 작품에 대한 감정을 놓게 하는 거 같다.	아카이빙을 보는 느낌과 흐지 않도록 온라인 전시 기획을 할 필요가 있다.	ON pain	1	1
A	작같은 걸수는 수비연이(기념품) 행기인가는 경우도 많은데 온라인 전시는 괴짜처럼 수비연이 아니거나 감상성을 놓게 하는 것 같습니다.	온라인 전시에서 작품을 모으는 것에 흥미를 느낀다.	온라인 전시는 풍경적인 형태로 아우러지는 현장감을 어우러나, 작품에 대한 감정을 온라인에서는 얻기 어려워서 전시장을 찾을 때마다 작품을 감상해 대체로 수익을 찾을 수 있도록 하는 방법이 필요하다.	ON pain	1	1
A	그래서 만족하는 것도 없고, 거기까지 수 있는 것도 없구. 그래서 오프라인 전시는 경우가 많아요.	온라인 전시는 풍경적인 형태로 아우러지는 현장감을 어우러나, 작품에 대한 감정을 온라인에서는 얻기 어려워서 전시장을 찾을 때마다 작품을 감상해 대체로 수익을 찾을 수 있도록 하는 방법이 필요하다.	> 온라인에서 감상할 재미를 찾는 방법	Off merit	1	1
A	오- 이게 그니까 저는 소리 같은게 있어 맞는 얘기지 모르겠는데 전시를 가는 것 중에 하나가 사실 시간을 소비하기 위해 가는 것 같기도 해.	온라인 전시에서 작품을 모으는 것에 흥미를 느낀다.	온라인 전시는 풍경적인 형태로 아우러지는 현장감을 남기 감상하고 암자 한다.	Off merit	1	1
B	근데 온라인 전시는 저로 결론을 내렸더니, 시간을 써서 나를 위해서 시간을 소비하다가 보면 저마다 짐이 들어온다면서 저 짐을 끌어야 되는데.	온라인 전시는 풍경적인 형태로 아우러지는 현장감을 남기 감상하고 암자 한다.	온라인 전시는 풍경적인 형태로 남기는 것이 있는 게 아쉽다.	Off merit	1	1
B	그리고 온라인 전시는 저로 결론을 내렸더니, 시간을 써서 나를 위해서 시간을 소비하다가 보면 저마다 짐이 들어온다면서 저 짐을 끌어야 되는데.	온라인 전시는 풍경적인 형태로 아우러지는 현장감을 남기 감상하고 암자 한다.	1) 온라인에서 개인 정보를 넣는 세로형은 온라인 기념품(리워드)을 제공한다. 2) 온라인에서 개인 정보를 넣으면서 암자로 남기는 것에 대한 기쁨을 제공한다.	Off merit	1	1
B	도- 이게 그니까 저는 소리 같은게 있어 맞는 얘기지 모르겠는데 전시를 가는 것 중에 하나가 사실 시간을 소비하기 위해 가는 것 같기도 해.	온라인 전시는 풍경적인 형태로 아우러지는 현장감을 남기 감상하고 암자 한다.	사람들은 시간을 소비하는 행위로 인해 전시를 보고 있다. 사람들은 시간을 소비하는 행위로 인해 전시를 보고 있다. 사람들은 시간을 소비하는 행위로 인해 전시를 보고 있다.	Off merit	1	1
B	그리고 온라인 전시는 저로 결론을 내렸더니, 시간을 써서 나를 위해서 시간을 소비하다가 보면 저마다 짐이 들어온다면서 저 짐을 끌어야 되는데.	온라인 전시는 풍경적인 형태로 아우러지는 현장감을 남기 감상하고 암자 한다.	1) 개인 정보를 넣으면서 암자로 남기는 것에 대한 기쁨을 제공한다. 2) 개인 정보를 넣으면서 암자로 남기는 것에 대한 기쁨을 제공한다.	Off merit	1	1
B	근데 온라인 전시는 저로 결론을 내렸더니, 시간을 써서 나를 위해서 시간을 소비하다가 보면 저마다 짐이 들어온다면서 저 짐을 끌어야 되는데.	온라인 전시는 풍경적인 형태로 아우러지는 현장감을 남기 감상하고 암자 한다.	1) 개인 정보를 넣으면서 암자로 남기는 것에 대한 기쁨을 제공한다. 2) 개인 정보를 넣으면서 암자로 남기는 것에 대한 기쁨을 제공한다.	Off merit	1	1
C	전- 결국 온라인으로 관계하고 밖에 생각이 안드는 이유가.	온라인 전시는 자료 같은 걸 찾는 느낌이 아니라, 시사하는 내용을 찾는 느낌이다. 따라서 나	온라인 전시는 자료 같은 걸 찾는 느낌이 아니라, 시사하는 내용을 찾는 느낌이다. 따라서 나	ON pain	1	1
C	오프라인 전시를 보려고 했던 걸감도 있고, 의도와 높은 글씨나 배지에 집중하게 되는데 온라인으로 그런 것도 없어.	온라인 전시는 자료 같은 걸 찾는 느낌이 아니라, 시사하는 내용을 찾는 느낌이다.	1) 오프라인 전시를 찾는 이유는 작품을 찾기 위해서 소비하는 시간으로 인지하고 있다. 2) 작품을 찾기 위해서 소비하는 시간으로 인지하고 있다.	OFF merit	1	1
C	온라인 전시는 저로 결론을 내렸더니, 시간을 써서 나를 위해서 시간을 소비하다가 보면 저마다 짐이 들어온다면서 저 짐을 끌어야 되는데.	온라인 전시는 자료 같은 걸 찾는 느낌이 아니라, 시사하는 내용을 찾는 느낌이다.	1) 개인 정보를 넣으면서 암자로 남기는 것에 대한 기쁨을 제공한다. 2) 개인 정보를 넣으면서 암자로 남기는 것에 대한 기쁨을 제공한다.	OFF merit	1	1
C	온라인 전시를 보려고 했던 걸감도 있고, 의도와 높은 글씨나 배지에 집중하게 되는데 온라인으로 그런 것도 없어.	온라인 전시는 자료 같은 걸 찾는 느낌이 아니라, 시사하는 내용을 찾는 느낌이다.	1) 개인 정보를 넣으면서 암자로 남기는 것에 대한 기쁨을 제공한다. 2) 개인 정보를 넣으면서 암자로 남기는 것에 대한 기쁨을 제공한다.	OFF merit	1	1
	천안은 20분마다 고장 시간이 다리는 친구도 있는데 사람들은 그 친구를 좋아하는 듯한 걸 찾는 느낌이다. 그래서 그 스터디마다 노트로 출석증을 나누면 좋을 것 같아요.	온라인 전시는 저로 결론을 내렸더니, 시간을 써서 나를 위해서 시간을 소비하다가 보면 저마다 짐이 들어온다면서 저 짐을 끌어야 되는데.	1) 개인 정보를 넣으면서 암자로 남기는 것에 대한 기쁨을 제공한다. 2) 개인 정보를 넣으면서 암자로 남기는 것에 대한 기쁨을 제공한다.	OFF pain/ On exp	1	2 personalized service 의 필요성

# Results of Affinity Diagram

	Merit points	Pain points
Offline	Offline merit points	Offline merit points
Online	Online merit points	Online merit points

For a systematic analysis of the data, and for specifying the guidelines, we grouped the analyzed data like this.

Analyzed data Table

- ① Offline merits → Online can apply
- ② Offline pains → Online can solve
- ③ Online merits → Online can strengthen
- ④ Online pains → Online should solve

Type 1

Type 2

# Analytical framework for Insights and design considerations

Since we have several insights, in order to present them more clearly, we analyzed our insights by this framework, categorized them into 4 dimensions and made design considerations for each one

	Merit Points	Pain points
Offline	<p><b>1. Online can apply</b></p> <ul style="list-style-type: none"><li>1) Visitors expect to choose what information they get and how they get it</li><li>2) Visitors expect to keep evidences to mark and remember their exhibition experience</li></ul>	<p><b>2. Online can solve</b></p> <p>Visitors expect to appreciate exhibition according to their personal habits</p>
Online	<p><b>3. Online strengthened</b></p> <ul style="list-style-type: none"><li>1) Visitors expect new content and interactive method on online exhibition</li><li>2) Visitors expect to visit exhibitions without temporal/spatial limitations</li></ul>	<p><b>4. Online should solve</b></p> <p>Online exhibitions has a critical issue for engagement</p>

Offline merits → Online can apply

# Insight 1-1



## Visitors expect to choose what information they get and how they get it

We found that visitors have different goals(ex. Inspiration, entertainment) and even the same person can look at the same exhibit many times, each time in a different way and with different expectations. Visitors expect to hear different voices from docent or friend and leave the act of interpretation to themselves,



(P3) “그 이유같은걸 다시생각해보고 도슨트를 들으면서 내가했던 생각들과 이런 차이가 있구나 하는점”

(P3) “오프라인 전시를 보려면 의도해 놓은 글귀나 배치에 집중하는 편이에요...”

(P1) “전시장에서는 도슨트를 안듣거나 설명을 안읽을 수 있었는데 온라인전시는 일단 해석이 옆에 나오니까 보이더라고요.”

## Design Consideration

**1.Designers should consider how to provide moderate information level of the content for each user**

Ex) Customized service(timing, amount of information...)

**2.Designers should consider different information accepted methods of different users**

Ex) Proactive chat-bot

Offline merits → Online can apply

# Insight 1-2

**Visitors expect to keep evidences  
to mark and remember their exhibition experience**

We found that visitors keep some physical evidence(tickets, brochures or souvenirs) to mark and remember museum visiting as a special experience. To some degree, the physical evidence becomes the embodiment of their personal experience.



(P1) “전시 들어가기 전에 팜플렛이나 전시 티켓을 꼭 챙기거든요…”

(P1) “그래서 인상 깊었던 것들을 소장하고 싶다는 마음에 티켓 모으기를 하는 것 같아요…”

(P1) “항상 하는 건 아니고 진짜 좋다 생각한 전시가 있으면 티켓이나 팜플렛을 챙기는 편이고…”

## Design Consideration

**1. Designers should consider the proper content of online museum “souvenirs”**

Ex) physical or digital? personalized or common?

**2. Designers should consider how to help visitors to keep the evidence of online visiting**

Ex) Physical souvenir delivery service, online badges, SNS sharing

Offline pain → Online can solve

## Insight 2



### **Visitors expect to appreciate exhibition according to their personal habits**

We found that offline exhibition has lots of prohibition rules such as not going out during exhibitions, not making photos and making noises because of the etiquette for other visitors. In this case, online exhibitions don't have such rules and make users enjoy with its own exhibitions process.



(P3) "사람이 너무 많아서 표를 끊는데도 한시간이 걸렸고 들어갔는데 일렬로 사람들을 사이에 보는데..."

(P1) "주변에 관람하는 사람 스타일이 내 전시 스타일과 완전히 달라서..."

(P3) "조금 시끄럽고 사진을 많이 찍느라 관찰하고 보기힘든 것들이 많아요..."

### Design Consideration

- 1. Designers should consider about how to make sure the flexibility of online visiting**  
→ Pausing and continuing to view exhibitions functions, etc
- 2. Designers should consider what points that visitors want but can not do in offline but can do online**  
→ Services allow users to take photos and record of as much as they want to etc.

Online merits can be strengthened

## Insight 3-1



**Visitors expect new content and interactive method on online exhibition**

We found that visitors regard online museum as a complementary extension of offline museum rather than information archiving library. Moreover, visitors enjoyed various interactive multimedia(ex.vr,ar..) on the online museum



(P2)"원가 vr, ar 같은 기술을 썼을 것 같고, 소셜미디어 댓글기능을 사용한 것들이 있을 것 같아요..."

(P1)"저도 그냥 원래 있는 미술과 공간을 온라인으로 옮겨놨다 이런 개념보다는 원가 다른 걸 기대해요..."

### Design Consideration

- 1. Designers should consider about the orientation of online and offline museum and how to combine them**→ ex) before visiting: online can be an information channel for offline museum
- 2. Designers should consider about how to apply new interactive method on proper contents on the Online museum** → ex) Gamelification / Immersive theater
- 3. Designers should consider about how to achieve the online community engagement**  
→ Large-scale Live Chat, Sharing like a Social media.

Online merits can be strengthened

## Insight 3-2

**Visitors expect to visit exhibitions without temporal/spatial limitations**



We found that people prefer online exhibitions because users can see the exhibitions in the desired context. In the case of offline exhibitions, physical effort and preparation are required due to temporal/physical limitations.



(P1) “그리고 지금 상황처럼 코로나로 인해서 밖에 못 나가는 경우에는 .. 집에서 볼 수 있죠”

(P2) “쇼파에 걸쳐앉아서 티비로 보면서 신비하고 새로운 경험을 하고싶어요...”

(P3) “다들 삶이 바쁘시잖아요. 그래서 원하시는 전시에도 못가는 경우가 많으실 텐데...”

(P3) “평일 7시, 8시에 끝나면 일하고 난후 보기 가 되게 어렵거든요...”

### Design Consideration

**1. Designers should consider how to take the advantage of no limitations of time and space**

→ ex) 24/7 real time exhibition services, introducing non-local exhibitions

**2. Designers should consider various devices that user may use**

→ ex) adaptive screen size, multi-screen available in some environment, for example, home

Online pain → Online should solve

## Insight 4

### ***Online exhibitions has a critical issue for engagement***

Engagement is the critical issue. It is very hard for visitors to focus on the online exhibition. They may get disturbed easily from the device(ex.kakao message) and the surrounding context. Lack of physical presence and spatial sense are also important contributing factors to engagement issue.



(P4) “공간 안에서 이 물건을 보고 있다는 실감이 좀 안나는 느낌이에요...”

(P1) “구글 이미지 서치에서 다른 사람들이 찍어놓은 사진을 보고 간 느낌이에요...”

(P2) “평면 >평면에 옮겨 놓는거 같은 그림을 그림에 옮겨놓는 사이트라고 생각했어요...”

### Design Consideration

#### **1. Designers should consider about the possible environmental issues while online visiting**

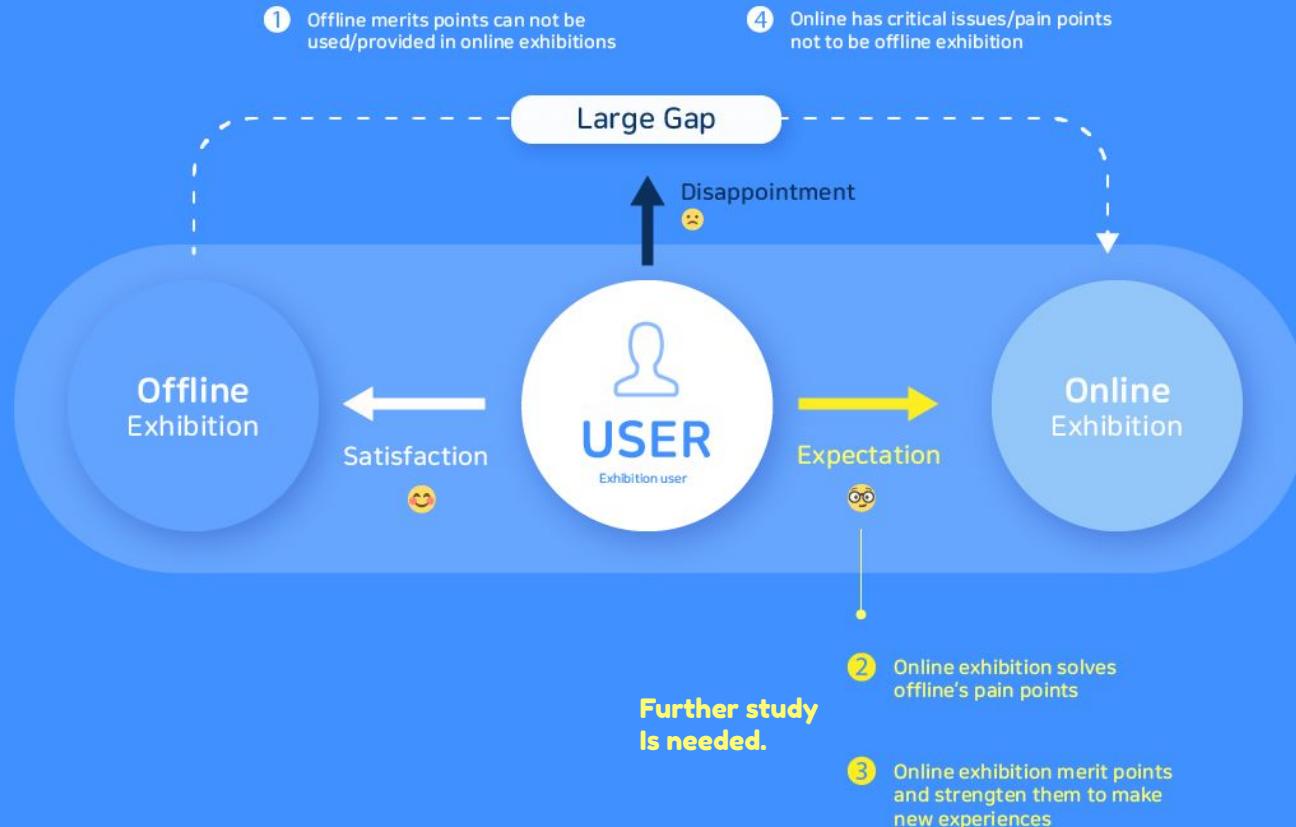
→ Before starting, providing a preliminary guide to where and when is good to appreciate it.

#### **2. Designers should consider about how to use the five senses to enhance the engagement of visitors**

→ Using background music and colors, brightness, holographic technology

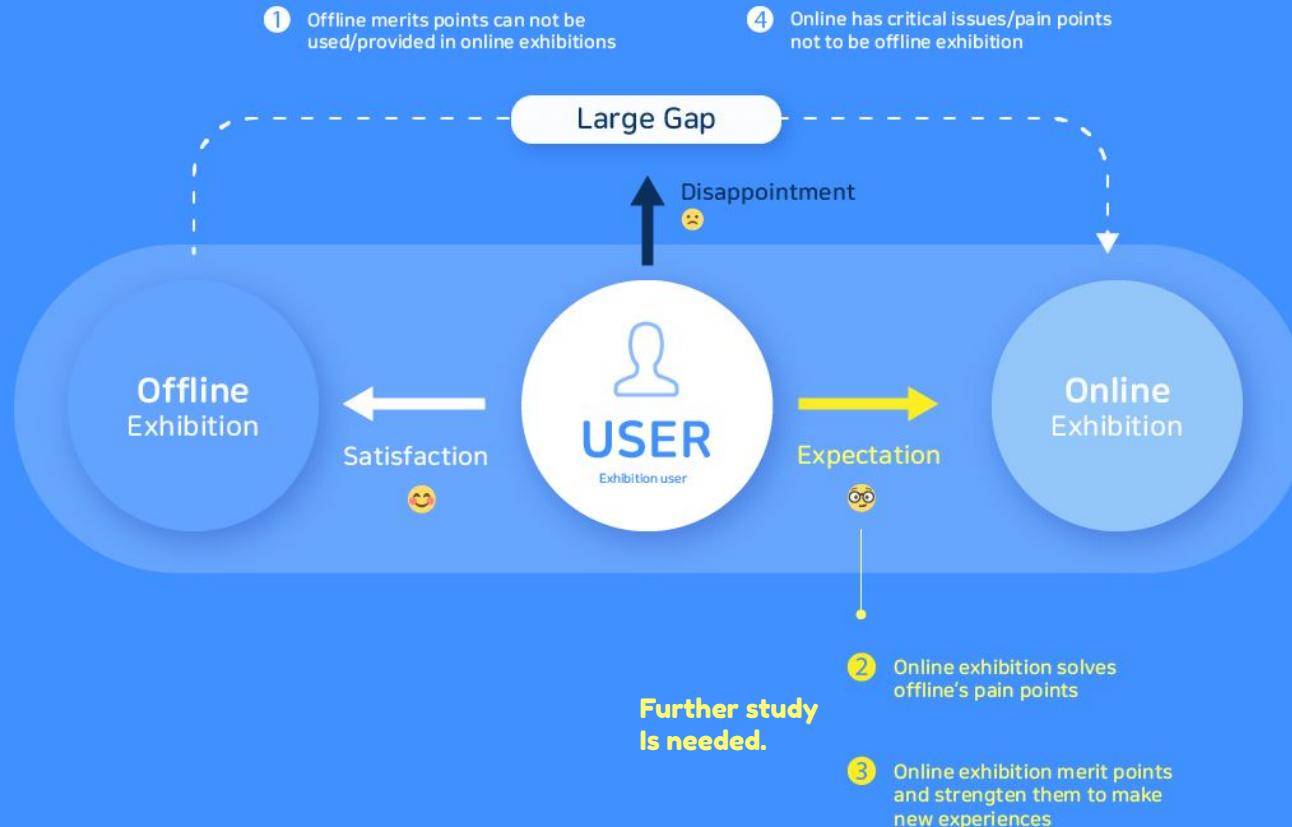
# Conclusion

## When mimicking



# Conclusion

## When mimicking



# Reflection

## Q. What the difficulties were in conducting the focus group

- The limitation of online: it is hard to control other participants behavior and technical issues
- For ethical issues: The researchers find it hard to control other participants who may record online videos or reveal secrets.
- The importance of the moderator's skill is too high during the process.
- The importance of the questions or examples → hard to answer or limiting the imagination

## Q. Any problems during interpreting the data

- During data analysis, especially 'fact finding methods', it was hard to prevent the researcher's judgment from being involved.

## Q. How the focus group helped your design project or did not help

- [helped] breaking stereotype about user's preferences of exhibition appreciate methods
- [did not help] They said just personal opinion and bias based on personal interests(majors) and background

# Reflection

## Q. What you would have done better

- It would better to use the nickname to protect their privacy
- Reduce moderator intervention to give more opportunities for participants talk more
- We did not have a lot of time left, we were not able to recruit people who are experienced Online museum

## Q. Good Points

- Giving time to experience the online exhibition first
- Well-structured questions → Little overlapping answers
- Through rehearsal, we can prevent problems that may occur in advance

**THANK  
YOU**