

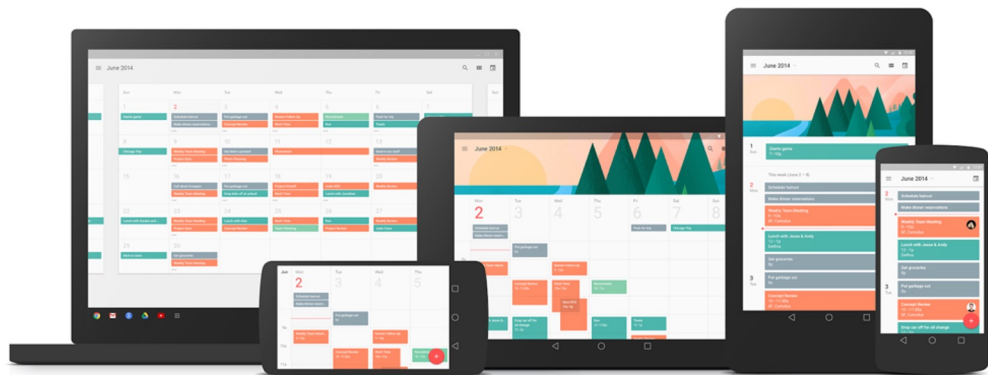
UX

Pixels. Products. Programs. Policies.

Elizabeth F. Churchill, PhD

August 30th 2022

UX What is it?

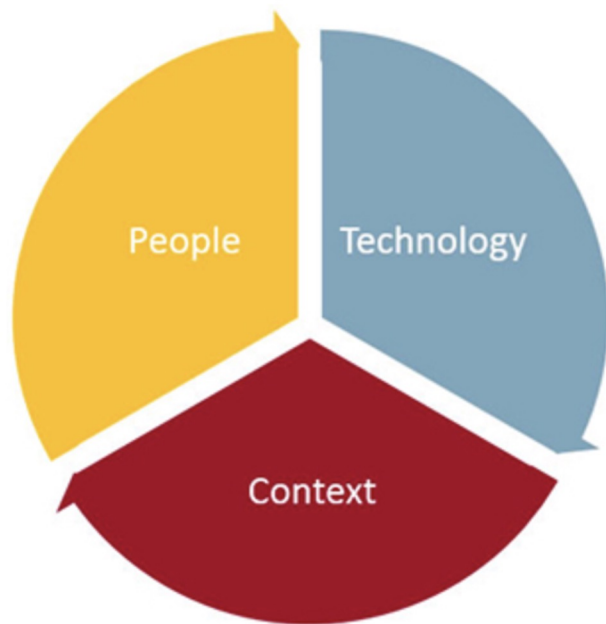


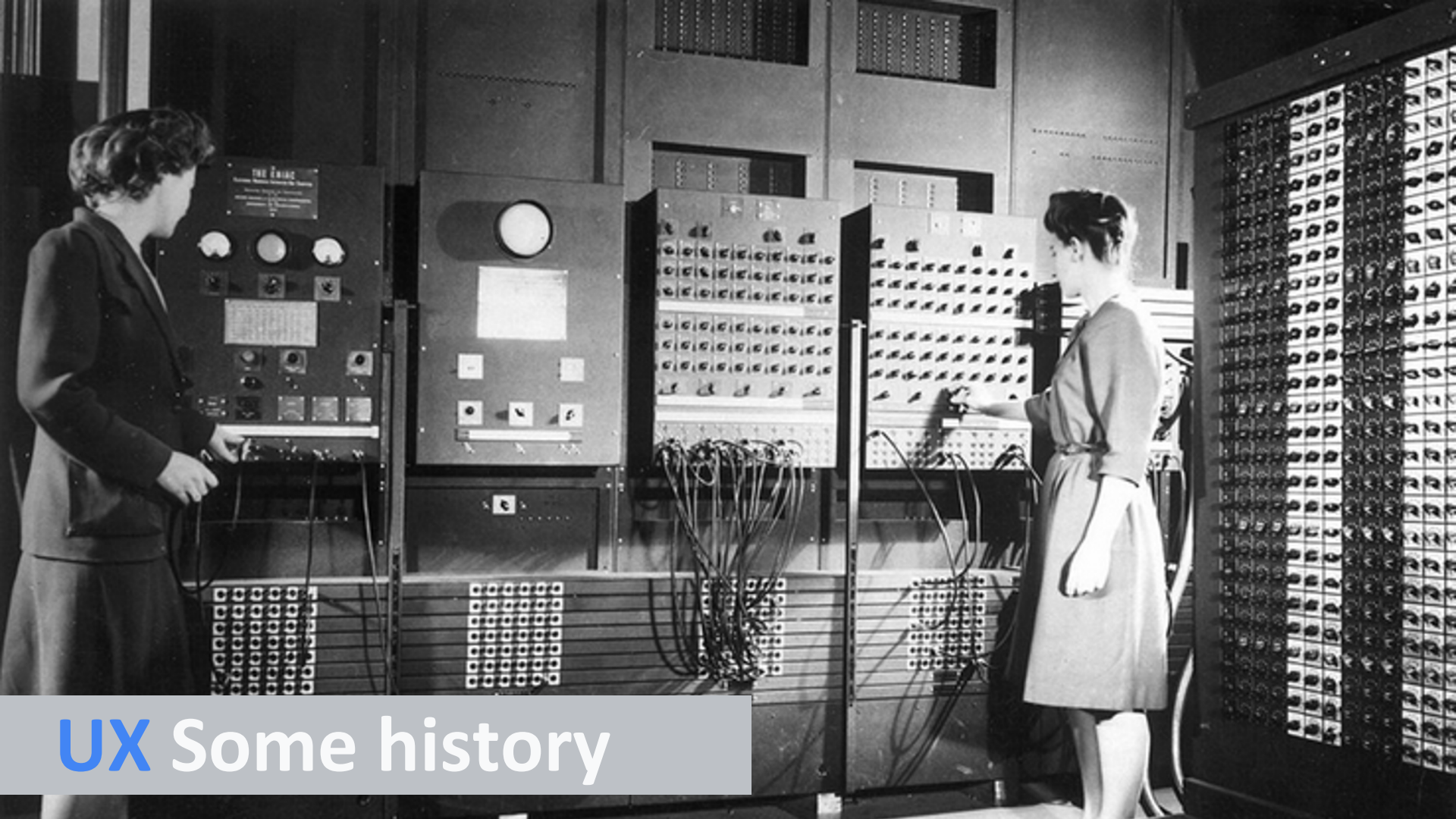


Use(r) experience encompasses all aspects of the end-user's interaction with the company, its services, and its products.”

What is User Experience?

Source: Nielsen Norman Group





UX Some history



1910's-1920's

Workplace studies

Organizational Psychology



1970's

Office Automation

Office systems for effective and efficient work practices



Use Experience (UX)

2000's+ many are focused on visual and interaction design



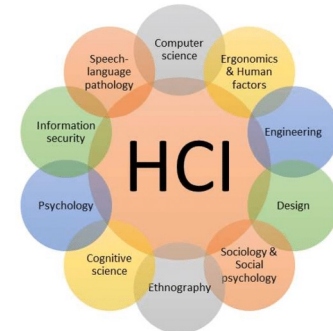
Human Factors

World War II cockpit ergonomics, collaborative work



Human Computer interaction

1980's focus on human cognition and interaction with computers



Timeline

Contexts



- **Discretionary use**
 - Choose to use, no serious consequences for non-use
- **Personal productivity**
 - Needed to get personal things done
- **Work productivity**
 - Work required, tied to productivity, goal achievement, and recognition
- **High stress, fast response, safety critical**
 - High stakes use

UX And so what....?

The \$300 Million Button



by Jared M. Spool

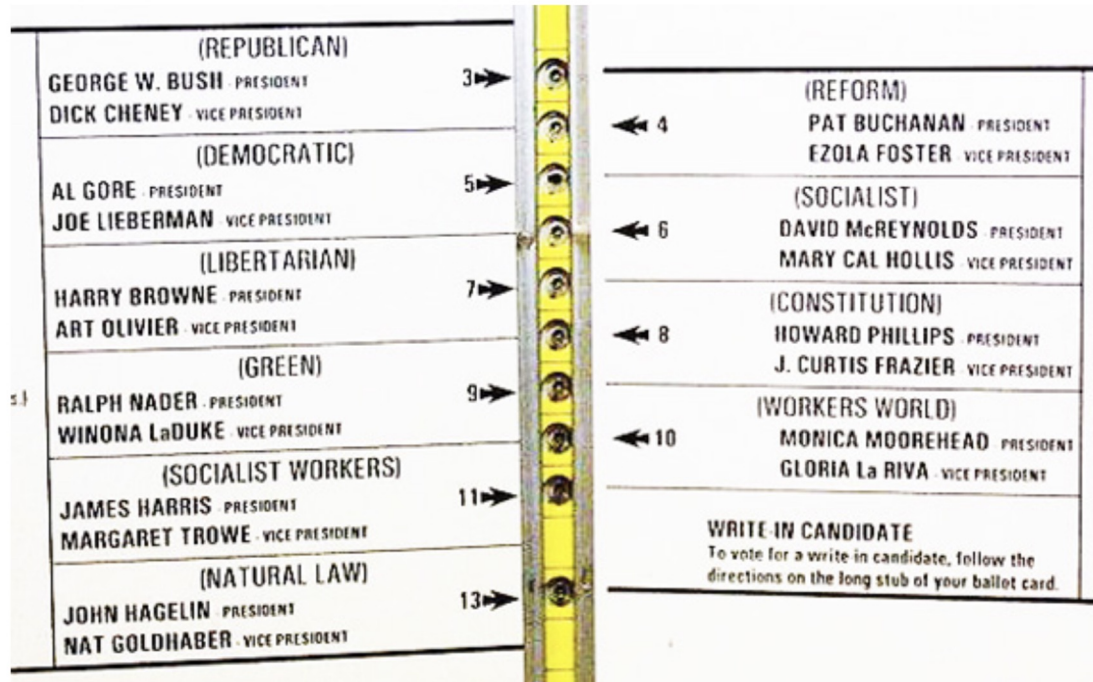
Shop - Select - Register?

The \$300 Million Button



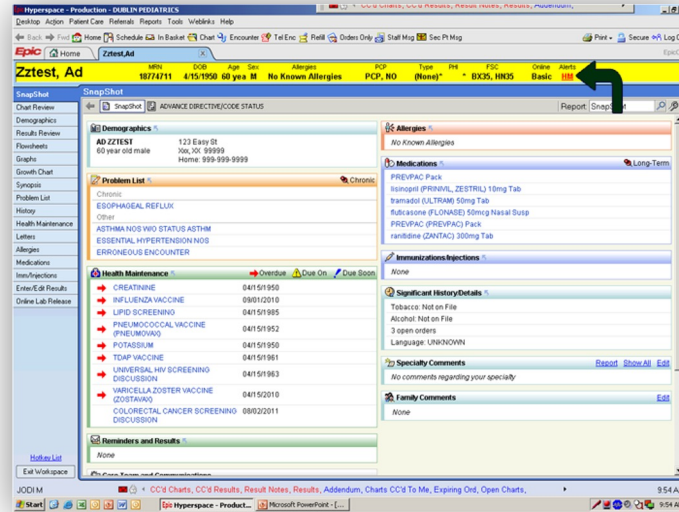
by Jared M. Spool

“I’m not here to be in a relationship...”



The infamous Florida butterfly ballot from the 2000 election.

“The interface that killed Jenny”



Kegworth Air Crash (1989)

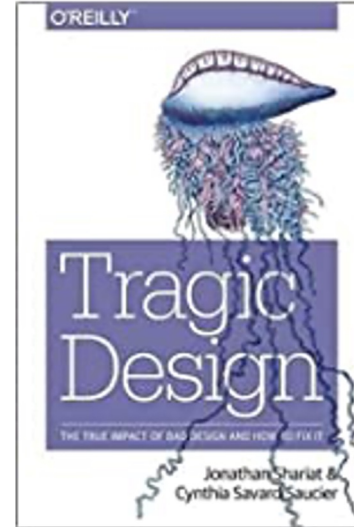
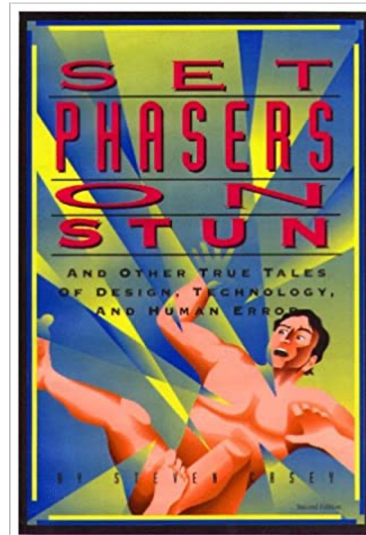
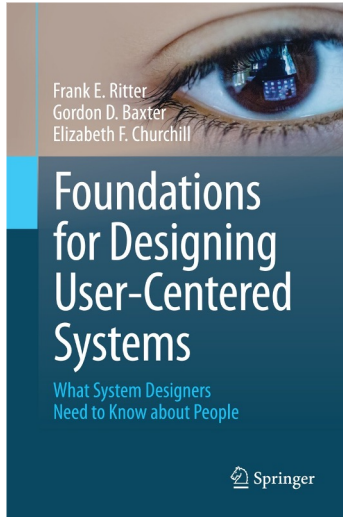


British Midland Airways Flight 092, a Boeing 737-400, analysis of “pilot error” overturned, resulted in policy change

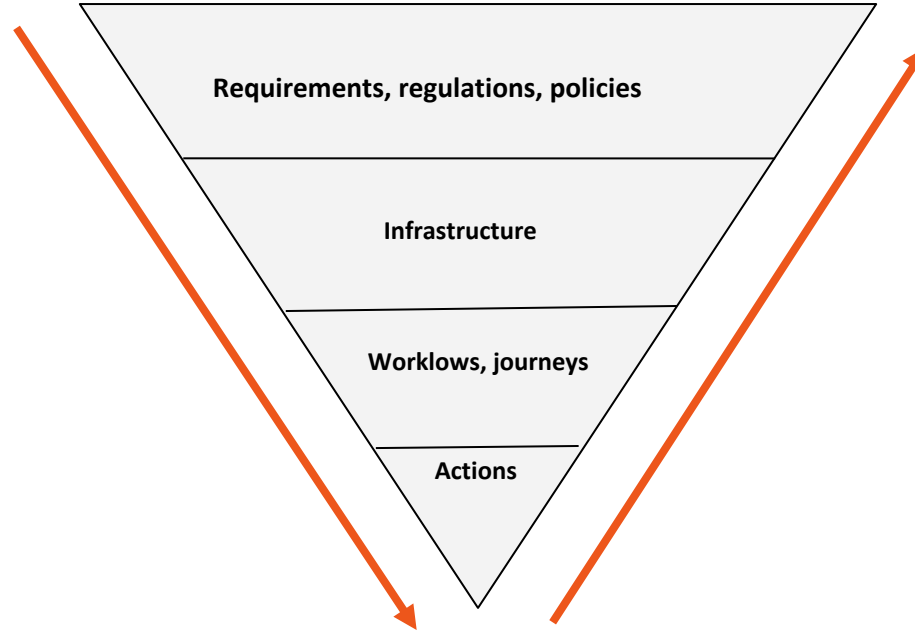
<https://www.itv.com/news/2019-01-08/how-the-kegworth-air-disaster-changed-airline-safety>.



Three Mile Island. Issues caused by poor UX.



“Blunt end”

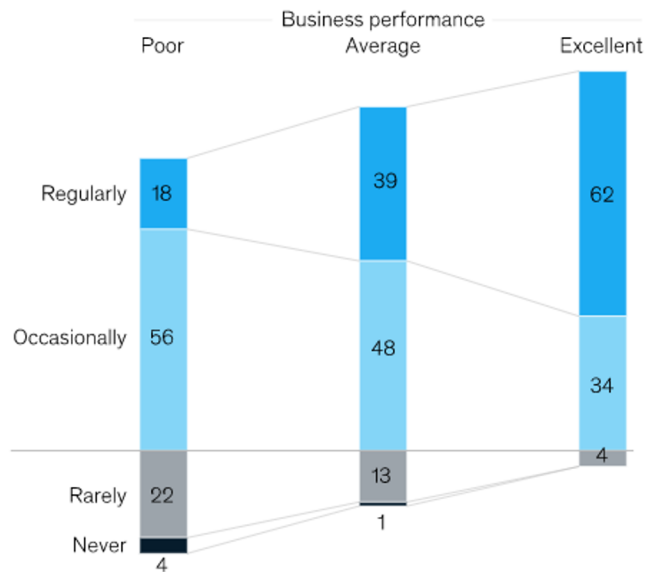


“Sharp end”

Error ergonomics and medical informatics

Designers might add as much value redesigning your company as your product.

Frequency of designers contributing to internal processes, %



Note: Figures may not sum to 100%, because of rounding.
Source: BVoD More than department survey (n = 250)

UX Scaling: Some observations

5000+

Stages of UX Evolution



No UX

“What is this UX thing?”

Most “design” done by ENG or PM

Nobody knows who the user is (or the user is “everybody”)

Designers are junior and typically report into PM or ENG, or are outsourced

No UX research, instead decisions are based on opinion or consensus



UX as Styling

“Make it pretty please.”

Main activity is visual & production design

Fighting fires

UX under-resourced

UX pulled in at end of process

Limited UX research

Focus on launches, not landings



UX as Process

“Let’s invest in this UX thing.”

UX Studios & Reviews

UX planning & prioritization (UX PgMs)

UX design system

UX Research - Qual + Quant

UX Content Strategy

UX Accessibility

Design sprints



UX as Strategy

“Great UX is a must!”

“3/4 in a box” teams

Clear understanding of users & CUIs

Clear vision & frequent innovation discoveries

Metrics frameworks

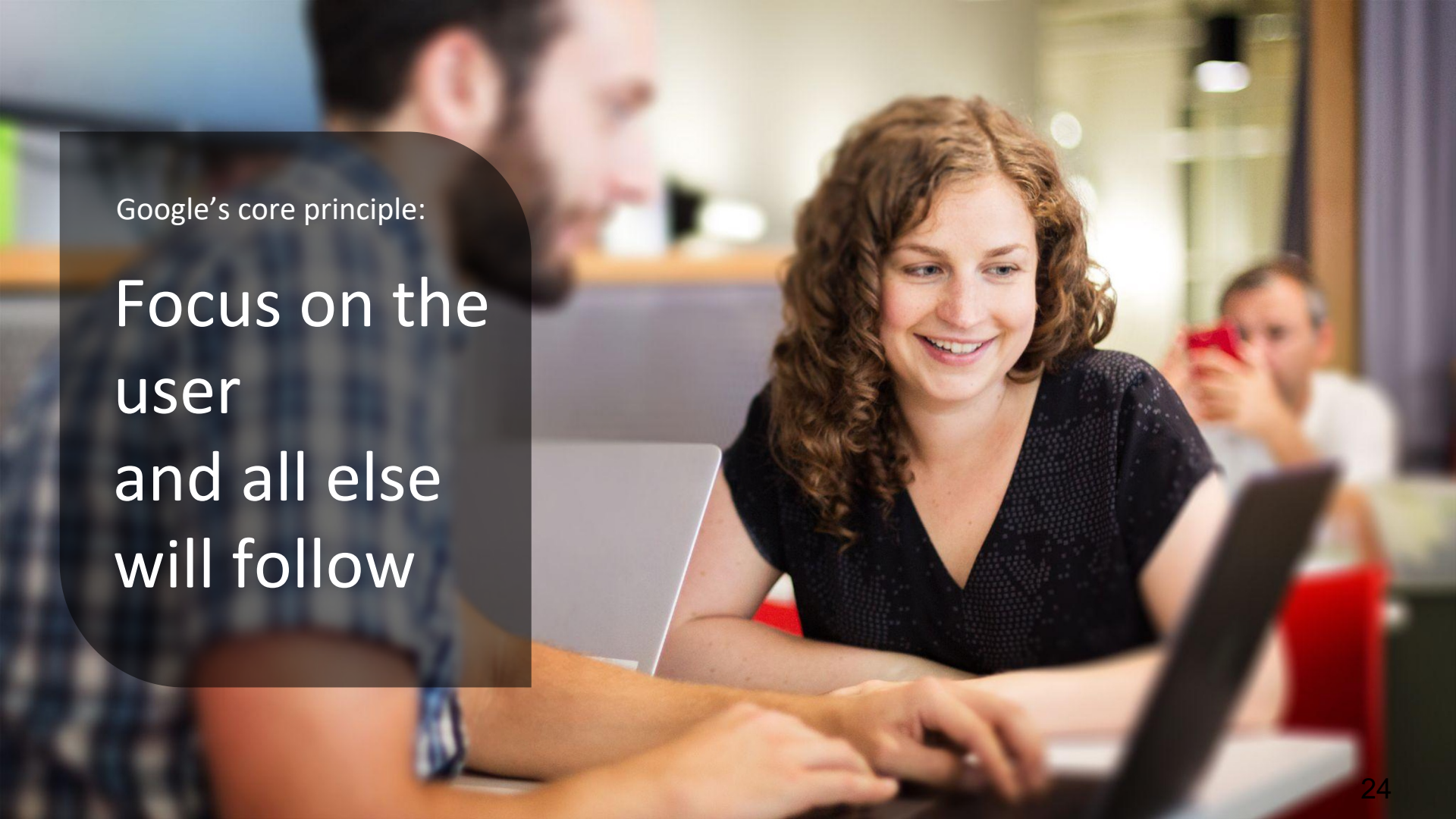
UXE & Shared Component Library

Continuous executive leadership commitment

01

What is the current and potential scope of impact?

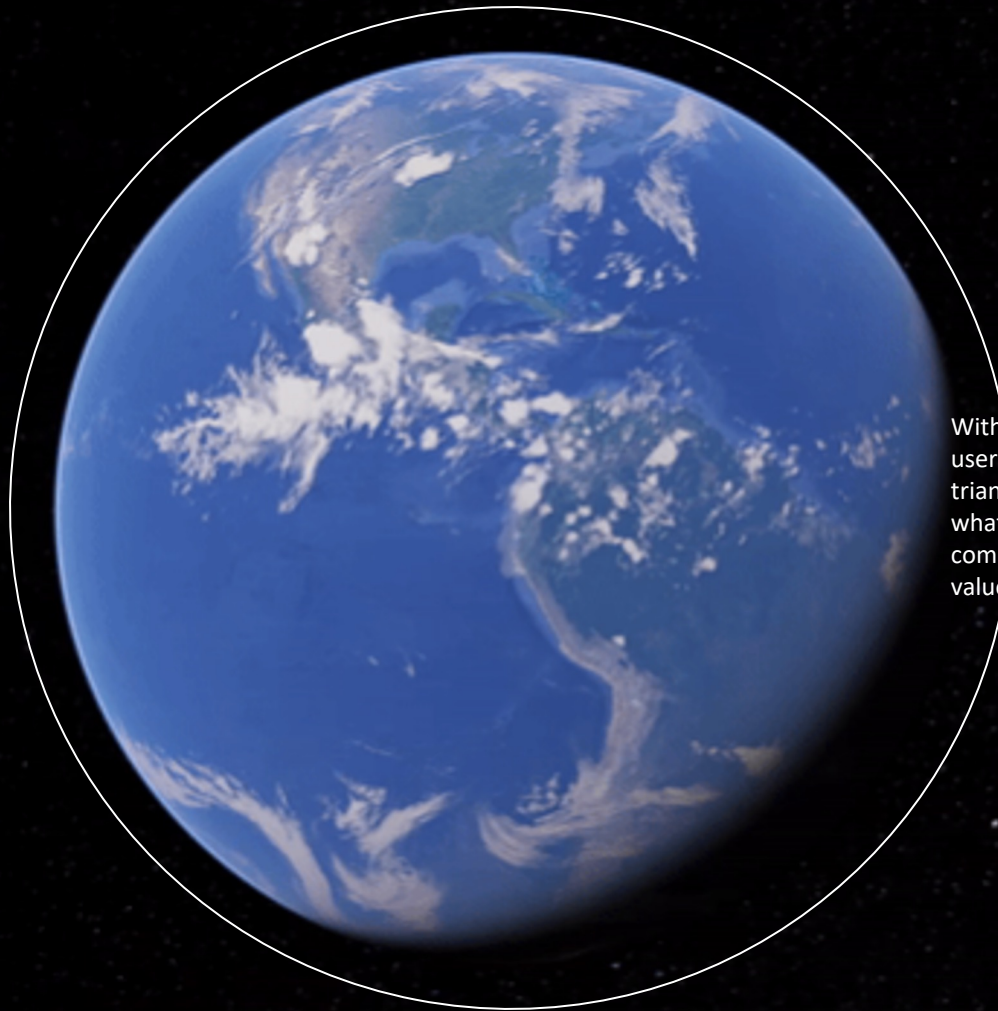
A focus on product excellence, based on interdisciplinary collaboration, and long term value.

A woman with curly brown hair is smiling and looking at a laptop screen. She is wearing a dark blue patterned top. In the background, a man is blurred, looking at a red smartphone. Another person is partially visible in the foreground, working on a laptop. The setting appears to be a modern office or co-working space with warm lighting.

Google's core principle:

Focus on the
user
and all else
will follow

UX iterative
design is
critical

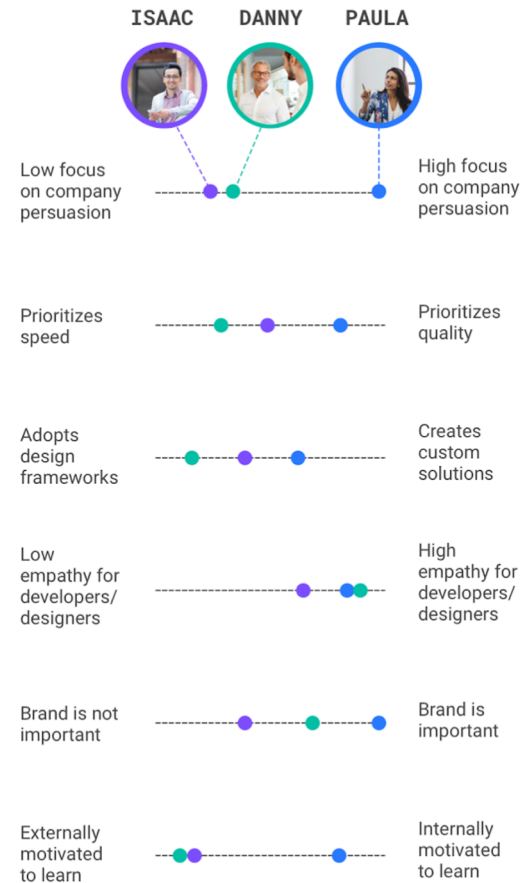
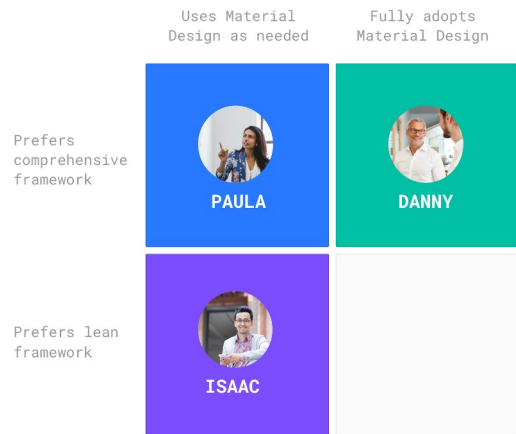


With **billions** of Google users, it takes collaboration and triangulation of data to understand what is now, what is next, and what comes after that for high, long term value.

02

Understand who the stakeholders are, who the partners are, and who the sponsors are.

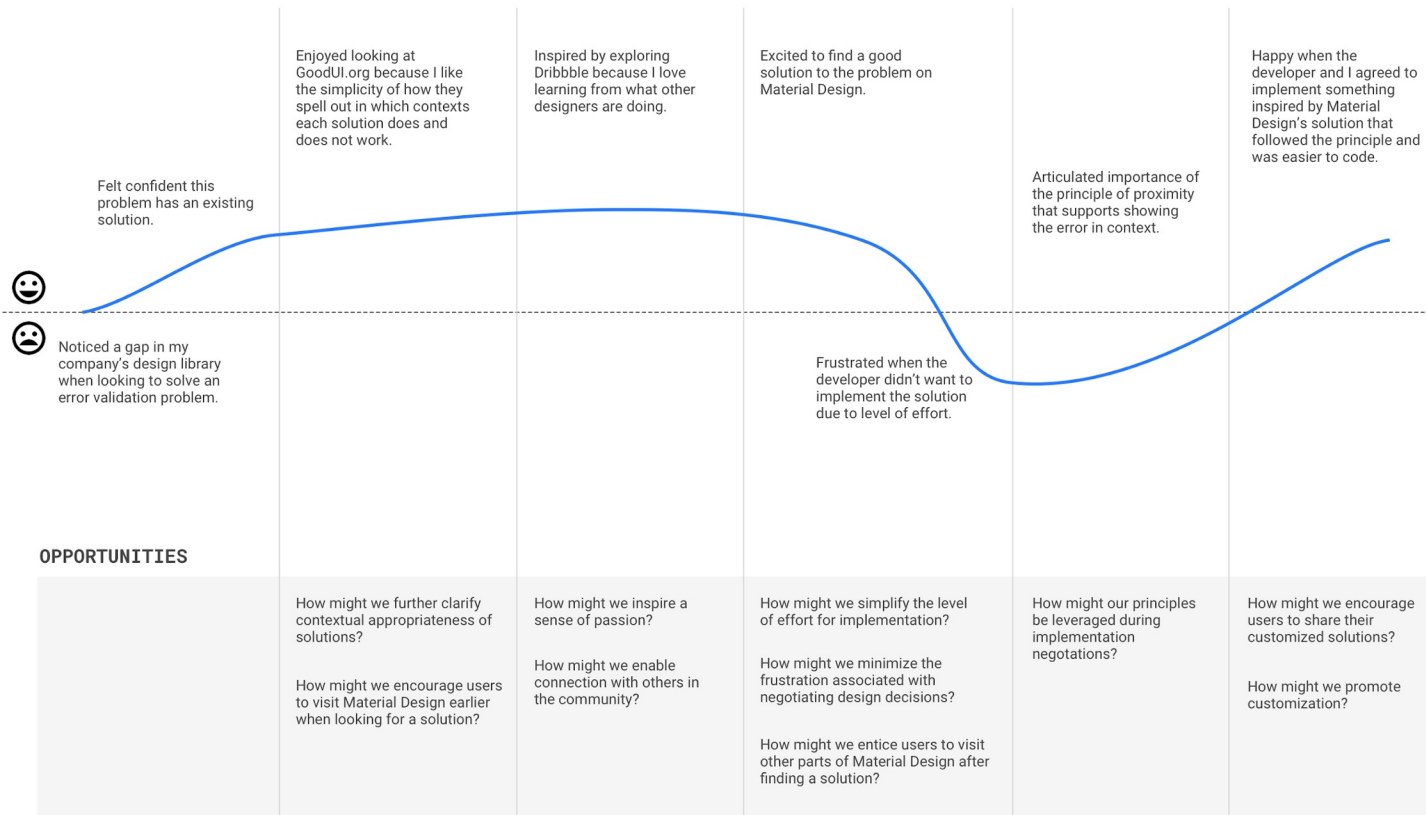
Deeply understand their work.





PAULA

Problem-Solving Journey



03

Invest in knowledge sharing and codify knowledge into (re)usable systems.

Newsletters, case studies, guidelines, design systems

GOOGLE'S DESIGN SYSTEM; MATERIAL DESIGN

Form

Shape

Line

Texture

Colour

Space

Motion/Movement

Typography/Fonts

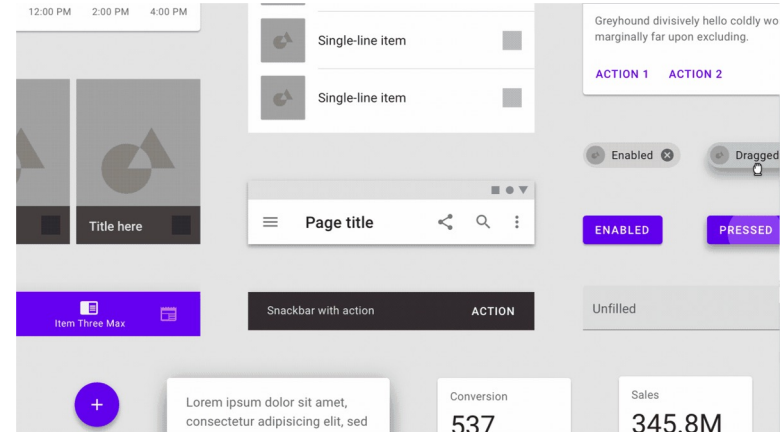
Content

Scale

Consistency

Efficiency

Teamwork



04 | Think beyond pixels and products, into programs.

Invest in support infrastructure, promote culture, and collaboration.

UXSat is part of an ecosystem of surveys that work together

Google-wide

Googlegeist

UX-wide

uxsat

2020 UX tools insights report



UX Infrastructure team

Accelerating user-centered product development across Google via forward-looking infrastructure and operations.





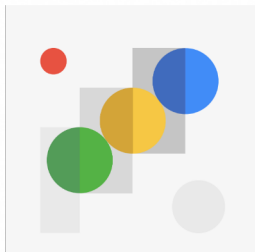
UX Community & Culture

Investing in our global UX community



UX Leadership Council

Elevate Google's products and experiences by advancing the people, practice and product of UX at Google



Advisory group of 9 senior UX Googlers with a mission to elevate Google's products and experiences by advancing the people, practice and product of UX at Google

**Promoting
Healthy UX
Practice**

**Talent
Development +
Mobility**

**Thriving UX
Community +
Culture**

**Clear Comms +
Operations**

05

Create high functioning teams focused on the overall goals and mission.

Set teams up for success with multidisciplinary input.

Research



Engineering

Design

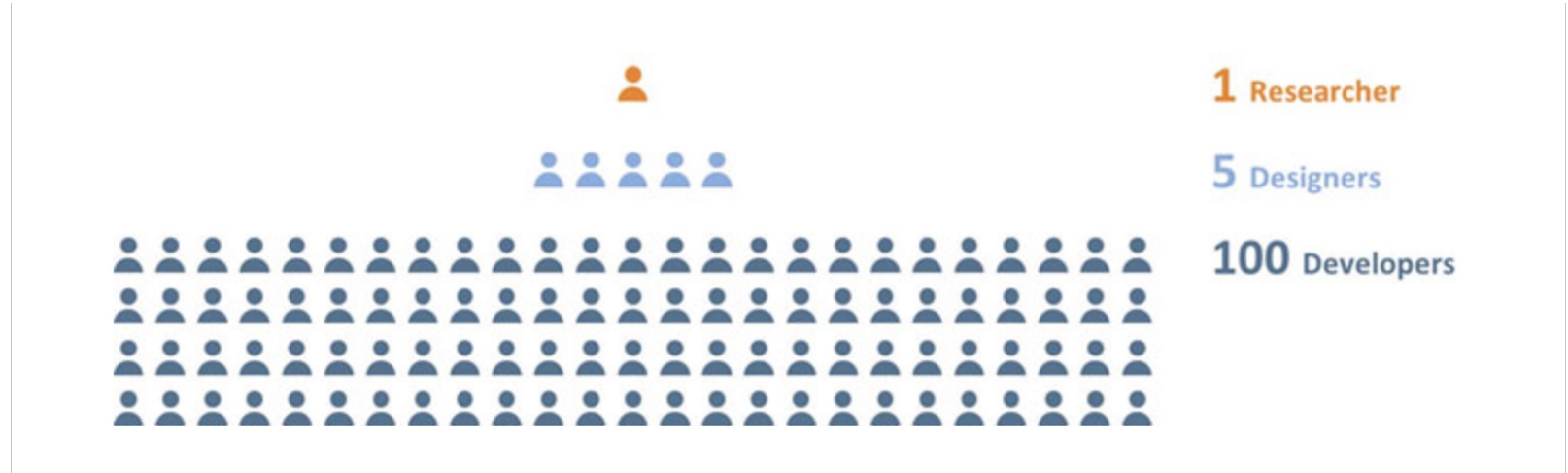


Product

Program

Management

Team Structure: Ratios



06

....and policies.....

A broadened UX agenda focuses on cross-organizational partnering to get to executive support and investment.



Given our scale, each year execution becomes more critical. We're investing **to improve development speed, ease, and quality** so we can help the company be faster.

We're looking at all the critical enabling processes to see how we can **simplify them, cut down bureaucracy, move faster, and be more nimble.**"

Sundar Pichai

December 2021



- 01** | **What is the current and potential scope of impact?**
Long term value. Data. Iteration.
- 02** | **Understand who the stakeholders are, who the partners are, and who the sponsors are.**
- 03** | **Invest in knowledge sharing and codify knowledge into (re)usable systems.**

04 | Invest in support infrastructure, promote culture, and collaboration.

05 | Create high functioning interdisciplinary teams focused on the overall goals and mission.

06 | Ladder up to executive mandate(s), get top-down support and investment.



Thank you.

echurchill@google.com

Thanks to Dawn Herman (Director of UX Infrastructure), to Heather McIntosh Cassano (Co-Chair of the UXLC Leadership Council), and to Adam Fry-Pierce (Chief of Staff for UX Leadership Council).