Appendix

DESIGN FOR our future

TU Delft

IDE Master Graduation

Project team, Procedural checks and personal Project brief

This document contains the agreements made between student and supervisory team about the student's IDE Master Graduation Project. This document can also include the involvement of an external organisation, however, it does not cover any legal employment relationship that the student and the client (might) agree upon. Next to that, this document facilitates the required procedural checks. In this document:

- The student defines the team, what he/she is going to do/deliver and how that will come about.
- SSC E&SA (Shared Service Center, Education & Student Affairs) reports on the student's registration and study progress.
- IDE's Board of Examiners confirms if the student is allowed to start the Graduation Project.

USE ADOBE ACROBAT READER TO OPEN, EDIT AND SAVE THIS DOCUMENT
Download again and reopen in case you tried other software, such as Preview (Mac) or a webbrowser.

STUDENT DATA & MASTER PROGRAMME

Save this form according the format "IDE Master Graduation Project Brief_familyname_firstname_studentnumber_dd-mm-yyyy".
Complete all blue parts of the form and include the approved Project Brief in your Graduation Report as Appendix 1 !

family name: Yao
initials: Y. given name: Yingzhu
student number: 4943279
street & no.:
zipcode & city:
country: Netherlands
phone:
email:

Your master programme (only select the options that apply to you):
IDE master(s): ( ) IPD (★) DfI ( ) SPD
2nd non-IDE master:
individual programme: - - (give date of approval)
honours programme: ( ) Honours Programme Master
specialisation / annotation: ( ) Medisign ( ) Tech. in Sustainable Design ( ) Entrepeneurship

SUPERVISORY TEAM **

Fill in the required data for the supervisory team members. Please check the instructions on the right !

** chair: Arnold Vermeeren dept. / section: HCD/HICD
** mentor: Ianus Keller dept. / section: HCD/DCC
2nd mentor: Miriam Soesan
organisation: Liquid Studio | Accenture
city: Utrecht country: Netherlands
comments (optional)

Chair should request the IDE Board of Examiners for approval of a non-IDE mentor, including a motivation letter and c.v..

Second mentor only applies in case the assignment is hosted by an external organisation.

Ensure a heterogeneous team. In case you wish to include two team members from the same section, please explain why.

TU Delft

Procedural Checks - IDE Master Graduation

APPROVAL PROJECT BRIEF

To be filled in by the chair of the supervisory team.

chair Arnold Vermeeren date 12 - 03 - 2020 signature

CHECK STUDY PROGRESS

To be filled in by the SSC E&SA (Shared Service Center, Education & Student Affairs), after approval of the project brief by the Chair.
The study progress will be checked for a 2nd time just before the green light meeting.

Master electives no. of EC accumulated in total: ____ EC
Of which, taking the conditional requirements into account, can be part of the exam programme ____ EC
List of electives obtained before the third semester without approval of the BoE

( ) YES all 1st year master courses passed
( ) NO missing 1st year master courses are:

name date - - signature

FORMAL APPROVAL GRADUATION PROJECT

To be filled in by the Board of Examiners of IDE TU Delft. Please check the supervisory team and study the parts of the brief marked **.
Next, please assess, (dis)approve and sign this Project Brief, by using the criteria below.

- Does the project fit within the (MSc)-programme of the student (taking into account, if described, the activities done next to the obligatory MSc specific courses)?
- Is the level of the project challenging enough for a MSc IDE graduating student?
- Is the project expected to be doable within 100 working days/20 weeks ?
- Does the composition of the supervisory team comply with the regulations and fit the assignment ?

Content: ( ) APPROVED ( ) NOT APPROVED
Procedure: ( ) APPROVED ( ) NOT APPROVED
comments

name date - - signature

A | PROJECT BRIEF

Personal Project Brief - IDE Master Graduation

TU Delft

Interactive storytelling installation for technology exhibition — project title

Please state the title of your graduation project (above) and the start date and end date (below). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

start date 12 - 03 - 2020 — 06 - 08 - 2020 end date

INTRODUCTION **

Please describe, the context of your project, and address the main stakeholders (interests) within this context in a concise yet complete manner. Who are involved, what do they value and how do they currently operate within the given context? What are the main opportunities and limitations you are currently aware of (cultural- and social norms, resources (time, money,...), technology, ...).

Accenture Liquid studio (LS) is a technology based innovation consulting company. They provide their technology capabilities which includes Brain-computer interface, Block chain, Cloud computing, Virtual reality, Augmented reality, Holographic, etc. These technologies have high innovation value and can provide client companies new platforms and possibilities. However, on the other hand, technologies, especially when go into more technical depth, where it starts to be even more obscure that their complexity creates a barrier to communication between potential clients, who are visiting to LS, and valuable technologies, which becomes an issue. This stops understanding and inhibits getting inspired, which blocks creativities, so that to break this barrier and build the bridge is the challenge, as illustrated in figure 1.

To face this, LS started the AR City Quest project to connect a number of demos under a virtual city context in a AR application under a game format so that user can be guided through a storyline for achieving an experiential solution. It is an opportunity to promote their internal technological capabilities through a smart environment within their office space from an immersive and informative experiences. Accordingly, the AR application will be the added smart layer to the physical demos to achieve this mixed reality in order to enhance that sense of immersive for the users.

The current demos including Blocktrain, DevOps, Magic mirror, smart plant, and so on (as shown in figure 2), where I see the potential to extend the cap throughout the experience. But for now, there is no clear narrative or overall user experience system for the City quest yet.

To achieve this overall experience, it should consist of two things, which are the group of physical demos and the AR application. The physical demos together tells the story, and meanwhile , AR application also tells the story but in a game form. By combining both part, they should create a holistic experience, while at the same time, it should be possible for them to explain the story separately.

space available for images / figures on next page

Personal Project Brief - IDE Master Graduation

TU Delft

introduction (continued): space for images

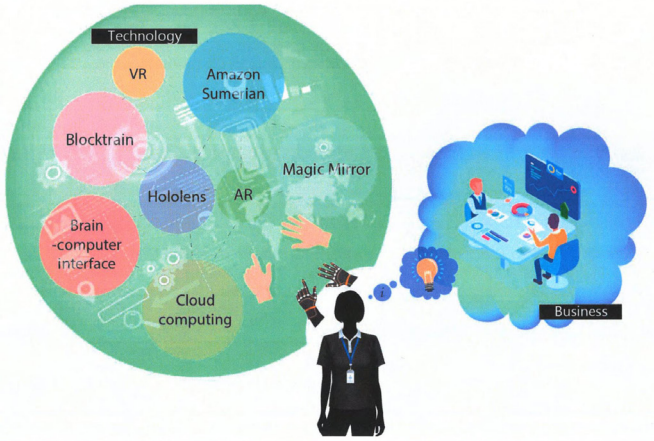


image / figure 1: To bridge for potential clients between understanding of technologies and innovative businesses

image / figure 2: Current demos in liquid studio

A | PROJECT BRIEF

Personal Project Brief - IDE Master Graduation

TU Delft

PROBLEM DEFINITION **

Limit and define the scope and solution space of your project to one that is manageable within one Master Graduation Project of 30 EC (= 20 full time weeks or 100 working days) and clearly indicate what issue(s) should be addressed in this project.

To challenge this barrier, three stages of problems are facing in this project:

1. A storyline need to be created fluidly that covering and linking through out the multiple technologies in order to smoothly get the audience involved into the blueprint of the studio's capability. Importantly, by using the storyline, it should to be able to point out the key elements that are valuable to the audience. Meanwhile, it should also be considered that the growth and changing possibilities of the demos and technologies that involves.

2. It is important to reduce complexity of information delivery from difficult languages. Keep the communication informative, but in a user friendly and effective manner as a memorable experience.

3. How to create two parallel story lines (physical demos, and AR application) that are complete when they are experienced separately, and on the other hand, they should be able to be combined into one holistic experience.

Potentially, by facing the situation that the visitors usually come in groups, it could be interesting to explore how in the future the AR application can also be used as part of a group visit.

ASSIGNMENT **

State in 2 or 3 sentences what you are going to research, design, create and / or generate, that will solve (part of) the issue(s) pointed out in "problem definition". Then illustrate this assignment by indicating what kind of solution you expect and / or aim to deliver, for instance: a product, a product-service combination, a strategy illustrated through product or product-service combination ideas, ... In case of a Specialisation and/or Annotation, make sure the assignment reflects this/these.

Creating interactive exhibition in the liquid studio to provide memorable experience for inspiring potential clients around multiple technologies in order to attract new business partners.

The research will first investigate within the company as a base about the current situation within Liquid studio. It is to understand and analyze the user group, spatial condition, existing technology demonstration, and other related status. The method for this phase include field survey, user interview, and context mapping, etc. Meanwhile, installation as the story telling media with the story line will be explored by literature reviewing, case studying, prototyping and user tests and evaluations.

The outcome of this project will be a video to communicate the narrative. For integration of the physical and AR application, as there will be multiple demos involves, it will start from the Magic Mirror demo, and then from the process, to see the possibilities on moving on to a second (smart plant) and a third one (blocktrain). It possibly will have the second one be started, and having the recommendation for the third one and the overall suggestions. A poster will be designed to explain the designed storyline, and a report and final presentation for explaining the process and key results. Prototyping, communication design methods, storytelling theories will be used during design and evaluation phases.

Initials & Name Y. Yao Student number 4943279

Title of Project Interactive storytelling installation for technology exhibition

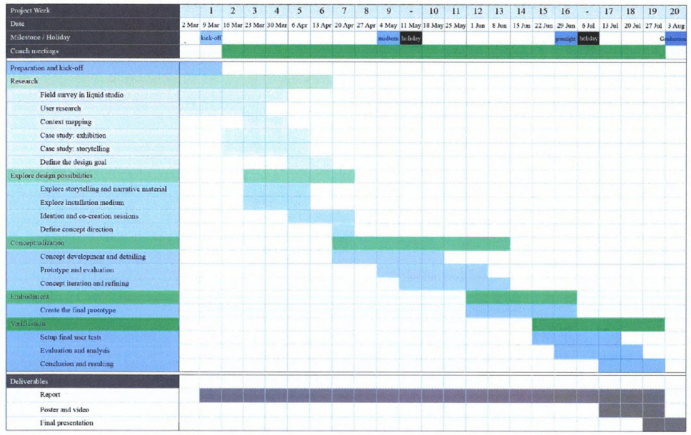
Personal Project Brief - IDE Master Graduation

TU Delft

PLANNING AND APPROACH **

Include a Gantt Chart (replace the example below - more examples can be found in Manual 2) that shows the different phases of your project, deliverables you have in mind, meetings, and how you plan to spend your time. Please note that all activities should fit within the given net time of 30 EC = 20 full time weeks or 100 working days, and your planning should include a kick-off meeting, mid-term meeting, green light meeting and graduation ceremony. Illustrate your Gantt Chart by, for instance, explaining your approach, and please indicate periods of part-time activities and/or periods of not spending time on your graduation project, if any, for instance because of holidays or parallel activities.

start date 12 - 3 - 2020 6 - 8 - 2020 end date



The project is planned into 5 parts, including research, exploration, conceptualization, embodiment, and verification.

To discover, from week 1 to week 7:
The aim is to do research and exploration around the topic to collect material that serves technology, exhibition, immersive experience, and storytelling. Through the phase, discuss about the narrative and interactions for the story line, in oder to get the design goal refined with a clear concept direction as a milestone for the project.

To design, from week 8 to week 13:
The selected concept will be then refined during this phase and meanwhile start developing the prototype with iterations. Tests and analysis will run for insights that support iterations and guide to the final version.

To finalize, from week 14 to week 20:
The final concept with the prototype will be finalized, be tested, and evaluated in the real context with user. Base on the results, recommendation for future developments could be formulated, and then wrap up the project by finishing deliverables.

Initials & Name Y. Yao Student number 4943279

Title of Project Interactive storytelling installation for technology exhibition

A | PROJECT BRIEF

Personal Project Brief - IDE Master Graduation

TU Delft

MOTIVATION AND PERSONAL AMBITIONS

Explain why you set up this project, what competences you want to prove and learn. For example: acquired competences from your MSc programme, the elective semester, extra-curricular activities (etc.) and point out the competences you have yet developed. Optionally, describe which personal learning ambitions you explicitly want to address in this project, on top of the learning objectives of the Graduation Project, such as: in depth knowledge a on specific subject, broadening your competences or experimenting with a specific tool and/or methodology, ... Stick to no more than five ambitions.

In the past, I was not a technology-loving person. When first time know about information and technology booming, I felt some fear and wondered what technology wanted. But when I gradually realized that technology is the shining point of the era I grew up, I started to learn and get engaged to it. Accept the changes it brings, and learn and promote its development. After all, technology is so attractive that it creating more possibilities among possibilities. Learning interaction design has made me see their creativity and growth even more valuable that its vitality is potentially driving society's footsteps. Technology promotes the formation, refinement, enrichment, and vision of diversification, which could be considered as the development of the society. I hope that this opportunity can be passed on to more people and play a greater role for achieving each individual. So when I met this project, I felt very much attracted. Understand the most cutting-edge technologies that framing the future, and enhance the communication in the direction of effective applications. I see this as something meaningful.

In considering of learning goal from this project, there are 2 main things. Firstly, is to gain experience in collaboration skills and communication within interdisciplinary teams to become more competitive for future career. And meanwhile, by being attracted from emerging technology, learning how these new technologies can be used in practical situations is expected to obtain during this project.

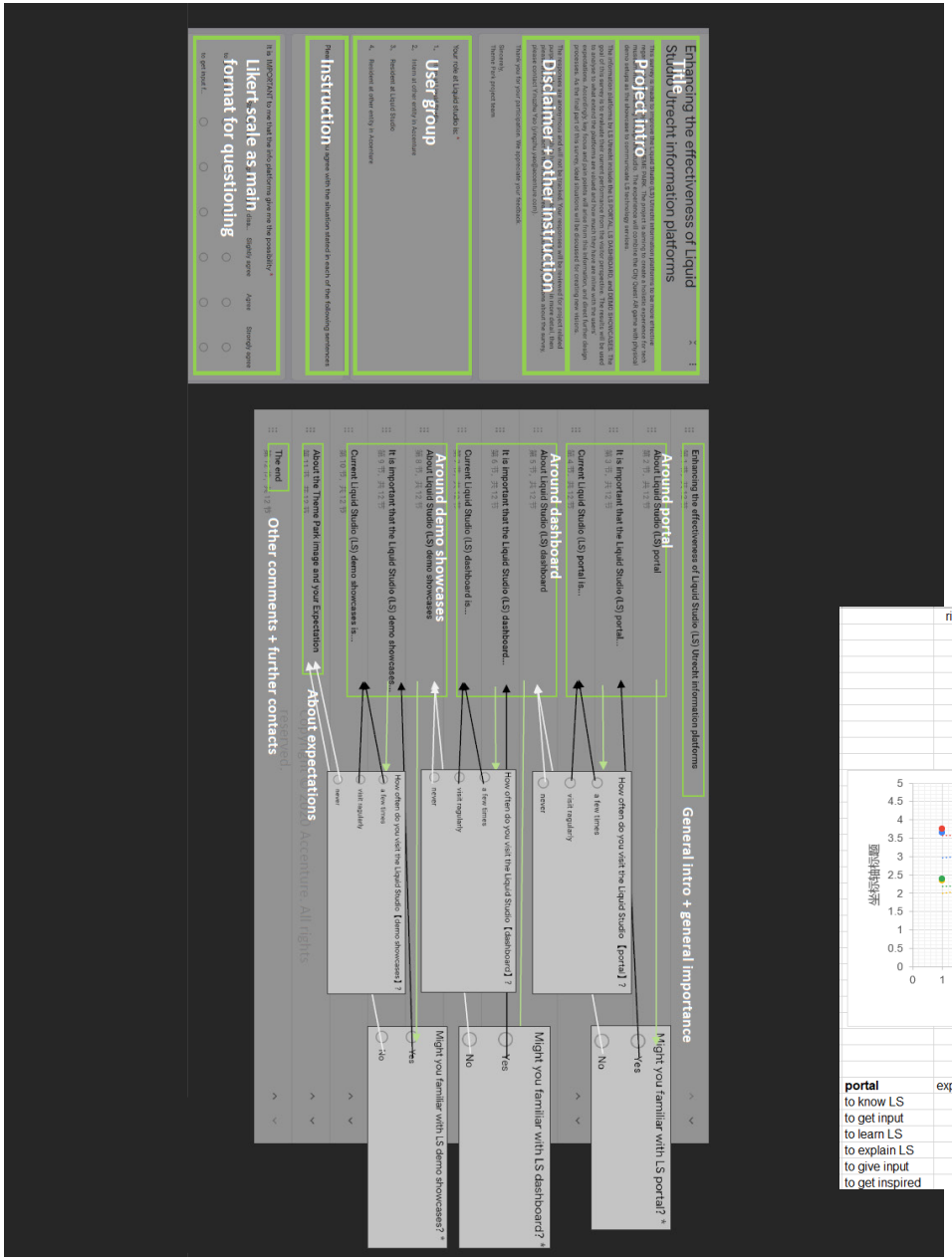
FINAL COMMENTS

In case your project brief needs final comments, please add any information you think is relevant.

Initials & Name Y. Yao Student number 4943279

Title of Project Interactive storytelling installation for technology exhibition

B | INTERNAL QUESTIONNAIRE
(DESIGNED TO DO EVALUATION CURRENT PLATFORM PERFORMANCE)



B | INTERNAL SURVEY RESULTS

Comparison raw data

demo	evious clier	evious proje	rrent proje	current clien	tees and sp	ervices offe	ial/future p	rojects	input for own projects		rich in conte	ir info hiera	echnical de	n short time	aining and playful
expectatio	2.5	3.5	4.33333	3	3	4.5	3.66667		3.5		4	3.66667	2.66667	3.66667	4.5
expectatio	2.875	2.875	3.375	2.875	2.875	3.5	3.625		3.25		3.625	3.125	2.25	3.75	4.125
satisfiction	1.5	3.66667	3.5	1.5	1.66667	3.33333	2		2.16667		2.66667	2.83333	2.33333	4	3.33333
satisfiction	1.85714	2.71429	2.57143	1.85714	2.42857	3.14286	2.28571		2.71429		2.85714	2.57143	2.14286	3.42857	3.42857

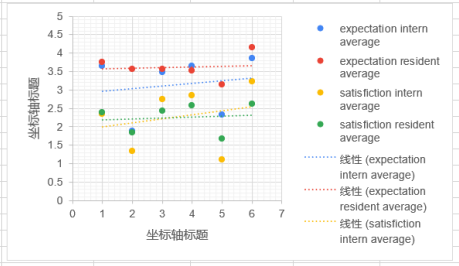
portal	to know LS	to get inpu	to learn LS	to explain	to give inp	to get inspired
expectation intern average						
expectation resident average						
satisfiction intern average						
satisfiction resident average						

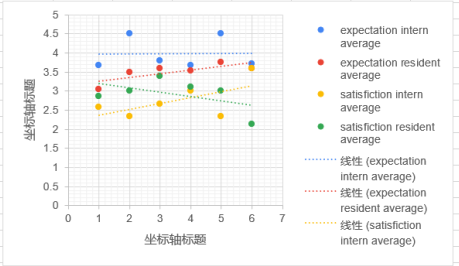
dashboard
expectation intern average
expectation resident average
satisfiction intern average
satisfiction resident average

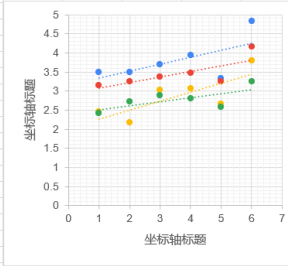
demo
expectation intern average
expectation resident average
satisfiction intern average
satisfiction resident average

portal	expectatio	expectatio	satisfiction	satisfiction	resident av	dashboar	expectatio	expectatio	satisfiction	satisfiction	resident av	demo	expectatio	expectatio	satisfiction	satisfiction	resident average
evious clier	3.44444	3.28571	1.66667	1.83333		previous clier	3.375	2.33333	1	2.5		previous clier	2.5	2.875	1.5	1.85714	
evious proje	4.11111	4	3.33333	3		previous proje	3.875	4	3.66667	4		previous proje	3.5	2.875	3.66667	2.71429	
rrent projec	4.22222	4	2.33333	2.66667		current projec	4.375	4	4	3.5		current projec	4.33333	3.375	3.5	2.57143	
urrent client	3.33333	3.42857	1.88889	2		current client	3.375	1.66667	2	2		current client	3	2.875	1.5	1.85714	
ees and spe	3.55556	3.71429	2.66667	2		employees and spe	4.125	3.66667	3	3.5		employees and spe	3	2.875	1.66667	2.42857	
ervices offe	4.33333	4.28571	3.44444	2.83333		services offe	3.125	2.33333	2.66667	2.5		services offe	4.5	3.5	3.33333	3.14286	
ial/future pr	2.55556	3.57143	1.11111	2.33333		potential/future pr	3.5	3.33333	1.66667	2		potential/future pr	3.66667	3.625	2	2.28571	
	3.65079	**3.7551**	**2.34921**	**2.38095**			**3.67857**	**3.04762**	**2.57143**	**2.85714**			**3.5**	**3.14286**	**2.45238**	**2.40816**	

rich in content	clear info hierarchy	th technical deta	in short time	aining and playful	input to other's projects	see new visi	out technolo	new tech l	benefits for clients
4.166666667	4	2.833333333	4	4.66667	3.33333	4.66667	5	4.83333	4.83333
3.875	3.25	2.375	3.75	4.125	3.25	4.125	4.25	4.375	3.875
2.833333333	3.166666667	1.666666667	3.333333333	4.33333	2.66667	3.66667	4.16667	3.66667	3.66667
2.857142857	2.857142857	2	3	3.28571	2.57143	3.14286	3.42857	3.57143	2.85714







portal	expectation intern	expectation reside	satisfiction inter	satisfiction resident average
to know LS	3.650793651	3.755102041	2.349206349	2.380952381
to get input	1.888888889	3.571428571	1.333333333	1.833333333
to learn LS	3.488888889	3.571428571	2.755555556	2.433333333
to explain LS	3.644444444	3.514285714	2.844444444	2.566666667
to give input	2.333333333	3.142857143	1.111111111	1.666666667
to get inspired	3.861111111	4.142857143	3.222222222	2.625

dashboar	expectatio	expectatio	satisfiction	satisfiction	resident av
to know LS	3.67857	3.04762	2.57143	2.85714	
to get inpu	4.5	3.5	2.33333	3	
to learn LS	3.8	3.6	2.66667	3.4	
to explain l	3.675	3.53333	3	3.1	
to give inp	4.5	3.75	2.33333	3	
to get insp	3.71875	3.58333	3.58333	2.125	

demo	expectatio	expectatio	satisfiction	satisfiction	resident
to know LS	3.5	3.14286	2.45238	2.40816	
to get inpu	3.5	3.25	2.16667	2.71429	
to learn LS	3.7	3.375	3.03333	2.88571	
to explain l	3.93333	3.475	3.06667	2.8	
to give inp	3.33333	3.25	2.66667	2.57143	
to get insp	4.83333	4.15625	3.79167	3.25	

visit frequency

Role	portal	dashboard	demo
Intern	regularly		
Intern	sometimes	never	sometimes
Intern	sometimes	never	regularly
Intern	sometimes	sometimes	regularly
Intern	sometimes	never	sometimes
Intern	sometimes	sometimes	
Intern	regularly	never	regularly
Intern	regularly	never	
Intern	sometimes	sometimes	sometimes

Role	portal	dashboard	demo
Resident	sometimes	never	regularly
Resident	sometimes	sometimes	sometimes
Resident			regularly
Resident	sometimes		sometimes
Resident	never		never
Resident	sometimes		sometimes
Resident	regularly	sometimes	regularly
Resident	sometimes	never	sometimes

deshboard raw data

Role	input to other's projects	input for own projects	previous project	current projects	previous clients	current clients	employees and specialists	services offers	potential/future projects	clear info hierarchy	entertaining and playful	rich in content	with technical details	in short time	clear info hierarchy	entertaining and playful	rich in content	with technical details	in short time	see new visions	try out technologies	introduce new tech to clients	create benefits for clients
Intern																							
Intern	5	5	4	4	4	4	3	4	4	5	5	5	3	5	5	5	5	3	5	4	4	4	4
Intern	4	4	3	5	1	1	5	3	4	4	4	5	4	2	4	5	4	4	4	4	4	4	4
Intern	5	5	5	5	2	2	5	4	4	5	4	5	5	3	5	4	5	5	3	2	4	5	5
Intern	5	5	5	5	5	5	5	5	5	5	3	5	5	2	3	2	5	5	2	5	5	2	3
Intern	5	5	5	5	5	5	5	0	0	5	1	5	5	4	4	2	4	4	4	5	5	2	5
Intern	4	4	4	3	3	2	1	1	4	3	3	4	5	3	3	3	5	5	3	3	3	3	3
Intern	4	4	1	3	3	3	4	3	3	1	4	1	5	2	2	3	1	2	3	3	2	3	2
Intern	4	4	4	5	4	5	5	5	4	5	3	4	3	2	5	1	5	3	2	5	4	4	4
intern average	**4.5**	**4.5**	**3.875**	**4.375**	**3.375**	**3.375**	**4.125**	**3.125**	**3.5**	**4.125**	**3.375**	**4.25**	**4.375**	**2.875**	**3.875**	**3.125**	**4.25**	**3.875**	**3.25**	**3.875**	**3.875**	**3.375**	**3.75**
Resident	3	3																					
Resident	4	3	2	4	1	1	4	1	4	4	4	4	2	4	4	4	3	2	3	2	3	3	2
Resident																							
Resident																							
Resident																							
Resident																							
Resident	4	4	5	3	5	3	4	4	3	4	4	5	4	4	4	4	4	4	4	3	3	4	4
Resident	4	4	5	5	1	1	3	2	3	0	4	3	4	4	1	4	4	4	4	4	5	5	5
resident average	**3.75**	**3.5**	**4**	**4**	**2.333333333**	**1.666666667**	**3.666666667**	**2.333333333**	**3.333333333**	**2.666666667**	**4**	**4**	**3.333333333**	**4**	**3**	**4**	**3.666666667**	**3.333333333**	**3.666666667**	**3**	**3.666666667**	**4**	**3.666666667**
performance	to give/get input				to get access to info of					to learn approaches and tehcnologies						to use as medium to explain approaches and technologies						to be inspired	
Role	input to other's projects	input for own projects	previous project	current projects	previous clients	current clients	employees and specialists	services offers	potential/future projects	clear info hierarchy	entertaining and playful	rich in content	with technical details	in short time	clear info hierarchy	entertaining and playful	rich in content	with technical details	in short time	see new visions	try out technologies	introduce new tech to clients	create benefits for clients
Intern																							
Intern																							
Intern																							
Intern	3	3	3	4	1	1	3	1	1	4	1	4	2	3	4	2	4	3	4	3	3	4	4
Intern																							
Intern	0	0	4	4	1	2	2	4	1	3	3	3	1	2	3	2	3	1	1	3	4	3	4
Intern																							
Intern																							
Intern	4	4	4	4	1	3	4	3	3	4	2	1	3	4	4	3	4	3	4	4	3	4	4
	2.333333333	**2.333333333**	**3.666666667**	**4**	**1**	**2**	**3**	**2.666666667**	**1.666666667**	**3.666666667**	**2**	**2.666666667**	**2**	**3**	**3.666666667**	**2.333333333**	**3.666666667**	**2.333333333**	**3**	**3.333333333**	**3.333333333**	**3.666666667**	**4**
Resident																							
Resident	2	2	3	3	1	1	3	1	1	4	4	3	2	3	4	4	3	1	3	1	1	3	1
Resident																							
Resident																							
Resident																							
Resident																							
Resident	4	4	5	4	4	3	4	4	3	4	4	3	3	4	4	3	3	3	3	2	3	3	3
Resident																							
	3	**3**	**4**	**3.5**	**2.5**	**2**	**3.5**	**2.5**	**2**	**4**	**4**	**3**	**2.5**	**3.5**	**4**	**3.5**	**3**	**2**	**3**	**1.5**	**2**	**3**	**2**
importance																							
intern average																							
resident average																							
performance																							
intern average																							
resident average																							

Role	previous clients	previous project	current projects	current clients	ployees and special	services offers	potential/future projects	out for own projec	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	to other's proj	see new visions	try out technologies	introduce new tech to clients	create benefits for clients
importance	previous clients	previous project	current projects	current clients	ployees and special	services offers	potential/future projects	out for own projec	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	to other's proj	see new visions	try out technologies	introduce new tech to clients	create benefits for clients
intern average	3.375	3.875	4.375	3.375	4.125	3.125	3.5	4.5	4.25	4.125	4.375	2.875	3.375	4.25	3.875	3.875	3.25	3.125	4.5	3.875	3.875	3.375	3.75
resident average	2.333333333	4	4	1.666666667	3.666666667	2.333333333	3.333333333	3.5	4	2.666666667	3.333333333	4	4	3.666666667	3	3.333333333	3.666666667	4	3.75	3	3.666666667	4	3.666666667
performance	previous clients	previous project	current projects	current clients	ployees and special	services offers	potential/future projects	out for own projec	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	to other's proj	see new visions	try out technologies	introduce new tech to clients	create benefits for clients
intern average	1	3.666666667	4	2	3	2.666666667	1.666666667	2.333333333	2.666666667	3.666666667	2	3	2	3.666666667	3.666666667	2.333333333	3	2.333333333	2.333333333	3.333333333	3.333333333	3.666666667	4
resident average	2.5	4	3.5	2	3.5	2.5	2	3	3	4	2.5	3.5	4	3	4	2	3	3.5	3	1.5	2	3	2
dashboard	previous clients	previous project	current projects	current clients	ployees and special	services offers	potential/future projects	out for own projec	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	to other's proj	see new visions	try out technologies	introduce new tech to clients	create benefits for clients
expectation intern average	3.375	3.875	4.375	3.375	4.125	3.125	3.5	4.5	4.25	4.125	4.375	2.875	3.375	4.25	3.875	3.875	3.25	3.125	4.5	3.875	3.875	3.375	3.75
expectation resident average	2.333333333	4	4	1.666666667	3.666666667	2.333333333	3.333333333	3.5	4	2.666666667	3.333333333	4	4	3.666666667	3	3.333333333	3.666666667	4	3.75	3	3.666666667	4	3.666666667
satisfiction intern average	1	3.666666667	4	2	3	2.666666667	1.666666667	2.333333333	2.666666667	3.666666667	2	3	2	3.666666667	3.666666667	2.333333333	3	2.333333333	2.333333333	3.333333333	3.333333333	3.666666667	4
satisfiction resident average	2.5	4	3.5	2	3.5	2.5	2	3	3	4	2.5	3.5	4	3	4	2	3	3.5	3	1.5	2	3	2

第 1 张表单回复 | expectation | comparison | portal (6，number) | **dashboard (number)** | demo (number) | rar ...

	to give/get input		to get access to info of							to learn approaches and tehcnologies					to use as medium to explain approaches and technologies					to be inspired			
Role	put to other's project	input for own projects	previous project	current projects	previous clients	current clients	employees and specialist	services offers	potential/future projects	clear info hierarchy	entertaining and play	rich in content	with technical details	in short time	clear info hierarchy	entertaining and play	rich in content	with technical details	in short time	see new visions	try out technologies	introduce new tech to clients	create benefits for clients
Intern	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Strongly agree	Agree	Slightly agree	Slightly agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Intern	Agree	Strongly agree	Slightly agree	Strongly agree	Slightly agree	Agree	Slightly agree	Strongly agre	Slightly agree	Strongly agree	Strongly agree	Strongly agre	Slightly agree	Agree	Strongly agree	Agree	Agree	Agree	Agree	Strongly agree	Agree	Strongly agree	Strongly agr
Intern	Slightly agree	Strongly agree	Agree	Strongly agree	Slightly disagre	Slightly agree	Slightly agree	Agree	Agree	Agree	Strongly agree	Agree	Slightly disagree	Slightly agree	Agree	Strongly agree	Agree	Slightly disagree	Slightly agree	Agree	Strongly agree	Agree	Agree
Intern	Agree	Agree	Slightly agree	Strongly agree	Slightly agree	Agree	Agree	Strongly agre	Agree	Slightly agree	Strongly agree	Strongly agre	Slightly agree	Strongly agree	Agree	Strongly agree	Agree	Slightly disagree	Slightly agree	Agree	Strongly agree	Strongly agree	Strongly agr
Intern	Agree	Agree	Strongly agree	Strongly agree	Strongly agree	Agree	Strongly agree	Strongly agre	Slightly agree	Agree	Strongly agree	Agree	Slightly disagree	Agree	Strongly agree	Slightly agree	Agree	Slightly disagree	Agree	Agree	Slightly agree	Strongly agree	Strongly agr
Resident	Slightly agree	Agree	Agree	Agree	Slightly agree	Slightly agree	Slightly agree	Slightly agre	Agree	Agree	Agree	Agree	Slightly disagree	Slightly agree	Agree	Agree	Agree	Slightly disagree	Slightly agree	Agree	Agree	Agree	Slightly agre
Intern	Disagree	Agree	Agree	Strongly agree	Slightly agree	Agree	Agree	Strongly agre	Strongly disagree	Strongly agree	Slightly agree	Slightly disag	Slightly disagree	Slightly agree	Strongly agree	Slightly agree	Slightly disag	Slightly disagree	Slightly agree	Strongly agree	Slightly disagree	Agree	Agree
Resident	Slightly agree	Slightly agree	Slightly agree	Agree	Disagree	Slightly disag	Agree	Agree	Agree	Agree	Strongly agree	Agree	Agree	Agree	Agree	Strongly agree	Agree	Agree	Agree	Agree	Strongly agree	Agree	Agree
Resident	Agree	Agree	Strongly agree	Strongly agree	Slightly agree	Strongly agre	Strongly agree	Strongly agre	Strongly agre	Strongly agree	Strongly agree	Agree	Slightly disagree	Agree	Agree	Strongly agree	Agree	Slightly disagree	Agree	Agree	Agree	Agree	Agree
Resident	Agree	Agree	Agree	Agree	Slightly agree	Agree	Agree	Agree	Agree	Agree	Strongly agree	Agree	Slightly disagree	Agree	Agree	Strongly agree	Agree	Slightly disagree	Agree	Agree	Strongly agree	Agree	Agree
Intern	Agree	Agree	Agree	Strongly agree	Slightly agree	Slightly agree	Strongly agree	Strongly agre	Agree	Strongly agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Slightly agree	Slightly disagre	Slightly agree	Agree	Agree	Agree
Intern	Agree	Agree	Slightly agree	Agree	Slightly disagre	Slightly agree	Agree	Strongly agre	Strongly agree	Strongly agree	Strongly agree	Agree	Slightly agree	Strongly agree	Agree	Strongly agree	Strongly agre	Slightly agree	Strongly agree	Agree	Slightly agree	Agree	Agree
Intern	Slightly agree	Slightly agree	Agree	Strongly agree	Slightly agree	Slightly agree	Agree	Agree	Agree	Strongly agree	Slightly agree	Agree	Slightly disagree	Slightly agree	Strongly agree	Slightly agree	Agree	Slightly disagree	Slightly agree	Strongly agree	Agree	Slightly agree	Slightly agre
Resident	Agree	Agree	Agree	Agree	Slightly agree	Agree	Slightly agree	Agree	Agree	Slightly agree	Agree	Slightly disag	Slightly agree	Agree	Slightly agree	Agree	Slightly disag	Slightly agree	Agree	Slightly agree	Agree	Slightly agree	Slightly agre
Resident	Agree	Agree	Slightly agree	Agree	Agree	Agree	Agree	Agree	Agree	Slightly disagree	Slightly agree	Slightly agree	Disagree	Agree	Slightly disagree	Slightly agree	Slightly agree	Slightly agree	Agree	Slightly disagree	Slightly agree	Slightly agree	Slightly agre
Resident	Slightly agree	Slightly agree	Agree	Agree	Agree	Agree	Agree	Agree	Strongly agree	Strongly agree	Strongly agree	Agree	Slightly agree	Agree	Strongly agree	Agree	Agree	Slightly agree	Agree	Strongly agree	Agree	Agree	Agree
Resident	Agree	Agree	Strongly agree	Strongly agree	Slightly agree	Agree	Agree	Strongly agre	Slightly agree	Slightly disagree	Slightly agree	Slightly agree	Slightly agree	Agree	Slightly agree	Agree	Agree	Slightly agree	Agree	Slightly disagree	Slightly disagree	Slightly disagree	Slightly agre

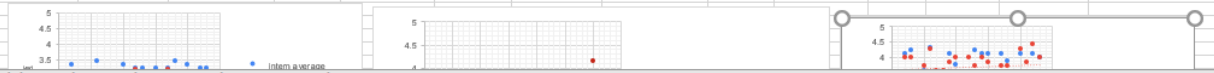
importance	to give/get input		to get access to info of							to learn approaches and tehcnologies					to use as medium to explain approaches and technologies					to be inspired			
Role	input to other's projects	input for own projects	previous project	current projects	previous clients	current clients	employees and specialists	services offers	potential/future projects	clear info hierarchy	entertaining and playful	rich in content	with technical details	in short time	clear info hierarchy	entertaining and playful	rich in content	with technical details	in short time	see new visions	try out technologies	introduce new tech to clients	create benefits for clients
Intern	1	1	4	4	4	4	4	4	1	5	5	5	0	5	5	5	5	0	5	4	4	4	4
Intern	2	2	4	4	4	4	3	5	4	5	3	5	2	3	5	3	4	1	4	5	4	5	5
Intern	1	2	4	5	2	3	4	5	4	4	5	4	1	5	4	5	4	1	4	4	2	4	4
Intern	3	4	4	5	2	3	4	5	3	3	5	5	3	4	3	4	5	3	4	3	4	4	5
Intern	2	2	5	4	5	2	4	5	2	3	5	4	2	5	4	5	4	2	5	4	5	5	5
Intern	4	1	5	5	5	5	3	1	1	4	5	4	5	1	5	3	3	4	2	5	1	1	1
Intern	4	1	5	3	4	2	5	5	1	3	3	4	1	2	4	4	4	1	5	4	3	5	5
Intern	3	3	2	3	2	3	2	4	3	2	4	3	2	3	2	3	4	4	4	4	3	4	3
Intern	1	1	4	5	3	4	3	5	4	5	3	3	1	3	5	3	4	2	4	4	3	5	4
intern average	**2.333333333**	**1.888888889**	**4.111111111**	**4.222222222**	**3.444444444**	**3.333333333**	**3.555555556**	**4.333333333**	**2.555555556**	**3.777777778**	**4.222222222**	**4.111111111**	**1.888888889**	**3.444444444**	**4.111111111**	**3.888888889**	**4.111111111**	**2**	**4.111111111**	**4.111111111**	**3.222222222**	**4.111111111**	**4**
Resident	4	4	4	4	3	3	3	4	4	4	4	4	3	4	4	3	4	3	3	5	5	5	4
Resident	1	1	4	4	2	2	4	4	4	4	3	4	3	4	4	3	4	3	4	4	2	4	2
Resident																							
Resident	4	4	3	4	3	4	4	4	4	4	5	4	2	4	4	4	5	4	2	4	4	4	4
Resident	3	4	4	4	4	4	4	4	4	4	4	4	2	4	4	4	4	2	4	4	5	4	4
Resident	4	4	3	3	4	4	3	5	1	4	3	4	0	4	2	4	4	0	4	4	3	4	4
Resident	4	4	5	4	4	4	4	5	5	5	4	4	2	4	5	3	4	2	3	5	4	5	5
Resident	2	4	5	5	3	3	4	5	3	3	3	3	4	4	4	4	4	4	4	4	4	5	5
resident average	**3.142857143**	**3.571428571**	**4**	**4**	**3.285714286**	**3.428571429**	**3.714285714**	**4.285714286**	**3.571428571**	**4**	**3.714285714**	**3.857142857**	**2.285714286**	**4**	**3.857142857**	**3.714285714**	**4**	**2.285714286**	**3.714285714**	**4.285714286**	**3.857142857**	**4.428571429**	**4**

performance	to give/get input		to get access to info of							to learn approaches and tehcnologies					to use as medium to explain approaches and technologies					to be inspired			
Role	input to other's projects	input for own projects	previous project	current projects	previous clients	current clients	employees and specialists	services offers	potential/future projects	clear info hierarchy	entertaining and playful	rich in content	with technical details	in short time	clear info hierarchy	entertaining and playful	rich in content	with technical details	in short time	see new visions	try out technologies	introduce new tech to clients	create benefits for clients
Intern	0	0	2	1	2	2	4	5	0	3	4	5	0	4	3	4	4	0	4	3	1	3	3
Intern	2	2	4	4	4	4	3	5	3	5	4	5	2	4	5	5	5	2	5	4	4	4	4
Intern	0	0	2	2	1	1	1	1	1	4	4	3	0	3	4	4	2	0	3	3	4	4	4
Intern	1	1	5	5	1	1	3	4	1	4	5	3	1	4	4	5	3	1	4	4	3	4	4
Intern	1	3	5	1	0	0	3	4	1	4	5	3	1	3	4	4	3	1	3	4	3	2	2
Intern	1	1	4	1	1	3	3	2	0	3	1	2	0	2	2	2	3	2	2	1	3	2	2
Intern	3	3	4	1	3	4	4	4	1	3	3	2	2	2	3	3	4	3	3	4	4	4	4
Intern	2	2	3	2	2	1	2	2	2	1	1	2	3	3	2	2	3	2	3	4	2	3	3
Intern	0	0	1	4	1	1	1	4	1	3	2	1	1	4	2	2	1	0	2	3	4	3	3
	1.111111111	**1.333333333**	**3.333333333**	**2.333333333**	**1.666666667**	**1.888888889**	**2.666666667**	**3.444444444**	**1.111111111**	**3.333333333**	**3.222222222**	**2.888888889**	**1.111111111**	**3.222222222**	**3.222222222**	**3.444444444**	**3.111111111**	**1.222222222**	**3.222222222**	**3.333333333**	**3.111111111**	**3.222222222**	**3.222222222**
Resident	1	1	3	2	1	2	1	3	2	2	3	2	1	3	3	3	2	1	3	3	2	2	3
Resident	1	1	3	3	2	2	3	3	2	2	2	2	2	3	2	2	2	2	3	2	2	2	2
Resident																							
Resident	2	2	4	4	4	4	4	4	4	4	3	3	3	4	3	3	3	3	4	4	4	3	3
Resident																							
Resident	2	2	3	3	1	1	1	1	2	2	4	3	0	3	3	3	3	1	3	3	3	1	3
Resident	3	3	4	3	3	3	3	4	3	4	3	2	2	3	4	3	3	3	3	2	2	4	3
Resident	1	2	1	1	0	0	0	2	1	0	2	2	1	3	1	3	1	1	3	2	3	3	2
	1.666666667	**1.833333333**	**3**	**2.666666667**	**1.833333333**	**2**	**2**	**2.833333333**	**2.333333333**	**2.333333333**	**2.833333333**	**2.333333333**	**1.5**	**3.166666667**	**2.666666667**	**2.833333333**	**2.333333333**	**1.833333333**	**3.166666667**	**2.666666667**	**2.666666667**	**2.5**	**2.666666667**

portal raw data

Role	previous clients	previous project	current projects	current clients	loyees and special	services offers	potential/future projects	ut for own projec	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	to other's pro	see new visions	try out technologies	introduce new tech to clients	create benefits for clients
importance	previous clients	previous project	current projects	current clients	loyees and special	services offers	potential/future projects	ut for own projec	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	to other's pro	see new visions	try out technologies	introduce new tech to clients	create benefits for clients
intern average	3.444444444	4.111111111	4.222222222	3.333333333	3.555555556	4.333333333	2.555555556	1.888888889	4.111111111	3.777777778	1.888888889	3.444444444	4.222222222	4.111111111	4.111111111	2	4.111111111	3.888888889	2.333333333	4.111111111	3.222222222	4.111111111	4
resident average	3.285714286	4	4	3.428571429	3.714285714	4.285714286	3.571428571	3.571428571	3.857142857	4	2.285714286	4	3.714285714	4	3.857142857	2.285714286	3.714285714	3.714285714	3.142857143	4.285714286	3.857142857	4.428571429	4
performance	previous clients	previous project	current projects	current clients	loyees and special	services offers	potential/future projects	ut for own projec	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	to other's pro	see new visions	try out technologies	introduce new tech to clients	create benefits for clients
intern average	1.666666667	3.333333333	2.333333333	1.888888889	2.666666667	3.444444444	1.111111111	1.333333333	2.888888889	3.333333333	1.111111111	3.222222222	3.222222222	3.111111111	3.222222222	1.222222222	3.222222222	3.444444444	1.111111111	3.333333333	3.111111111	3.222222222	3.222222222
resident average	1.833333333	3	2.666666667	2	2	2.833333333	2.333333333	1.833333333	2.333333333	2.333333333	1.5	3.166666667	2.833333333	2.333333333	2.666666667	1.833333333	3.166666667	2.833333333	1.666666667	2.666666667	2.666666667	2.5	2.666666667

portal	to know LS	to get input	to learn LS	to explain LS	to give input	to get inspired
expectation intern average	3.650793651	1.888888889	3.466666889	3.644444444	2.333333333	3.861111111
expectation resident average	3.755102041	3.571428571	3.571428571	3.514285714	3.142857143	4.142857143
satisfiction intern average	2.349206349	1.333333333	2.755555556	2.644444444	1.111111111	3.222222222



第 1 张表单回复 | expectation | comparison | portal (6, number) | dashboard (number) | demo (number) | rar ...

s and technologies				to be inspired	
nwith technical details	in short time	see new visions	try out technologies	introduce new tech to clients	create benefits for clie
Slightly agree	Agree	Slightly agree	Agree	Agree	Agree
e Disagree	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree
Slightly disagree	Slightly agr	Agree	Strongly agree	Strongly agree	Strongly agree
e Slightly agree	Agree	Agree	Strongly agree	Agree	Strongly agree
e Strongly agree	Slightly dis	Strongly agree	Strongly agree	Strongly agree	Strongly agree
e Slightly disagree	Slightly agr	Strongly agree	Strongly agree	Strongly agree	Agree
Strongly agree	Slightly agr	Strongly agree	Agree	Strongly agree	Slightly disagree
Slightly agree	Agree	Agree	Agree	Agree	Agree
Agree	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree
Slightly disagree	Agree	Agree	Strongly agree	Agree	Agree
Agree	Slightly dis	Slightly agree	Slightly agree	Strongly agree	Strongly agree
Slightly agree	Agree	Disagree	Slightly agree	Slightly disagree	Slightly disagree
e Slightly agree	Strongly ag	Agree	Strongly agree	Agree	Agree
e Slightly disagree	Agree	Slightly agree	Strongly agree	Strongly agree	Strongly agree
e Disagree	Agree	Agree	Slightly agree	Strongly agree	Strongly agree
Agree	Slightly agr	Strongly agree	Strongly agree	Strongly agree	Strongly agree
e Agree	Slightly agr	Strongly agree	Strongly agree	Strongly agree	Strongly agree

Info platform command
in general

1	importance	to give/get input		to get access to info of						to learn approaches and tehcnologies					to use as medium to explain approaches and technologies					to be inspired			
2	**Role**	input to other's projects	input for own projects	previous project	current projects	previous clients	current clients	employees and specialists	services offers	potential/future projects	clear info hierarchy	entertaining and playful	rich in content	with technical details	in short time	clear info hierarchy	entertaining and playful	rich in content	with technical details	in short time	see new visions	try out technologies	introduce new tech to clients	create benefits for clients
3	Intern																							
4	Intern	3	3	3	5	3	3	3	5	4	5	5	5	3	5	5	5	5	3	5	5	5	5	5
5	Intern	3	3	1	4	2	3	3	3	3	4	5	4	0	4	4	5	4	1	4	5	5	5	5
6	Intern	3	3	5	5	3	3	4	5	4	4	5	4	2	4	4	5	4	2	3	4	5	5	5
7	Intern	5	5	5	2	3	2	3	5	4	1	5	4	4	2	3	5	5	4	4	5	5	5	5
8	Intern																							
9	Intern	4	4	4	5	3	4	4	5	4	4	3	3	4	3	3	4	4	4	3	5	5	5	5
10	Intern																							
11	Intern	2	3	3	5	1	3	1	4	3	4	4	4	3	4	5	4	3	3	5	4	5	4	4
12	intern average	**3.333333333**	**3.5**	**3.5**	**4.333333333**	**2.5**	**3**	**3**	**4.5**	**3.666666667**	**3.666666667**	**4.5**	**4**	**2.666666667**	**3.666666667**	**4**	**4.666666667**	**4.166666667**	**2.833333333**	**4**	**4.666666667**	**5**	**4.833333333**	**4.833333333**
13																								
14	Resident	4	4	2	3	2	2	1	3	2	2	3	4	1	3	3	4	4	1	3	3	3	4	4
15	Resident	1	1	1	1	1	1	3	3	1	3	5	2	2	4	2	4	2	2	4	4	4	4	1
16	Resident	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	5	5	5	5
17	Resident	4	4	4	4	3	4	4	4	5	4	5	4	2	4	4	5	4	2	4	4	4	4	4
18	Resident	4	4	4	4	4	4	4	4	4	4	4	4	2	4	4	4	4	2	4	4	4	4	4
19	Resident	4	3	1	3	3	2	1	2	4	2	3	3	1	4	2	4	4	1	4	4	4	4	4
20	Resident	3	3	3	3	3	3	4	5	5	4	5	5	3	4	4	4	5	4	4	4	5	5	4
21	Resident	2	3	4	5	3	3	2	3	4	2	4	3	3	3	3	4	4	4	3	5	5	5	5
22	resident average	**3.25**	**3.25**	**2.875**	**3.375**	**2.875**	**2.875**	**2.875**	**3.5**	**3.625**	**3.125**	**4.125**	**3.625**	**2.25**	**3.75**	**3.25**	**4.125**	**3.875**	**2.375**	**3.75**	**4.125**	**4.25**	**4.375**	**3.875**
23																								
24																								
25																								
26	performance	to give/get input		to get access to info of						to learn approaches and tehcnologies					to use as medium to explain approaches and technologies					to be inspired			
27	**Role**	input to other's projects	input for own projects	previous project	current projects	previous clients	current clients	employees and specialists	services offers	potential/future projects	clear info hierarchy	entertaining and playful	rich in content	with technical details	in short time	clear info hierarchy	entertaining and playful	rich in content	with technical details	in short time	see new visions	try out technologies	introduce new tech to clients	create benefits for clients
28	Intern																							
29	Intern	3	3	3	4	3	3	3	4	4	5	5	5	3	5	5	5	5	3	5	4	4	4	4
30	Intern	0	0	4	4	1	1	1	3	1	1	1	1	4	1	3	1	1	3	3	4	4	4	4
31	Intern	3	3	4	4	1	1	1	3	1	3	4	3	3	5	3	5	4	1	3	2	3	3	3
32	Intern	3	3	5	1	1	1	2	3	2	3	4	3	2	3	4	5	3	2	2	4	5	5	3
33	Intern																							
34	Intern	3	3	5	4	3	3	3	4	4	5	5	4	4	3	5	5	4	3	3	5	5	5	5
35	Intern																							
36	Intern	4	1	1	4	0	0	0	3	0	0	1	0	1	4	1	3	0	0	4	4	4	1	3
37		**2.666666667**	**2.166666667**	**3.666666667**	**3.5**	**1.5**	**1.5**	**1.666666667**	**3.333333333**	**2**	**2.833333333**	**3.333333333**	**2.666666667**	**2.333333333**	**4**	**3.166666667**	**4.333333333**	**2.833333333**	**1.666666667**	**3.333333333**	**3.666666667**	**4.166666667**	**3.666666667**	**3.666666667**
38																								
39	Resident	3	3	2	3	1	1	1	3	3	2	3	3	1	3	2	3	3	1	3	3	2	3	3
40	Resident	2	2	3	3	1	1	3	3	1	2	4	3	2	3	2	4	3	2	3	2	3	4	1
41	Resident	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5
42	Resident	2	2	3	2	2	2	3	4	2	2	3	3	2	3	4	4	3	2	4	4	4	4	4
43	Resident																							
44	Resident	3	3	2	3	3	3	3	3	1	4	4	3	1	4	4	3	3	1	3	4	4	4	4
45	Resident	3	4	4	2	2	2	3	4	4	4	4	3	3	4	4	3	4	3	3	3	4	4	3
46	Resident	1	1	1	1	0	0	0	1	1	0	2	1	1	3	1	1	1	1	1	1	2	1	0
47		**2.571428571**	**2.714285714**	**2.714285714**	**2.571428571**	**1.857142857**	**1.857142857**	**2.428571429**	**3.142857143**	**2.285714286**	**2.571428571**	**3.428571429**	**2.857142857**	**2.142857143**	**3.428571429**	**2.857142857**	**3.285714286**	**2.857142857**	**2**	**3**	**3.142857143**	**3.428571429**	**3.571428571**	**2.857142857**
48																								
49																								
50	**importance**																							
51	intern average																							
52	resident average																							
53																								
54	**performance**																							
55	intern average																							
56	resident average																							
57																								
58																								
59	**Role**	previous clients	previous project	current projects	current clients	ployees and special	services offers	potential/future projects	ut for own projec	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	to other's pro	see new visions	try out technologies	introduce new tech to clients	create benefits for clients
60																								
61																								
62	**importance**	previous clients	previous project	current projects	current clients	ployees and special	services offers	potential/future projects	ut for own projec	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	to other's pro	see new visions	try out technologies	introduce new tech to clients	create benefits for clients
63	intern average	2.5	3.5	4.333333333	3	3	4.5	3.666666667	3.5	4	3.666666667	2.666666667	3.666666667	4.5	4.166666667	4	2.833333333	4	4.666666667	3.333333333	4.666666667	5	4.833333333	4.833333333
64	resident average	2.875	2.875	3.375	2.875	2.875	3.5	3.625	3.25	3.625	3.125	2.25	3.75	4.125	3.875	3.25	2.375	3.75	4.125	3.25	4.125	4.25	4.375	3.875
65																								
66	**performance**	previous clients	previous project	current projects	current clients	ployees and special	services offers	potential/future projects	ut for own projec	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	to other's pro	see new visions	try out technologies	introduce new tech to clients	create benefits for clients
67	intern average	1.5	3.666666667	3.5	1.5	1.666666667	3.333333333	2	2.166666667	2.666666667	2.833333333	2.333333333	4	3.333333333	2.833333333	3.166666667	1.666666667	3.333333333	4.333333333	2.666666667	3.666666667	4.166666667	3.666666667	3.666666667
68	resident average	1.857142857	2.714285714	2.571428571	1.857142857	2.428571429	3.142857143	2.285714286	2.714285714	2.857142857	2.571428571	2.142857143	3.428571429	3.428571429	2.857142857	2.857142857	2	3	3.285714286	2.571428571	3.142857143	3.428571429	3.571428571	2.857142857
69																								
70																								
71																								
72	**demo**	previous clients	previous project	current projects	current clients	ployees and special	services offers	potential/future projects	ut for own projec	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	rich in content	clear info hierarchy	with technical details	in short time	entertaining and playful	to other's pro	see new visions	try out technologies	introduce new tech to clients	create benefits for clients
73	expectation intern average	2.5	3.5	4.333333333	3	3	4.5	3.666666667	3.5	4	3.666666667	2.666666667	3.666666667	4.5	4.166666667	4	2.833333333	4	4.666666667	3.333333333	4.666666667	5	4.833333333	4.833333333
74	expectation resident average	2.875	2.875	3.375	2.875	2.875	3.5	3.625	3.25	3.625	3.125	2.25	3.75	4.125	3.875	3.25	2.375	3.75	4.125	3.25	4.125	4.25	4.375	3.875
75	satisfiction intern average	1.5	3.666666667	3.5	1.5	1.666666667	3.333333333	2	2.166666667	2.666666667	2.833333333	2.333333333	4	3.333333333	2.833333333	3.166666667	1.666666667	3.333333333	4.333333333	2.666666667	3.666666667	4.166666667	3.666666667	3.666666667

demo raw data

第 1 张表单回复 | expectation | comparison | portal (6，number) | dashboard (number) | demo (number) | rar ...

B | OTHER MATERIALS

PLEASE READ FIRST :)

This survey is made to improve the Liquid Studio (LS) Utrecht information platforms to be more effective regarding the internal project of the THEME PARK. The project is aiming to create a holistic experience for tech museum visitors walking through the studio. The experience will combine the City Quest AR game with physical demo setups as the showcase to communicate LS technology services.

The INFORMATION PLATFORM by LS Utrecht includes the LS PORTAL, LS DASHBOARD, and DEMO SHOWCASES. By naming information platform, it is generally mentioning all of them as platforms that LS provides information.

The goal of this survey is to evaluate their current performance from the visitor perspective. The results will be used to analyse to what extend the platforms are valued and how much they have are in line with the users' expectations. Accordingly, key focus and pain points will arise from this information, and direct further design processes. As the final part of this survey, ideal situations will be discussed for creating new visions.

The survey includes 12 pages, and each page have 1 to 6 questions. It can take 5 to 15 mins accordingly that some pages may be skipped by different answers.

The responses are anonymous and will not be tracked. Your responses will be reviewed for project related purposes only. However, if you wish to have contact us to communicate your thoughts in more detail, then please leave your name and contact in the indicated area. In case you have any questions about the survey, please contact Yingzhu Yao (yingzhu.yao@accenture.com).

Thank you for your participation. We appreciate your feedback.

Sincerely,
Theme Park project team

Your role at Liquid studio is: *

1。 Intern at Liquid Studio

2。 Intern at other entity in Accenture

3。 Resident at Liquid Studio

4。 Resident at other entity in Accenture

Please select to what extent you agree with the situation stated in each of the following statements

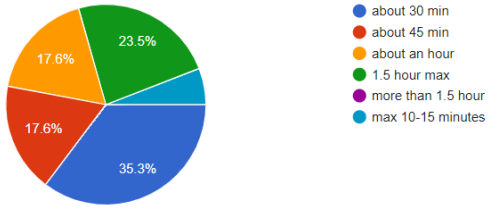
说明（可选）

It is IMPORTANT to me that the info platforms give me the possibility *

	Strongly disa...	Disagree	Slightly disa...	Slightly agree	Agree	Strongly agr...
to give input ...	○	○	○	○	○	○

How much TIME would you like to spend to go through the full studio tour that combines THEME PARK and AR game quest?

（17 条回复）

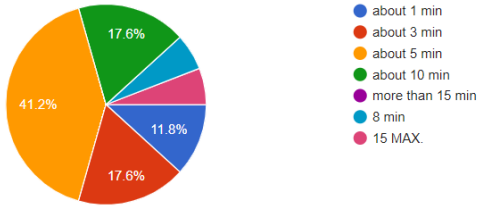


How much TIME would you like to spend to go through the whole AR CITY QUEST GAME in the demo theme park?

（17 条回复）

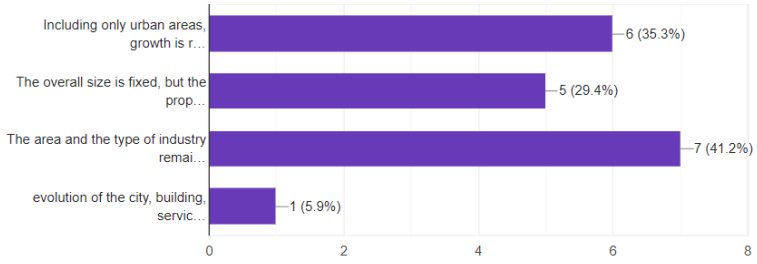
How much TIME would you like to spend to finish EACH QUEST (to interact with EACH TECHNOLOGY) in the AR city quest game?

（17 条回复）



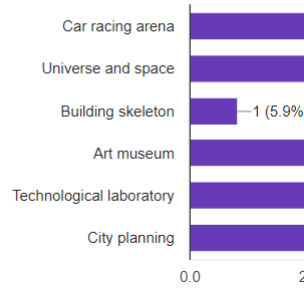
Conceptually, how do you imagine the GROWTH of the VIRTUAL CITY in the game

（17 条回复）



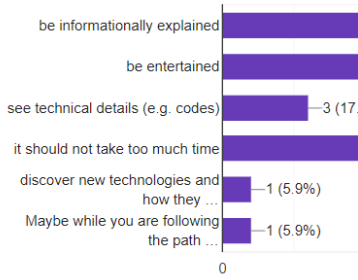
Conceptually, what would you expect PHYSICAL INSTALLATIONS to be?

（17 条回复）



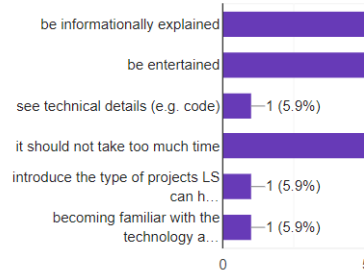
What would you expect to EXPERIENCE b

（17 条回复）

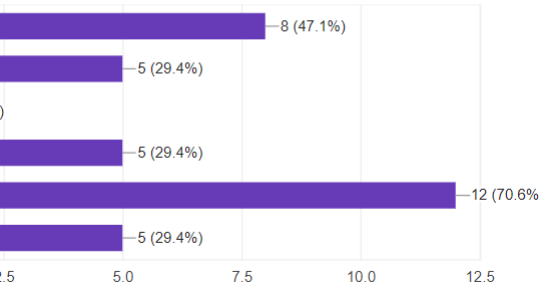


What would you expect to experience by MOBILE APPLICATION?

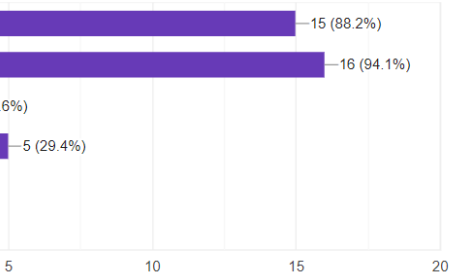
（17 条回复）



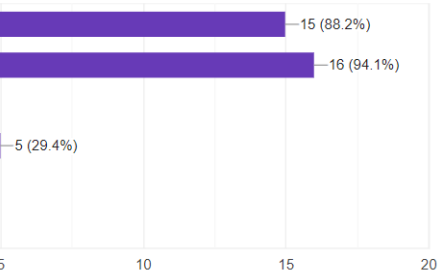
the OVERALL METAPHOR for the demo theme park



y walking through the PHYSICAL THEME PARK?

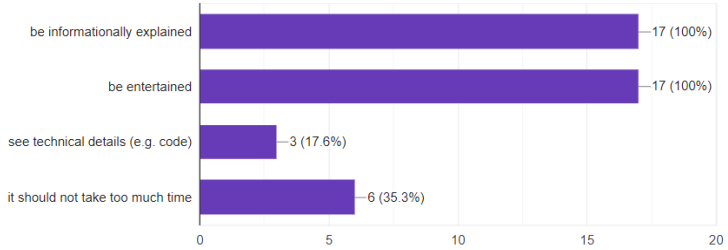


finishing the CITY QUEST GAME from the AR



What would you expect the OVERALL EXPERIENCE of the MIXED REALITY combination of the AR quest game together with the PHYSICAL theme park?

(17 条回复)



If you have any other remarks, ideas, expectations to share, or any problems or feedback, please just leave a note here. We will read it carefully and value your words :)

(1 条回复)

It seems like there are double questions, about the LS Portal and the dashboard or actual demos. If i read carefully there is a difference in the top sentence, but that is not clear during the questions itself, therefor it seemed like it was a repeated question.

Additionally, if any other ideas that you feel not able to convey through this questionnaire, we can arrange an interview to communicate face to face. If so, please leave your name and contact information below, and we will get in touch with you :)

(1 条回复)

Isabel van der Steenhoven and you know how to contact me ;)

Interview script

- Thank you for being here for the survey and interview, for the user research on theme park project.

- I am Yingzhu, and I am a now a graduate Master student from TU Delft major in design for interaction

- My role or the goal in this project is to create the overall journey of the theme park visiting on a user experience perspective.

- This is the third week I actually working on it and currently focusing on user need analysis, so here is why I am forming this interview with you 😊

- Thank you again for joining. The survey I sent to you will be a material for us to go along this interview with generally three aspects: your need towards the information platforms, how do they perform, and what do you expect from the new design?

- another thing is about the survey that let's see if we have time to finish that together, cause this is the first run, so hopefully we can, but if do not have time, then should also be possible to do if afterward without me.

- shall we start by some general questions of you?

Part 0 general needs

Name
Age:
Position:
How long work **in LS:**

How often you visit the **portal website**? For what? And when?

-Never

-to find a internship to see information

Do you sometime visit the **dashboard website**? When do you normally visit the website? For what?

never

How often do you visit the **demo setups**? When do you go to there? For what?

2/3 times

Coffee break

Randoms when finding a places

Focus on own project, not quite relavent

If we consider the portal, the dashboard, and the demo setups as information platforms, any comments around them? Can be pros and cons, or some general advises, anything remark?

Nothing related

Gitlab

Applying, no project

Part 1

- Base on the previous research, I had my assumptions of user needs and summarised them by mapping the needs in to 4 categories: to learn, to tell, to give input, and to be inspired.

- so generally, regard to these information platforms from LS, from your perspective, let's go through these categories

- what is the information you would like to learn from the information platforms

- When you have a need on using them as a material to tell stories from them, what would be the scenario? and what kind of people are involved? what do you need from it?

- would you have any kind of input to these platforms from your side? And how do you achieve that normally?

- the final one, about being inspired, does these platforms get you inspired in anyway? And do you sometime have a need on being inspired from them, and how do they match with your expectation?

- regarding to the BCI project you are currently working on, and also as a part of the info will be included in the theme park,

what would be the focus you would suggest on presenting it,

how would you like to tell the story about this interesting technology?

what would be the key takeaway by the audience from your expectation?

Part 2 survey

- the survey is basically inviting you to give scores on two aspects: how important those user needs related to you and then how does the current platforms full filled your needs.

Part 3 about expectations

- explain the theme park with AR city quest

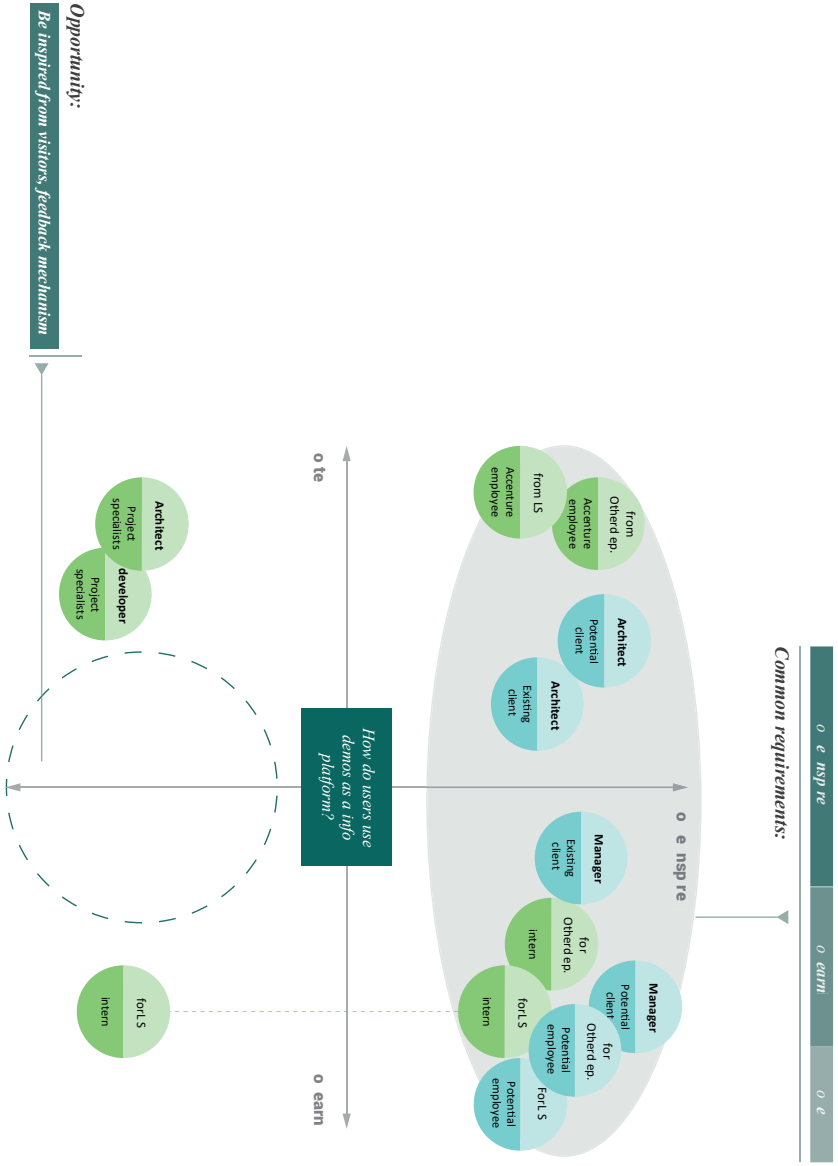
- How would you imagine it?

Thank you for your participant, do you have any question for me? Or any suggestion on improve this interview or survey?

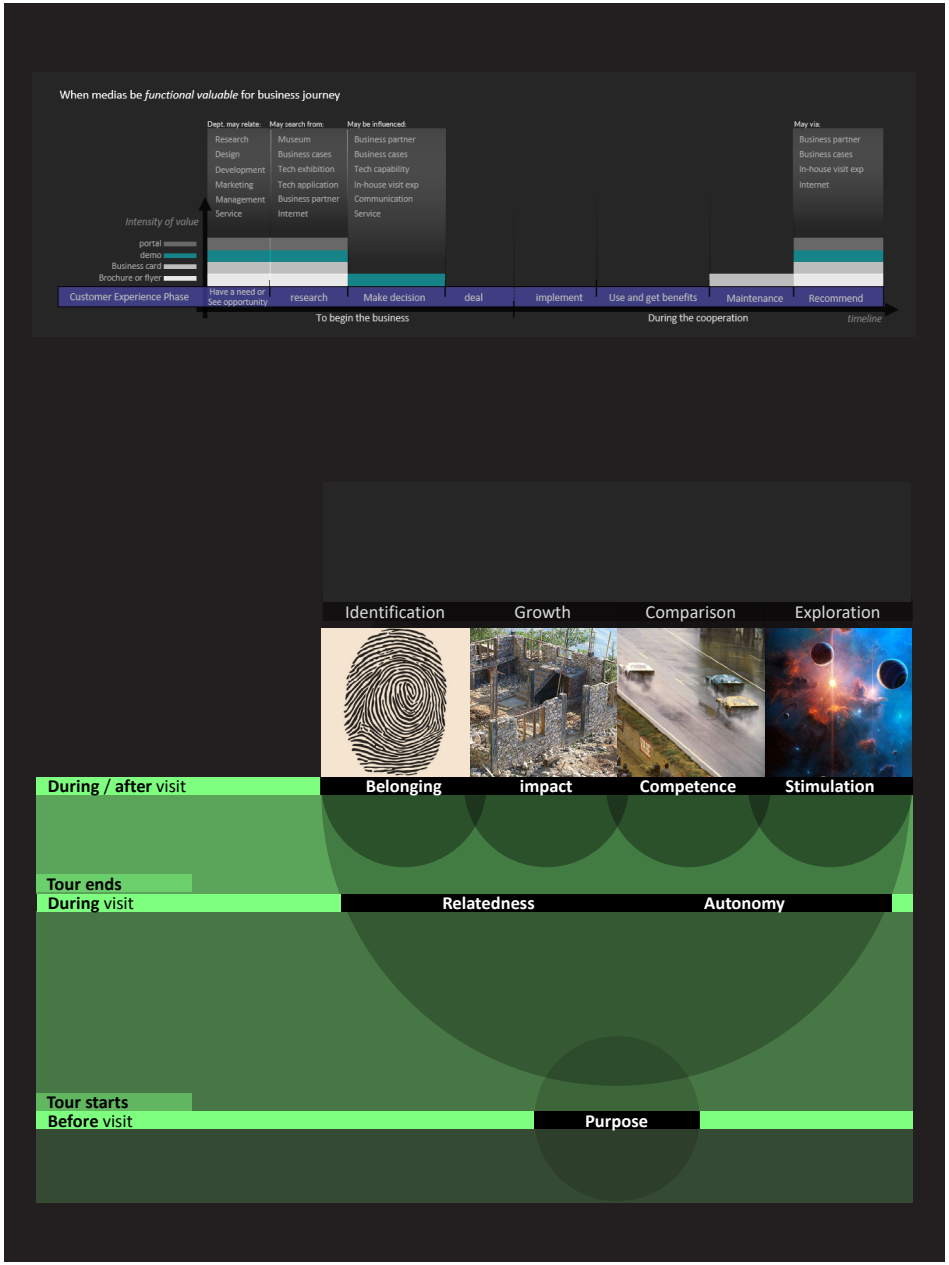
C | ANALYSIS PROCESS
(HOW DOES USER GROUPS MAP WITH USER NEEDS)

C | ANALYSIS PROCESS
(HOW DO USER GROUPS USE THE INFO PLATFORMS)

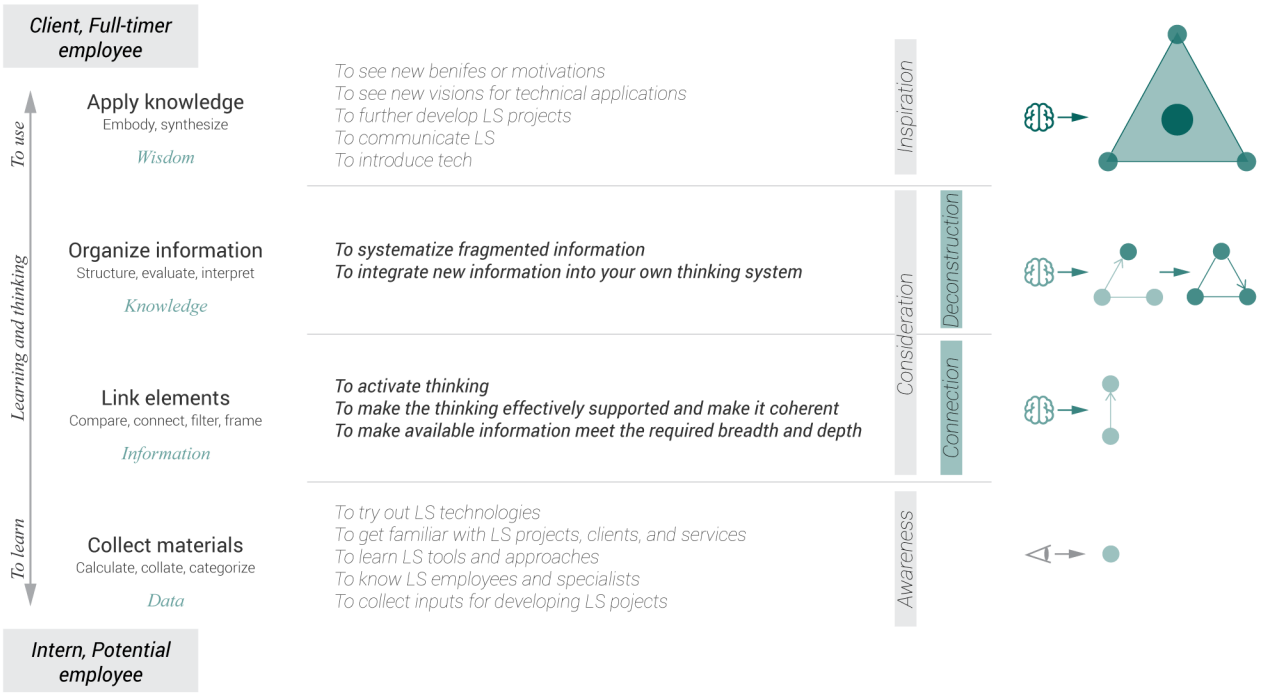
C | VISITOR MOTIVATION MAP
(BY INITIAL CATEGORIES)



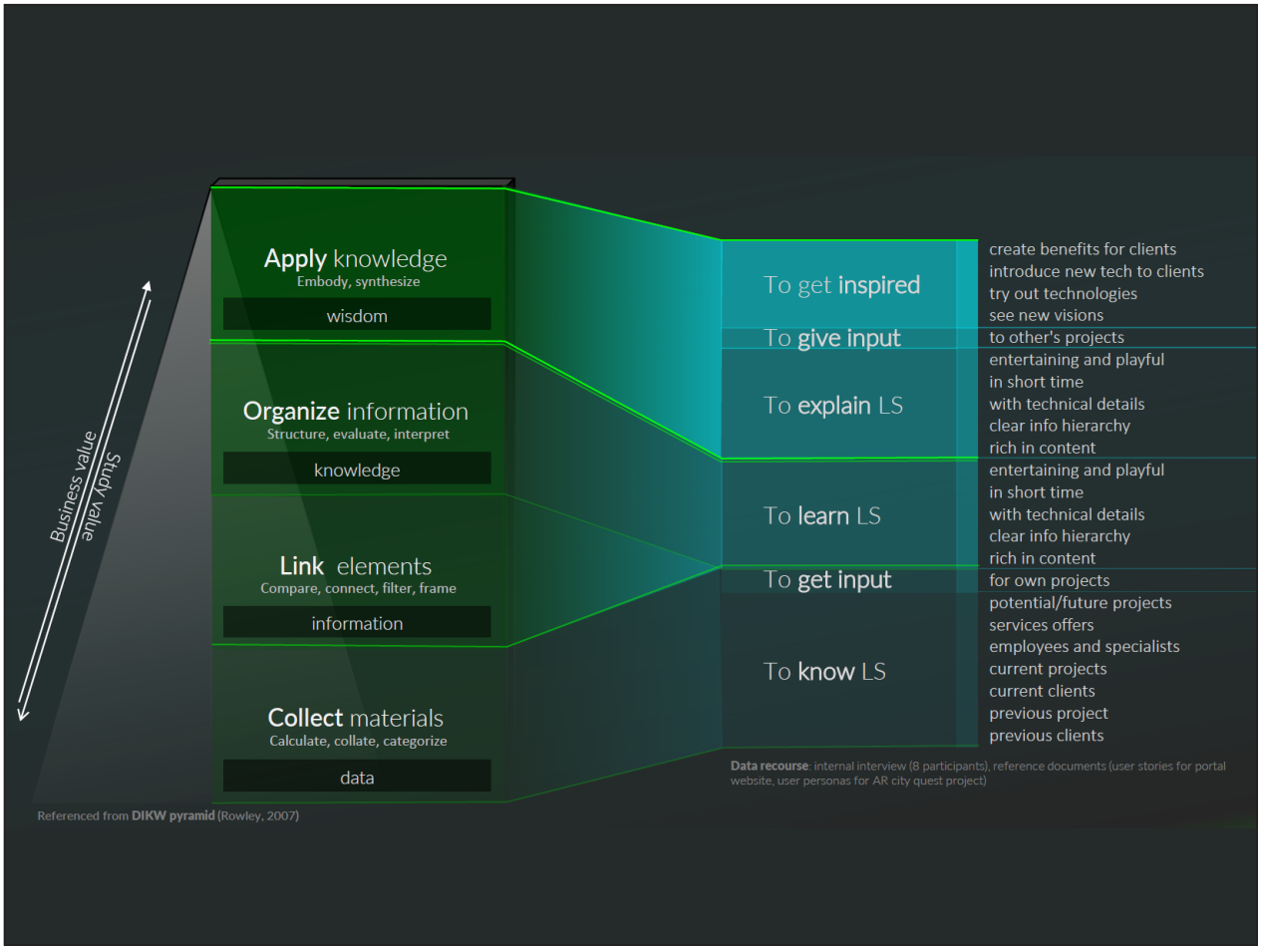
C | VISITOR JOURNEY MAP
(MEDIA FUNCTIONAL VALUABLE ALONG BUSINESS JOURNEY | EMOTIONAL FUNDAMENTAL NEEDS ALONG THEME PARK VISIT)



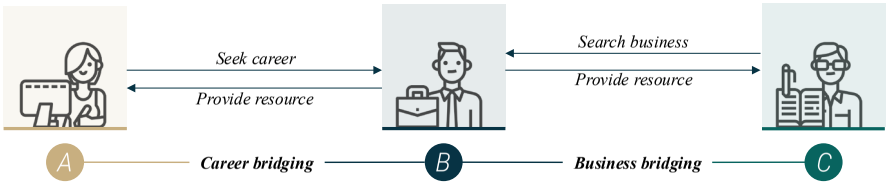
C | MOTIVATION MAP (INFORMATION PERSPECTIVE ON KNOWLEDGE TRANSFER)



C | DIKW ANALYSIS (VISITOR NEEDS IN SPECIFIC)



C | TARGETED PARTICIPENTS GROUPS (VISITOR NEEDS IN SPECIFIC)



Visitor groups	Internal visitor for new **career** opportunities	Internal visitor for promoting **business** opportunities	External visitor for seeking **business** opportunities
Relation ship with LS	*As they just joining the company, they are urging to seek for as much as knowledge on understanding their new career life. Look for interesting opportunities or project they could work on by creating or joining.*	*LS, as one of Accenture's subsidiaries, in such a large-scale global multinational company, if the business relationship is not close, as Accenture's non-LS employees, their understanding of LS is mostly limited to the business block and LS Overview of business functions.*	*Also as external visitors, even though they have a similar level of knowledge about LS as visitor group A, their intention and purpose are different.*
In-house visit motivation	*Through in-house visit, they wish to understand LS in a more realistic approach, and hope to get the opportunity to realize self-growth or show their own value by start and continue their career in LS.*	*For non-LS employees, it is difficult to consciously understand the specific R & D capabilities and scope of LS, and this is exactly what they need to establish internal information exchange to transform scientific research capabilities into business prospects.*	*Visitor group C come to in-house tour as representatives of other own enterprises, hoping to find opportunities for mutually beneficial cooperation between both sides.*

enhance the sense of experience

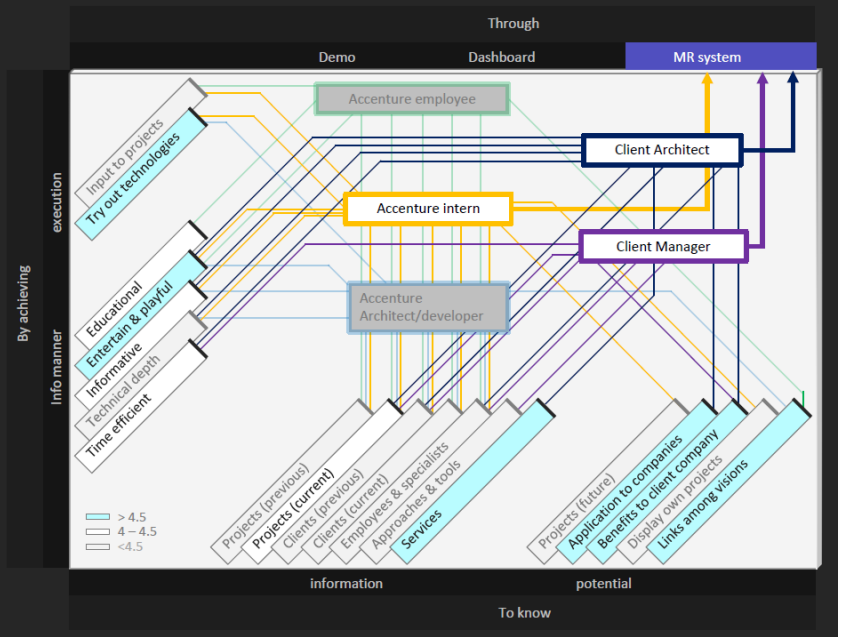
C | USER NEED MAP WITH PERSONAS

By having the key factors, the design aim should include:

Try out technologies in entertain and playful manner

Highlight current projects and services that LS offers

In order to see new visions for new tech opportunities for applications and benefits for client companies



TIME LINE&LOCATION	may not arrive at the location to prepare — to arrive	at the location (in LS Utrecht Office) just arrive — about to leave			may not be at the location fresh and clear — base on memory and accessible materials
FUNDAMENTAL NEED	*Purpose*	*Relatedness & Autonomy + Competence & Stimulation*			*Belonging & Impact*
PHASE	***Before visit***	***Visit start point***	***During visit***	***Visit end point***	***After visit***
VISITOR ACTIONS AWARENESS	Tour info *e.g. location, time, schedule, dressing, etc.* Required preparation *e.g. documents, ID, etc.* Instructions for certain situations *e.g. to delay, to not attend, etc.* Contact info *e.g. website, email, phone, etc.* Further planning *If there are arrangements for other things to come, etc.* Relevant documents *e.g. welcome slides, etc.*	Space and facility conditions *e.g. layout, functional areas, etc.* Atmosphere and environment *e.g. employee working images, etc.* Corporate cultural elements *e.g. brand visuals, branding elements, etc.*	Employee situation *e.g. working style, specialists, contact persons, etc.* More detailed company information *e.g. projects, clients, tools and approaches, etc.* Business scope *e.g. technical capability, etc.* Business capability showcase *e.g. technical demonstrations, etc.*	Collection of acquisition *e.g. info about LS, common vision with LS, etc.* Insights for making revelant decisions *e.g. to work for/cooperate with, etc.*	Reflection *Collection of acquisition* *e.g. info about LS, common vision with LS, etc.* *Insights for making revelant decisions* *e.g. to work for/cooperate with, etc.* Sovernirs and materials from LS *e.g. business card, brochures, any records, etc.* Contact channels *e.g. people network, email/phone/social media,etc.*
CONSIDERATION	▶ *Plan to ensure arriving at the target location on time, be prepared and make the journey start smoothly* ▶ *Once encounter a problem, quickly and clearly determine the steps to solve the problem*	▶ *How to deal with the materials and what should be done?* ▶ *Who to contact, who can be helpful when facing certain questions?* ▶ *Where will be holding the activities and how can the facilities be used in the space?* ▶ *Where to get the info that was aiming for?* ▶ *What is the initial impression of the company, what are assumptions and expectations made upon it?*	▶ *Understand the information and turn it into own* ▶ *Try to find the part of information that was planned to be found or explored* ▶ *Found anything interesting that was not expected as an added bonus* ▶ *Get in touch with people and things that are interested in, and push connection and understands further*	▶ *Organize the harvest as a finishing touch* ▶ *Have a relatively complete understanding of the overall impression* ▶ *The visitor 's intentions about himself and the company began to become clear* ▶ *Whether to promote follow-up development with the company, thus forming a relatively effective basis*	▶ *Based on the goal, reflect on the existing knowledge, review the relevant materials available in the hand* ▶ *Or generate intentions to further develop connections and relationships*
KEY NOTES	▷ **Information integrity** *The relevant information is helpfull to be prepared and provided to visitors in advance* ▶ **Information readability** *The platform that can find relevant information is single (email) and important information items not visible enough* ▶ **Information usability** *There is a gap between the visitor's memo or execution habits, and information or retrieval is re-entered across multiple platforms.*	▶ *For the first visit, the location of the company 's building is not obvious* ▷ *The navigation instructions inside the building play a certain role in helping visitors find the right place (company logo outside the building, elevator floor instructions, visual guidance after arrival)* ▶ *The operational guidance after entering the company is relatively lacking, and the activities and zoning guidelines are not clear (especially for self-help)*	▶ *Demonstration of maintenance requires more investment. The frequency of use of each demonstration, the situation encountered problems can be more monitored, and timely repairs, targeted improvements.* ▶ *Information about the presentation is not sufficient. This is a common situation. The purpose of the presentation, the theme, and the content that you want to present must be explained by relevant personnel.* ▷ *As a demonstration of innovative technology, the demonstration itself should be able to activate the visitor's thinking, learn new technology, accept new things, experience novelty and develop thinking.*	▷ *At this point, the visitor has relatively gained enough information, and has a more comprehensive and deeper understanding from a shallow level.* ▶ *Summarizing and finishing work has great follow-up extension value and will be a good opportunity to plan the added value of the visit*	▷ *What the visitor can finally take away from the visit is truly reflected at this stage* ▷ *When the memory and the required materials can be mastered, it can promote the effectiveness and feasibility of further operations*
QUOTE	*"Information for preparing are written in the paragraphs, it is easy to miss any key items, and it takes some time to read if I want to search for any item in specific."* *"I need to pick and separately deal with the info, for example, integrating time information into the schedule, and location into the map app to use them,"*	*"The hotel reception may be able to help, but I am not sure if they can help me open the door. But fortunately I guessed right, my magnetic card was stored there."* *"I was just stood at the door and looked around after learned from the lady at service desk that I still need to wait for a while. I don't really know where I am allowed to move during the waiting time or what I can do,"*	*"There is always someone around me, so whenever I have a question, I can get a timely answer, which is very helpful."* *"The demo models all looked interesting, and they were drawn to see what they were. But in fact, when I first visited alone when no employee told me, I found myself not easy to understand. And it seems that some of the demos are malfunctioning, which makes me even more confused, but there is nothing I can do."* *"The explanation by the experts is very helpful. I have never thought of many technological innovations. The questions and discussions of the people who visited together were also very interesting. It made me hear a different focus from my own perspective and help me understand."*	*"Not only here, in fact, every time you participate in offline activities, there will be many unexpected gains, those are the highlights."* *"I want to keep those meaningful glowing points in a certain way, and I will not waste this trip when I look back."* *"I met new people, learned new knowledge, gained insight, and made my goals clearer."*	*"Some technologies are helpful, and I want to learn more about them autonomously."* *"When I have new questions or ideas to communicate, I will try to get in touch again,"* *"When I talk or discuss it with my friends, I need some materials, such as photos or official websites."*

E | PERSONAS

MELISSA - 38

Accenture Employee

User Story

Melissa is 38 years old and has been working at Accenture for over 10 years now. Melissa lives with her husband and her child in Amsterdam. She is a working mom who is busy throughout the week and must make long hours. During the weekends, Melissa loves to spend quality time with her family and likes to walk her dog. Melissa works in the Strategy department of Accenture in Amsterdam. She is visiting the Utrecht office for a meeting. While entering the Utrecht office, she passes through Liquid Studios. Melissa is intrigued by the innovative atmosphere and is interested in learning more about the demo's displayed in the office. Melissa askes one of the employees at the engineering team area in the office for a tour. Even though Melissa works at Accenture, she had little technical knowledge, but is averagely skilled in using new applications. She has heard of AR before. She would like to receive information in an educational and playful manner.

Goals visiting LS

- Wants information about LS in an educational, entertaining and playful manner.
- Wants to know about the projects of LS.
- Wants to know about the clients of LS.
- Wants to know about their colleagues at LS.
- Wants to give input in the projects at LS.
- Wants to find links between different divisions at Accenture.

ABRAHAM - 26

Accenture Architect / Developer

User Story

Abraham is 26 years old and is a fanatic gamer. Abraham is intrigued by new technologies and likes to understand and play around with them. In his free time, he meets up with his friends for drinks and hates to workout. Abraham is working at the Technology division of Accenture in Utrecht. Abraham is a highly skilled developer with a lot of technical knowledge. Abraham daily passes through the Liquid Studio and likes to learn more about the newly developed gadgets. He knows his colleagues at Liquid Studios quite well and likes to talk with them about what they are working on in technical depth and give input. Abraham gets excited to learn more about the progress Liquid Studios is making and likes to share what he is working on himself. Abraham likes to receive educational and playful content when hearing about Liquid Studios.

Goals visiting LS

- Wants information about LS in a playful and more data-heavy manner.
- Wants to know about the projects of LS (in more technical depth).
- Wants to interact and is eager to try out technologies at LS.
- Wants to know about the clients of LS.
- Wants to know about their colleagues at LS.
- Wants to give input in the projects at LS.
- Wants to find links between different divisions at Accenture.

PAUL - 20

Accenture Intern

User Story

Paul is studying software engineering in Eindhoven. Paul is close to wrapping up his studies and will be working as an intern at Liquid Studios for his master thesis. He loves to spend time with his friends, drink some beers, or go to the gym. When Paul entered Liquid Studios for the first time, he was overwhelmed by all the cool flashing screens around the studio. Paul is eager to explore what the office has to offer and learn more about what Liquid Studios does. He also likes to learn more about what he potentially can bring to the Liquid Studio. Paul is technically skilled and therefore easily grasps how to interact with the different demo's in the office. Paul wants to learn more about the technical background of the different demo's.

Goals visiting LS

- Wants information about LS in a playful and more data-heavy manner.
- Wants to know about the projects of LS (in more technical depth).
- Wants to interact and is eager to try out technologies at LS (in more technical depth).
- Wants to know about the clients of LS.
- Wants to know about their colleagues at LS.
- Wants to know what projects colleagues at LS are working on.
- Wants to know what potential projects they could be working on in the future at LS.
- Wants to give input in the projects at LS.
- Wants to display their own project at LS.

STEPHANIE - 45

Client Manager

User Story

Stephanie is 45 years old and is a very active person. Stephanie does not have kids and lives with her husband in a small village close to the city. She likes to go running in the weekends. Stephanie is a senior manager at a client of Liquid Studios. She has a busy schedule and likes to run meetings efficiently. Stephanie is visiting Liquid Studios to gain a deeper understanding of what Liquid Studios can mean for her company. She wants to learn about the different projects, the approach, the employees working on the projects and the services. Stephanie hopes the tour through the office will be a bit entertaining and understandable. For technical knowledge and insights, she relies on her colleague from the tech department that is joining her (of some of the newest technologies she has never heard of before). Stephanie knows how to use her phone and computer but is not really up to date on the newest possibilities and applications.

Goals visiting LS

- Wants information about LS in an educational, entertaining and playful manner.
- Wants to understand the LS approach and their knowledge / tools.
- Wants to spend their time efficiently.
- Wants to know about the projects of LS and what LS can offer the company.
- Wants to understand how the technologies behind the demo's at LS can help innovate the company.
- Wants to know about the services of LS.
- Wants to know about the previous clients of LS and their experiences.
- Wants to know about the employees at LS and their specialties.

JOHN - 32

Client Architect

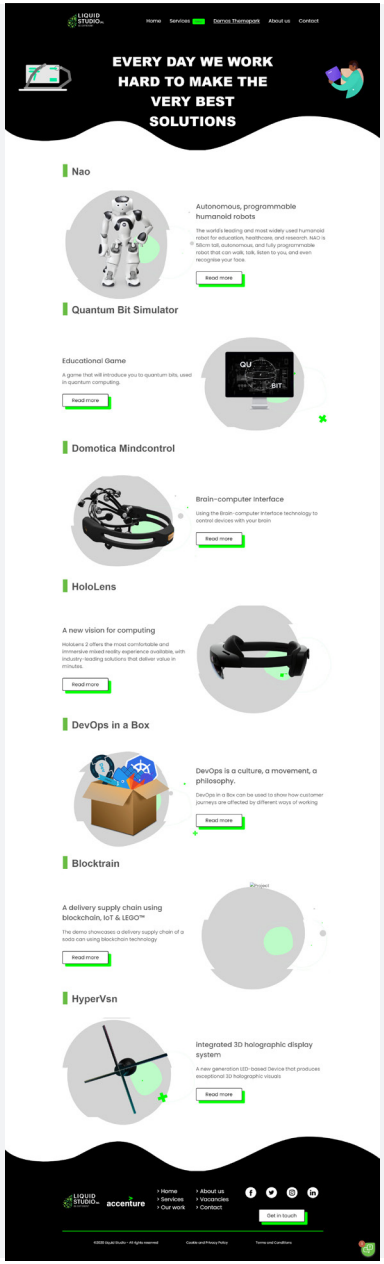
User Story

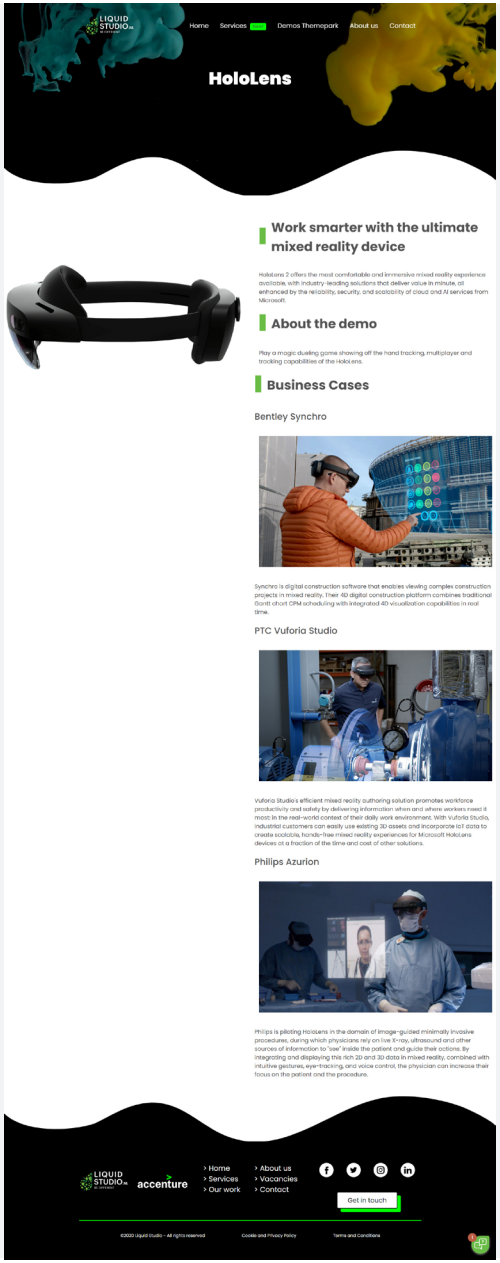
John is 32 years old and lives with his girlfriend close to the city. John has a baby on the way. During the weekends, John loves to spend time in nature with his wife. John is an architect at a client of Liquid Studios. John is accompanying his boss to a visit at Liquid Studios to gain a deeper understanding of what the consultants can do for their company. John has in-depth technical knowledge of the problem the company is currently encountering. He hopes to learn more about what projects Liquid Studios works on, a bit of the technical background behind the different technologies and how the consultants can help him solve the problem. He knows his manager is depending on him for his technical expertise and therefore will ask the more in-depth questions. However, John is not a developer himself, so he is not able to code.

Goals visiting LS

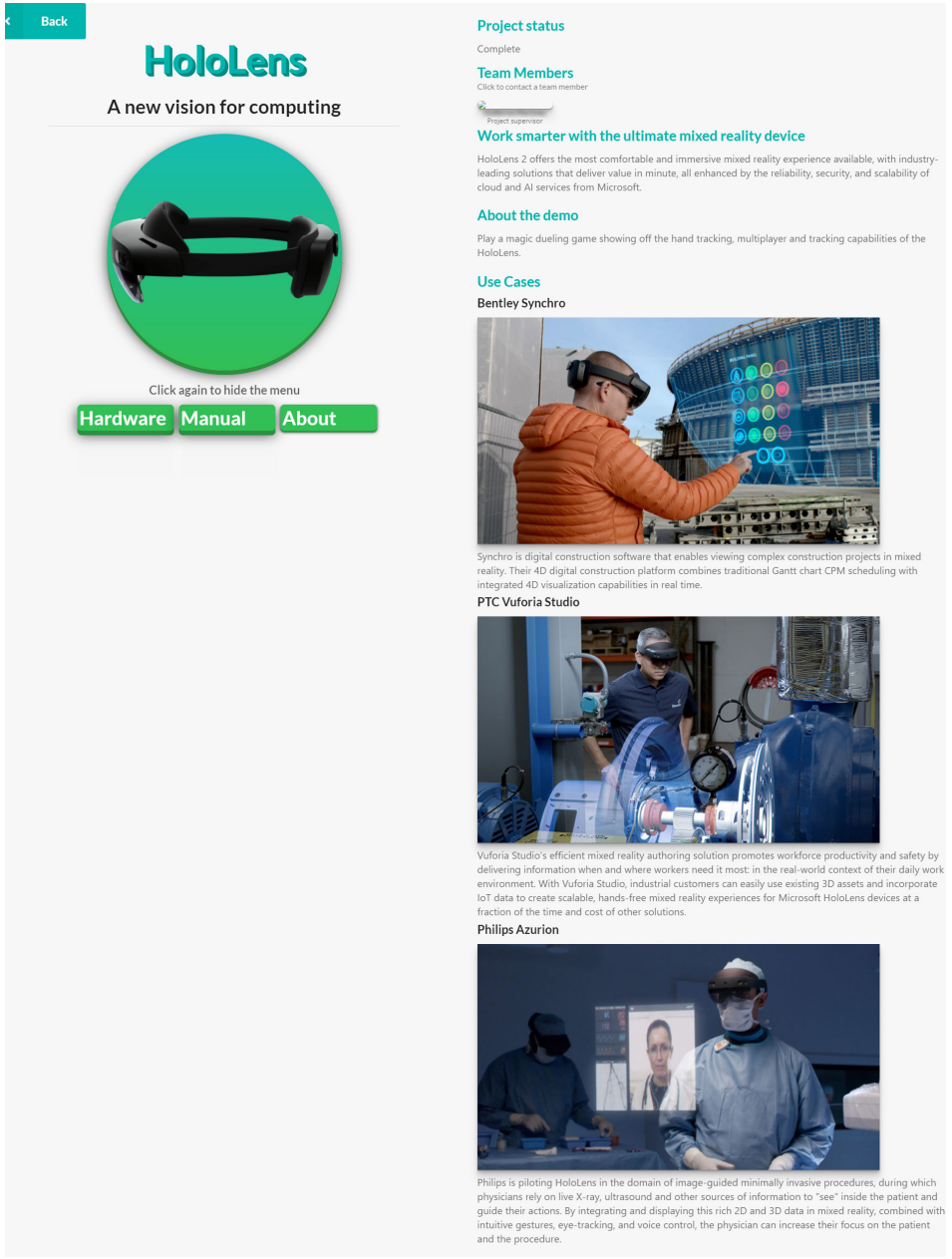
- Wants information about LS in a playful and more data-heavy manner.
- Wants to understand the LS approach and their knowledge / tools (in more technical depth).
- Wants to spend their time efficiently.
- Wants to know about the projects of LS and what LS can offer the company.
- Wants to understand how the technologies behind the demo's work (in more technical depth) and how they can help innovate the company.
- Wants to know about the services of LS.
- Wants to know about the previous clients of LS and their experiences.
- Wants to know about the employees at LS and their specialties.

F | OFFICIAL WEBSITE CURRENT VERSION
(DEMO THEME PARK PAGE AND SHOWCASE EXAMPLE)

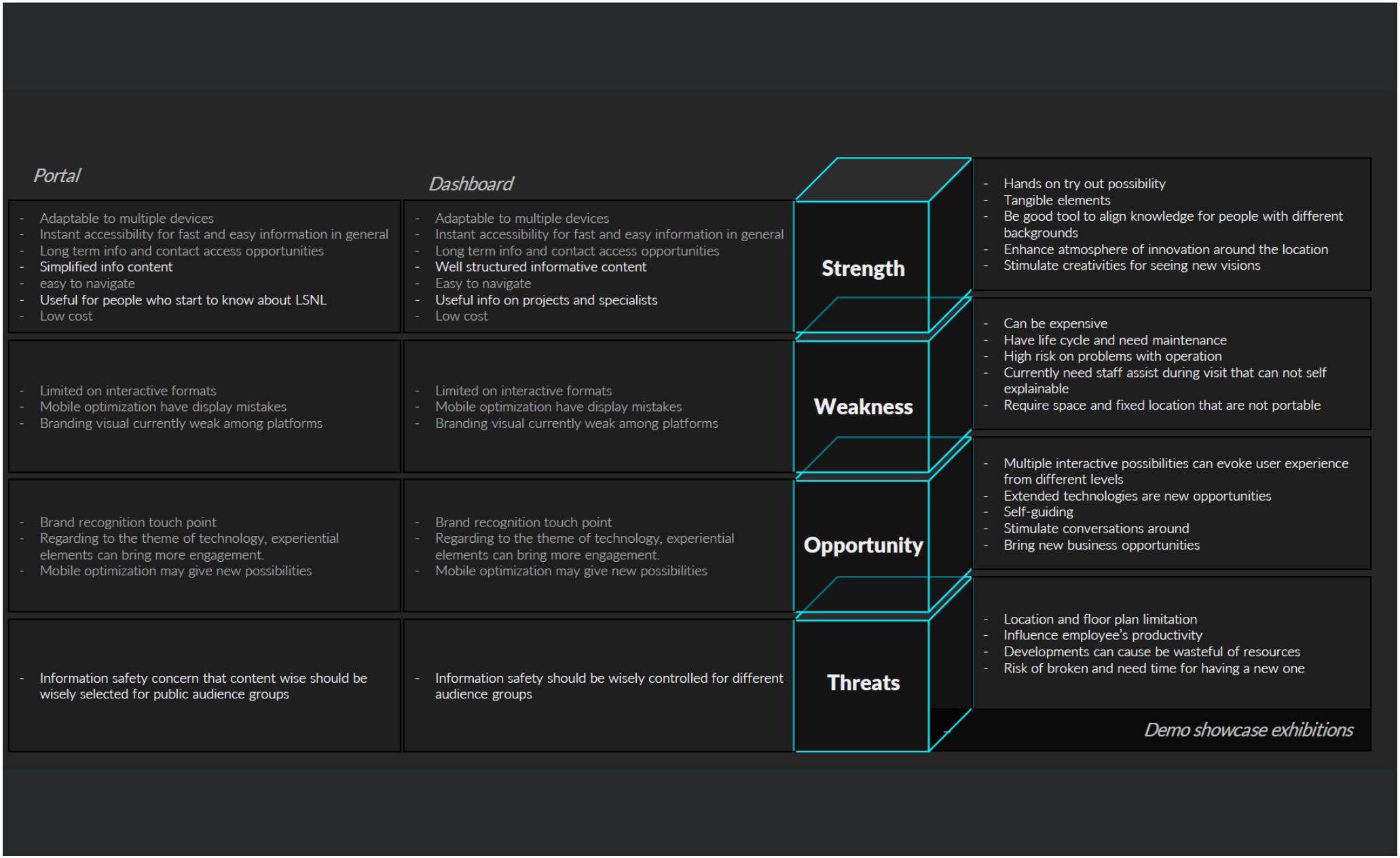




F | DASHBOARD CURRENT VERSION
(SHOWCASE EXAMPLE)

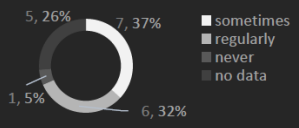


F | TRIPLE SWOT ANALYSIS AMONG INFO PLATFORMS



How does the current platforms working? - around demos

- *Interns presents 10% higher expectations from fuller timers linearly*
- *There is a 20% lower from expectation to satisfaction in general*
- *Previous and current clients, colleague specialises, and technical depth, are not much expected from demos, but still see large room to improve from current status.*



How is the difference on user requirements between internal user groups to info platforms in general ?

To get inspired
- create benefits for clients 23
- introduce new tech to clients 22
- try out technologies 21
- see new visions 20

To give input
- to other's projects 19

To explain LS
- entertaining and playful 18
- in short time 17
- with technical details 16

To learn LS
- clear info hierarchy 15
- rich in content 14
- entertaining and playful 13
- in short time 12
- with technical details 11
- clear info hierarchy 10
- rich in content 9

To get input
- for own projects 8

To know LS
- potential/future projects 7
- services offers 6
- employees and specialists 5
- current projects 4
- current clients 3
- previous project 2
- previous clients 1

About historical data, project info presents more value then client groups
by data from user needs 1-2

Residents tend to use the information platforms creating business values for clients and seeing futures, while interns use them as learning tools facing current challenges
by linear trends and data from user needs 4, 6, 17-23

Interns rely more on info from platforms for doing explanations
by data from user needs 17-23

Overall *requirement of tech detail* is *at relatively low level*
by data from user needs 11, 16

Data recourse: internal survey
Sample amount: 17 (9 interns, 8 full timers)
to what extent agree with the situation stated in each of the following statements with scale of 6 levels from strongly disagree to strongly agree, which are transform to cores from 0 to 5 for analysis.

Compare among the three relevant platforms

MISSION & VISION

Ideate and pilot leading-edge client-specific solutions leveraging the latest technologies and partners with the unique objective to scale.

IGNITE INNOVATION
Co-Create NEW Business with speed and agility.

Don't wait for the RFP to come. But rather, pro-actively, invite your clients to discover, ideate and prototype on NEW technologies to help them disrupt their market

ACCELERATE TRANSFORMATION
Set up or extend NEW Tech Foundries.

Leverage Liquid Studio to set up or extend a "NEW Tech Foundry". Bring client resources into LS teams or the other way round to best infuse our culture & way of working & technical skills.

CONNECT ECOSYSTEMS
Leverage the best of IA, IPS & Business Partners.

Connect to all our Innovation Architecture pillars as well as with our practices, IPS and business partners: SAP, Microsoft, Google, Oracle, and more.

GROW TALENT
The place to be for highly skilled resources.

Liquid Studio is a team of technology agnostic & full stack gurus, on all new technologies (i.e. XR, AI, Blockchain, IoT, Big Data, Analytics), able to tackle any type of business challenges and available anytime.

CORE VALUES

What we believe

WE STAY AHEAD
Technology is changing faster than ever before. Not only do we embrace innovation, we explore, get inspired, and create, to transform cutting-edge technologies into tangible innovations, business solutions & services. Our team is able to push the limits of what is possible by leveraging our global network of experts, partners and consistent access to the latest technologies.

WE LOVE CHALLENGES
At Liquid Studio we never see limitations, we see challenges, opportunities, and adventures! We get a thrill from complexity and making the impossible possible is what drives us. We are here to brainstorm, kick start, or transform your business. The sky is the limit!

WE ARE A FAMILY
Liquid Studio is home to people who are curious, full of energy, and like to color outside of the lines. We are developers, engineers, designers, and a bunch of other experts with a great sense of humor. But above all: we are a family of dreamers. We brainstorm, laugh, learn, inspire, and deliver awesome ideas and solutions together. We put people first and value real relationships. We are all about working hard and having a lot of fun along the way.

WE DON'T WALK, WE RUN
We deliver, and we deliver fast! By working in short agile sprints, we turn inspiring concepts into tangible solutions in days, rather than months. The team consists of hard workers and problem solvers who are focused on producing results, not excuses.

CUSTOMER PROFILE

Startups, medium to big-sized companies within and outside of Accenture are our customers. We target the ones that desire to make a change in their organizations, want an innovation makeover, or have a specific challenge related to technologies. We help them emerge new technologies into their organizations and/or provide solutions to their problems.

COLOR PALETTE

Primary palette
Text and background colors

RGB: 0 / 215 / 0
Hex: 00D700
CMYK: 74 / 0 / 85 / 0
Or PANTONE 2271

RGB: 255 / 255 / 255
Hex: FFFFFF
CMYK: 0 / 0 / 0 / 0

RGB: 0 / 0 / 0
Hex: 000000
CMYK: 75 / 68 / 67 / 90

RGB: 145 / 145 / 145
Hex: 919191
CMYK: 46 / 38 / 38 / 2

Secondary palette
Accenture colors

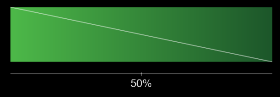
RGB: 0 / 83 / 10
Hex: 00530A
CMYK: 91 / 0 / 78 / 55
Or PANTONE 7484

RGB: 0 / 255 / 0
Hex:00FF00
CMYK: 49 / 0 / 100 / 0
Or PANTONE 802

RGB: 0 / 243 / 255
Hex: 00F3FF
CMYK: 53 / 0 / 10 / 0

Gradient

The gradient is created by the two first colors of primary and secondary palettes, taking 50% as midpoint location.



H | SPATIAL CONDITION IN LSNL UTRECHT OFFICE

Within the image as shown, the rendering gives a more detailed idea on office layout with its casual furnishing style. Two areas are indicated from the rendering to the illustration that are currently where present most of the demos.

Figure X: LSNL office indoor floor planning rendering

Semi-open working space

Most of the time it is used as an open office area. Sometimes isolated from outside and used to host larger sessions (about 100 people). It is under casual office style and equipped with smart office equipment, such as smart displays.

Social & Relax

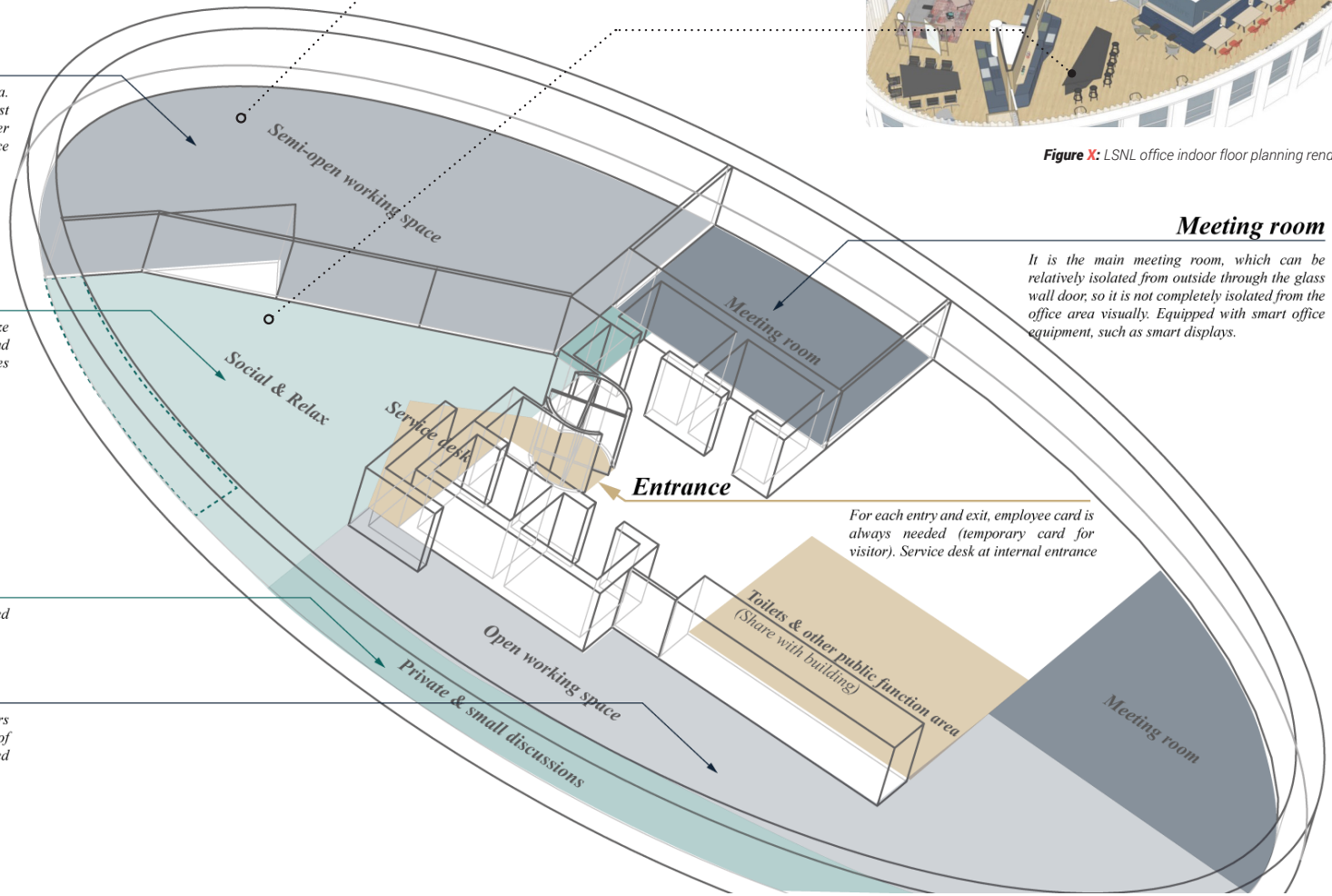
An area for employees and visitors to socialize and relax, providing coffee and refreshments, and the main display area of current demo showcases (indicated by the dashed line).

Small-scale discussion & private telephone area

Provide an atmosphere that is relatively isolated from open office areas

Open working space

Open work area, a variety of tables and chairs arranged to meet the preferences of employees of different working modes. There is no fixed location arrangement, first come first served.



Meeting room

It is the main meeting room, which can be relatively isolated from outside through the glass wall door, so it is not completely isolated from the office area visually. Equipped with smart office equipment, such as smart displays.

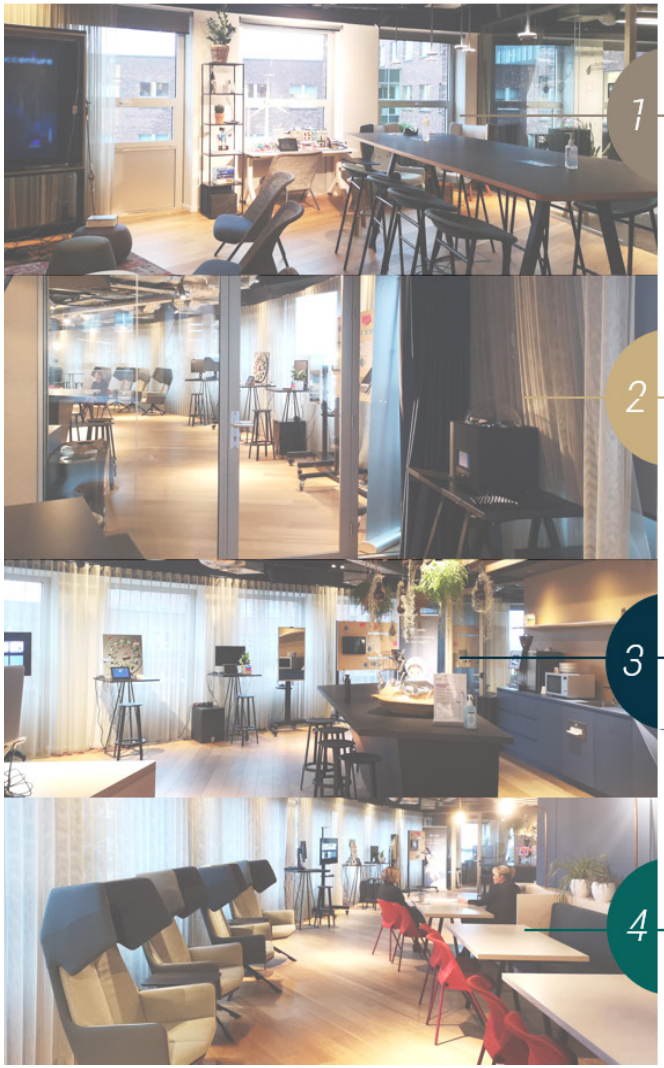
Entrance

For each entry and exit, employee card is always needed (temporary card for visitor). Service desk at internal entrance

Figure: LSNL office indoor floor planning

The main exhibition areas

The four photos as below record several perspectives that the visitors could see the showcase areas. The illustration shows the angle of view when the photo was taken and the range included in the office.

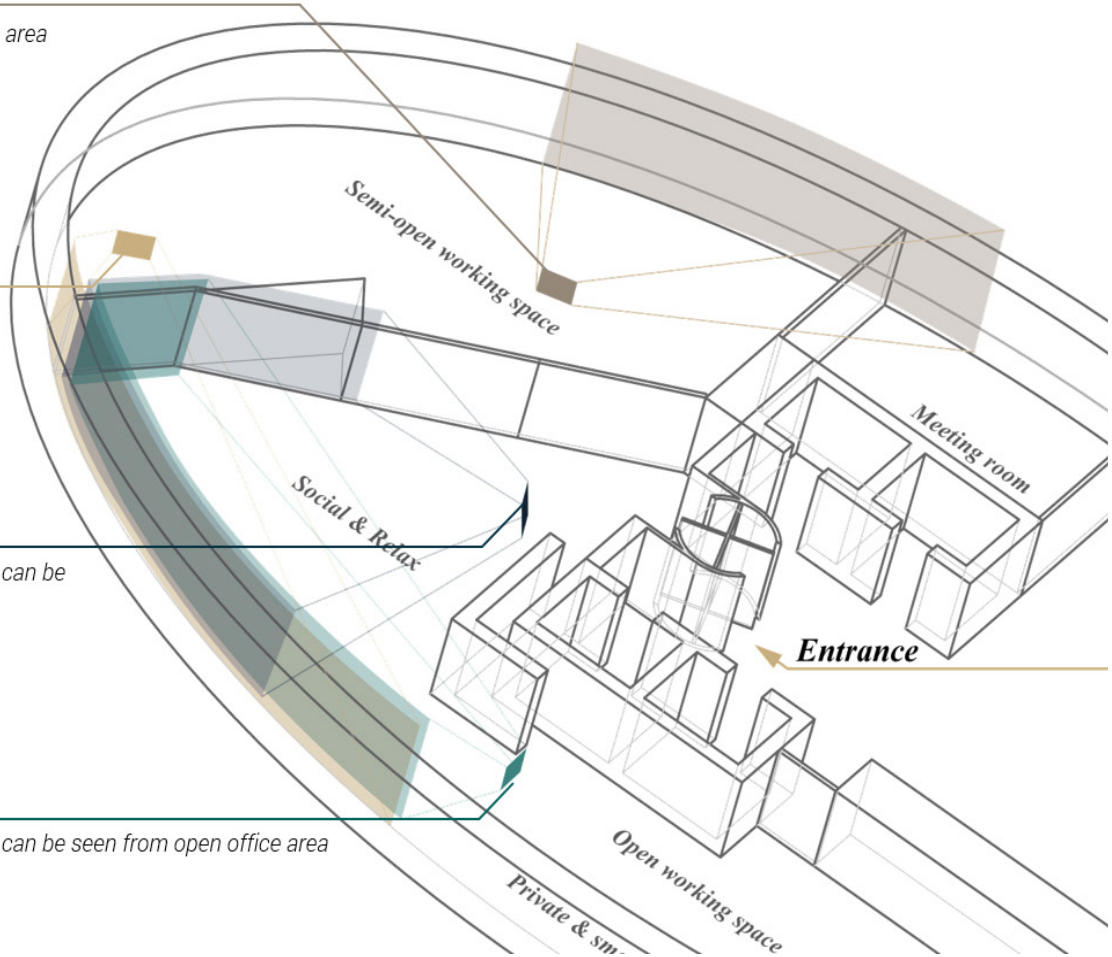


1 *Individual booths in the office area*

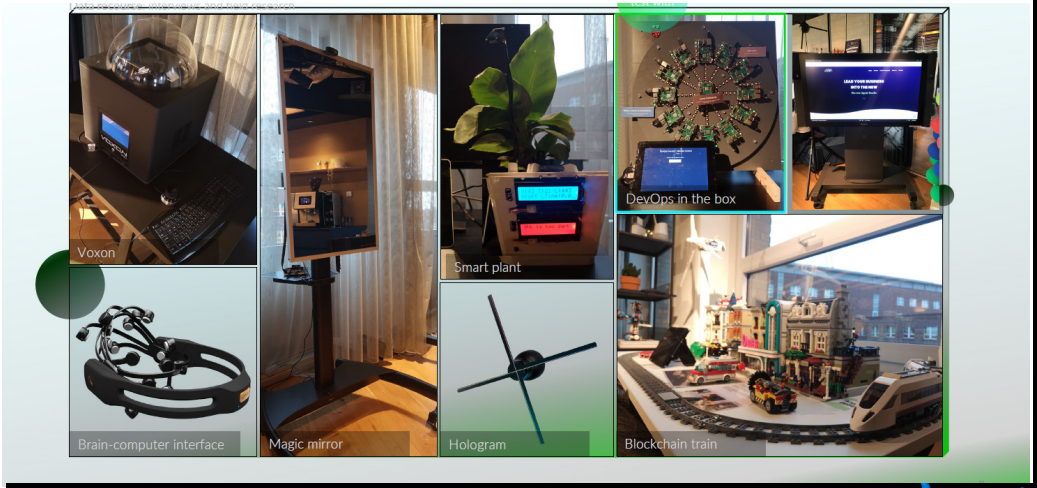
2 *Perspective of the back door of the office area*

3 *The main exhibition area that can be seen at the entrance*

4 *The main exhibition area that can be seen from open office area*



H | DEMO IN THE LOCATION



HOLOLENS

PROJECT BACKGROUND

The Hololens is Microsoft's take on augmented reality, which they call "mixed reality". Using multiple sensors, advanced optics, and holographic processing that melds seamlessly with its environment, These holograms can be used to display information, blend with the real world, or even simulate a virtual world. You can interact with this virtual world using your real life hands and speech commands.

BUSINESS USE CASE

The Hololens can be used for a whole range of products, Other than using the Hololens for gaming you can use the Hololens to visualize a virtual object like a car into a real world meeting room where everyone wearing a Hololens can view and interact with the object. Another thing you could do is have a virtual meeting room for international meetings. So that within the virtual room you can pull out documents and put them on a virtual wall for everyone in the experience with you to read, copy or interact with.

DEMO DESCRIPTION

Making a magic dueling game showing off the hand tracking, multiplayer and tracking capabilities of the Hololens.

DEVOPS IN A BOX

PROJECT BACKGROUND

DevOps in a Box is used to show how DevOps makes this transformation process more convenient and efficient. This process is visualized and made tangible by connecting a cluster of Raspberry Pis with LCD lights and demonstrated in a way that can represent the load and how the network traffic is spread across nodes. When a company goes through DevOps transformation, it is not only an organizational transformation but also a mechanical shifting. Furthermore, the transformation needs to happen at all levels of the organization, from top to bottom and vice versa. It is a bi-directional process.

BUSINESS USE CASE

DevOps in a Box can be used to show how customer journeys are affected by different ways of working. For instance, to compare large enterprises applications using monolithic architecture, with the ones built with a microservices approach. Big companies are migrating to the DevOps way of working to optimize their services. With the help of Cloud infrastructure, DevOps practice empowers clients to test their new features with a small group of customers to get immediate feedback from the customers responding to changes. Meanwhile, it also reduces rollback surface in case something goes wrong in the rollout process, with an aim to deliver a "zero disruption" experience. In addition, DevOps in a Box can be used to deliver training capabilities such as using Kubernetes, configuration management tools and cloud-native architectures best practices.

DEMO DESCRIPTION

DevOps in a Box is a showcase of DevOps transformation for complex enterprise systems. By combining the DevOps approach with a cluster of hardware running Kubernetes, it demonstrates a customer-centric way of working to deliver features end to end. The demo also gives an example of how DevOps transformation reforms the missing ring between engineering and decision-making stakeholders.

VOXON VX1

PROJECT BACKGROUND

The Voxon VX1 is a device that can display 3D holograms that are visible from any angle and do not require special glasses or a headset to be seen.

BUSINESS USE CASE

The Voxon VX1 can be used for medical purposes such as visualizing images from a CT or MRI scan, it can be used to play games, the Voxon VX1 comes with a set of gams such as chess and Pacman. The Voxon VX1 has also been used to make a holographic video call.

DEMO DESCRIPTION

Showing the standard features that are already on the Voxon VX1, the medical images, some of the games and animations. Currently being worked on combining the Voxon VX1 with the Brain Computer Interface (BCI), to control a hologram with the BCI and visualize the brain activity while performing this task.

BLOCKTRAIN

PROJECT BACKGROUND

Blocktrain is an interactive embodiment of blockchain and IoT technologies combined to showcase a simple example of a supply chain use-case and practical integration possibilities of the two technologies. Through smart contracts and IoT hardware, Blocktrain ensures proper provenance tracking, traceability and transparency.

BUSINESS USE CASE

Blockchain is very theoretical subject, benefits of which might be difficult to demonstrate, while modern supply chains have several standing issues i.e. reverse logistics; globalization; market growth; customer service and cyber risks. In this way, Blocktrain can showcase potential benefits of the blockchain (traceability, data safety, optimization) through addressing supply chain's improvement areas.

DEMO DESCRIPTION

The demo showcases a delivery supply chain of a soda can. Blocktrain comprises of 5 stations – ore mine, aluminum producer, can factory, supermarket and a customer, which in turn represent 5 parties/nodes of the blockchain. These parties can trade goods with each other in exchange for funds. The demo operates as follows: train connects to the IoT platform through an MQTT protocol and sends relevant location and temperature/humidity updates. All new events are managed from the DAML (blockchain) and further sent to the IoT platform. So whenever a new trade is created – the train moves to the seller location to pick up the goods and transports them to the buyer. Upon a successful delivery, funds are transferred from one party to another through an escrow.

NAO ROBOT

PROJECT BACKGROUND

NAO robot is a programmable humanoid robot that is designed to interact with humans. Equipped with voice interface, cameras and multiple sensors and motors, NAO works as a perfect tool for educational and human interactional purposes. The purpose of this project is to extend the capabilities of NAO with an intelligent dialogue systems and advanced motion techniques.

BUSINESS USE CASE

Nao is very useful for entertainment and demonstration purposes. It can have smart interactions with clients via chatbot, with speech being complemented by gestures and other movement. Additionally, it can be prothegrammed in an easy way with a graphical interface, so clients themselves can build behaviors for Nao. In this way, Nao can showcase the application of different concepts such as Modularization, AI and Robotics and the interplay between those disciplines in a playful and enjoyable way.

DEMO DESCRIPTION

Introducing the users to the concepts of modularization and extendibility with external modules in a complex systems like NAO by verbal and non-verbal interaction.

LIQUID STUDIO DASHBOARD

PROJECT BACKGROUND

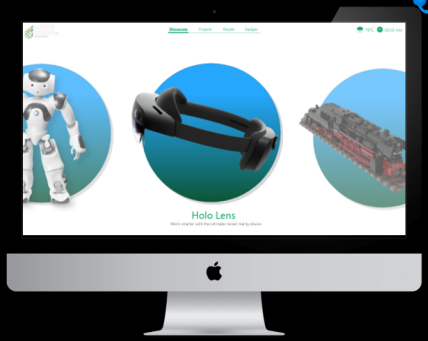
Liquid Studio Theme Park has prototypes that use the newest technologies available on the market. Because of that the need for a dashboard was born to get all the information about each prototype in one single place.

BUSINESS USE CASE

The web application is made specifically for Liquid Studio, but it can be easily adjusted to be used within any company and with any projects out there.

DEMO DESCRIPTION

The web application is being used on the Microsoft Hub near the Liquid Studio Theme Park. You can use the application to find more information about the prototypes, details about each project, people who are working on it and use cases.



SMART PLANT

PROJECT BACKGROUND

In recent times, employers have felt an increasing need to update the standard, layout, and architecture of their working space. Shared seating solutions, rest and relaxation areas, and more homely environments have become the new norm as the workforce continues to demand better conditions from their employers. And the very key answer to a good working environment is plants. Our mission is to automate the care of a plant by remotely monitoring its health and altering its environment for optimal growth with a device called Smart plant.

BUSINESS USE CASE

Having plants in office poses a challenge of maintaining and taking care of a large number of plants considering the big effort and high labor cost. Besides, it is not an easy task for someone to know the ideal living condition for many different plants in the office to take a proper care of them. Therefore, it can result in dead plants which are costly to replace. Thus, automating the task will be a great solution considering its advantages of being precise, scalable and can store as much data as needed.

DEMO DESCRIPTION

The device can monitor the plant's living condition (humidity, light intensity and temperature) by reading sensor data. Then the data will be sent to the cloud for processing and receive back the commands it needs to execute (watering the plant or sending warnings to users if the light intensity or temperature is not within the acceptable range.

MAGIC MIRROR

PROJECT BACKGROUND

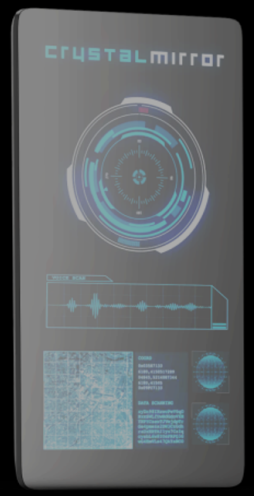
A magic mirror is simply an intelligent personal assistant in a mirror which can recognize your face, show your own customized time-table based on that, find number of coffees you had this week, do things on your voice command etc. It can also show the weather update of your location, quick news flash and do other simple tasks like play a YouTube video or play a song on Spotify. It is being made to be intelligent and helpful.

BUSINESS USE CASE

It can be very useful in offices as it helps you to check your personal time-table based on your face, so it will help you check your important events on the go throughout the office. It can also serve as a simple assistant which can tell the whole office when it's going to rain or about a lunch party being organized. Magic mirror is a fun addition which can server as an office JARVIS.

DEMO DESCRIPTION

Making use of our own Machine learning facial recognition model, weather and new APIs, Jetson Nano and Raspberry Pi, Magic mirror can serve as a great addition to an office.



BRAIN-TO-COMPUTER INTERFACE (BCI)

PROJECT BACKGROUND

A brain-computer interface (BCI) can perceive the human brain waves, digitize these waves and translate them into action commands. In practice, this implies that the BCI can translate a user's brain waves into commands and connect them to specific actions such as controlling electronic and digital devices or generating muscle movements.

BUSINESS USE CASE

With the capability of replacing, restoring, enhancing, supplementing and improving the output of brain waves as well as recognizing the facial expressions, a BCI is highly valuable in the medical industry. Amongst other things, it can help patients move their leg, talk through a computer, or control a motorized wheelchair despite their body disability or the loss of natural Central Nervous System's output. Additionally, the BCI can also be used for entertainment purposes.

DEMO DESCRIPTION

Making use of Machine & Deep Learning the BCI is able to use brain waves to move virtual objects according to certain commands. Connecting the BCI to the 3D volumetric display Voxon VX1 adds a whole new dimension to understanding and visualizing your own brain. Activity of the brain can be seen in real-time. The Voxon VX1 allows to view the brain from all angles.

HYPERVSN

PROJECT BACKGROUND

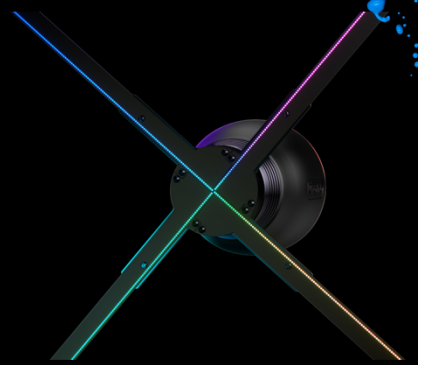
HYPERVSN is an Integrated 3D Holographic Display System that allows you to create your own 3D content. It displays the highest-quality visuals and enables advanced media planning and management. Taking audiences from what they once thought was a technological fantasy to an engineering reality. With the HYPERVSN Wall you can produce high-resolution images of almost any size, inviting audiences to take a deeper and wider perspective in viewing 3D content. HYPERVSN Walls can be installed vertically or horizontally to fit your specific space and brand requirements.

BUSINESS USE CASE

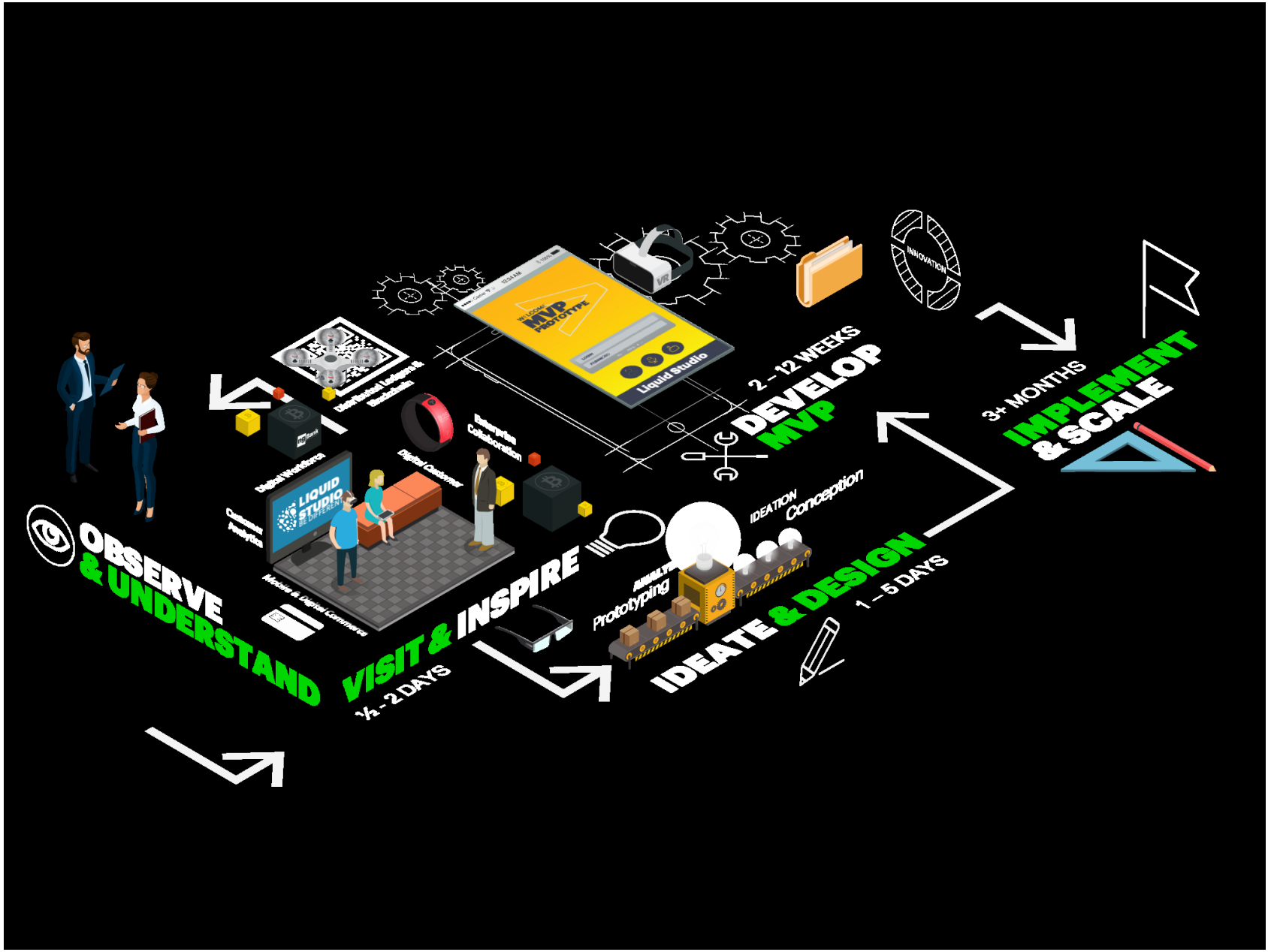
Hypervsn allows users to display 3D holographic visuals of almost any size, instantly grabs attention and triggers real emotions within audiences. HYPERVSN guarantees an increase in foot traffic and a boost in sales at the same time create an unique atmosphere at your store, office or event.

DEMO DESCRIPTION

HYPERVSN is the Digital Generation's ultimate solution for scalable visual disruption. This astonishing 3D device is the first holographic product on the market that allows you to create your own 3D content without any specific design skills, while providing you with an entire system for device display & management.

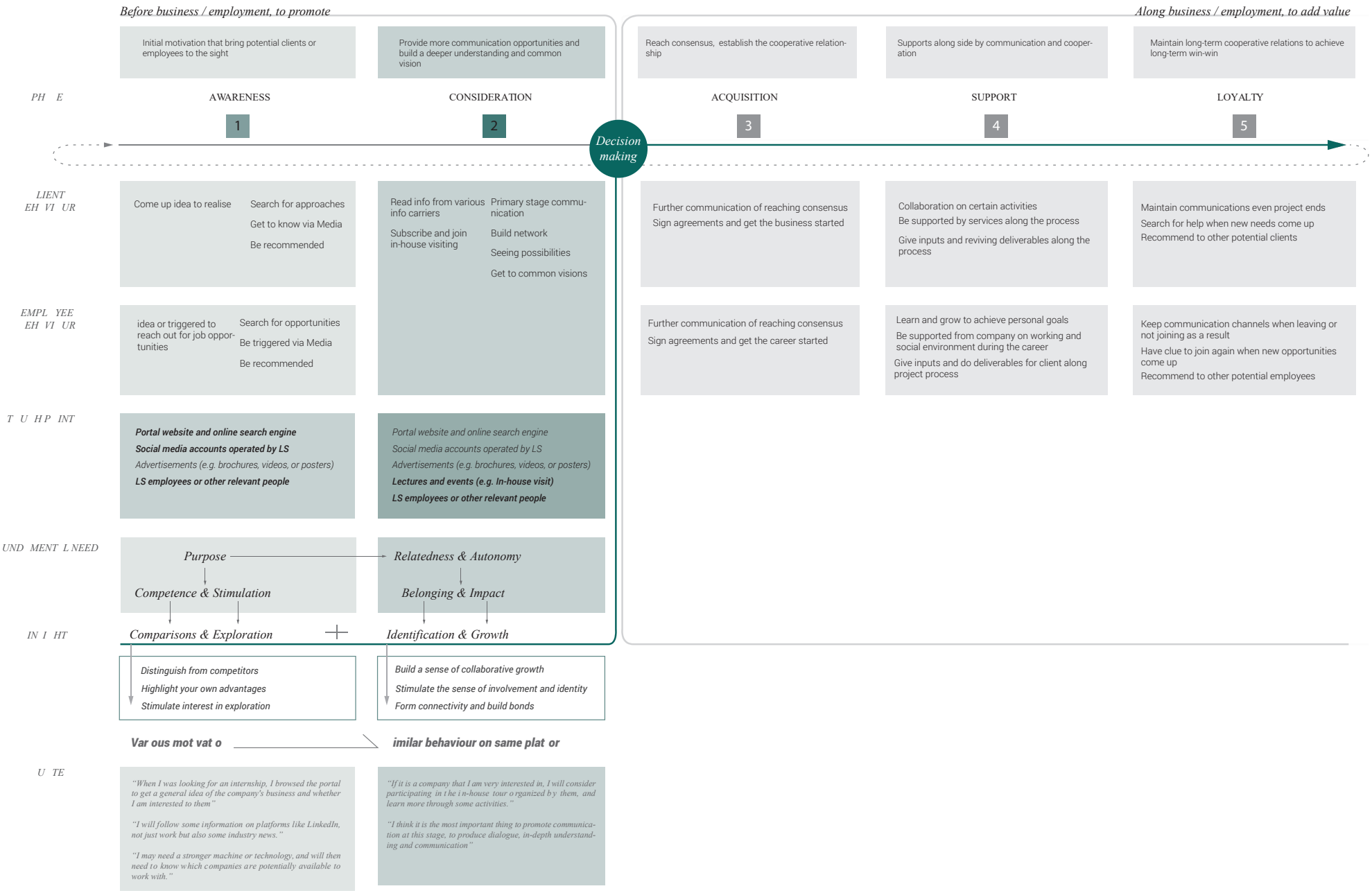


I | LIQUID STUDIO CUSTOMER JOURNEY
(LIQUID STUDIO THE NETHERLANDS)



J | VISITOR JOURNEY IN GENERAL

ON BUSINESS / EMPLOYMENT



KEY TECH TRENDS

At Liquid Studio, we are inspired by Accenture's #TechVision. Find out more about these trends before browsing through our showcases.

ARTIFICIAL INTELLIGENCE

Computer vision, deep learning and process automation – machines are aiding us in optimizing processes and influencing decisions. AI is also making every interface both simple and smart, setting a high bar for daily customer interactions.

DISTRIBUTED LEDGER

Distributed ledgers will expand networks by eliminating the need for trusted third parties. Blockchain is a type of **distributed database system** that maintains and records data while allowing multiple parties to **securely share access to data.**

EXTENDED REALITY

AR/VR is removing the distance to people, important information and exciting experiences, transforming the way people live and work. They **create entirely new ways** for people to **experience and engage** with the world around them.

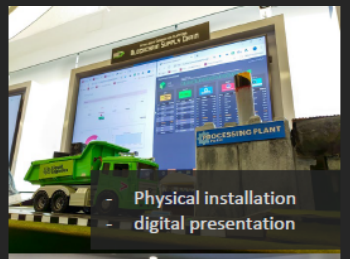
INTERNET OF THINGS

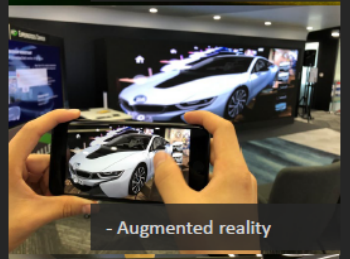
A network of devices, vehicles and "things" **embedded with electronics, software and sensors** that exchange data through the Internet. This helps us make informed decisions, reduce costs and provides a seamless user experience.

THE "HUMAN+" WORKER

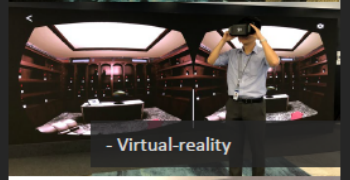
"Human+" workers, empowered by their skillsets, knowledge, and a constantly growing set of capabilities **made possible through technology**, will build the pathway to the next big wave of innovation.

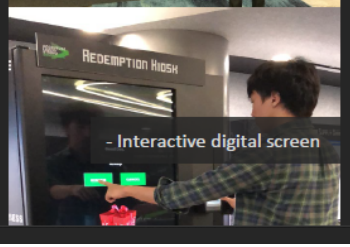
Data recourse: share from LS Singapore, online meetings


- Physical installation
- digital presentation

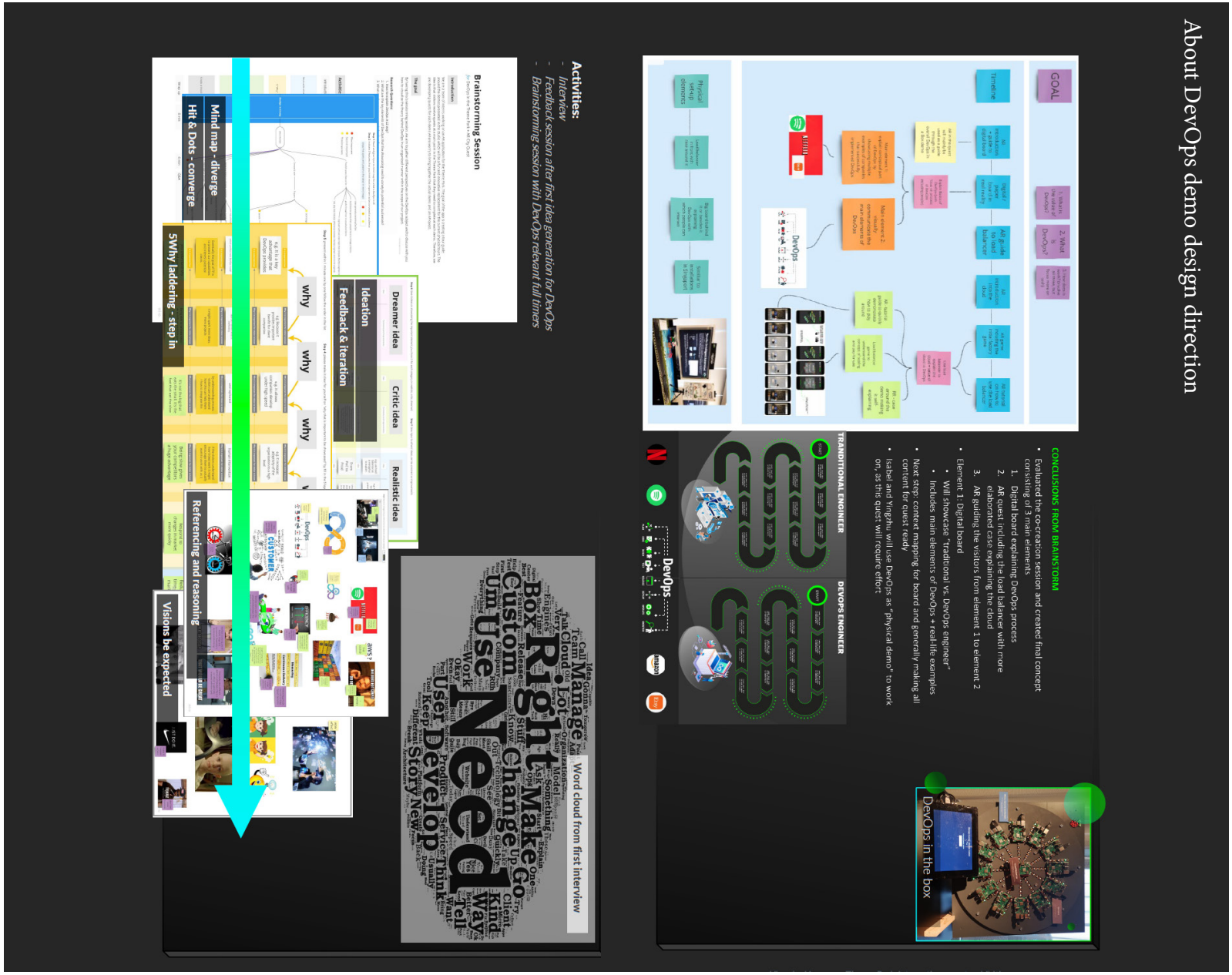

- Augmented reality


- mixed-reality


- Virtual-reality


- Interactive digital screen

L | RESEARCH ACTIVITIES AROUND DEMO
(DEVOPS)



Brainstorming Session

for DevOps in the Theme Park + AR City Quest

Introduction

We are a team of interns working on an AR application for the Theme Park. The goal of the around the demos presented in the studio which will be a fun and innovative replacement idea is that visitors receive quests at a main point in the Theme Park that they need to com are developing quests for each demo where we try to bring together the actual demo and a

The goal

By having this brainstorming session, we aim to gather different perspectives on the DevOp how to visualize the theory behind DevOps in an organized manner within the scope of our

Research Questions:

1. How to explain *DevOps in LS way*?
2. What are the *key elements* of DevOps that the *showcasing need to convey* to potential au
3. What can *be ways to approach the demo*?

Activities and timeline

Introduction	10 min		10 min	Welcome and get started
Work with mind map	10 min	step 1	3 min	Read the mind map
			5 min	Adjust or add input to min
		step 2 + 3	2 min	Select key element and ad
5 "Why"	10 min	step 4	5 min	Fill in 5 "why" laddering
		step 5	5 min	1 min present on laddering
Ideation session	15 min	step 6	3 min	Write down a dreamer ide
			3 min	Write down a critic idea
			3 min	Write down a realistic idea
		step 7	3 min	Read each other's ideas
			3 min	Give inputs to others' idea
Create a mood board	9 min	step 8	3 min	Search for 3 images that y
		step 9	3 min	Search for 3 images that you think match or image of experiencing DevOps technology
		step 10	3 min	Post-it any element you feel interesting to images
Wrap up	6 min		6 min	Q&A

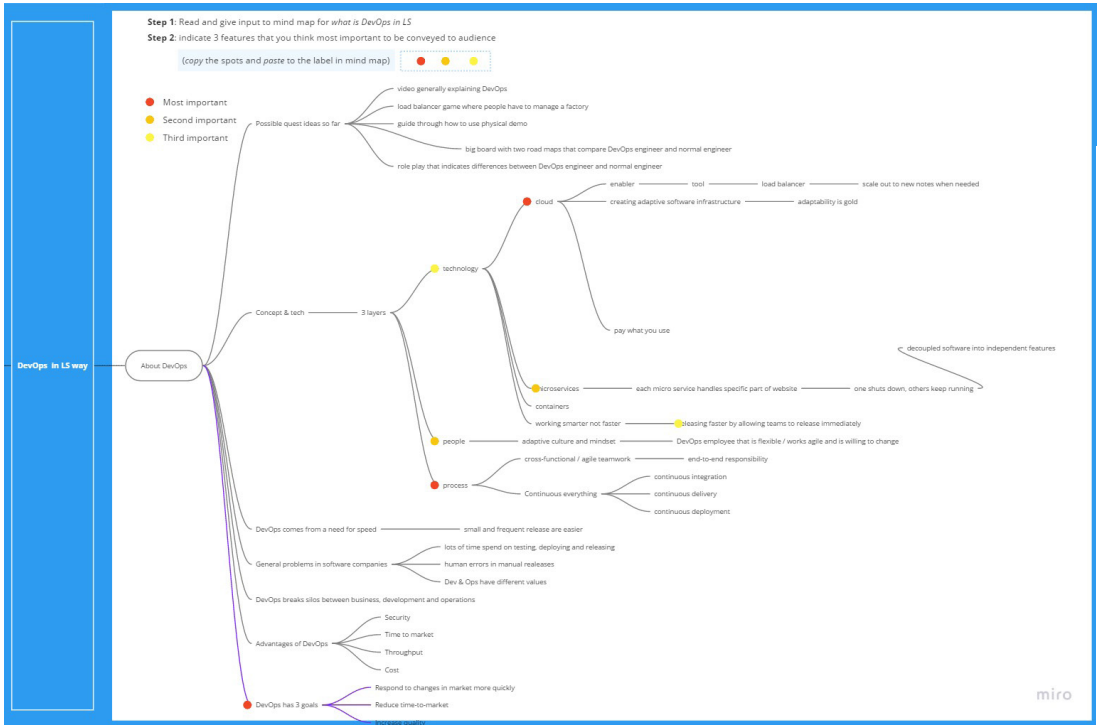
app is creating a tour guide
or the current physical tours. The
plete at each demo. Therefore, we
n AR quest.

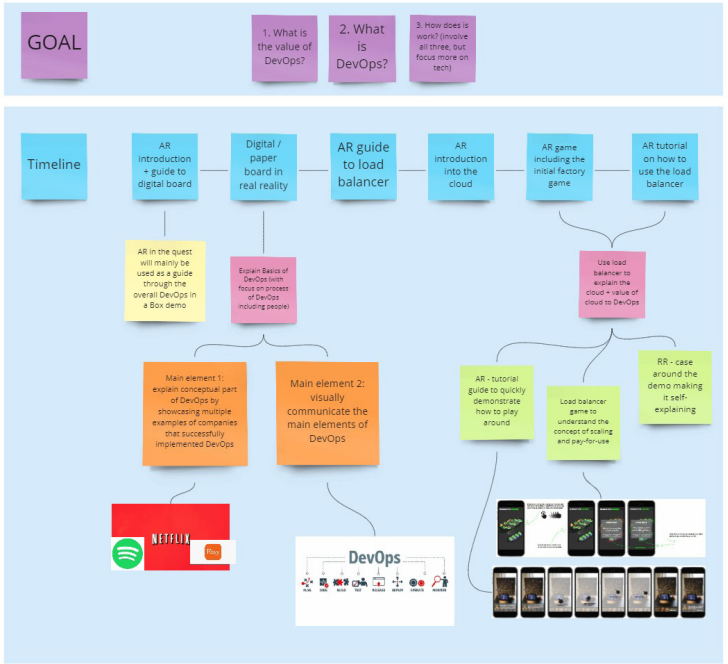
s subject and to discuss with you
project.

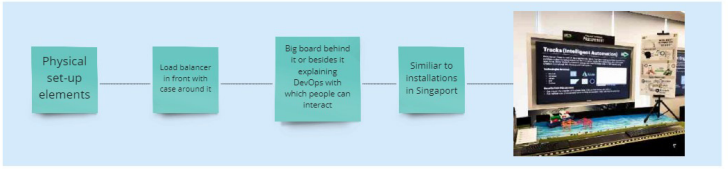
diences?

	13:00
	13:10
d map	13:13
d to yellow board	13:18
	13:20
g one by one	13:25
a	13:30
	13:33
	13:36
	13:39
s	13:42
ou think can be nice references	13:45
represent your feeling or	13:48
see from the other's	13:51
	13:54

60 min







Step 6: Give 3 ideas on showcasing the important element you chose (1 for each category on realistic, critic, dreamer)

Step 7: Give input to others' ideas, can be comment or improvements

Dreamer idea

idea | Comments and improvements

DevOps roleplay on Website hosted on cloud

Show the key differences in the wow between a devops team publishing a change in production and a classic team going through a legacy approach and a change management process

Full VR or AR walk through of the process. Everything visualised + sound effects like 4D cinema ;)

Let people interactively see a backlog and their results change live when they change parameters like team governance, release freq., etc

DevOps "guidelines" manual

Explain Devops in general in AR with user interaction

Critic idea

idea | Comments and improvements

Modernizing legacy workloads and defeat cloud bias

Show Enterprise client that cloud providers can provide level of compliance which are far beyond what they can imagine. And that every system on the world can be potentially rebuilt with a cloud friendly architecture ! This will boost our cloud sales !

PP presentation with some examples of processes from past projects

WHY Silicon valley rapid development benefits

Show real-world examples of good and bad scenarios of responsiveness.

I think this would be nice to anyways in the final design (e.g. in a case around the demo)

Basic guide of best practices

Realistic idea

idea | Comments and improvements

e.g. use load balancer as a metaphor to explain

e.g. should be self presentative

e.g. can let user play in the role as the load balancer to distribute the work loads

is load balancu really DevOps

From PoC to Prod

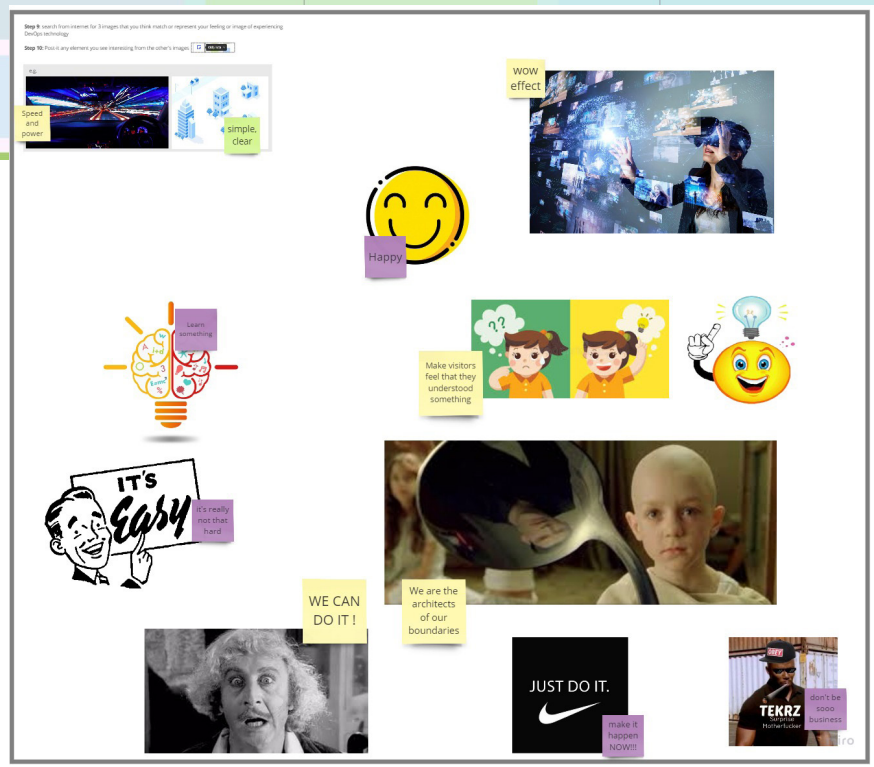
show how bringing your idea' alive it's easier in the cloud. And that from poc to market there is no gap if this is done in combination with DevOps

This is a nice demo of what is the cloud, but not really what is DevOps.

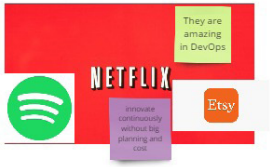
Let people experience the value of releasing continuously by creating a pipeline demo that they can use themselves.

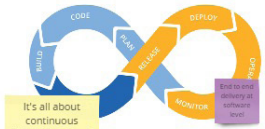
(maybe a story where they are a company that has to deliver's something in a certain time period)

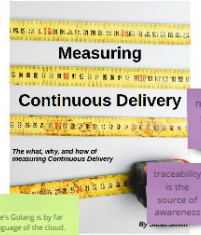
CI/CD architecture for different technologies

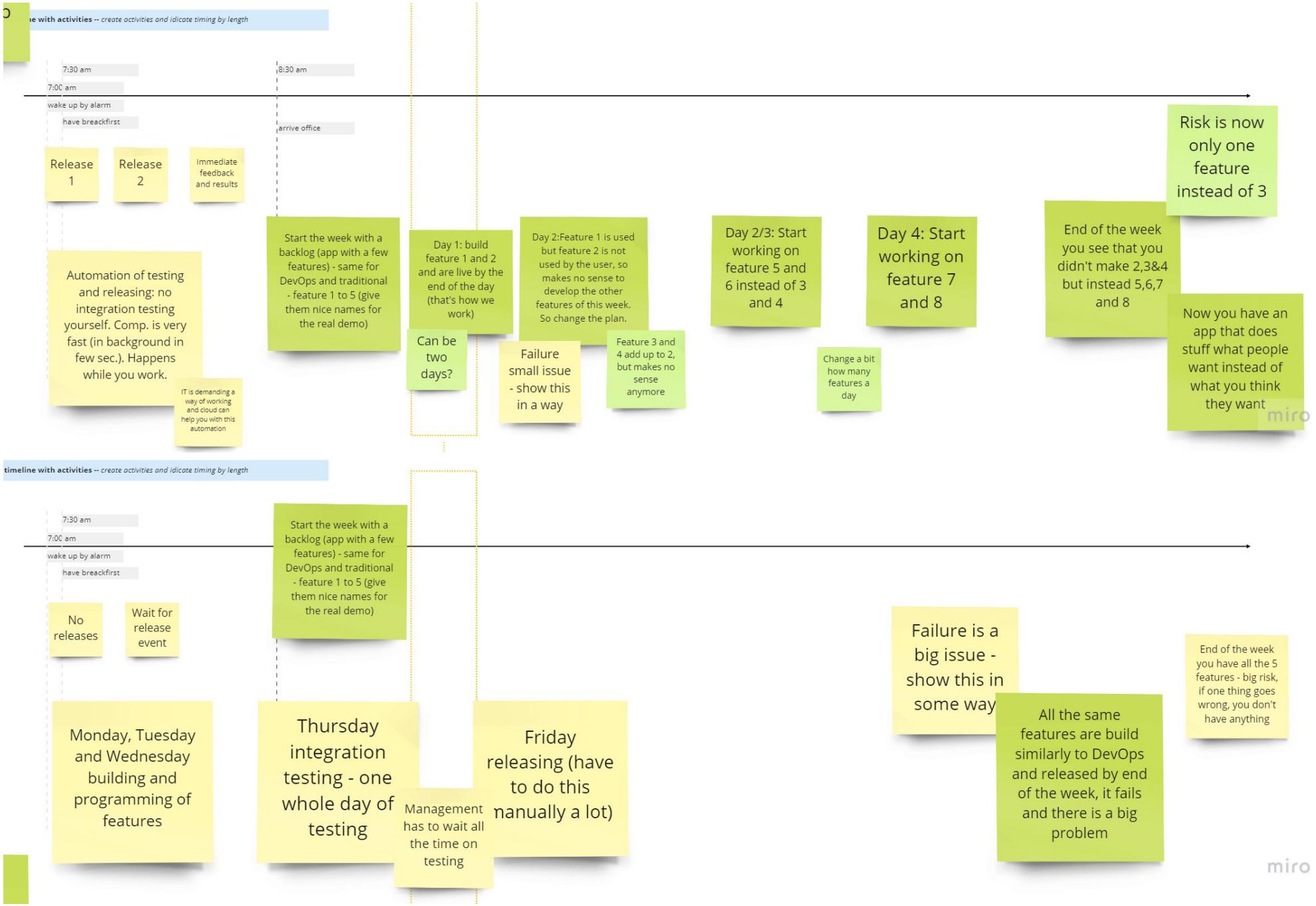


Step 8: Search for 3 images that you think can be nice references, and tip your highlights

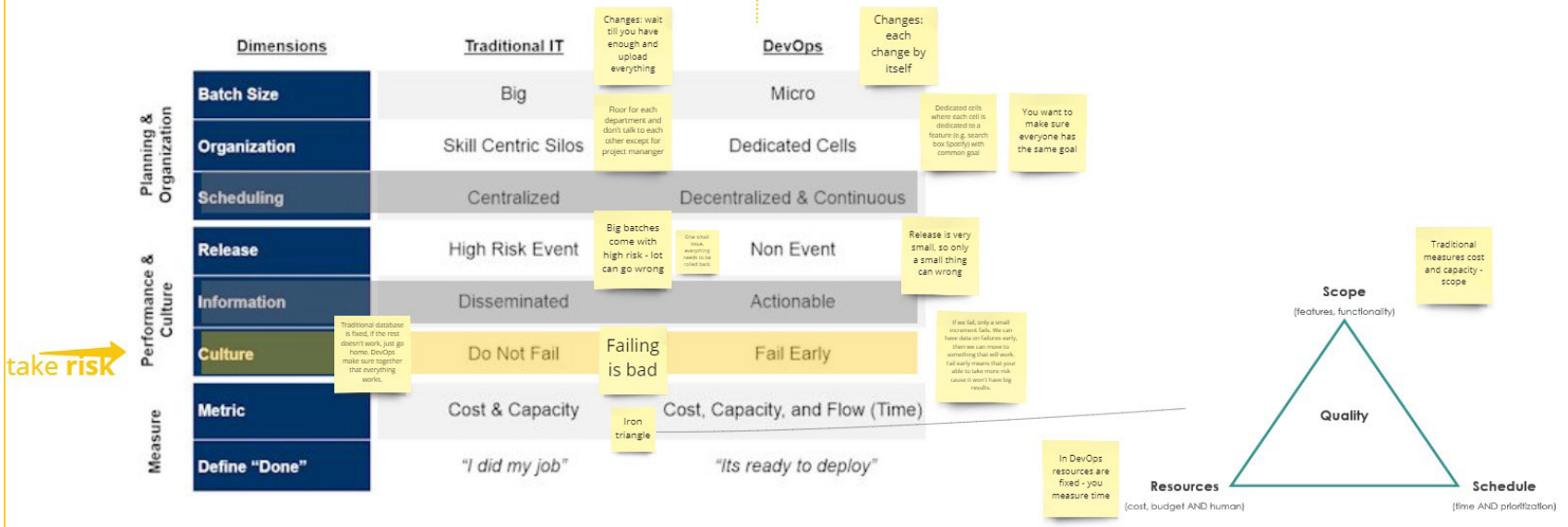




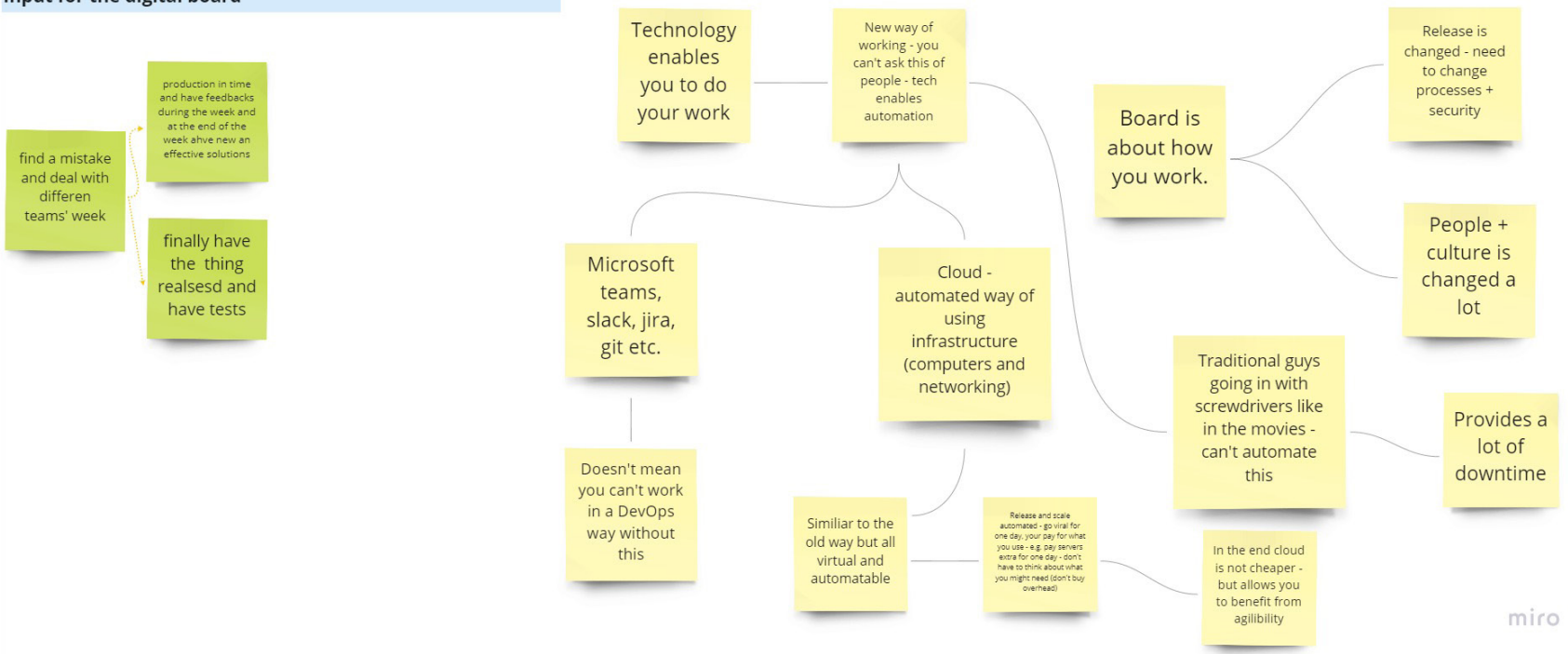



timeline with activities -- create activities and idicate timing by length
7:30 am
7:00 am
wake up by alarm
have breackfirst
8:30 am
arrive office
Release 1
Release 2
Immediate feedback and results
Automation of testing and releasing: no integration testing yourself. Comp. is very fast (in background in few sec.). Happens while you work.
IT is demanding a way of working and cloud can help you with this automation
Start the week with a backlog (app with a few features) - same for DevOps and traditional - feature 1 to 5 (give them nice names for the real demo)
Day 1: build feature 1 and 2 and are live by the end of the day (that's how we work)
Can be two days?
Day 2:Feature 1 is used but feature 2 is not used by the user, so makes no sense to develop the other features of this week. So change the plan.
Failure small issue - show this in a way
Feature 3 and 4 add up to 2, but makes no sense anymore
Day 2/3: Start working on feature 5 and 6 instead of 3 and 4
Change a bit how many features a day
Day 4: Start working on feature 7 and 8
End of the week you see that you didn't make 2,3&4 but instead 5,6,7 and 8
Risk is now only one feature instead of 3
Now you have an app that does stuff what people want instead of what you think they want
miro
timeline with activities -- create activities and idicate timing by length
7:30 am
7:00 am
wake up by alarm
have breackfirst
No releases
Wait for release event
Start the week with a backlog (app with a few features) - same for DevOps and traditional - feature 1 to 5 (give them nice names for the real demo)
Monday, Tuesday and Wednesday building and programming of features
Thursday integration testing - one whole day of testing
Management has to wait all the time on testing
Friday releasing (have to do this nanually a lot)
Failure is a big issue - show this in some way
All the same features are build similarly to DevOps and released by end of the week, it fails and there is a big problem
End of the week you have all the 5 features - big risk, if one thing goes wrong, you don't have anything
miro

Indicate what is the elements that makes this difference



Input for the digital board



INTRODUCTION

The AR CITY QUEST

AR City Quest is a mobile app that guides Liquid Studio visitors through all the demos inside Liquid Studios using Augmented Reality technology. The app will provide a high-tech and more interactive experience compared to usual office tours which are perceived to be outdated. The AR app has been developed for the phone only so far to make it accessible to all visitors and it enables Liquid Studios to provide additional information about the clients visit.
The goal of the AR app is to show visitors what Liquid Studio has to offer. Through quests at each demo, visitors will learn about the newest technologies that might be relevant for their company. The presentation of the application will be adjusted to the specific client visiting. For now, the application is designed for the Liquid Studio Theme Park, however it could be redesigned for companies with similar interactive tours.
The visitor can download the app and login with their specific company code. In the app the visitor encounters a city that needs help innovating. The residents of the city give the visitors quests to help them grow and innovate. These quests are all related to the demos displayed in the studio. Through the quests, visitors will learn about the different demos and gain understanding on what value it can potentially create for them as client.

The past six months, we have been working on building a foundation around the previously explained idea for the AR City Quest. This design document explains how we came to the designs we have so far and provides ideas on how to continue with this project. To understand what we are talking about in this document, it might be useful to first read the original design document of the AR City Quest (see overall concept) and talk to the different demo developers. We hope this document will help you continue our work and finish what we started!

DESIGN APPROACH

How did we design for AR?

Throughout the project we have relied on the same approach for designing the AR experience. We brainstormed about a possible quest that would bring together the real reality so to say, add a playful informative AR layer and provide a game element making sure that we designed the complete environment surrounding the AR. When the concept was there, a storyboard was created to consider the overall flow that the user would go through and provide the visuals that our two developers needed for development. Generally, this worked well, storyboarding has been suggested online as well as an appropriate approach for UI/UX design for AR. However, looking back, it might be interesting to research if there is a design prototyping program that would allow you to simulate the AR experience. Even though we used Adobe XD and got relevant feedback from this, there is still a big barrier to the AR environment that you don't have with designing a normal application. XD mainly helps you to dive deeper into the flows and overall visuals. Of course, the approach you choose is completely up to you!

THE CONCEPT

The AR CITY QUEST

To start off the project, we mainly looked at how AR tours were implemented in museums. Guidigo is a company that designs AR tours for museums. We used them as a source of inspiration throughout the project.

There were a few elements we researched to create a picture of our users and the overall look-and-feel of the application. First, we created personas of potential visitors (see next page). These personas are based on user research for the LS Portal from a previous intern and by talking to the residents in the studio. Yingzhu started to conduct more research on the personas later in the project. Her research concluded that the three most important personas for the Theme Park are the client, LS intern and LS full-time employee. The user research on the LS Portal provided us with relevant information on how different parties would like to receive information about LS. Yingzhu also continued to build on this research. Please refer to her work in case you would like to know more about her insights.

Secondly, we researched the placing of the demos throughout the studio. We had two ideas for this. The first idea was to spread out the demos throughout the studio to trigger people to experience the whole office. However, we later ran into the problem that users need to return to the book / main city each time that they have completed a quest. Therefore, we decided it would be best to create one experience area with all the demo's together. This is probably also best for the safety of the AR user as they might get sucked into their phones. Unfortunately, we were not able to test this due to the Corona virus. When it is possible again, it would be good to still user test the movement flow of the tour.

Thirdly, we had multiple discussions about the look-and-feel of the overall Theme Park and the AR app itself. For the overall look-and-feel of the Theme Park, Yingzhu and Hester had meetings with Liquid Studio in Singapore. Their Theme Park is further developed and an important inspiration source for this project.

For the branding of the AR app, it is important to know that the LS branding is still in development. In general, if you use the black and green colors in the design, it is ok. It is possible to play with this. To give an example, we started using a lot of 80% black as a background of our visuals to create a more coherent image. Also, all the icons and illustrations we used throughout the project can be found on in Teams and are collected from Adobe Stock.

Important links:

INTRODUCTION INTERFACE

Introducing the user in the LS AR world

The LS introduction interface was designed to provide visitors with some basic location and contact information in advance of their visit. For example, we included that Google Maps automatically opens when clicking on the map in the interface. The idea was to create a basic paragraph that could be attached to mails to the visitors that instructed them to download the app in advance of the visit.

Furthermore, the app includes some basic instructions on how to use AR. People are generally less familiar with AR applications than usual applications. To allow the user to play around with the AR environment, they need instructions on what to do (this is based on research we did on AR). These instructions where later animated to provide a less text-heavy / carrousel like solution. There is still room for improvement regarding the animations, these were solely developed to convey our thoughts. In general, the design of the introduction interface still requires reconsideration and iterating.

We also came up with this idea to make the AR app personalized for each company visiting the studio (see main city). The introduction environment provided the possibility to work with personalized codes that could be send in advance of the visit. Kyle started with implementing such a solution, but due to other priorities this was never finished.

Important links:
- Animated beginning interface

MAIN CITY

The city of Liquidios

The main city of the AR City Quest consists of an 3D AR virtual city that pops-up when a large old book in the center of the LS near the coffee area is scanned. In this story, the user is the mayor of the city who returns from a long leave to guide the city to the city of the future. The advisor of the mayor welcomes the mayor back in a short introduction and asks the mayor to help. The user (or mayor) can help the city by clicking on a selected amount of buildings in the city. Each building represents a specific demo in the Theme Park and comes with a character that guides the user throughout the quest. The buildings are selected based on the story that the demo tries to convey. We came up with the combinations in the table below.

An important note here is that the AR city is not in any way related to the Lego City that is displayed in the Blocktrain demo. The city should be expanded with additional buildings that are connected to other demos in the Theme Park. Also, random trees, residential areas, etc. need to be added to make it feel like city for the final product.

Once the user has completed a quest, the designated area in the city will be upgraded. The area will appear to be in a clouded / manufacturing type of state with a clear sign of pending until the user has completed the next quest. Once the next quest is completed, the newly upgraded area will reveal itself. It should still be considered what should happen with the upgrade of the latest quest and how this upgrading system will be implemented.

Demo	Building	Reasoning	Character
***Dashboard (optional)*	City Hall	The city hall is the central point of information similarly to the dashboard.	Mayor (the user) & advisor / assistant Sophia
Smart Plant	Farm	The most logical solution to connecting plants to a city is through a farm.	Farmer Tom
Blocktrain	Train station	The blocktrain consists of a train passing multiple stations	Conductor Steff
DevOps in a Box	Industry sight	The DevOps in a Box quest includes a small game where users need to manage a factory.	Factory worker Thomas
Magic Mirror	Mall	One of the main applications of the magic mirror is in retail.	Shop owner Alysha
Virtual Assistant	Hospital	The virtual assistant of Amazon is used as a helping hand in hospitals to guide visitors to the right room.	Nurse Laura

** Early in the project, we were thinking of connecting the Dashboard to the City Hall as the both provide the center of information in the city and the Theme Park. However, this was never work-out and needs to be reconsidered.*

THE SMART PLANT

Self-nurturing plant

It was challenging to create a playful and interesting quest for the Smart Plant as it required multiple additional elements to make it relevant for users. We first designed a quest that was text-heavy which explained the sensors and the business case. The first design also included a simple plant management game which was inspired by the many plant nurturing games in the app stores. This was later changed to a new design to get rid of the text heaviness and to make the game more interesting.

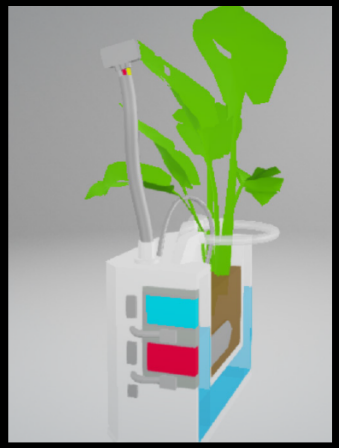
The current design consists of a 3D cut through virtual layer of the plant. It was decided to use a cut through image to enable the user to have have one view of the displays on the outside and the sensors on the inside of the plant pot.

Starting the quest, a short animation starts playing explaining the business case behind the plant. The plant can be put in offices since it can take care of itself, there is no more need for paying a company to take care of plants in the office. This together with the fact that plants have multiple positive advantages on employees and the office atmosphere, provides the business concept behind the Smart Plant.

This animation video is followed by a simple drag and drop game where the user must drag the right icon (sun, rain drop, temperature) to the right sensor in the plant. This will help users understand what sensor measures what. Once the icon is correctly placed in the box, a small explanation will pop-up to explain the sensor more elaborately. Here, the user can use the rotatable virtual layer to get a clear view of the allocation of the sensors and understand how the plant was manufactured. Once all icons are connected correctly, the game is finished. The icons and indication arrows are designed in 2D to keep it simple and the design focused on the plant itself. Such indication arrows are important to guide user through AR experiences and help them userstand what to do.

For future iterations we have some additional ideas to make the AR environment more interesting. One of the ideas is to connect the game to the dashboard of the plant to show accurate measurements. Once an icon is correctly connected with the sensor, the corresponding line will light up in the graph. This would allow the user to read the accurate data of the Smart Plant in the Theme Park.

To provide additional look-and-feel to the AR environment, we researched implementing real life weather conditions. The Smart Plant measures weather conditions, such as the temperature and humidity, which made us think that we could



add weather conditions around the plant similarly to a Snapchat filter of the weather app on your phone.

Finally, an alternative solution to the cut through virtual layer would be to only make a cut through from the front side perspective together with using a button that would allow to switch views. This allows you to use the real plant as the outer view and create a cut through virtual layer on top of the actual plant once you switch views. However, this might take away the possibility to rotate the plant. This idea is presented in the design storyboard of the Smart Plant.

Important links:
- Smart Plan t Dashboard
- Storyboard Smart Plant & Animated business case

MAIN CITY

The city of Liquidios

There were a few ideas to improve the overall UI/UX of the city. Firstly, we wanted to add zoom ins and fades when a building is selected. Meaning that to clarify that the user has selected a certain building in the city, the other will fade out and the interface will zoom into the designated building. This idea came from the Adobe XD user test feedback.

As previously mentioned, an important idea that we could not work out was the idea of a personalized city for each visiting client. We came up with two approaches to this. The first approach consisted of designing a code template which could help quickly design a quest for the company shortly before the visit. The second approach included personalizing the entire city and only making the quests accessible that would be interesting for that specific company. The idea was to generate a list of all possible industries that LS client's could be in and build configurations of the city based on this. Of course, the first approach can be included in the second approach. An additional important aspect of this personalized city (regardless of the two approaches) would be to add the logo of the client to the different buildings in the city. More information on the personalized city can be found in the ideas in the backlog of the Jira board.

Important links:
- City Characters
- Jira board

THE BLOCKTRAIN

Making supply chains more efficient

Previous interns developed an AR app specifically for the Blocktrain. This app is not used anymore, because it is outdated. Still, for us it served as a source of inspiration. The old Blocktrain AR quest included a conductor Lego character that guided the user around the different stations of the Blocktrain by hopping on and off the actual Lego train. Our first iteration included a similar idea where the user had to guide the Blocktrain from one station to another by reading many instructions. The user could follow the supply chain process in an area at the top. This supply chain track record was based on a Blocktrain platform explanation video that we found online.

During user testing, it was concluded that the Blocktrain Quest idea was too text-heavy and needed to be more gamified to keep people's attention. To solve this issue, we came up with two game elements. To understand what will be discussed next, take a look at the final storyboard of the Blocktrain Quest on the next page. The storyboard shows how we imaged the end product.

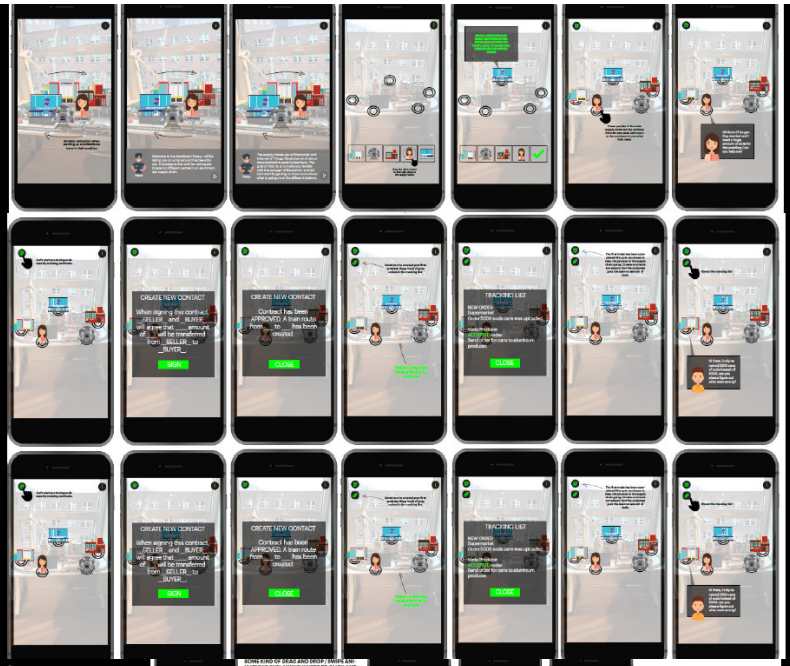
An important visual element that we added on top of the Blocktrain are the 3D icons of the stations. These were introduced, because at the time the stations only included printed numbers. The idea was to start the quest with a short introduction by the conductor where the icons would rotate and then spread out into drag and drop boxes. The user would be triggered to build the soda can supply chain themselves which would provide them with the knowledge for the second game element. After the icons were placed on the right station, a small animation would start to show what the icon represent.

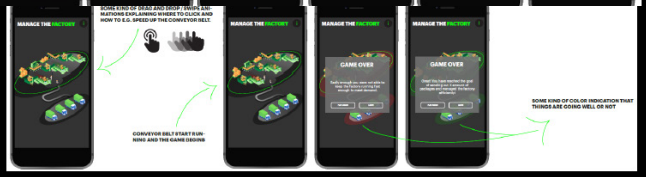
The second game element was based on the earlier mentioned Blockchain tutorial. This game element challenges users to create contracts between the different parties which allows the train to move from one station to the other to pick up supplies. This phase also includes a tracking list in which the user can track the status of the order (e.g. whether the created contract is accepted or declined). The idea behind this gamified element was to help the user understand that the aim of Blockchain is to make the exchanges of goods in a supply chain more visible. The game ends when the supplies have reached the customer.

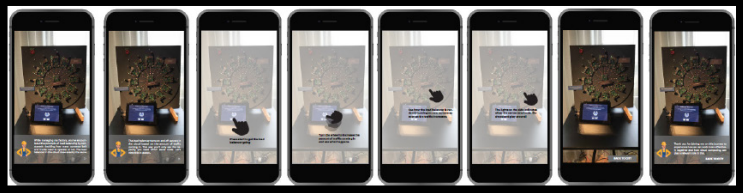
An important visual element in this quest is that the actual Lego train of the Blocktrain demo moves once a contract has been accepted. This enables user to interact with both the AR and physical environment simultanuously. Also, we were thinking that is would be nice if you see the supplies and people hop on and off the train in case of transportation. At the end of the quest, the rotation icons were supposed to return with an outro of the conductor con-cluding the quest.

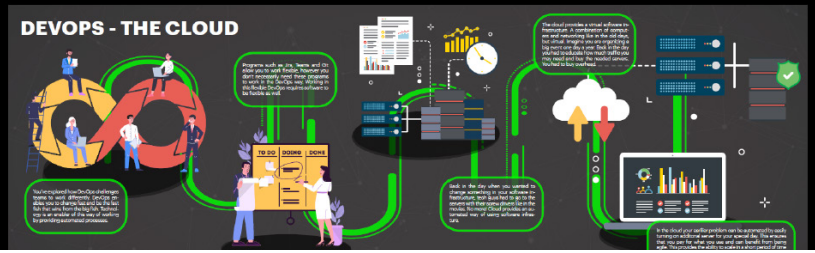
Functionality wise, the quest is there as we imagined it, however the design still requires iterations.

Important links:
- Insolar Blocktrain Example
- LS Blocktrain
- Blocktrain Concept Explanation & Storyboard
- Contact Piotr for access to the Blocktrain codes.









DEVOPS IN THE BOX

A new organizational methodology

Developing the DevOps in a Box quest was a long iterative process which included a lot of help from the professionals in the studio. In case you start further iterating on this demo, it would be wise to ask Bas or Guillermo to give you the 1-hour version of their 'DevOps Foundation' workshop. This will provide you with the information needed on the LS views on DevOps.

We soon concluded that the DevOps in a Box demo wasn't representative for the overall DevOps story. The previous DevOps in a Box demo consisted of a load balancer with which the Cloud could be explained. The story missed out on the overall People, Process and Technology perspective of LS on DevOps. To improve the current demo, we decided to design additional elements to convey the overall DevOps story to the user.

The first iteration of the design included a design in which we tried to explain the load balancer. We came with the idea to add a 'Factory Management Game' where the user had to be the load balancer in the Cloud. The load balancer in the Cloud manages the traffic by turning on and off servers. We wanted to challenge the user to manage conveyer belts to grasp the idea behind the load balancer before moving to the explanation of the Cloud. This load balancer game would be followed by simple pointing / arrow instructions on how to use the physical demo and show people what happens. We wanted to keep this part simple, because with a few simple text instructions the user should be able to understand what the load balancer does. These two elements of the 'Factory Management Game' and instructions on how to use the load balancer stayed part of our concepts throughout the process and is also included in the final design.

Next iterations mainly revolved around creating some sort of source of information to explain the People and Process part of DevOps. The first idea we had, was to include a video about this part of DevOps. We developed slide decks for a first prototype video. These slide desks can provide you with general information about DevOps. We discussed with Bas and Miriam that LS could later, after our project, produce these videos professionally, because they can also be used for other purposes.

For the final design we decided to step away from the video, because we concluded that an additional demo would be needed to the load balancer to fill the gap in the Theme Park. This is when we started developing the Digital Board. The Digital Board was a solution that we could easily prototype and included all the information necessary. Based on a co-creation session with Guillermo, Bas, Paolo and Miriam, we concluded that they found that it is very important to visualize the process of DevOps and how it differs from the traditional software teams. To visualize this, we included the roadmaps and the drag and drop game together with some general information in the Digital Board. The business cases where included, because from our own experience we noticed that case examples really helped to grasp the DevOps concepts and imagine what DevOps could do for a client.

Interactivity was very important for the Digital Board. The Digital Board would be presented on a big screen in the studio, so we wanted to avoid that the user would solely read. Due to time restrictions, we limited ourselves to pop-ups, drag and drop and small animations. However, it would have been interesting to explore additional solutions to create interactivity. While designing this Digital Board, we also kept the idea in mind that we could start using audio in case the text was too much (like the audio tours in museums).

Once we designed the Digital Board, we had two major components: the load balancer quest with factory game and the board. The final thing we needed was a link between the two major elements. We came up with the idea to create an AR information overview poster type of thing (see next page). In this visual we visualized the link between the two elements. This was a fast way that wouldn't take up much time in the quest to transfer the needed knowledge to the user.

The overall process included many expert design sessions where Bas, Guillermo, Paolo and Miriam were included. In case you need any additional information on our thought process, you can involve them. Especially Bas has played a major role in the process.

Important links:

- Slides DevOps Foundation Training
- DevOps Slide decks Research & Visual
- Digital board link
- Link between board and load balancer visual
- Load Balancer Storyboard

MAGIC MIRROR

The retail experience of the future

After talking with the developers of the Magic Mirror, we came up with the idea to present a virtual layer on top of the Magic Mirror showing one of the potential business cases. This virtual layer came from the fact that functionality wise the mirror is still very limited. Ideally, such a business case can be combined with some basic interactions with the actual Magic Mirror. The mirror is currently developed towards the personalization perspective where the user can see the weather or get messages on traffic. However, the other side of this mirror is that it can be for example placed in shopping malls. We researched what Magic Mirrors are currently used for and brainstormed about potential business cases. It was decided that it would be interesting to come up with a business case that was similarly to the cases it is known for but slightly different.

The storyboard created for the Magic Mirror presents a story where the Magic Mirror can be connected to your personal closet. Steve Jobs always wore the same thing, because you can only make a few good decisions a day. The idea was that this Magic Mirror would have the ability to scan your clothes and remember them. Each morning it would generate three outfits to choose from for that day based on your calendar and the weather. It also included a calendar in which it would remember what you wore, help you with laundry and help you pack your bags when you are going away.

Finally, we had an additional idea to play around a bit with the Magic Mirror. Within this idea the user would be recognized by the mirror by their LinkedIn picture that we would upload in advance of the visit. Once recognized, the user can create their own personal avatar for in the Theme Park. This would mean that the Magic Mirror might need to be combined with another building in the city, such as the City Hall, the home of the mayor (the character of the user in the game).

Important links:

- Magic Mirror Storyboard business case idea

VIRTUAL ASSISTANT

The LS assistant

The virtual assistant was only slightly touched upon. We talked to the creator of the LS virtual assistant. Currently, the LS virtual assistant mainly includes the ability to talk to it through Google Home. Previous interns did develop a visual platform, but it is not being used because it doesn't look good. The idea was to create a similar virtual person as the Amazon virtual assistant to put a face to the voice coming from the Google Home. The demo would thus consist of a display with the Google Home on it and a larger screen with the virtual assistant talking to the user. We wanted to challenge users to ask the LS assistant a X amount of questions to get to know more about LS.

Important links:
- Youtube Tutorial Amazon Virtual Assistant
- The LS Assistant (Ask Trajce for access)

FUTURE VISION

What next?

Due to time limitations, we as a team were not able to complete the AR City Quest to the extent initially expected. Throughout this document, we have touched upon how the elements already there can be improved and extended. Starting the project, it is probably best to go from there. Meaning that the following elements still need to be implemented:

- Implement city upgrades; the idea was to develop a second 'futuristic' 3D city. Each time a new quest would be completed, that belonging corresponding city area would upgrade to the city of the future.
- Implement zoom in on the specific city area once it has been selected and the quest starts.
- Optional: make the city look more like city by implementing inactive resident houses, trees, a park, etc.
- Finish the blocktrain quest design as intended and described in the blocktrain storyboard.
- Finish the plant quest as intended and described in the blocktrain storyboard.
- Reconsider the overall design / UI/UX of the quests.

Furthermore, we have prepared a user testing protocol for you to continue with. As the user tests must be run remotely due to the Corona crisis, it is much more complicated than usual. Therefore, we decided to make an elaborate protocol and run the pilot tests for you, so you can finalize the tests by running the actual user tests with LS interns and residents. This will be a great opportunity for you to get to know the project well! The following documents are important to have a look at:

- Folder with everything you need for the user test
- Results of participant 1
- Results of participant 2
- List of features to improve based on the user tests

Finally, some final advice; in the backlog of the Jira board, you can find some additional ideas that we had to continue this project. Feel free to do what you feel is right. Good luck and enjoy!

UI/UX DESIGN FOR AR

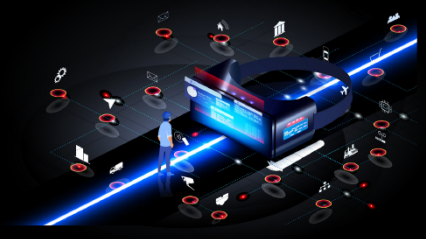
General remarks

General tips and trick:
- With AR the user's portable device is the window into the enhanced world. This portability means that a designer must always consider the user's environment. Make sure you consider the entire environment around the user when your designing for AR.
- Context is king! Make sure that you correctly bring the studio, the demo, additional displays / cases and the AR environment in a balanced manner together.
- AR in interactive museum tours is mainly used as an additional informative layer that reveals missing information. Thus, it is important that the demo should stay the center piece in the design and the AR shouldn't necessarily overrule.
- As a designer it can be hard to visualize your ideas and see what does and what doesn't work in the AR environment. Therefore, close collaboration with the developer is important.
- Don't assume people know how to user AR.

UI/UX in AR lessons learned
- In general, there are three approaches to UI in AR:
  - Fixed to screen space; all elements are locked to the screen space and the user needs to position the camera correctly to experience the AR
  - Real world related; the AR UI is related to the environment and the physical world around the user
  - Object related; the AR UI is attached to an object or trigger in the real-world space. This is what we have used in our project. We used this approach for the AR City Quest.
- Minimize the text in the environment – people are lazy and don't like to read!
- QR codes ruin the experience - use object-based scanning
- Devote as much screen as possible to the AR
- Carefully guide people around the tour – use hints about what they need to do
- Consider using indirect controls when you need to provide persistent controls. Direct manipulation of the object is overall better. In general stay close to what the user knows well and what feels logical.
- Put important elements in the center

"A UI without UX is like a painter slapping paint onto a canvas without thought; UX without UI is like the frame of a sculpture with no paper mache on it. A great product experience starts with UX followed by UI. Both are essential for the product's success." - by Rahul Varshney, Co-creator of Foster.fm

UI/UX in AR lessons learned for future iterations
- AR encourages user to actively seek for new content – use smart UI to point users in the right direction
- Use audio and haptics to enhance the immersive experience
- Be mindful of people's comfort
- Help people move gradually + make sure they're safe
- Keep notifications when something doesn't work simple and understandable
- Color use important for the right response



M | CONCEPT MAP DRAFT

Tour Phase		before tour	start point	during the tour	end point	after tour
Information elements		Tour info e.g. location, time, schedule, dressing, etc. Required preparation e.g. documents, ID, etc. Instructions for certain situations e.g. to delay, to not attend, etc. Contact info e.g. website, email, phone, etc. Further planning If there are arrangements for other things to come, etc. Relevant documents e.g. welcome slides, etc.	Space and facility conditions e.g. layout, functional areas, etc. Atmosphere and environment e.g. employee working images, etc. Corporate cultural elements e.g. brand visuals, branding elements, etc	Employee situation e.g. working style, specialists, contact persons, etc. More detailed company information e.g. projects, clients, tools and approaches, etc. Business scope e.g. technical capability, etc. Business capability showcase e.g. technical demonstrations, etc.	Collection of acquisition e.g. info about LS, common vision with LS, etc. Insights for making revelant decisions e.g. to work for/cooperate with, etc.	Reflection Collection of acquisition e.g. info about LS, common vision with LS, etc. Insights for making revelant decisions e.g. to work for/cooperate with, etc. Sovernirs and materials from LS e.g. business card, brochures, any records, etc. Contact channels e.g. people network, email/phone/social media,etc.
Physical elements		Visitor personal devices	Office building Office interior and facilities Theme park tech demos Visitor personal devices	Office building Office interior and facilities Theme park tech demos Visitor personal devices	Office building Office interior and facilities Theme park tech demos Visitor personal devices	Visitor personal devices
Human resources		Colleague (visitors as a group)	Colleague (visitors as a group) LS employees	Colleague (visitors as a group) LS employees	Colleague (visitors as a group) LS employees	Colleagues
Relevant Activities/Features	Other digital channel LSNL boarding pass	**1.** receive invitation (download app; be informed on tool and approach, the AR tour and the role will play) requirements (alignment to personal schedule or note software) **5.** get relevant files be reviewed and documented **6.** be guided to the office (embedded functions from other app, e.g. Google map)	**1.** arriving around/at the building follow the guiding software independently (theme park) **4.** short introduction on AR city quest and them park basic setups inform rewards of the adventure	social media (photo or video records store and sharing)	social media (photo or video records store and sharing) (general star score, or any suggestions)	social media (photo or video records store and sharing) afterwards
	AR City quest – individual		**5.** check tour setups before actual start (e.g. game customising relevant visitor info) **6.** assign character and review character ability on gaming parameters (e.g. energy / budget) start game by scan	**1.** adjust or accept demo main explore routine, or select free mode to pick freely (then potential hints for make selections should provide) **2.** be guided to the first demo and start explore the showcase **3.** meet any question can be guided to the right person (real-time feedback) **4.** activate interactions with NPC (or get in touch with demo tech's experts); get contact info of tech contact person **6.** explore around the demos while collect elements to fulfil game mechanism (e.g. **1.** complete a certain quest to upgrade a part of map (build on abilities) **2.** complete the story line for certain reward , etc.) **7**. review own foot print	**4.** Review individual visiting summary (Record visitors interested points (long stopped place, by e.g. Self explorations) (review the points be collected and map with valuable or benefit parameters for the virtual city, e.g. public relationship, economy, security, stakeholder questions, total, etc.) **5.** Display the result with previous visitors records (best of the day/monthly records) **6.** review individual rewards	
	AR City quest – group		**7.** Select teammates and competitors **8.** access to the overview of all teams and review ability distribution	**5.** show status of other participants **6**. Invite team member join any certain demo visit (for interest or game aim) **7.** explore around the demos while collect elements to fulfil game mechanism (e.g. **1.** to get props that increase yourself or disrupt others in the game; **2.** different demo match with different parameter that competition happens when multiple player at same demo; **3.** complete a certain quest to upgrade a part of map **4.** complete the story line for certain reward , etc.) **8.** can review timely group member's "foot prints"	**7.** Review group visit summary (Record visitors interested points as a group (e.g. challenges met, competitions with other teams, highlighted demo for the team (most team member visited, or spent most time), etc.) (review the points be collected and map with valuable or benefit parameters for the virtual city, e.g. public relationship, economy, security, stakeholder questions, total, etc.) **8**. integrate team members' achievements, review and receive rewards in a group manner (build big picture, sense of achievement) **9.** Maybe not everyone has browsed all the demos within certain time limitation, but they can communicate with each other during or afterward to know each other's stories	
	Physical material		**9.** be guided towards and have overview among theme park	For each demo: **Welcome** **Introduction** – What does the tech behind the demo; What's the key value it brings; How does it work, key elements **Value in context** – Business cases (visitor background relevant + optional in other fields) **Feedback** – Try on session (business context modelling): Model the demonstration so that the visitor can adjust the parameters in the model program and experience the corresponding demo as a basic model customization on site, where allows visitor try out their own preference on how they would like the demo match with their expectation or propose; Feedback live board	**10.** Obtain souvenirs related to this visit, such as company business cards printed with information about the visitor's own experience summary **11.** collect other physical takeaway materials (hand bags, booklets, etc.) **12.** Drinks (can use points collected from completing the game quests to "buy" drinks for relax and further conversations) **14.** Conversations and drinks Some of the demos may be able to implement with the office (e.g. smart plant somewhere as a daily in used product; magic mirror in wash room), so stimulate naturally the using cases that visitor can feel them in real life setup	

M | AR CITY QUEST GAME STORY JOURNEY MAP

Briefly recap on AR city quest game program, it works as the self-guiding system for visitors for enabling independent visit among exhibits, where visitor will participate in the experience actively from a role-playing game (RPG). Based on the findings from the previous phases, the journey storyline should present for visitors holistically. Some parts of the idea were mentioned along the analysis phase, and here is summarizing as below (Figure x) into a journey map as proposed.

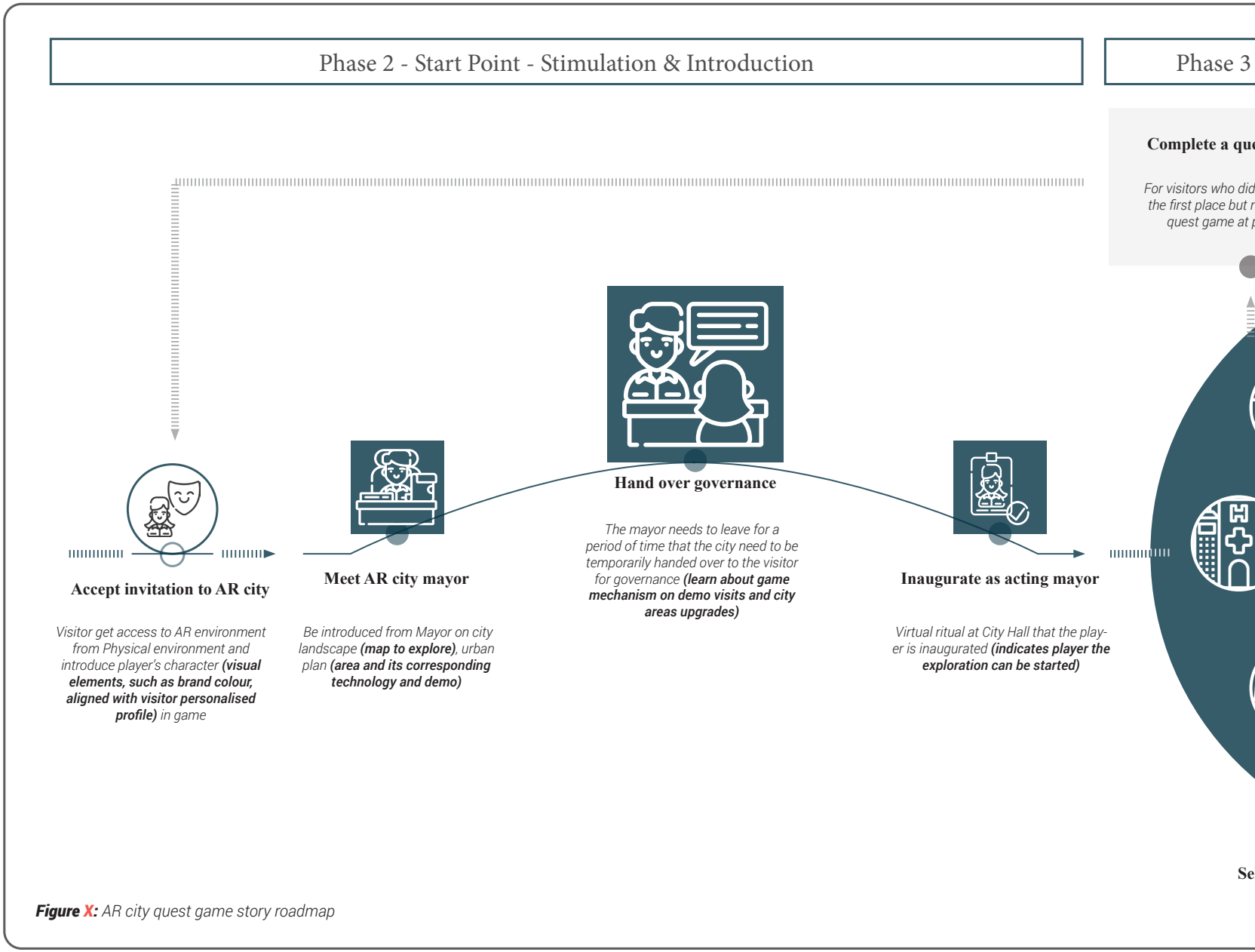


Figure X: *AR city quest game story roadmap*

- During the tour - Navigation & Exploration

est from demo

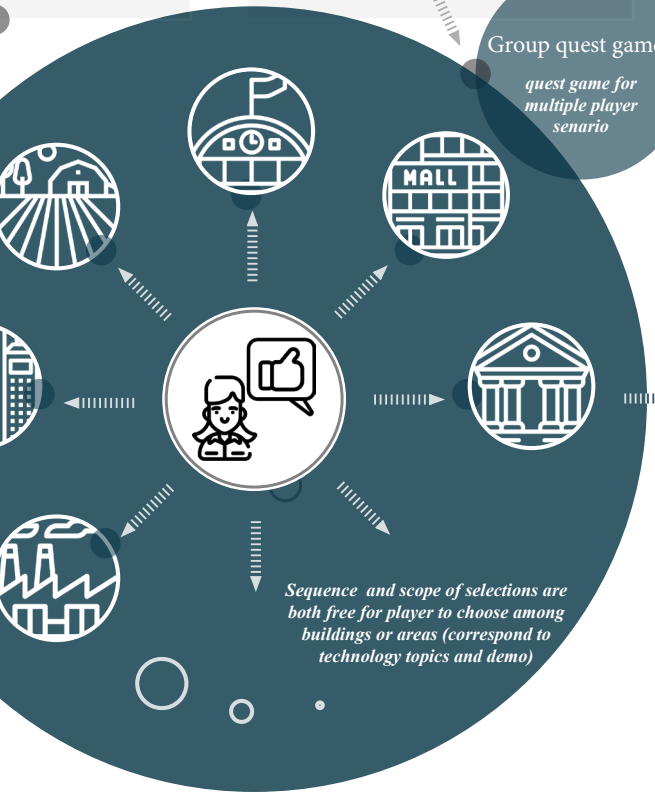
not join AR city in notice and join AR physical demo

Join a quest as visitor

For visitors who did not join AR city in the first place but notice and join other visitor's AR quest game at physical demo

Group quest games

quest game for multiple player senario



Sequence and scope of selections are both free for player to choose among buildings or areas (correspond to technology topics and demo)

lect and complete quests from each area among AR city
Receive rewards when complete each quest

Phase 4 - End Point - Takeaways & Feedbacks

Get city upgraded

Quests are done for selected buildings or areas, and correspondingly those upgraded parts visually reveals an upgraded version of the city in overview

Hand over governance

Player is leaving and mayor came back. Player hand over the governance back to mayor, for report what have been done and what are left for mayor ***(wrapping up the story line)****. Mayor ask for some comments on how the player experienced the city* ***(feedbacks)****, and then introduce how the player can visit* ***(physical souvenir)*** *or access* ***(programmes in LS passport)*** *to info and the city after closed up the tour.*

Celebrate achievements

Virtual ritual at City Hall as accomplishment ***(indicates player the exploration can be done)***

Collect award of completion

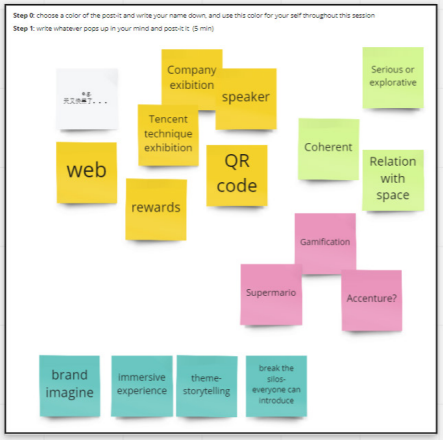
Visitor be guide from AR game back to Physical environment and collect a physical souvenir for AR city quest ***(can be used as AR mark for viewing a full upgraded version of the virtual city)*** *from Liquid Studio*

N | RAW DATA
(CREATIVE SESSION PILOT TEST)

Step 0: choose a color of the post-it and write your name down, and use this color for your self throughout this session

Step 1: write whatever pops up in your mind and post-it it (5 min)

Purge - Problem Finding Diverge



Chenye

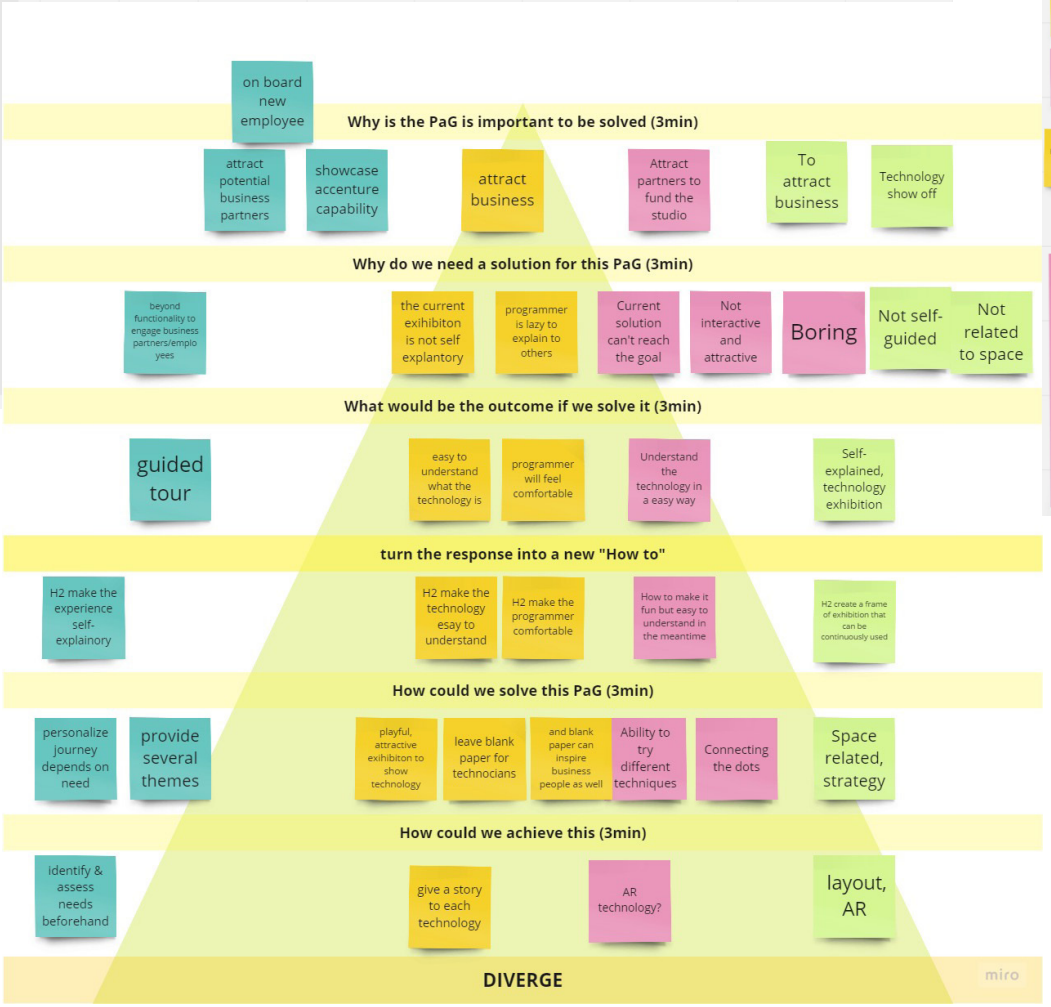
Bao

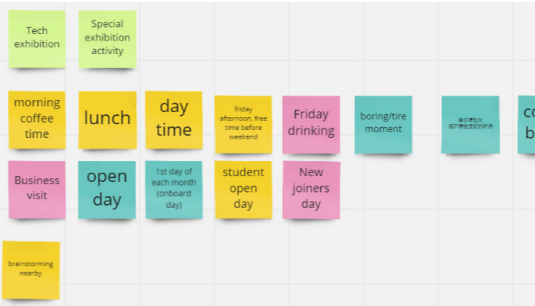
Chong

Yue Lin

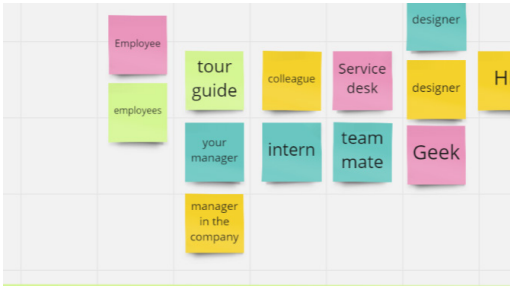
Problem as Given (PaG):

to create an interactive smart exhibition within the liquid studio Utrecht office to provide immersive walking through experience for inspiring studio visitors around multiple technologies in order to attract new business partners.

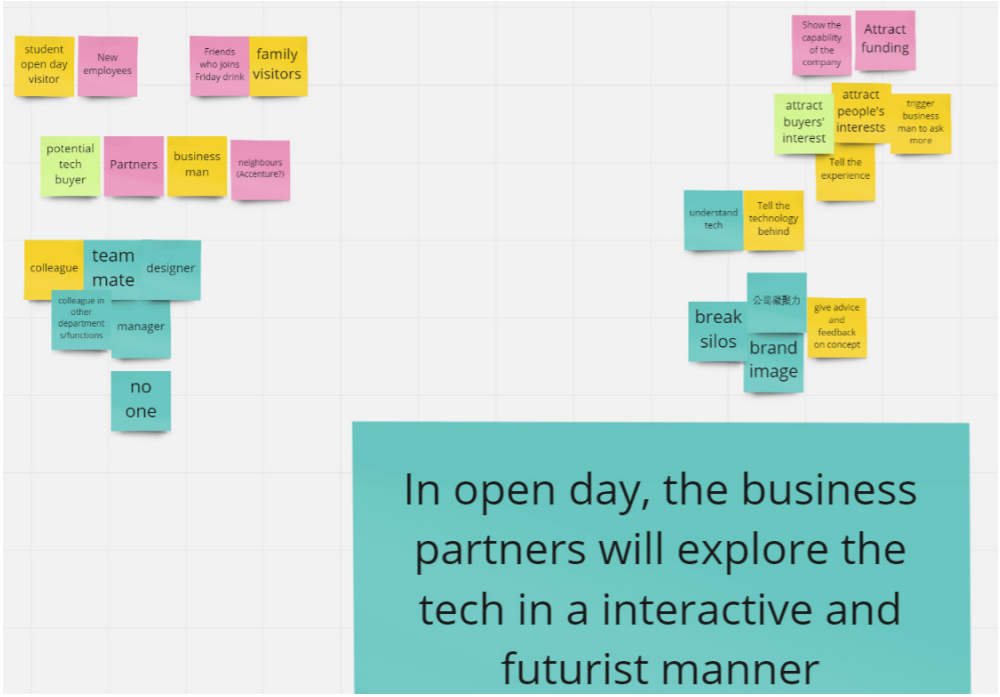


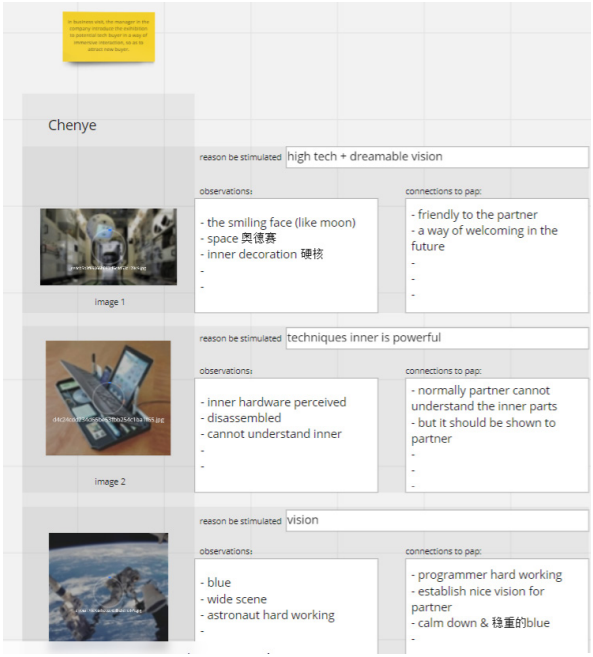


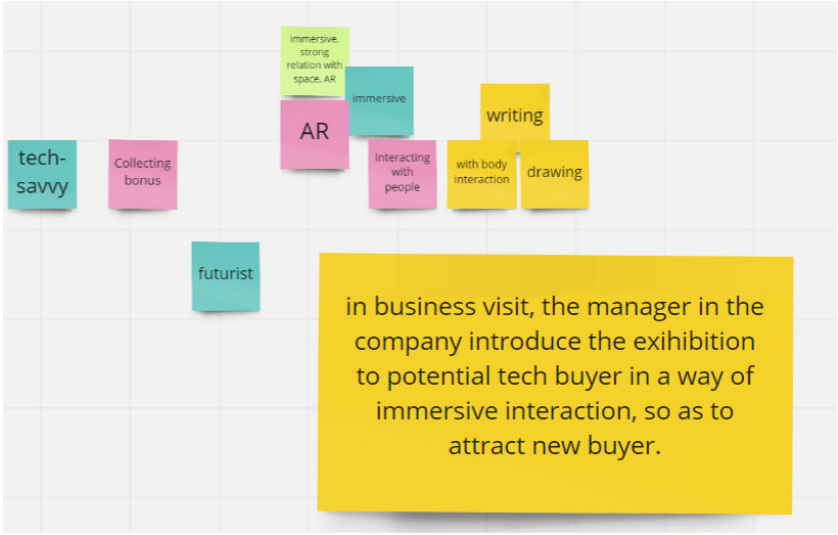
For a group of people (either new employees or business visitors), a game which helps them to experience new technologies , and also connect with other people (like a ice-breaker?)



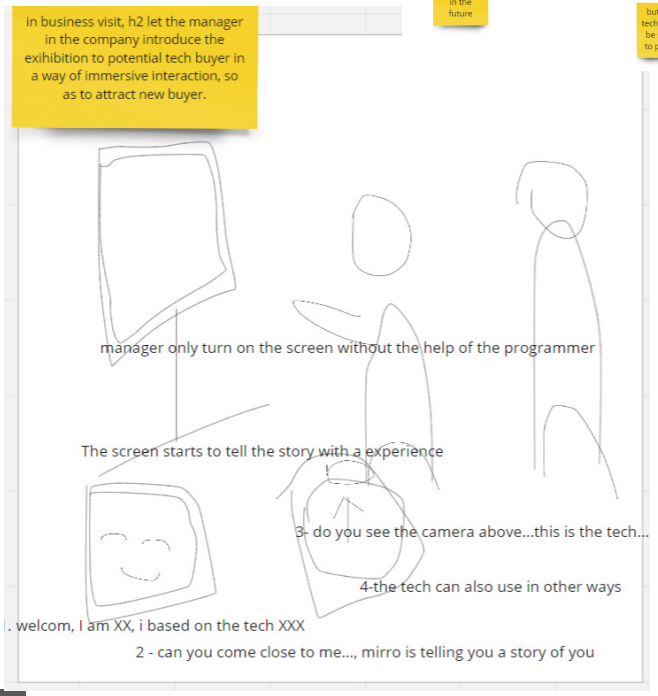
How to formulate a strat
to continuously update t
exhibition so as to attra
potential tech buyers ar
inspire employees


student open day visitor
New employees
Friends who joins Friday drink
family visitors
potential tech buyer
Partners
business man
neighbours (Accenture?)
colleague
team mate
designer
colleague in other department s/functions
manager
no one
Show the capability of the company
Attract funding
attract buyers' interest
attract people's interests
trigger business man to ask more
Tell the experience
understand tech
Tell the technology behind
break silos
公司凝聚力
brand image
give advice and feedback on concept
In open day, the business partners will explore the tech in a interactive and futurist manner


Chenye
reason be stimulated
high tech + dreamable vision
observations:
- the smiling face (like moon)
- space 奥德赛
- inner decoration 硬核
connections to pap:
- friendly to the partner
- a way of welcoming in the future
image 1
reason be stimulated
techniques inner is powerful
observations:
- inner hardware perceived
- disassembled
- cannot understand inner
connections to pap:
- normally partner cannot understand the inner parts
- but it should be shown to partner
image 2
reason be stimulated
vision
observations:
- blue
- wide scene
- astronaut hard working
connections to pap:
- programmer hard working
- establish nice vision for partner
- calm down & 稳重的blue


immersive, strong relation with space, AR
immersive
AR
writing
tech-savvy
Collecting bonus
Interacting with people
with body interaction
drawing
futurist
in business visit, the manager in the company introduce the exihibition to potential tech buyer in a way of immersive interaction, so as to attract new buyer.


critical
realistic
dreamer
friendly to the partner
a way of welcoming in the future
calm down & 稳重的blue
but inner tech should be shown to partner
establish nice vision for partner
programmer hard working


in business visit, h2 let the manager in the company introduce the exihibition to potential tech buyer in a way of immersive interaction, so as to attract new buyer.
manager only turn on the screen without the help of the programmer
The screen starts to tell the story with a experience
3- do you see the camera above...this is the tech...
4-the tech can also use in other ways
. welcom, I am XX, i based on the tech XXX
2 - can you come close to me..., mirro is telling you a story of you

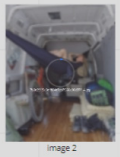
How to formulate a strategy to continuously update the exhibition so as to attract potential tech buyers and inspire employees

Your name

reason be stimulated: clean style

observations:
-clear layout
-easy to emphasize

connections to pap:
-A coherent style of posters/exhibitions
-visiters could identify what is "exhibition"
-Theme



reason be stimulated: immersive, personal experience

observations:
-feeling the technology on her own
-get the most from exhibition

connections to pap:
-immersive experience help visiters to get how it works/ what it could be applied

reason be stimulated: tense, strong, shocking

observations:
-the crowds are excited about the competition/scene

connections to pap:
-create tense feelings
-competition
-curiousity

critical | realistic | dreamer

curiousity | A coherent style of posters/exhibitions | Theme | immersive experience help visiters to get how it works/ what it could be applied | competition | create tense feelings

How to formulate a continuous exhibition

Your name

reason be stimulated: feel in control

observations:
- overview
- scenario
- routes

connections to pap:
- provide／envision future scenario
- provide different approach to experience

reason be stimulated: brand imagine

observations:
- clear showcase branding
- 驿站

connections to pap:
- reinforce accenture imagine
- fit into accenture brand personality
- 短暂停留，relax/energize

reason be stimulated: laboratory

observations:
-laboratory
-someone do the experiments

connections to pap:
- 实际操作、演示

critical | realistic | dreamer

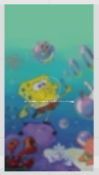
短暂停留 | fit into accenture brand personality | provide different approach to experience | 实际操作、演示 | provide/envision future scenario | reinforce accenture imagine | relax/energize

In open days, H2 make the business partners explore the tech in a interactive and futurist manner

guide the business partner to envision the future scenario, and demonstrate how each tech will adding value to the potential business context

In a company visit, how to make the experience playful and meaningful for a group of people?

Your name



reason be stimulated:

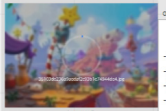
observations:
-Fun, playful, a bit "childish"
-Show technology but not too serious
-Play with people around you!
-吹泡泡-->怎么吹一个又大又圆的泡泡又不会破-->不断试错

connections to pap:
-游戏化
-制造一些挑战！
-在具体的使用和尝试中感受tech

reason be stimulated:

observations:
-Social & Networking
-尬聊的痛苦

connections to pap:
-尬聊终结者
-帮助visitor和employee开启一段谈话



reason be stimulated:

observations:
-与其他人的互动
-Fun, playful, a bit "childish"
-Group work

connections to pap:
-Add some groupwork elements to the game

critical | realistic | dreamer

Multi-player can use in the mean timne | Add some groupwork elements to the game | 游戏化

In a company visit, how to make the experience playful and meaningful for a group of people?

For a group of people (either new employees or business visitors), a game which helps them to experience new technologies , and also connect with other people (like a ice-breaker?)

Get a task
Try to find a solution by him/herself
Meet a challange
Ask employee
Collaborate with other player
Solve the challenge
Level up!

Formulate a theme/coherent layout and expression

Unified, immersive as a whole

How this tech will apply in the future scenario?

before the tour	start point	during the tour	end point	after the tour

Invitation

Tickets (physical /virtual)

Get a schedule of the day

Theme

step by step tour

try different demo to solve the task step by step?

ask how do you think use this one to solve the task?

then try demo

Low connection

Get a task

Fancy showoff

Warm welcome

relax

energize

killer time

come to look around

future scenario

game as trigger

Solve the task by different ways

Connect with Employee

Connect with other player

dealing with 关卡

finish the task and ask do you want to know how the exployee solve the task

the task seems can not by yourself, do you want some help?

Conclusion (video/communications)

Reflection of the day

idea of how to apply specific tech

interest

Brainstorm Future vision with employee

interaction with accenture employee

question

a trigger to contact(QR code: intro of the relative employee)

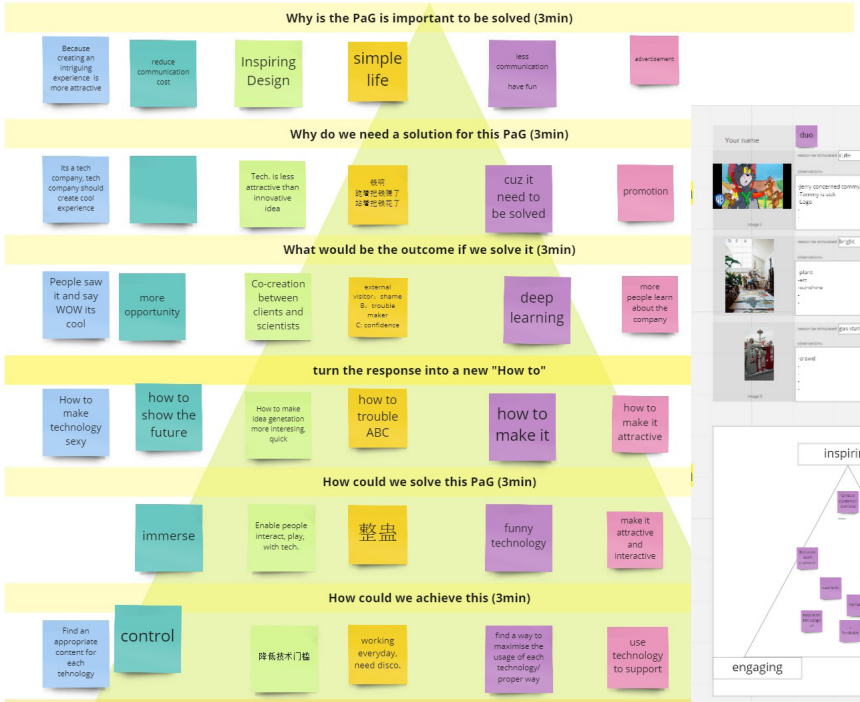
a few weeks later, a email, do you remember the game in tour?

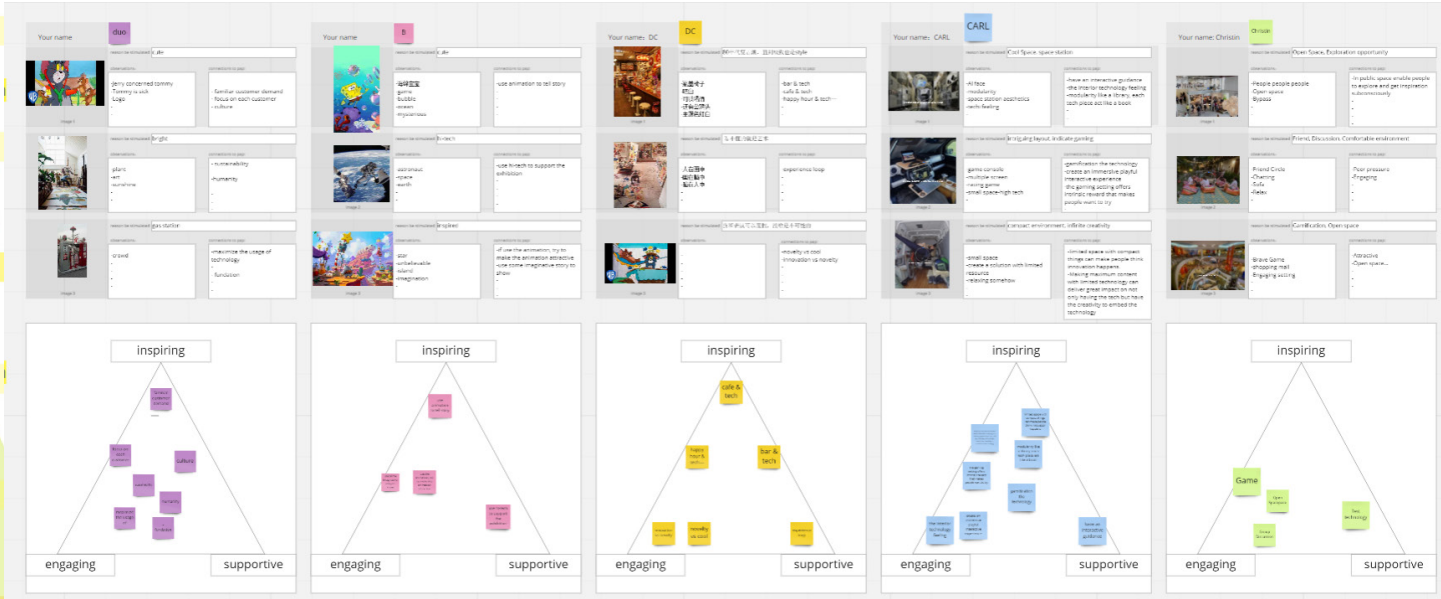
memories

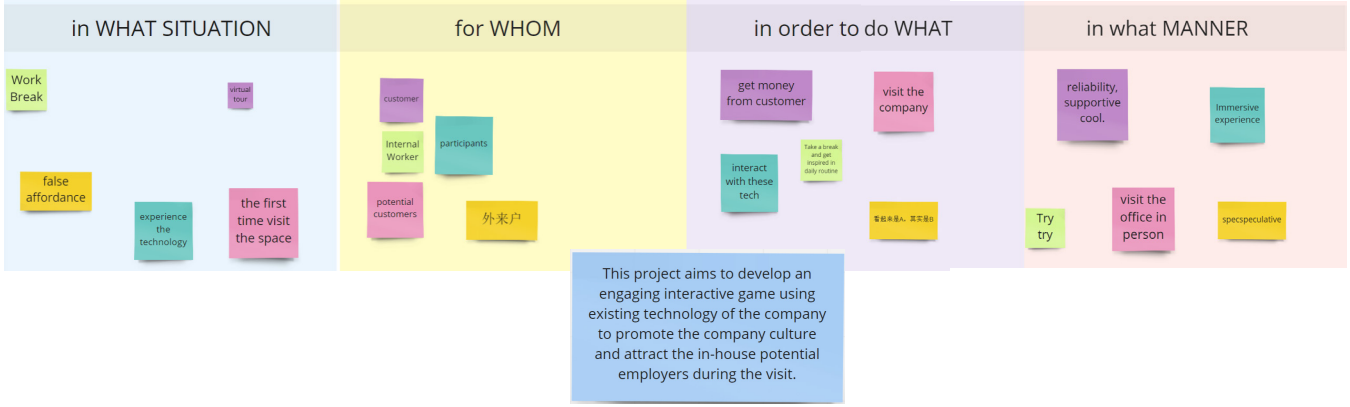
capacity perception

Drinking

N | RAW DATA
(CREATIVE SESSION 1)

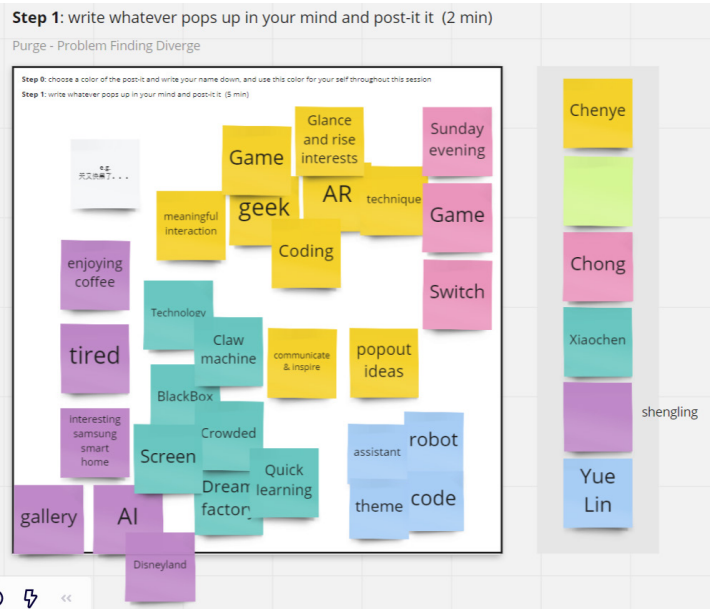


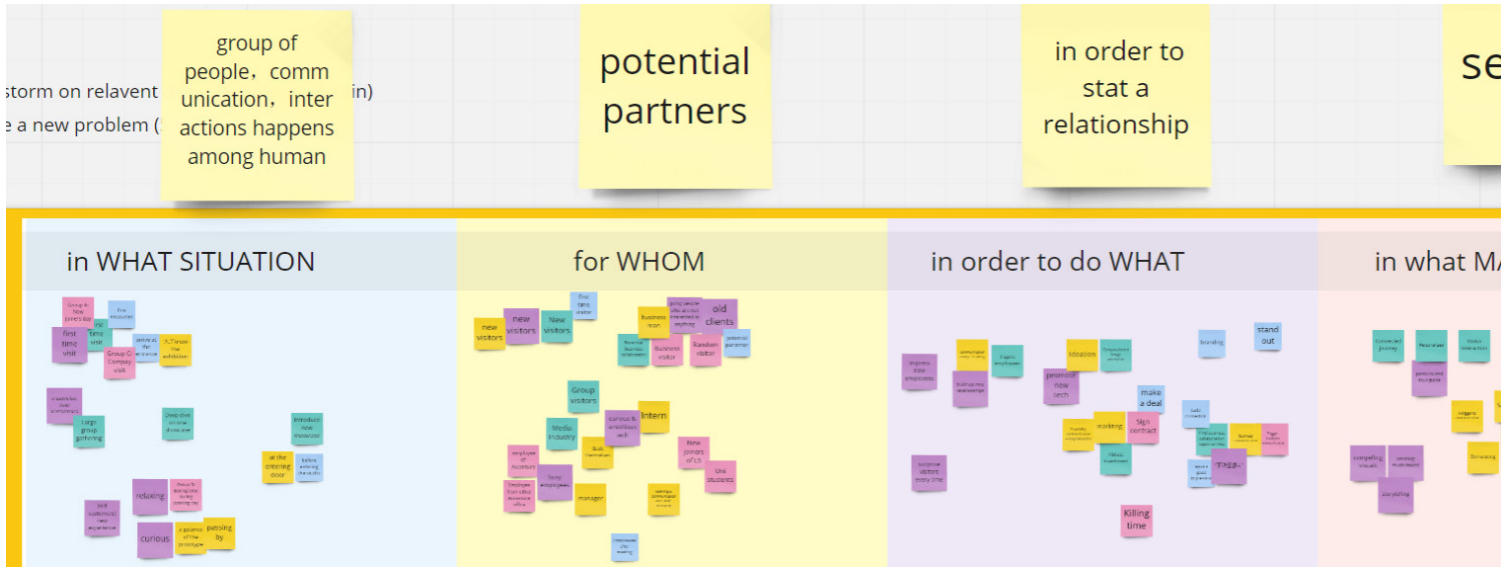


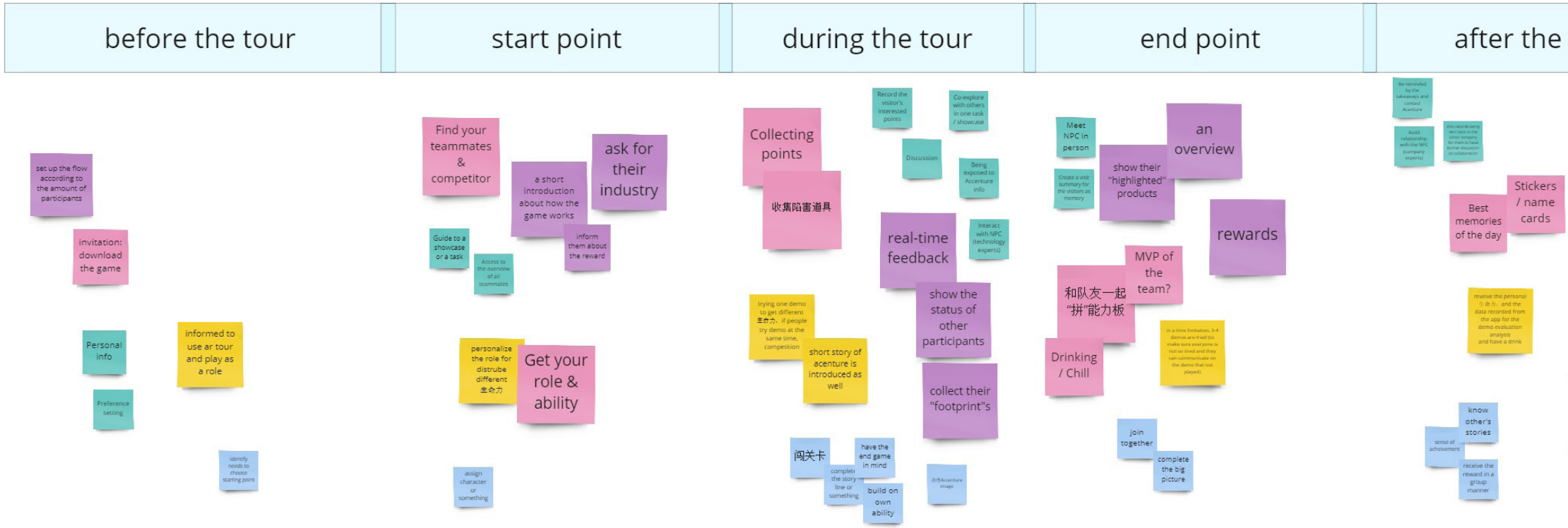


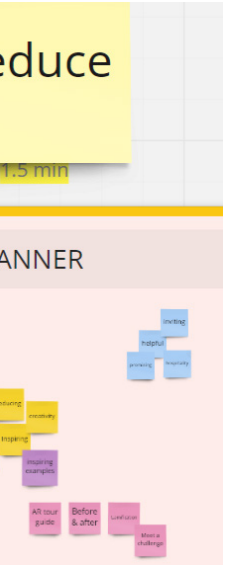
This project aims to develop an engaging interactive game using existing technology of the company to promote the company culture and attract the in-house potential employers during the visit.

N | RAW DATA
(CREATIVE SESSION 2)







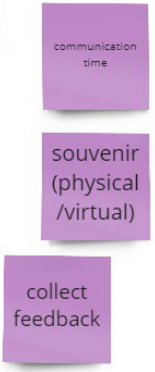

educe
1.5 min
ANNER
tour

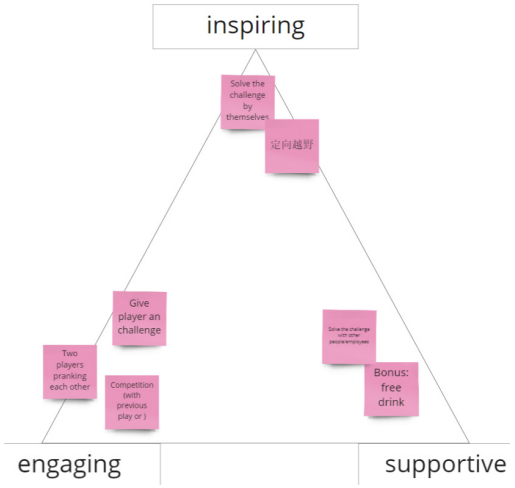

inspiring
shared memory
sit together and chill
inviting entrance
drinks!
open up small surprises separately
vivid design
interesting
engaging
reward / goal setting
a virtual guideme soul of the product
supportive
a game including small "tasks"
have a "sit together" coffee time for sharing experience
set up the environment based on target groups' interest/memory
can "walk" in one introduction
link all products together in a coherent experience(flow)

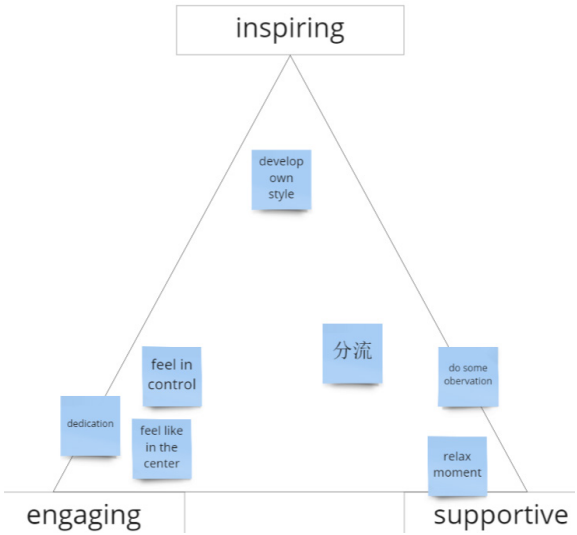

inspiring
ideas are frictioning
ideas pop out immediately but fade away immediately as well
postponed judgement needed
relaxed surrounding to be created
user needs association to inspire
need to create a feasible way of communication
engaging
supportive
ideas are frictioning
postponed judgement needed
ideas pop out immediately but fade away immediately as well
user needs association to inspire
relaxed surrounding to be created
need to create a feasible way of communication

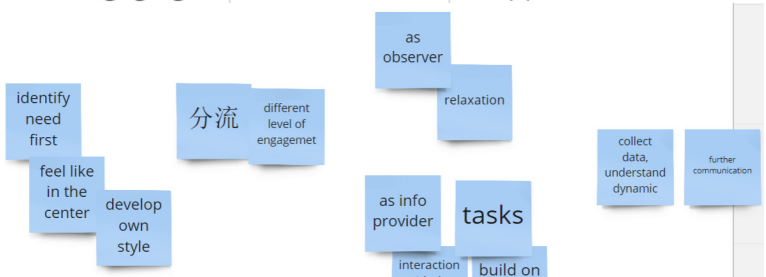

inspiring
Co-creation on new possibilities of the techs
KoI sharing
Communicate with others through multiple channles
Allow diversity of comments/ideas
Discussion constantly
Half-close space (immerse&interact)
Record this visiting journey
Watch together
Engaging in the showcase
Key info pop-up everywhere
engaging
supportive
Video game: explore and become master with teammates
Digitally interact; Physically locate
Create multi-visitor tasks
Be invited to another teammates's task when getting physically close
Guide visitor to each showcase
send them info and tips
Encourage to leave ideas and comments
Have a big screen/platform showing the exploring achievements of the team
See what others are exploring and progress
View others comments


demo
once get the idea, use phone to record
all ideas like bubbles pop out
喜欢的idea 点赞👍
造访团本日最佳idea （想想ide acadymy 的workshop）
结束今日访问


communication time
souvenir (physical /virtual)
collect feedback







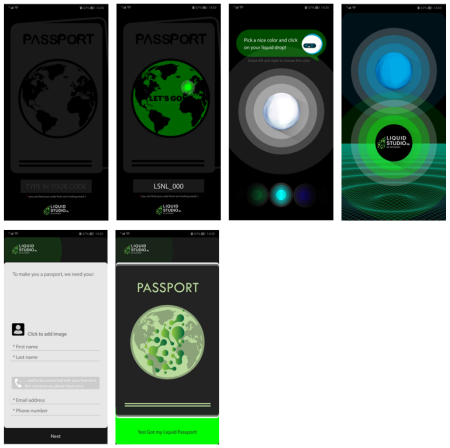
游戏流程：邀请函（游戏软件）到了公司，找到队友（自己人，公司的人），找对手（分组竞争关系；过去玩家的记录），定向越野（促进大家explore，collect points；找道具，炸别人，给别人增加困难），解决问题（自己，团队，工作人员），留下评论，点变成drink（chill）

0 | STORYBOARD STORY
(CONCEPT EVELUATION)

Before the tour

I just **received a welcome email** from Accenture that I am joining Liquid Studio the Netherlands, a tech innovation studio of Accenture, as a new intern from next Monday. The email includes information with several tasks that need to be completed and informed, and there will be an orientation program to be held on the first few days for new joiners onboarding at Accenture. Besides the info, it also suggests me to download an app, called *Liquid Passport*, to help me manage all these smoother as a new joiner to Liquid Studio. A code, which is *LSNL_000*, is displayed together with the app download link that seems like I will need that when I use the app.

I download the app and start to try out how does it work. So here it needs the **code**, and let's go with it! Oh, here is a nice **welcome animation**, yes, I'm a blue drop, and now joining the liquid studio! let me entry some info to get my **profile register**, name, email.... Yes! Got it!



Oh, here pop up the **info of my new joiner orientation program**, all the needed info is here, and I can always check by quick access here, about timing, processes, contacts, etc. and more of it, I can also quickly **sync them to my own calendar** automatically! Cool! Then I don't need to do this manually, easy!

Wow, so here I can also jump to the map by simply **click on the address to plan the travel**!

And, also a **check list for the tasks and documents** that need to be done or prepare with me in advance, it's so handy by having it! I can be sure that I am fully get prepared this time!

So I am now near the office building, but how to get to the office area, let me see if it can give me some tips...(once open the app around the building) wow! it knows I am about there, a **AR guidance** is available! OK, so I will follow the indication, nice, so there is **the entrance**!

Wait, it says I need to **collect an ID** card at the hotel reception. OK so the path is directing me to....yes, here is the reception.

Check on the task, **card collected**! Let move on to reach the office! (follow indication, take the elevator to the correct floor. Meet with more new joiner and talked about how nice this passport app interesting and helpful) so there is the card scanner, let me try. (arrive at the office)

start the tour (start point)

Here is the service desk. We had short conversation for greeting and tell her I am her for the new joiner's day. She gave me a warm welcome to the company and as there still some time before the program starts.

As there is quite some time, as other new joiners also, I decide to have a look at that area I noticed when I just entry the office. There are quite some fancy things happening right in front of me along the windows. I think that should be the *demo theme park*, which I already feel curious about when I first notice it from the program planning, sounds fun.

Wait, the camera recognized the decoration in the middle of the floor and a pop-up jumped out! Ok, so it is also inviting me to go there to have a closer look, but by starting an AR game called *AR city quest*. OK I'm really curious, I'll start the game and see what is going to happen.

Wow, here is a virtual floating city! Cool! (introduction of AR city quest, story narrative starts, the player as a city mayor and being requested for an upgrading of his/her city by complete technical game quests among the demos. And first, education on main AR system work mechanism (how to exit AR program back to passport interface for other functions, how to activate menu list within AR program, where to find the map as an overview guidance to control the tour arrangement, how to use navigation control panel along the theme park tour, how to start one single visit with quest from the overview), then game starts)

During the tour

Oh, it also suggests me to explore only the demo of smart plant that upgrades the city farm area to leave other areas to later times as others may take around 7mins or more, and there is no enough time for all before the program starts. Oh yeah, it says the smart plant or holographic showcase visiting may takes less time, around 5min, but holographic is being visiting by another guy.

I could also choose to join that guy, but I may not have time for more conversations if I still want to choose a nice place to sit before the first talk starts. Well, there are 10 in total, I shall have more time to go through them as the plan shows there will be one and a half hour for exploring the theme park after this talk session.

Ok, agree with the suggestion, let's visit the smart plant, but where is this smart plant? Ah, the app is guiding me again, so there the showcase is. Wow, the visual looks different within and out the screen! Cool!

(approached to the showcase) it ask me to hang my phone to a phone stand (a mobile phone holder capable of moving at multiple angles after the mobile phone is fixed in the corresponding position) after I put my phone on the stand, it gives me some hint on what are these materials on the showcase. It is interesting, easy for me to manage what are the things I want to go with. Ok, so, this is the using case, that is physical demo.

It says move the phone with the arrow to see how it works, Oh, the camera recognized an icon in the showcase, aha, the quest is triggered! I'll do it, so my farm can upgrade! (Complete the quest from phone screen.) done! Ok, it will take 1 and a half min to wait for the result, let me see if I miss any part of this interesting thing. "Leave a comment", a hh, a comment board, let me read what other people say about it, yes, I agree with this note, give it a "like". "meet the expert" shows like inactivated, oh, seems like he is not in the office today maybe. Ah, "try it yourself" is pointing to the iPad, this small program on the iPad is letting me DIY my own smart plant scenario, let me try.

I like this round shape, emmm, yellow color, in a study room, hh nice! Created! I look forward to this if I can really have it. Oh, there is a QR code, my Liquid passport can record this for me by simple move my phone camera to scan it!

Oh, it says the farm is upgraded, let me have a look. (get the phone off the stand, and holding it back to that AR mark in the middle of the floor, the farm area is upgraded.)

Cool! I really want to see how the city looks like when everything is upgraded! Look forward to the theme park session after ward! Now it is reminding me to get prepared to for the talk that only 5 mins left.

(When open AR city quest again to continue, check again for the tour plan. Go to map page by scan the AR mark on the floor, to see overview of the showcases, see previous explored parts and recommendations on the demos to be explored base on some basic info, e.g. time cost (visit demo and time needed for upgrade once complete corresponding quest), tech topic, etc., it reveals aside each building or area.)

Let me see, the train station is related with *blocktrain* demo, so it is about blockchain technology and will take approximately 7 mins. Sounds interesting, let's start this one. (click on the building, then app starts to guide him for completing the demo visit and the quest)

(during his visit, he jumps out an idea that willing to talk with an expert, luckily, the hint "meet the expert" this time looks available at the moment (if status is busy but in the office, the player can drop an message to the expert by following the instruction, which will then be received by the expert city quest program, as a quest for him from his theme park showcase visitor.), he then send the quest to meet the guy and followed the arrow and found the person who is in the coffee area. They then had a nice conversation around the topic. At the end of the conversation, the expert ends this visitor quest on his phone and they add each other in the contact list in Liquid passport, so can then have further connections. They even managed to schedule a meeting simply from the Liquid passport for further discussions on his idea on the coming Wednesday. And then he back to his theme park adventure again.

He found the game quest can also become multiple player version if he requests to join someone else, he wants to try that. He decides to try it when visiting the DevOps demo as he already knew DevOps quite well before, so now he prefers to try out the quest and may save some time for look up something else. As he expected, there is someone else at the DevOps showcase. He sent a request to that player if he can join the quest and was accepted. They talked a bit for this meet and added each other to the contact easily from the Liquid passport interface.

Afterwards, he back to the theme park and continue his exploration. Learn techs, play quests, meet people, build networks.

end the tour (end point)

(About the time to move on and close up the program, he finished 7/10. The system has a new pop up to remind him on catching up the schedule and go to service desk for collect a gift as personal reward from the exploration within the AR city quest. And also, a hint that let him try to see the secret gift from camera under this AR mode once he have that in his hand)

(At the service desk) wow, such a nice little thing, it is unique! Let me see it from the screen, curious what does it do?

(he left it on the desk and see from his screen) 3 versions to be evaluated

Ver 1 : wow! The city! The upgraded city, wow, and I can also play a bit with it! (rotate, zoom in and out a bit, click on certain building, citizen story plays about how the new tech the mayor learned is benefiting for their current life, then a button to link to info page that further explains the corresponding technology). So, this is a AR mark that I can take away with me, means I can play with this cool AR city wherever I have this small mark with me! So cool!

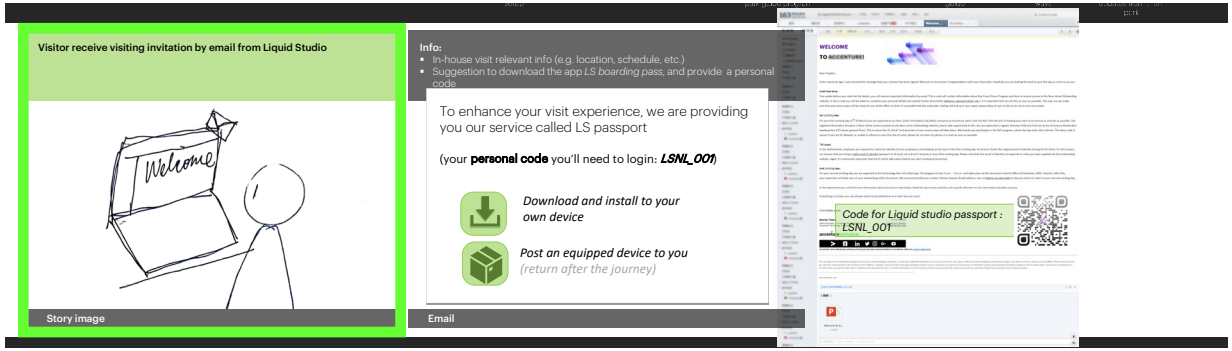
Ver 2 : wow! A mini demo exhibition! and I can also play a bit with it! (rotate, zoom in and out a bit, click on any mini demo, the demo be zoomed in for relevant info and can activate the corresponding AR quest again. then a button can link to info page that further explains the corresponding technology). So, this is an AR mark that I can take away with me, means I can go through these interesting demos wherever I have this small mark with me! So cool!

Ver 3 : wow! Is it an overview of the tech topics? Oh, it is also an overview of my own tour! So I spent 30 mins on blockchain topic? Oh yeah, I had that nice conversation with the expert. And what else, oh I spent only 7 min on DevOps and much faster than the average which is 15 min? ha-ha, that's because I knew it before so no need much learning to complete the quest, yeah. This display is cute, the bubbles are floating, I can also play a bit with it! (move finger among the bubbles to influence how they float, click on certain topic bubble, the DIY user case (player's demo) be created and the comment he/she left when visit the showcase will be presented, then a button can link to info page that further explains the corresponding technology). So this is a AR mark that I can take away with me, means I review all these interesting topics and my own demos wherever I have this small mark with me! So cool!

After the tour

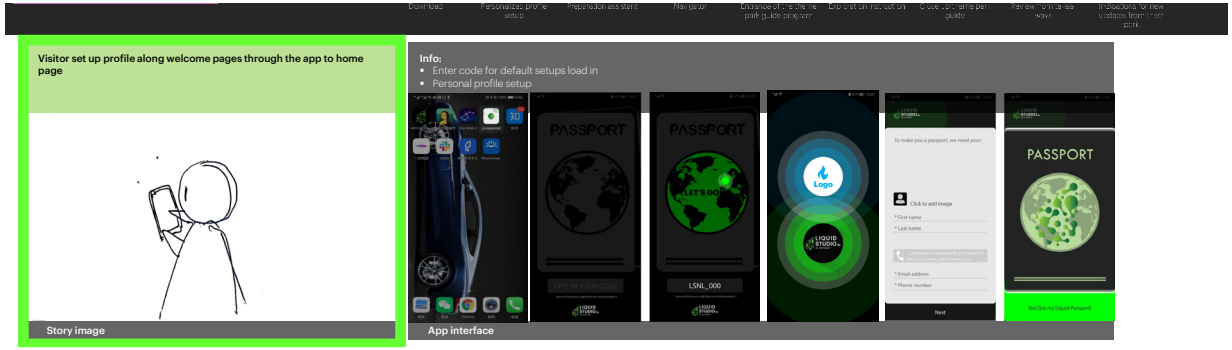
The tour was a nice experience for him, and after he left the building, he feels even more confident that the Liquid passport in his phone is safely keeping all those valuable memories with him. Once he has a command, he can always navigate in the app to find a clue. though not really inside that building, but still connecting with the info and people he needs.

文档结尾 ■

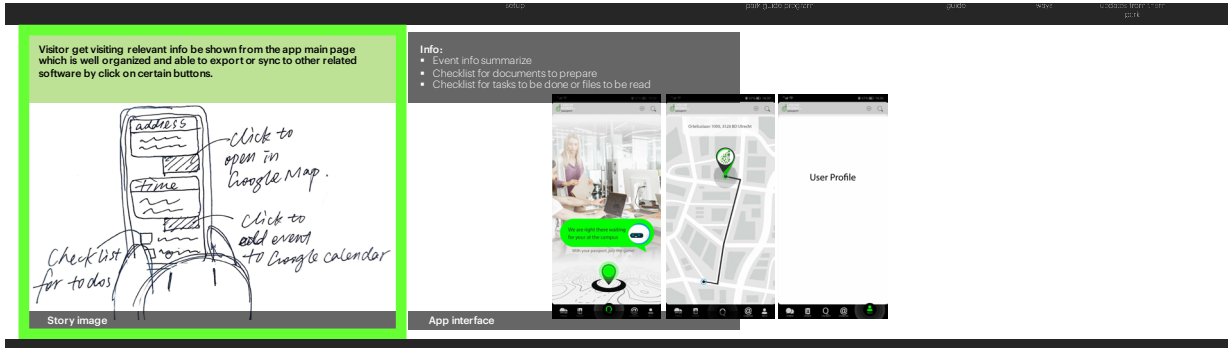


Paul just received a welcome email from Accenture that he is visiting Liquid Studio the Netherlands, a tech innovation studio of Accenture. He is looking forward to meet any concrete technical opportunities from Liquid studio that can help his company becoming more competitive within the industry under this digital generation that driven by big data and high techs. He generally learnt about this company from their portal website and followed their social accounts for updates. He noticed quite a potential to realise his expectations from LS, so he got contacted with them from their public channel, and applied for this in-house visit for understanding further to their approaches and services that he wish to see the vision clearer in this way.

Since then, he received this invitation for an office tour be planned on next Monday, where he as a manager together with Sam, his colleague who has more profession knowledges on newest techs. They will represent their company and go visit LS to see what can LS mean to they. The email also includes more information, includes activities and schedules that will take place along the visit day, location, and together with several interesting links that are suggested for Paul to explore before the visit. One of those is called Liquid Studio passport, which presents as aiming to enhance his visit experience. The code, LSNL_001, is displayed together, which seems like is specially provided for him that he will need if he use the thing called LS passport.



As he is curious about how does the LS passport work, Paul followed the link and installed it to his own smart phone, then he noticed that the code is needed here to get access to it. Once Paul entered the code, the green global is lighted up. He notice the green light button is pointing at the Netherland that the system knows where he is going to visit, as there are 31 Liquid Studios all around the world. Then an animation is played that two digital bubbles appeared and coming close towards each other. The bubbles are using the logos and brand colours from both Paul's company and LS. This made him felt be cared about as a visitor and a costomer, and have been warm welcomed. Even though he is not yet being there, he start to look forward to meet them, the next Monday can come earlier. Quickly filled in his name and contact, he got his passport be activated.



To get things be better prepared, the LS passport first act as a personal assistant for Paul that all those visiting relevant information as the invitation email brings are now all well organised in a structure that easy to read or search for a certain piece of information. Moreover, just now, he was actually planning to first add all the schedule and planning to his own calendar if he did not go to the link to try this app out when he first received the email. but now, he found it allows him export all these info to his own calendar directly by just several clicks. The address can also link to map app to start travel immediately, and a task checklist is also presented there, to show any documents are required to bring with for entering the office, or any files are there for Paul to check them out in advance. It is really handy that Paul feels confident to get himself well prepared to enjoy the coming Monday.

Once Paul arrived around the office building with Sam, the app gave them notifications and ask if they need to activate the AR micro navigator service that will guide them from where they are now standing at towards the office entrance which located at the 4th floor in the middle of the compound hotel business office building. Paul felt relieved at this moment because the office building marked as the destination on the map seemed to be a large one, and no wander as the app indicates, it is a compound hotel business office building, and he is now wondering where the entrance is. Additionally, as the neighbourhood is somehow an industrial area. There are few people on the street that looks empty. Although he hasn't lost his way yet, he has this concern already. So this micro-navigator thing seems able to solve his immediate needs to the aim place.

He accepted to activated the AR navigator, and Paul allows the program on camera using. As Paul started the program, Sam decide use it but just follow Paul. From the screen, Paul now sees a virtual path added to the environment which is visually guiding him to walk with, very handy to use. He entered the building along the path, and it starts to pop up some icons that showing locations or directions of, for example, toilet, elevator, reception, etc. He notice the path toward elevator is not available for them to pass the gate in front of the elevator as they still need to go to the hotel reception service desk first to collect the visitor ID card for entrancing the office area. So they quickly go to the reception, got the card in hand, and smoothly walked through the gate till the office room on the 4th floor.

The service desk is right on the left of the entrance which is easy to recognize, and he also confirmed that from the hint provided in AR navigator. Apart from this, he can't ignore the fancy demo showcases along the window, and an impressive visual sticker posted in the middle of the floor on the ground.

They were then lead to Bill, who he contacted before that managed this office tour with. After some talks, Bill lead Paul and Sam to the demo area where Paul have already be attracted once he enter the office. He saw those demos introductions from LS portal and definitely would like to learn more from their showcases. Bill suggested that there is an interesting self-guiding program in LS passport AR interface called AR city quest in a game format, which can let him as a visitor to navigate through out the demo theme park more playful and autonomously. Paul certainly would like to have a look at it as he wander how interesting the AR program will look like. He chose to try out this by himself first, while Sam prefer to talk with Bill directly along the visits. Could be more insightful when they discuss afterward he assume as they are exploring from different aspects.

A popup works as an invitation appear from Paul's screen when his camera recognized the visual mark on the floor on asking if he would like to join. Paul accepted and a virtual city magically displayed with fancy effects. Then, briefly with some introductions and tutorials in the first mins, he understands that he is now the mayor of this virtual city and he is asked to upgrade his city by learning new technologies. To upgrade the city, he needs to upgrade the buildings or the areas in the city one by one, by complete the linked quests that can be done from each corresponding physical technology showcases in the theme park. This means, he can have a upgraded virtual city gradually along his exploration within the demo theme park. This is a new concept for Paul to visit such an exhibition that he can't wait to start.

After the introductions, the game is about to start, he notice the city is mainly coloured with his own companies brand colour and his company logo is also on the buildings within the city, which make him feel LS has warmly prepared. From his overview by seeing all these quest buildings, the system popup a hint that there are certain topics more recommended from LS that they think may value the most among the 15 topics in total that could match better to Pauls company. this makes him expect to achieve further from this visit that he believe these recommendations will make sense, and motivates more to explore around. There are some small hint displays together with each building or area in AR environment virtual city on the tech topic the building represents, and the approximate time cost on finishing the corresponding demo showcase. He decide to start with the farm area to try out a bit the system as it shows normally takes only 5mins, as the shortest within the scope be recommended from LS. The farm stand for the technology of smart plant.

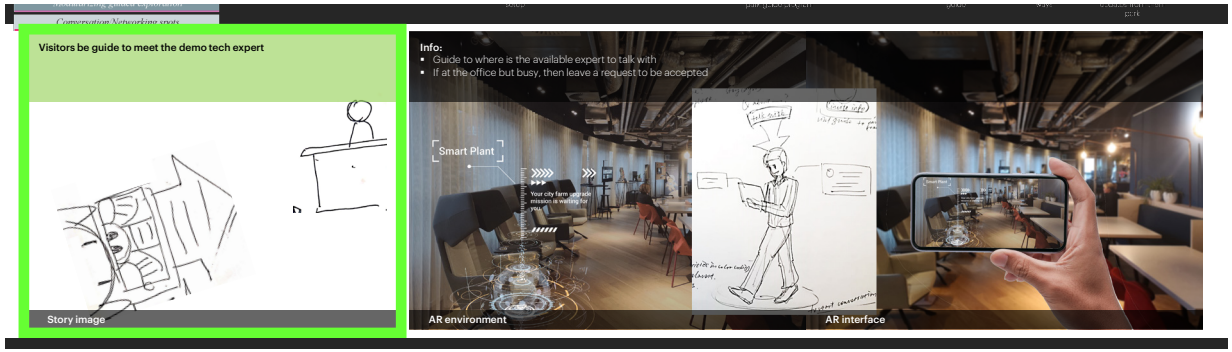
Paul clicked on the farm in the AR CITY, and just like how he experienced with the handy micro navigator to find the office room in the complex building, he is virtually guided towards the smart plant showcase booth.

He walked towards the booth, and as indicated from the screen, he got his phone with the AR camera activated holding onto a flexible moveable phone stand. In this case, he found his own phone, together with the physical demo and booth, become a showcase. The AR layer present a overview of what are the relevant materials around the scene. It becomes free for Paul if he would like to interact with any part of the showcase as he can know what to expect immediately if his AR camera recognize the certain item on the booth.

Introduction videos on the screen behind tells about the technology background and possible use cases. On the iPad, a small program works as a DIY workshop for Paul to create his own using scenario of this smart plant. He chose to have a round shaped yellow colour smart plant in a office context. He is at the moment imagining how convenient the office life for his company would be like if the plants are self manageable to keep alive healthily and beautifully.

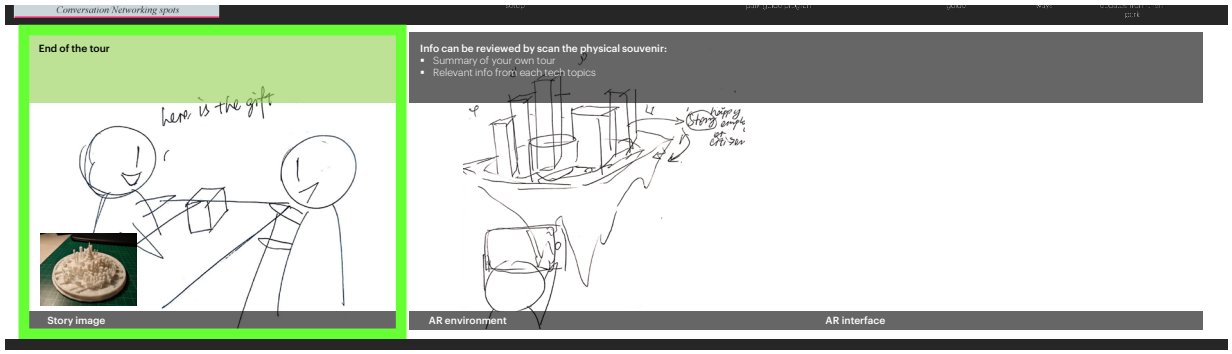
When the phone recognize the physical demo on the booth, the quest was triggered to be popped up from the plant that reminded Paul of his visual farm. Farmers are waiting for him to get the city farm be upgraded. He joined the game, which is a drag and drop simple one. The three sensors of light, humanity, and temperature need to be dragged to the right spots to get the mechanism activated. He completed it quickly as it is simple, but he feel he is now really understood how does it work, and how does the technology values for his own scenario.

He noticed there is a button on the right bottom called “talk to an expert”. He clicked on the button, and system ask him if he would like to request for a chat as the expert is now available somewhere in the office and can guide him towards there.



Paul is amazed by this possibility to meet the specialist to discus further, he confirmed to send the request, and the micro navigator started again to guide him around the office and found that employee. They got a short and nice conversation, added each other to the contact list, and managed to schedule a meeting on Wednesday to talk more about it.

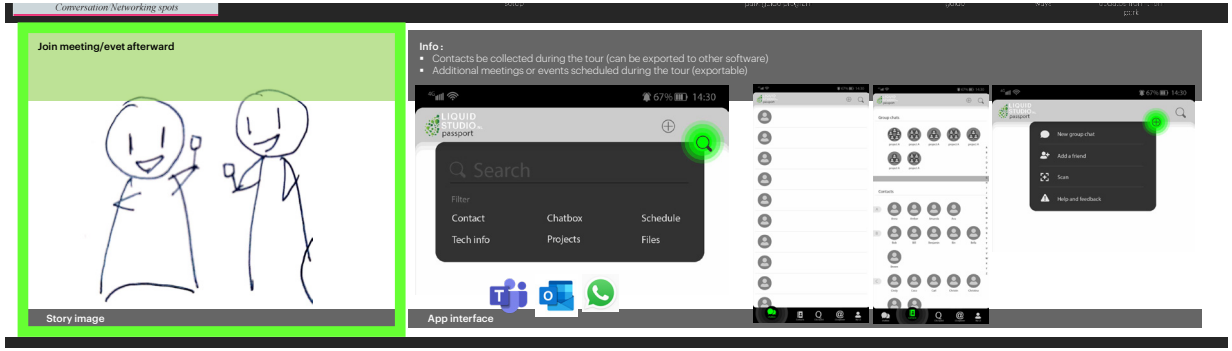
When Paul back to the theme park, he scanned again to the AR mark, he saw the farm is upgraded into a fancier version, which visually can tell the suggestion on a result of combination of blue and green that represents a coloration between his company and LS brand colours.



During his exploration, he found high techs provides from LS are quite interesting and full of potentials that effectively enhance his own business, and the image is clear in his mind how can the potential become valuable achievements. More valuable, Paul managed to meet several specialists on those technical topics he found interesting or valuable.

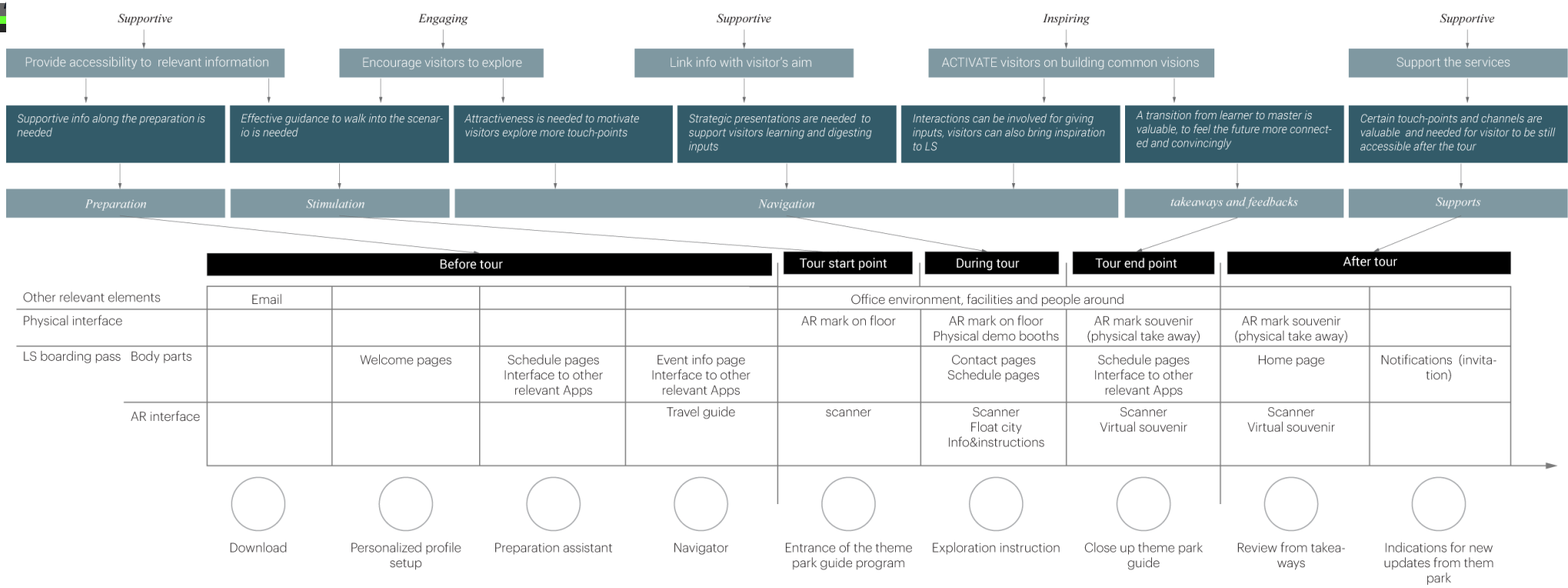
He gathered with Sam in the middle of the tour, and Sam also had a try together with Paul as the quests can become a group game when multiple players are joining. They had quite an memorable visit along the theme park demos.

Finally, they received a 3D printed souvenir. When they know this small thing can be used as an AR mark, to display their own upgraded AR city even they are not inside the LS office, they feel so nice to receive it as they can reexperience the result of this Mixed Reality tour.



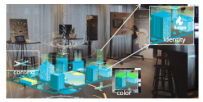
Paul export the meetings and contacts to his daily using apps or platforms, and kept contacts with the network he built along that tour. They managed to push their ideas into projects, and Paul's company is currently a client for Accenture Liquid studio.

Some time later, Paul received a notification from the app that something new happed to the theme park that a new demo is added there around a new technical topic, and he is invited to try that out. He is interested with the new tech, so he will plan a new visit to the office, and see if there is nice opportunities for him to take for his company.

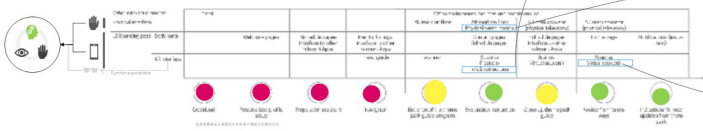


0 | RAW DATA (CONCEPT EVELUATION)

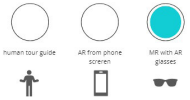
visual coding through out the journey
which element do you feel the most on involvement



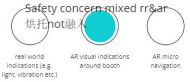
- the part you feel any awkward or uncomfortable?
- the part you feel the most interesting?
- the part you feel the most that it influences your overall experience?



to be guided through out the tour
which techonology do you prefer the most



to be guide from *building in the city* to the *coresponding physical demo booth*
which way of indication on navigating do you prefer the most



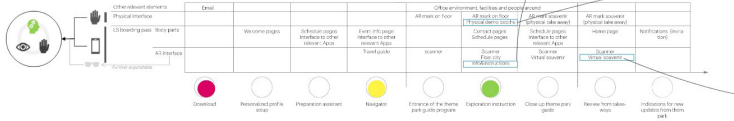
virtual takeaways
which conctent do you prefer the most

to what extend you feel	supportive	5	4	4	5	5.5
	engaging		4.5	5		
	inspiring			5.5	4.5	

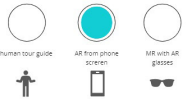
miro

identity coding through out the journey
which element do you feel the most on involvement

- the part you feel any awkward or uncomfortable?
- the part you feel the most interesting?
- the part you feel the most that it influences your overall experience?



to be guided through out the tour
which techonology do you prefer the most



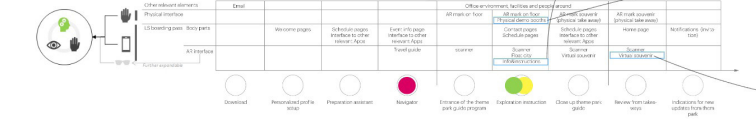
to be guide from *building in the city* to the *coresponding physical demo booth*
which way of indication on navigating do you prefer the most

virtual takeaways
which conctent do you prefer the most

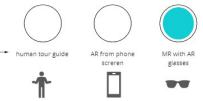
to what extend you feel	supportive	6	4	4	5	5
	engaging	3	6	5	4	4
	inspiring	3	4	3	3	3

miro

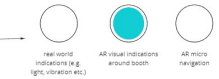
- the part you feel any awkward or uncomfortable?
- the part you feel the most interesting?
- the part you feel the most that it influences your overall experience?



to be guided through out the tour
which techonology do you prefer the most



to be guide from *building in the city* to the *coresponding physical demo booth*
which way of indication on navigating do you prefer the most

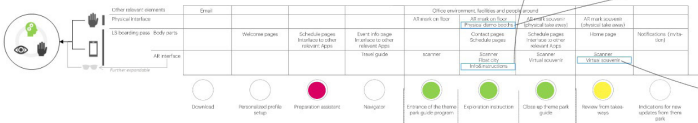


virtual takeaways
which conctent do you prefer the most

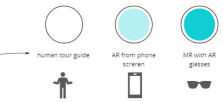
to what extend you feel	supportive	5	3	4	3	4
	engaging		5	4		
	inspiring			5	4	

miro

- the part you feel any awkward or uncomfortable?
- the part you feel the most interesting?
- the part you feel the most that it influences your overall experience?



to be guided through out the tour
which techonology do you prefer the most



to be guide from *building in the city* to the *coresponding physical demo booth*
which way of indication on navigating do you prefer the most

concern on not noticing indication (group situation)

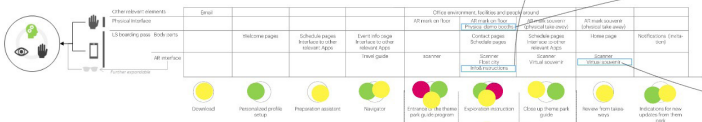
virtual takeaways
which conctent do you prefer the most

straight forward

to what extend you feel	supportive	5	4	5	5	5
	engaging	1-6	4	6	1-6	1-6
	inspiring	1-6	1-6	6	5	1-6

miro

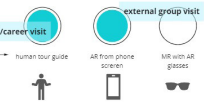
- the part you feel any awkward or uncomfortable?
- the part you feel the most interesting?
- the part you feel the most that it influences your overall experience?



to be guided through out the tour
which techonology do you prefer the most

external/career visit

external group visit



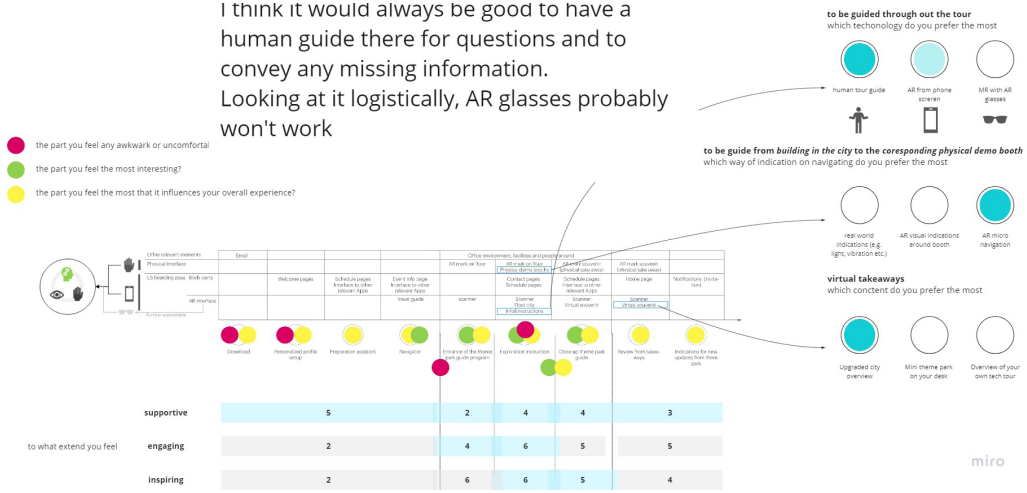
to be guide from *building in the city* to the *coresponding physical demo booth*
which way of indication on navigating do you prefer the most

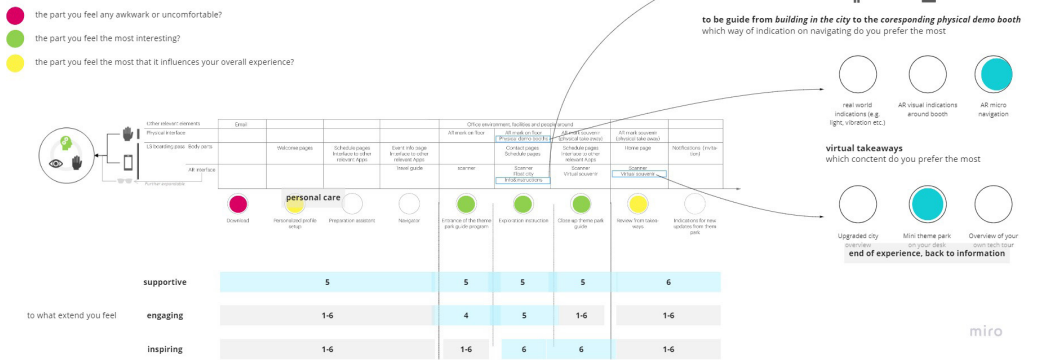
virtual takeaways
which conctent do you prefer the most

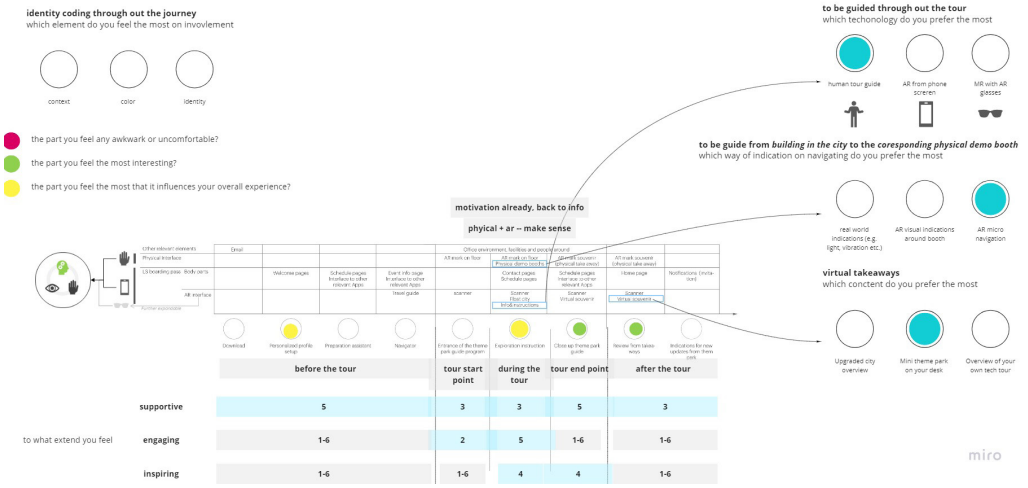
to what extend you feel	supportive	6	5	6	6	5
	engaging	4	4	5	6	4
	inspiring	5	6	5	6	5

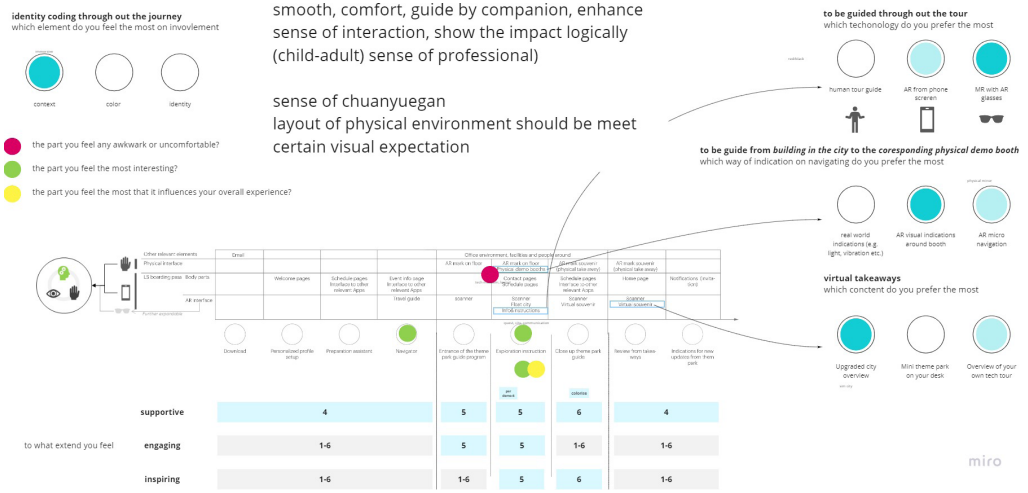
miro

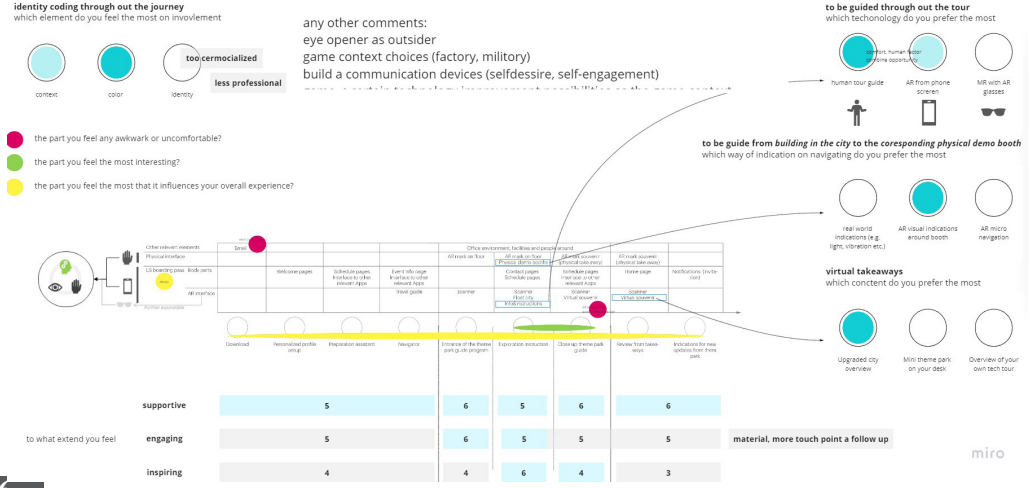
I think it would always be good to have a human guide there for questions and to convey any missing information.
Looking at it logistically, AR glasses probably won't work











P | CONSENT FORM
(LS PASSPORT USER TEST)

CONSENT FORM

You have been invited to participate in a user study conducted by Liquid Studio, Accenture, the Netherlands about the LS passport. **LS Passport is a mobile app** that is designed for supporting this journey that assists Liquid Studio visitors for Liquid Studio in-house tour around the Demo Theme Park. The app will **provide a self-directed and more explorative experience** compared to usual office tours which are perceived to be less memorable.

The aim of the user study is to test the **usability of the LS Passport application** and the **potential effectiveness of varies features** that users are supported for visiting Utrecht Liquid Studio office tour and while going through the LS Theme Park.

The user test will last **approximately half an hour**. Within the time, you will be asked to **navigate along the tasks in the application** while navigating through the app. Once these tasks are completed, an **interview** will be conducted to gather your opinions and thoughts about the LS Passport.

By signing this consent form, you are declaring that you participated in this user test **voluntary**. In case you want to **withdraw** from the user test you can mention this to the researcher **at any time. Collected information** will be treated **confidentially**.

☐ I **do** give permission, to the researchers to take pictures, videos and recordings that can be used for research purposes. Next to this, my data may also be used for the purpose of this research. I understand that this data will be processed anonymously and will be treated confidentially.

☐ I **do not** give permission, to the researchers to take pictures, videos and recordings that can be used for research purposes. My data may only be processed anonymously for the purpose of this research. I will not be seen or heard in any photos, videos or recordings.

LIQUID STUDIO.NL BE DIFFERENT

I understood this 'consent form', and voluntarily take part in this user test. I understand that my permission does not damage my legal rights in case of negligence or other legal fault of anyone involved in this study.

Signature of the research participant:

Name participant _____

Signature participant _____ **Date** _____

Signature of researcher:

I believe the participant is giving informed consent to participate in this study.

Signature researcher _____ **Date** _____

LIQUID STUDIO.NL BE DIFFERENT

P | QUESTIONS AND RAW DATA
(LS PASSPORT USER TEST)

	A1	A2	A3	B1	B2	B3	C1	C2	C3
Current location	New York	Beijing	Hangzhou	Singapore	Eindhoven	Delft	Cicago	Tennesse	Hangzhou
how comfortable did you feel going through with LS passport visit plan?	6	6	6	6	6	6	6	7	6
how much effort did it take you to get use to the passport journey?	2	4	2	5	6	5	1	1	5
To what extend did you enjoy going through with LS passport visit plan?	7	7	7	6	5	7	7	7	6
To what extend did you feel the journey EXPLORATIVE by going through with LS passport visit plan?	7	7	7	6	7	6	7	7	7
To what extend did you feel the journey COLLABORATIVE by going through with LS passport visit plan?	5	5	6	5	5	5	7	7	6
To what extend did you feel the journey DISCOVERABLE by going through with LS passport visit plan?	6	6	7	7	6	7	7	7	7
1. I think that I would like to use this app frequently for the visit	2	1	1	3	1	2	1	1	5
2. I found the app unnecessarily complex	3	4	2	4	3	3	4	5	3
3. I thought the app was easy to use.	3	2	2	3	4	2	1	1	3
4. I think that I would need the support of a technical person to be able to use this app.	5	4	5	5	4	5	2	5	5
5. I found the various functions in this app were well integrated.	2	1	2	1	4	2	1	1	1
6. I thought there was too much inconsistency in this app.	5	5	5	4	5	5	5	5	5
7. I would imagine that most people would learn to use this app very quickly.	3	1	1	2	4	3	1	2	3
8. I found the app very cumbersome (heavy/troublesome) to use.	4	5	4	5	2	3	5	5	3
9. I felt very confident using the app.	2	1	1	3	4	1	1	1	1
10. I needed to learn a lot of things before I could get going with this app.	5	5	5	1	5	2	5	5	1
What did you enjoy the most about using the app and why?									
Was there anything unclear in the app that prevented you from interacting with the app in the way you imagined to?									
Did the overall flows in the app make sense? Did the app include buttons or redirections that did not make sense?									
Is there anything that you are currently missing in the app?									
To what extend do you think such an app would be an appropriate alternative to physical one-on-one studio tours?	5	6	7	6	5	7	6	7	7
to what extend do you agree that such an app made the overall Theme Park experience ENGAGING?	6	7	7	6	6	6	7	7	7
to what extend do you agree that such an app made the overall Theme Park experience SUPPORTIVE?	6	5	7	7	6	7	7	7	7
to what extend do you agree that such an app made the overall Theme Park experience INSPIRING?	6	6	6	6	5	6	7	7	7
to what extend do you agree that such an app will increase the overall Theme Park experience?	5	6	7	7	6	7	7	7	7
Do you have any final suggestions on how to improve the AR City Quest or additional ideas?									