UX DESIGN

MASTER THESIS IN CO-OPERATION WITH RE'FLEKT GMBH

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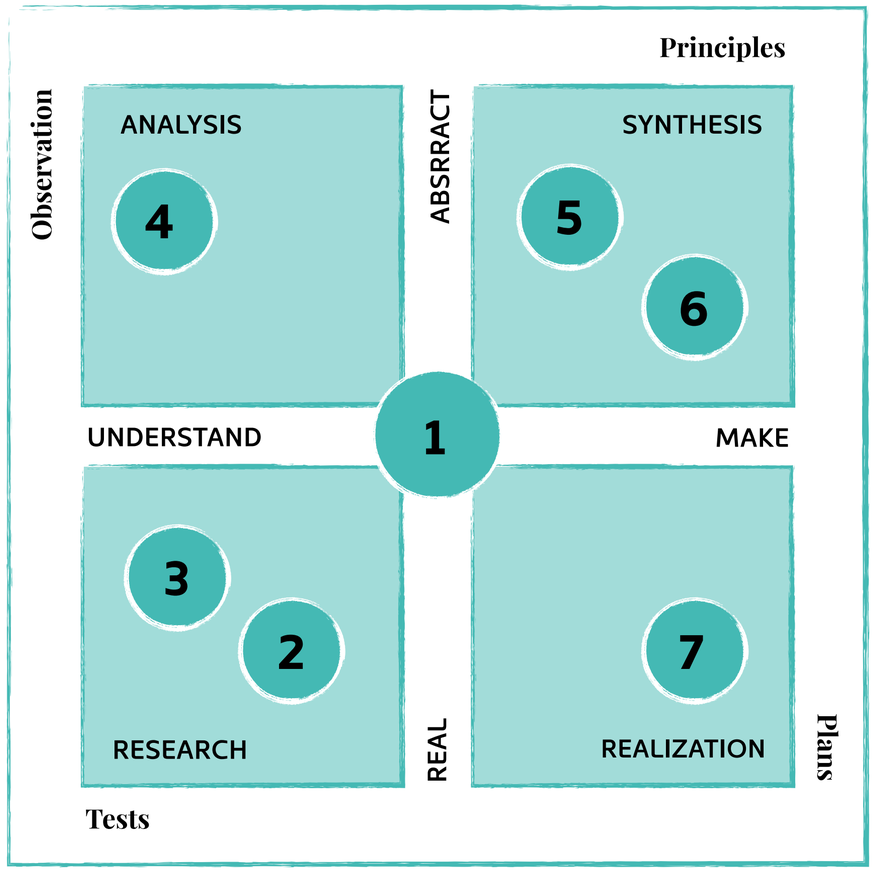
How can the Seven Modes of Design Innovation Help combine the UX of two different AR Products?

SENSE INTENT - METHODOLOGY



1. **Sense Intent** - Problem Definition, Methodology
2. **Know Context** - Trends, Competitors, Product Field Ref Guide
3. **Know People** - Expert Interviews, Personas, User Journeys
4. **Frame Insights** - Workshop, Findings
5. **Explore Concepts** - User Flows
6. **Frame Solutions** - Prototypes, Feedback, Iterations
7. **Realise Offerings**

Kumar, V. (2013). 101 design methods: A structured approach for driving innovation in your organization. Hoboken, NJ: Wiley.

KNOW CONTEXT - TRENDS, COMPETITORS

- **Healthcare**
- **Automotive**
- **Enterprise**
- **Mobile**
- **Remote**

16.8 Billion USD

AR & VR Market Revenue Worldwide 2019

198 Billion USD

AR Global Market Size 2025

29.5 Billion USD

AR & VR Economic Impact 2020

ptc | SCOPE AR | ATHEER | DAQRI | UPSKILL | UBiMAX wear IT at work

Gordon, K. (2019, March 14). Augmented Reality (AR) - Statistics & Facts. Retrieved July 7, 2019, from https://www.statista.com/topics/3286/augmented-reality-ar/

Nguyen, T. H., & Blau, B. (2018, January 5). Competitive Landscape: Augmented Reality Tools for Enterprise, 2018 [PDF]. Connecticut: Gartner Inc.

Makarov, A. (2019, April 04). 9 Augmented Reality Trends to Watch in 2019-2020: The Future Is Here. Retrieved July 7, 2019, from https://mobidev.biz/blog/augmented-reality-future-trends-2018-2020

KNOW CONTEXT - PRODUCT FIELD REFERENCE GUIDE - 1 REFLEKT REMOTE, 2 REFLEKT ONE

Frahm, K. (2016). The Product Field reference guide. Product Field.

“Only an ecosystem can help provide a seamless user experience! “

“We have to provide a consumer based Experience! “

“UX and UI of a product are of highest priority as they help fix technical Problems! “

“Its is absolutely essential that we get the usability right making it easy and efficient! “

“We need to understand the clients use cases in-order to provide a standardised solution! “

John Doe
Senior Technician

Bane Doe
Junior Technician

KNOW PEOPLE - USER JOURNEY - REFLEKT ONE

(THINKING)
This looks interesting, I'll try this

(UNSURE)
Is this more efficient?
Not sure how long this will take!
Do I need login credentials for every?
Do I have all the docs I need?
Do I need to connect to the WIFI?

(THINKING)
The login is straight forward

(UNSURE)
Hope I remember my credentials!
forget my password, how do I reset it?
How long would it take?

(SATISFIED)
I found the scenarios I need in the menu
It shows me how to initiate tracking
Found my personal scenarios
Overview of the app UI was clear

(WORRIED)
I do not find my scenarios!
How do I find my scenarios?
Where do I find the server details?
Why do I have to enter these details?
What if I enter the wrong details?

(SATISFIED)
Tracking was quick and easy
The animation was clear & Intuitive
The text was clear and precise
Number of steps are clearly mentioned
Freeze mode helps keep content in place
Additional image was helpful

(UNSURE)
I have to initiate tracking all the time
I don't understand the step
Not sure which step I am at
Too much information
Complicated UX
The UI is not intuitive

(WORRIED)
Have I completed all the steps?
I was not able to follow the steps!
I would rather make a call.
How are the steps documented?
Could I chat or call an expert?
The app is too complicated!

(SATISFIED)
I received a checklist after all the steps!
The tasks were easy to follow & Precise
I Received the exact steps I need!
I was able to complete the task faster!
I did not need my manual!
There was no need of documentation!

1 APP CONSIDERATION 2 OPEN APP 3 SCENARIOS 4 TRACKING & USING 5 WAIT & WONDER 6 TASK COMPLETE

Wójcicka, D. (2015, September 09). 10 most interesting examples of Customer Journey Maps. Retrieved July 9, 2019, from http://blog.uxeria.com/en/10-most-interesting-examples-of-customer-journey-maps/

KNOW PEOPLE - USER JOURNEY - REFLEKT REMOTE

(UNSURE)
Is this more efficient?
Not sure how long this will take!
Do I need login credentials for every?
Do I have all the docs I need?
Do I need to connect to the WIFI?

(THINKING)
This looks interesting, I'll try this

(UNSURE)
Hope I remember my credentials!
I have to enter all my details?
Why do I have to do this?

(THINKING)
The login is straight forward

(WORRIED)
How do I know which expert I would get?
Um, is anyone there?
I don't understand that response!
Do I have to find an expert myself?
Do I need to add the expert to my contact?

(SATISFIED)
I like that I can chat or call an expert

(UNSURE)
Was my description clear?
Will I get in touch with the right ex?

(SATISFIED)
It was easy to use send a text!
It was easy to describe my issue

(WORRIED)
Do I need cellular data to make a call?
Have I done the step before calling?
How do I know if the expert is free?
Do I need more documentation?

(SATISFIED)
The expert resolved the issue for me!
The option to switch to video was helpful!
Sticky annotation made pointing perfect!
I had the right expert!
The call resolved my issue!

(SKEPTIC)
I have to explain a lot to the expert
It was hard to explain everything - chat
I would like to solve it myself

(SATISFIED)
The task is done!
The steps were easy over the video call!
The expert had the right data!
I did not have to explain my issue!
Annotations improve accuracy!

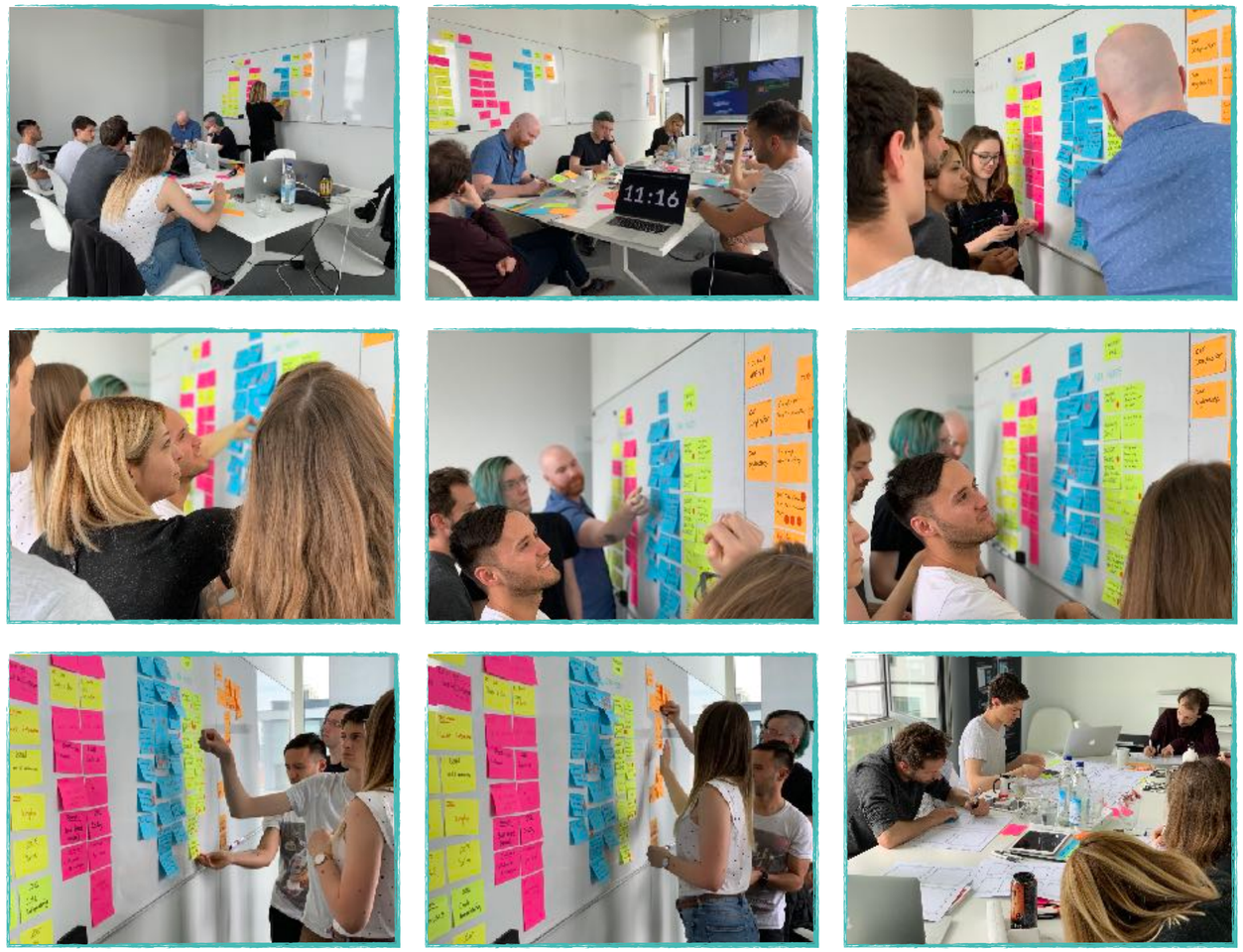
(WORRIED)
Whats the status of the chat?
Do I need more documentation?
Can I contact the same expert?
The app is too complex!

1 APP CONSIDERATION 2 ONBOARDING 3 CHAT / DATA ENTRY 4 INITIATING CHAT 5 WAIT & WONDER 6 PHONE/VIDEO CALL 7 WAIT & WONDER 8 TASK COMPLETE

Wójcicka, D. (2015, September 09). 10 most interesting examples of Customer Journey Maps. Retrieved July 9, 2019, from http://blog.uxeria.com/en/10-most-interesting-examples-of-customer-journey-maps/

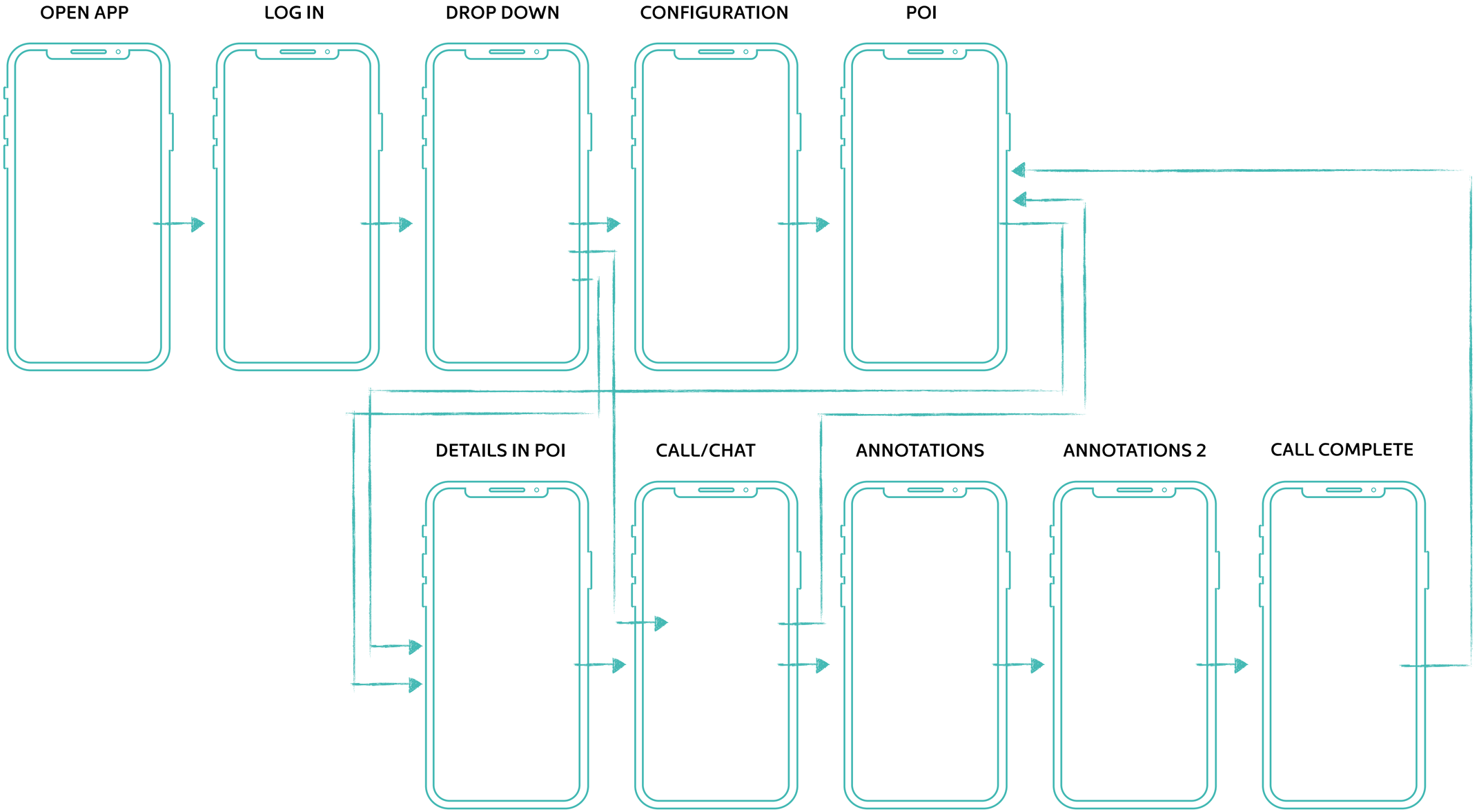
How do we provide a Seamless User Experience whilst bringing both the products together?

- Vision Before and After
- Identifying user needs
- Idea Generation
- Elaborate Ideas
- Create Concepts



Brown, D. (2017, December 12). The Secrets of Creating Great Design Workshops - EightShapes. Retrieved July 9, 2019, from https://medium.com/eightshapes-llc/the-secrets-of-creating-great-design-workshops-1e3476b548bf

EXPLORE CONCEPTS - USER FLOWS - HIGH LEVEL



FRAME SOLUTIONS - PROTOTYPES, FEEDBACK, ITERATIONS

MOBILE - iPHONE - DRAFT 1

ONBOARDING

TRACKING

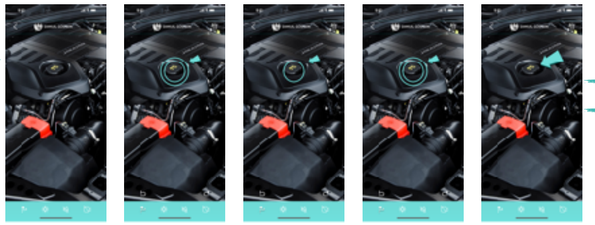
STEP-BY-STEP

CHAT

FEEDBACK

3D/VR MODE

VIDEO CALL & ANNOTATIONS



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Apple Inc. (n.d.). Human Interface Guidelines. Retrieved July 9, 2019, from https://developer.apple.com/design/human-interface-guidelines/ios/app-architecture/loading/

FRAME SOLUTIONS - PROTOTYPES, FEEDBACK, ITERATIONS

MOBILE - iPHONE - FINAL

ONBOARDING

TRACKING

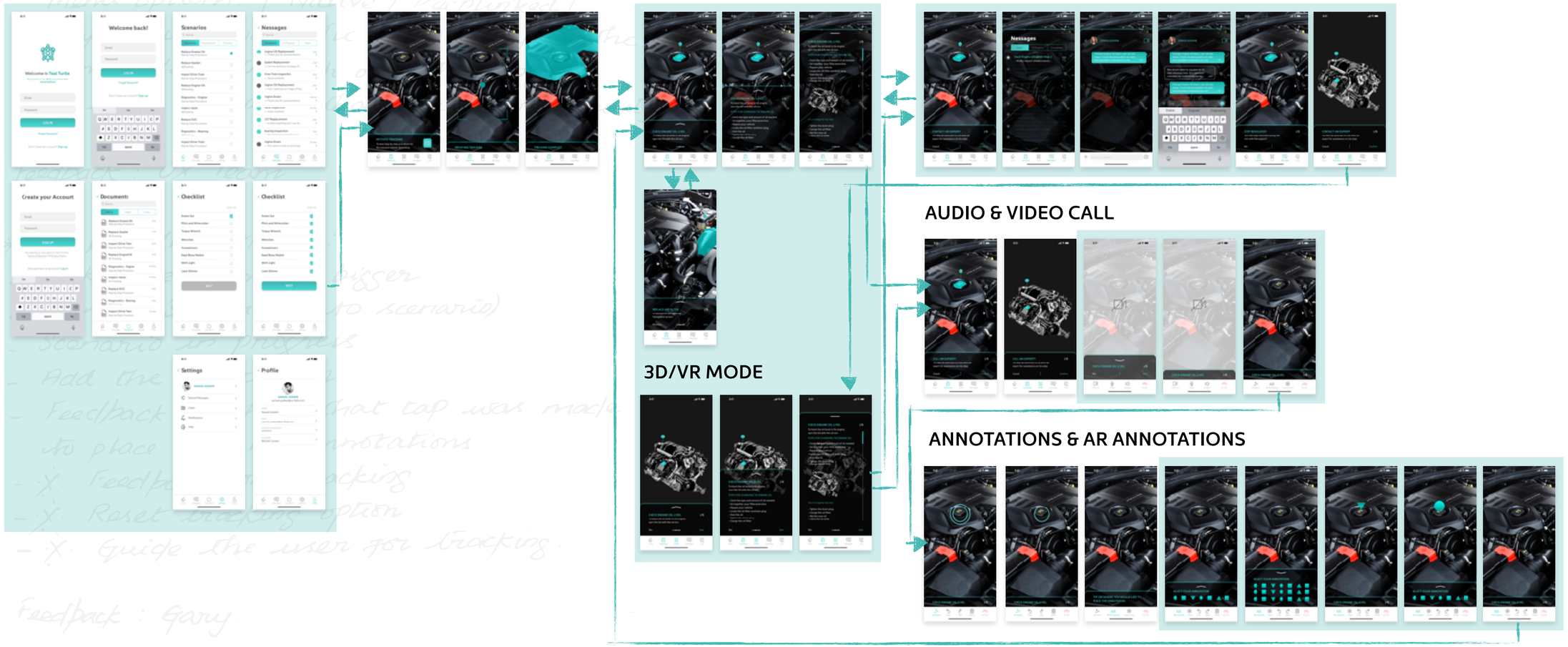
STEP-BY-STEP

CHAT

AUDIO & VIDEO CALL

3D/VR MODE

ANNOTATIONS & AR ANNOTATIONS



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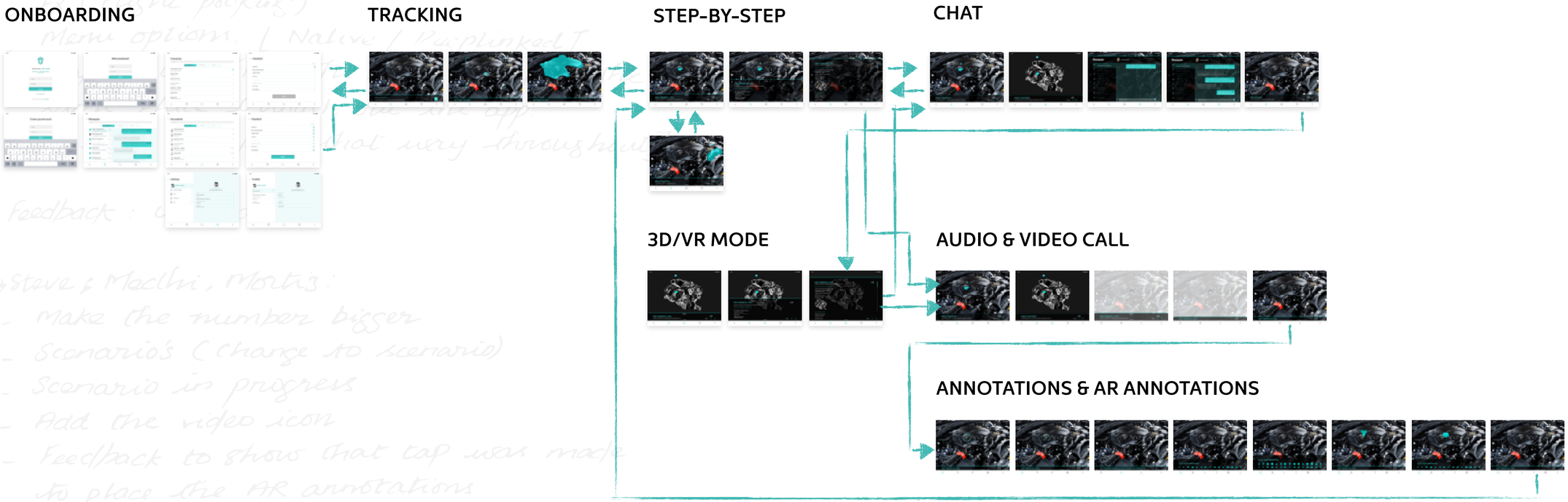
FRAME SOLUTIONS - PROTOTYPES, FEEDBACK, ITERATIONS

TABLET - iPAD - FINAL



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NEXT STEPS & LIMITATIONS

- Create Working Prototype
- Cross Platform : Hololens ?
- Test new prototype with existing clients
- Get feedback from existing clients
- Develop Business Model

- Technology
- Client Adaption
- Pricing Model
- Appropriate Use Cases
- Scalability

SUMMARY OF KEY LEARNINGS

1. **Sense Intent -** Identify the relevance of the topic
2. **Know Context -** Detailed analysis of the existing products - Problems & Solutions
3. **Know People -** Jobs to be done - Pain Points - Identify users
4. **Frame Insights -** Examine existing products - Define user needs - Create concepts
5. **Explore Concepts -** Combine the UX of two products
6. **Frame Solutions -** Realise the UX & UI of new product - Importance of feedback
7. **Realise Offerings -** Limitations & Next Steps

Thank You !