

A photograph of two people holding Samsung S20 smartphones. The person on the left is wearing a blue denim jacket and holding a dark-colored phone. The person on the right is wearing a pink ribbed sweater and holding a light-colored phone. They are standing in front of a blue-tinted window with a grid pattern. The text 'Samsung S20' is overlaid in large white font.

Samsung S20

Mobile Phone Camera Experience Design for Millennials

Team



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UX Designer

My role & contributions

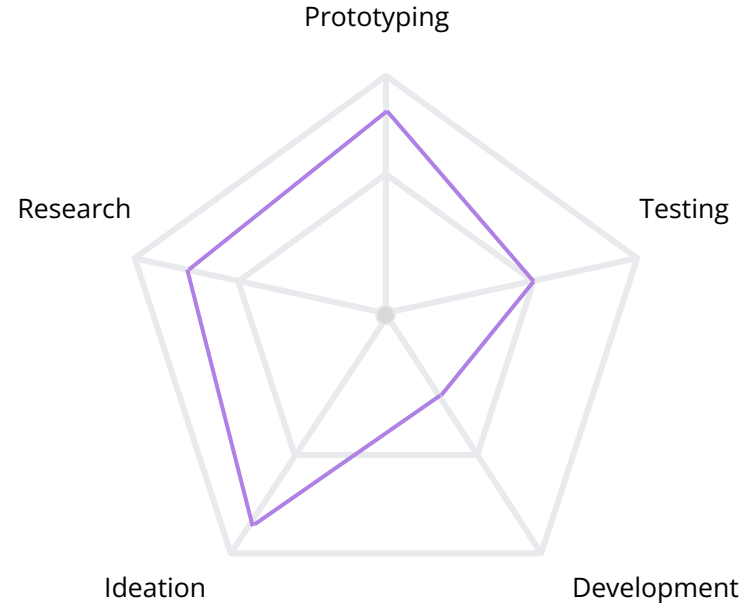
- **UX Research**

3 guerrilla interviews, 3 in-studio interviews), comparative studies (camera modes), conducted 5 usability testing sessions

- Facilitated two brainstorming sessions.

- **Prototyping**

Created low-fidelity & high-fidelity prototypes using Sketch and Unity 3D (interactive camera concepts)



The Problem

In 2019, Samsung's internal research indicated **Customer Satisfaction Index (CSI)** for Samsung Galaxy S9 phone camera with **just 1% increment** from previous year (2018, CSI: 81).

This is **low in comparison** to its competitor and also given that Samsung had far better hardware and software features delivered with the phone camera.



Empathize & Discover

TARGET AUDIENCE

Who are the users?

Millennials in the U.S.

Age 18 to 36 (Born between 1982 - 2000)

We chose millennial users as they are the high impact group and avid smartphone users.

We approached with a goal to uncover core values that drive appealing experiences for millennials.



PRIMARY RESEARCH

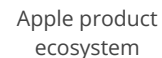
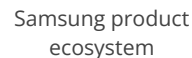
Semi-structured & Guerrilla interviews

We interviewed 12 millennials to understand their smartphone camera use, preferences, what motivates them and what do they value in terms of photo capture experience.



Comparative Analysis

Evaluated camera modes usefulness & how they differ in serving millennial user group

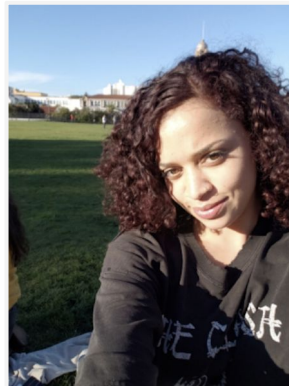


Research Insights

ISSUES IDENTIFIED

Lack of authentic expression in photos taken using Samsung S9

By default the Samsung S9's selfie camera mode applied '**skin tone**' filter which resulted in photo losing original characteristics.



Samsung S9
portrait selfie



iPhone X
portrait selfie

"In photo taken by Samsung phone, my hair lacks depth and face looks flat ... I want my photos to look like me and not someone else ... "

RESEARCH INSIGHT

False notion as a result of camera's default settings

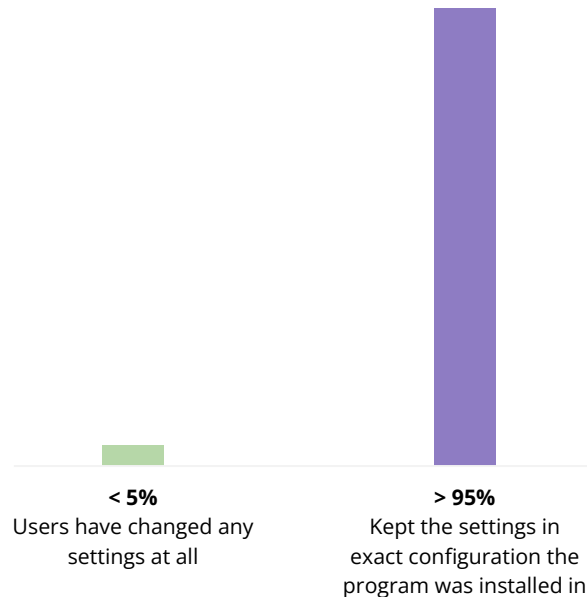
Users tend to believe that default settings in phone camera provides best photo capture experience.

Source:

'Do users change their settings?' by Jared Spool, 2011

<https://archive.uie.com/brainsparks/2011/09/14/do-users-change-their-settings/>

Accessed on 13 Nov 2018



ISSUES IDENTIFIED

Proper lighting while taking photos plays a huge role

For every photo users tend to capture, they almost every time put lot of effort getting the light right. It's a challenge and takes lot of cognitive effort to spatially illuminate the subject.

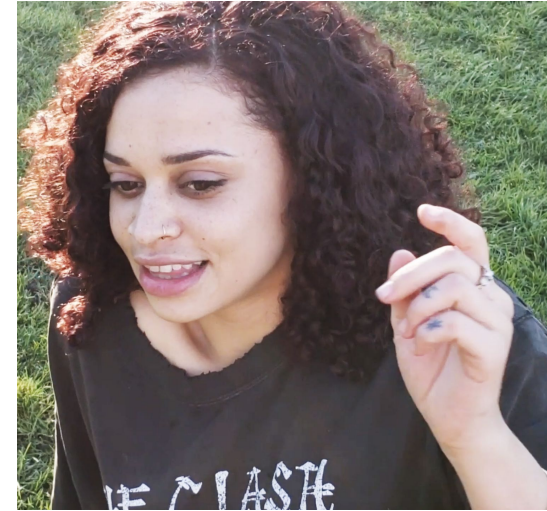


"Most times I end up going in circles to align for better light but it's tricky... you know ... you can later edit them but that does not come so natural ..."

ISSUES IDENTIFIED

More steps in sharing the photo content

While most users capture photos and instantly share them on social media and other apps, we can rethink of reducing the number of steps involved.



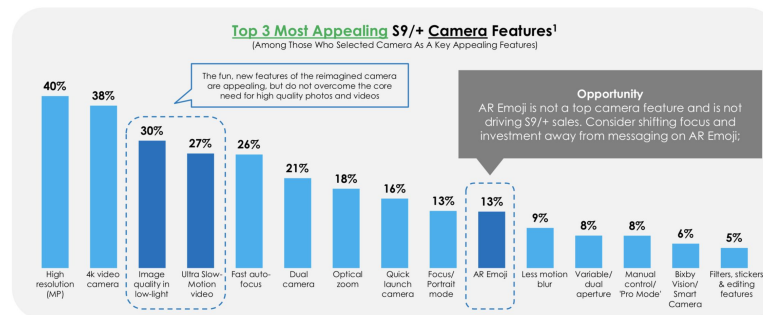
"Mostly I take selfies and share them on social media ... I tend to use camera directly on my Snapchat since it's quick"

RESEARCH INSIGHT

Users are more interested in professional camera modes

As there are too many camera modes available while users prefer the core features, frequently used modes need to be more accessible.

Source:
Samsung's internal mobile phone camera research report, 2018



Usage stats gathered from Samsung S9 phones around the globe indicate professional photo capturing modes are most widely used

ISSUES IDENTIFIED

For visually impaired users, it's challenging to focus on a subject

Getting photos right in terms of focus and subject positioning is important. Those details play a role in communicating one's intended stories.

Samsung S9 camera accessibility can be improved to help solve the above issue.



"A friend of mine is legally blind and he takes more photos than me... he mentions VoiceOver feature is very useful but on Samsung it's not easy to focus on faces while taking photos ..."

Redefine the problem

Bringing pieces together

Samsung Galaxy S9 has **too many camera modes** while only few are frequently used. With **less contextually driven experiences** and **missing millennial's core values**, overall resulting experience is less appealing to the end users.



USER STORIES

Generate & prioritize



User



Goals



Activities

#1

As a **social media influencer**, I want to **encourage young women to embrace natural outlook** so I **capture selfies that are authentic & share them**

#2

As a **social media influencer**, I want to **capture my experience & story creatively** so I **adjust, edit & balance light**

#3

As a **tourist**, I like to **spend more time experiencing & being in moment** so I find ways to **share photos quickly**

#4

As a **tourist**, I want to **connect with people better** so I **take photos with them**

Ideation

UX Design Principles



Millennials actively support and embrace products that share their values

1. **Inclusion over segmentation**
(Inclusive community, Disability inclusion, Gender inclusion)
2. **Empowered experience**
(Privacy, Disconnection)
3. **Purpose over brand**
(Sustainability, Purpose)
4. **Community over product**
(Community, Mood based music)
5. **Experience across all touch points**
(Physical experiences, Social payments, Personalized service)

CONCEPT GENERATION

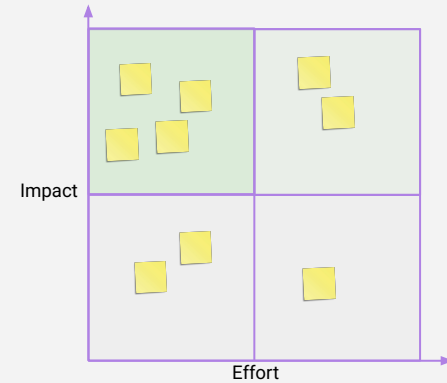
Immersive Brainstorming

How might we enable users to capture content matching their imagination?

How might we simplify photo capture modes with focus on contextually-driven experience?

How might we enable users share photos more efficiently?

How might we design for inclusive experience?



Prototyping & Design decisions

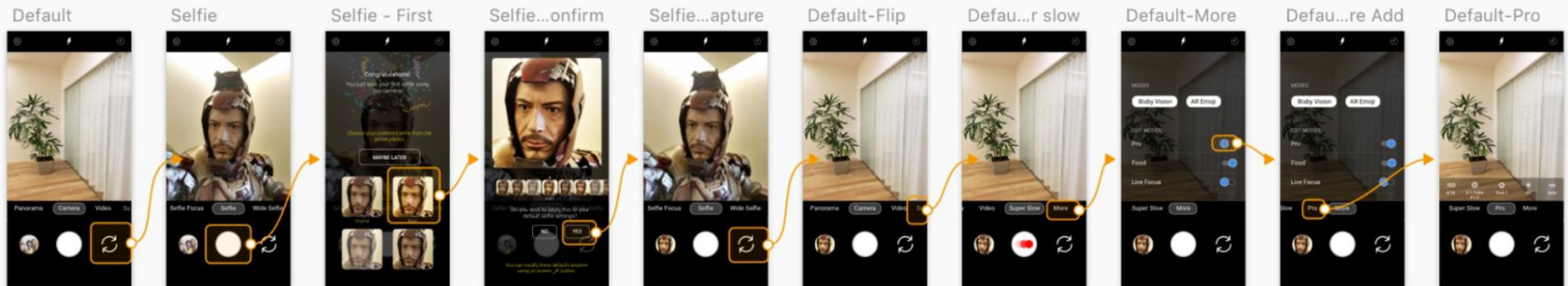
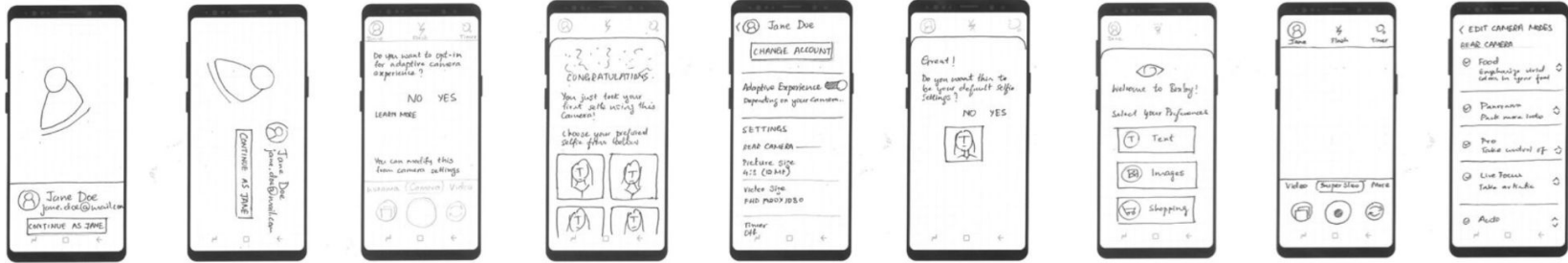
Initial sketches & iterations



"I feel like there are too many steps to set the defaults filter... also, I don't want use my login for camera..."



"The camera modes and selfie swap button are more easy to access and I like overall simple outlook of the UI"



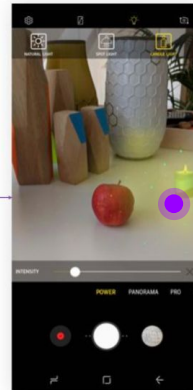
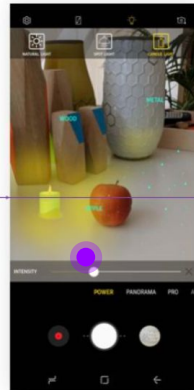
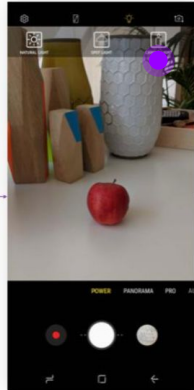
Initial sketches & iterations




"I like how some materials can absorb and some can reflect ... there is also a simple way to control light intensity value ... it's useful "



"It seems a bit complex to me... I'm not sure which light to select for my needs ..."



Virtual light that
can interact with
physical world

 Tap & Drag interactions

Introducing S20 Camera

Redesigned Camera Experience



Learn & Adapt

Listen to user and evolve to provide default experience that match user expectations



Instant share

A quick way to share photos captured reducing friction



Creative-self

Provide efficient way to manipulate light while capturing photo content



Less is more

Offer core camera modes first & group the rest for users to select from

Learn & Adapt



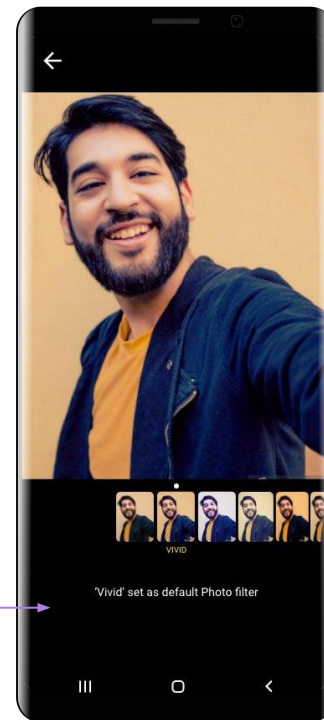
Selfie mode



Pick a new filter

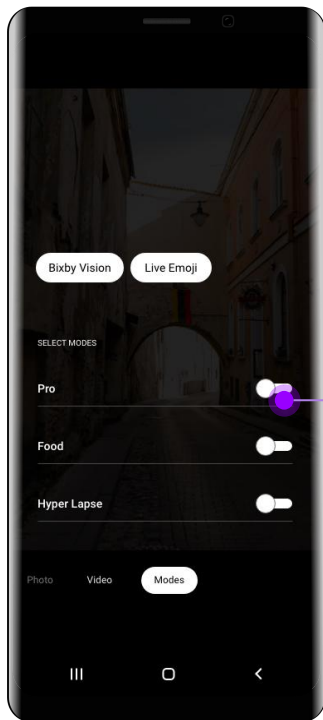


Set new filter as default

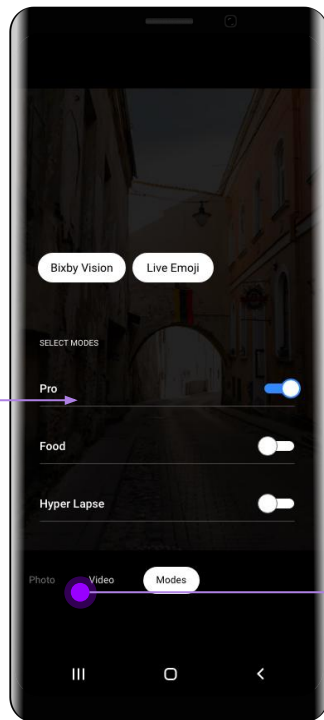


New default preference set

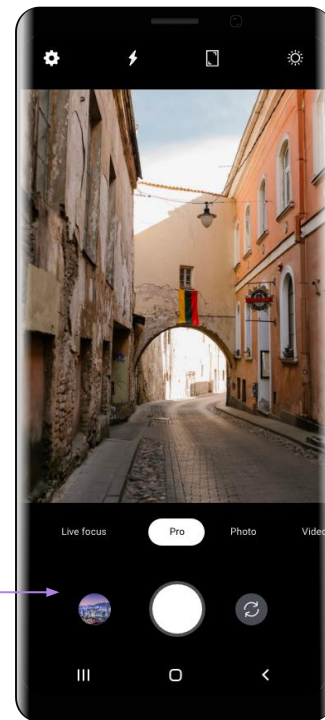
Less is more



Group least used modes



Add new mode selected



Selected mode now available

Creative-self

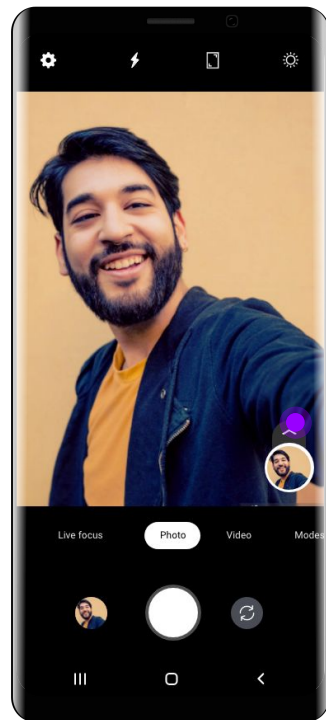


Add virtual light into scene

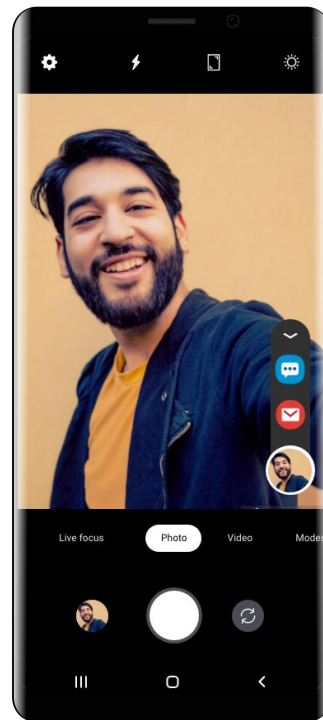


Manipulate light

Instant share



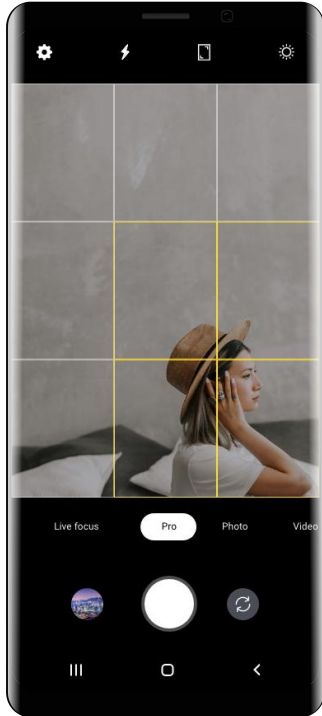
Tap to share the photo captured



Select any available means to share

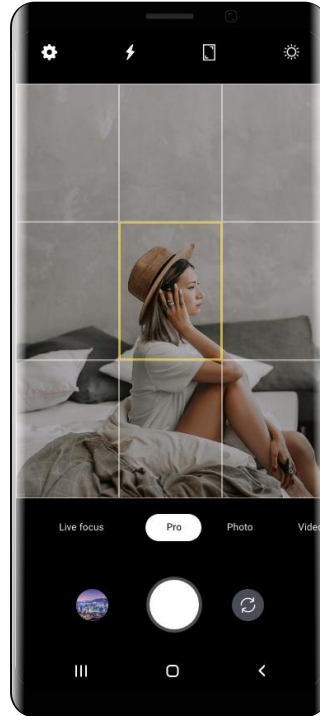
Accessibility - Vision

🔊 "Face positioned near Bottom-right cell"

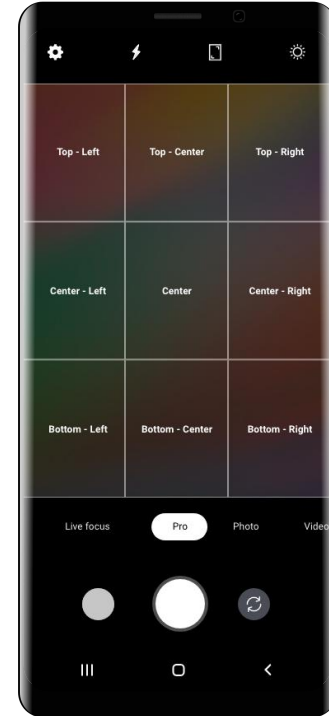


Reference grid - off center

🔊 "Face positioned in Center cell"

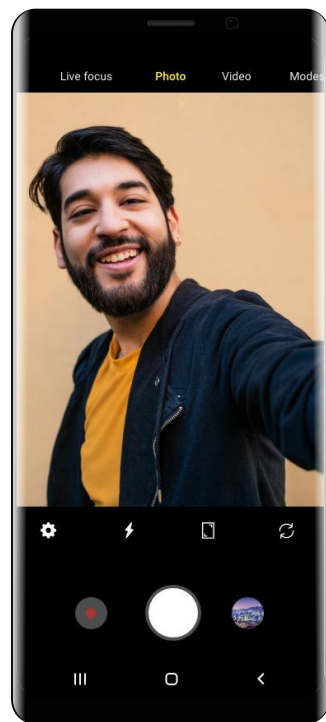


Reference grid - In center

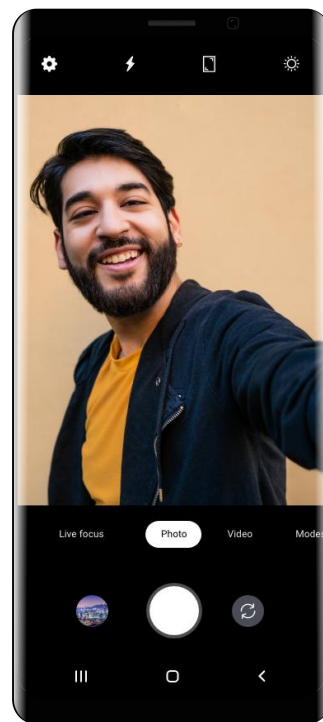


Reference grid labels

How to ensure better reachability?

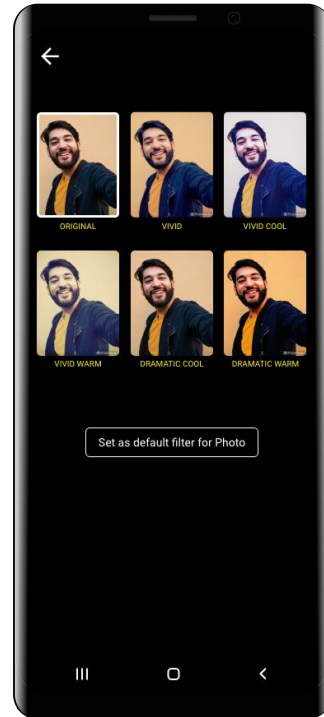


Before

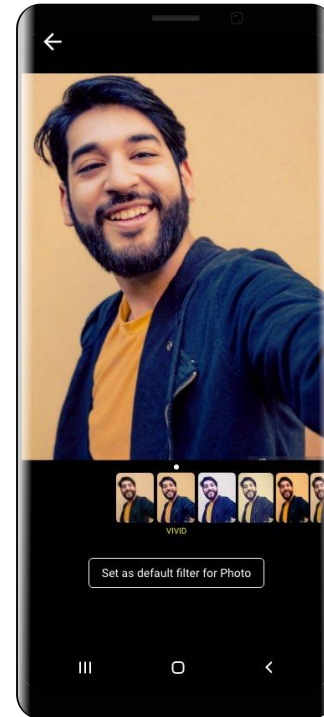


After

How to enable users make effective decision about their input?

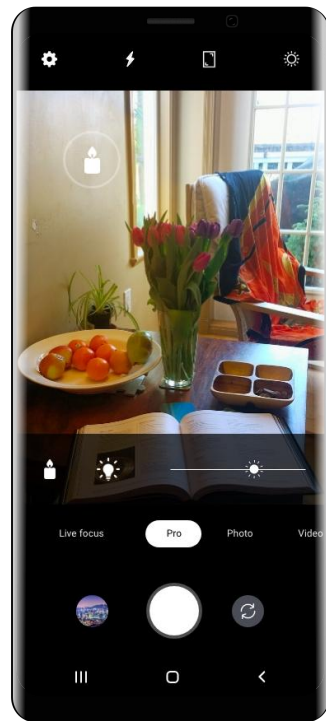


Before

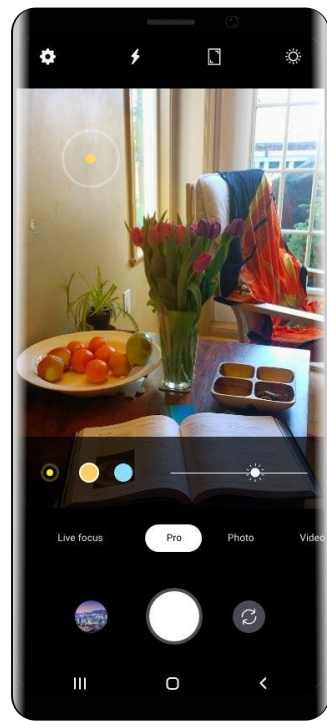


After

Keeping it simple and clear

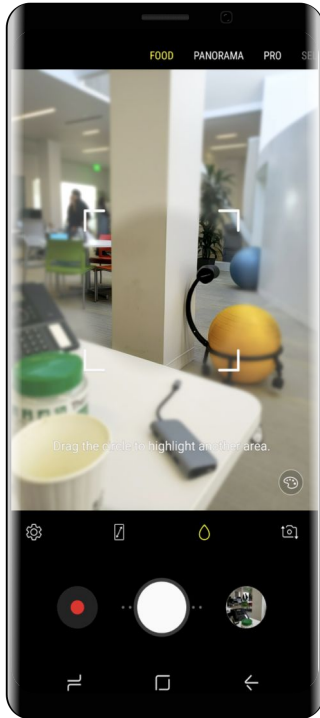


Before

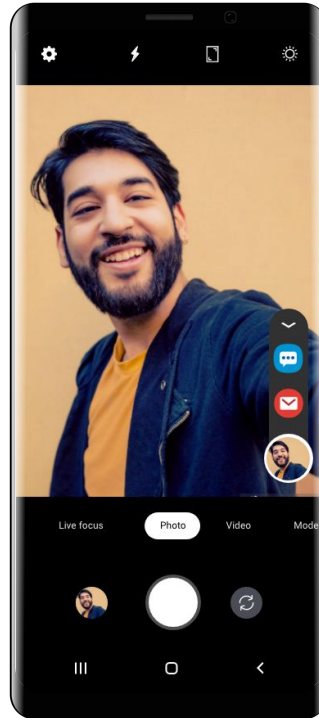


After

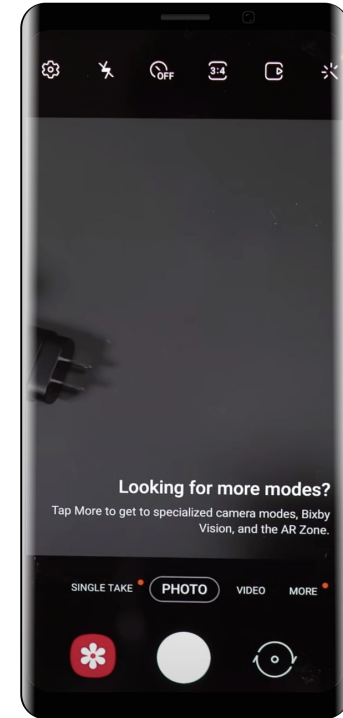
Experience Evolution & Comparison



Samsung S9 camera view



Concept mockup



Samsung S20 camera view

THE IMPACT

What did we accomplish?



CSI score

2% increment & also **12%**
higher engagement with
native camera app



Adoption of 'Voice of Millennials'

Other product teams adopted
insights, methodologies that
influenced purpose-centric
approach



More pre-orders

S20 model received **18%**
more pre-orders than S10