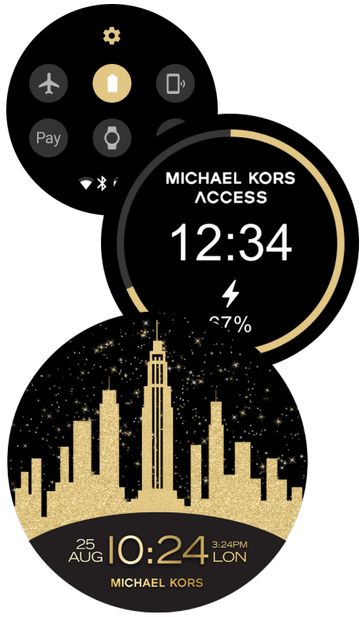
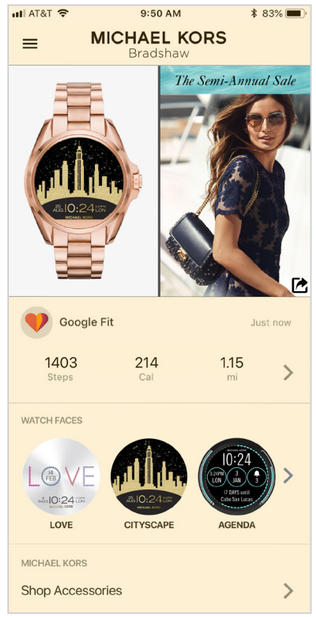
RYAN GERAGHTY

PRODUCT UX DESIGNER

Nontraditional UX

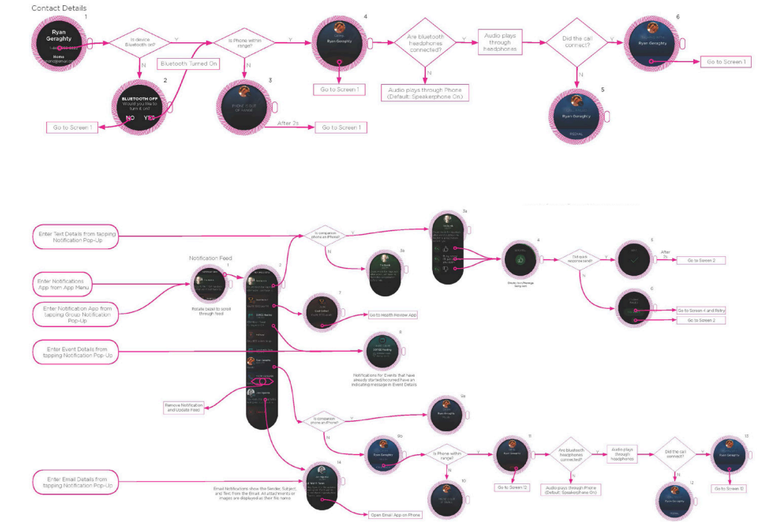
Interfaces made for small screen, circular screen, and no screen devices.





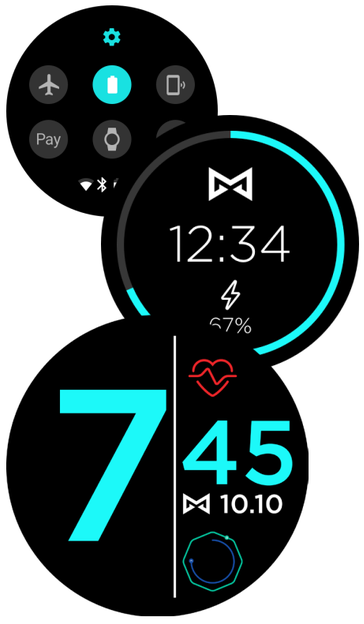
Platform Parity

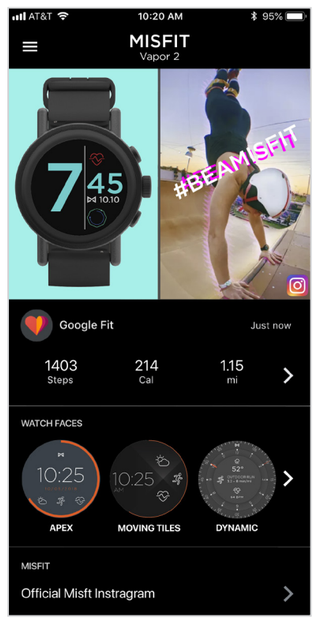
Consistent, unified experiences for 11 brands across iOS, Android, and Wear OS.



Holistic Thinking

Consideration of all constraints, even those beyond UX, to create fully informed products.





Call On Watch | Wear OS

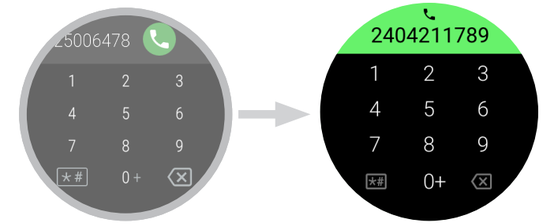
TASK
Improve the phone call experience and feature set on Wear OS devices leading up to Fossil's launch of LTE smartwatches.

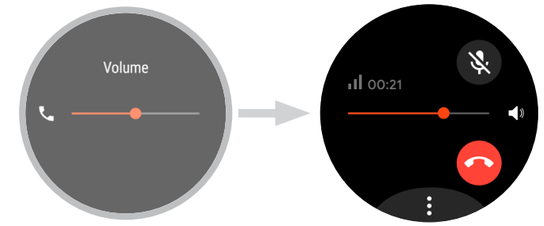
CHALLENGES
- Reduce steps for basic controls.
- Improve interaction for users with large fingers.
- Implement a robust set of phone features without cluttering the screen.
- Assure parity with iOS and Android.
- Stay within Google's design and system parameters.

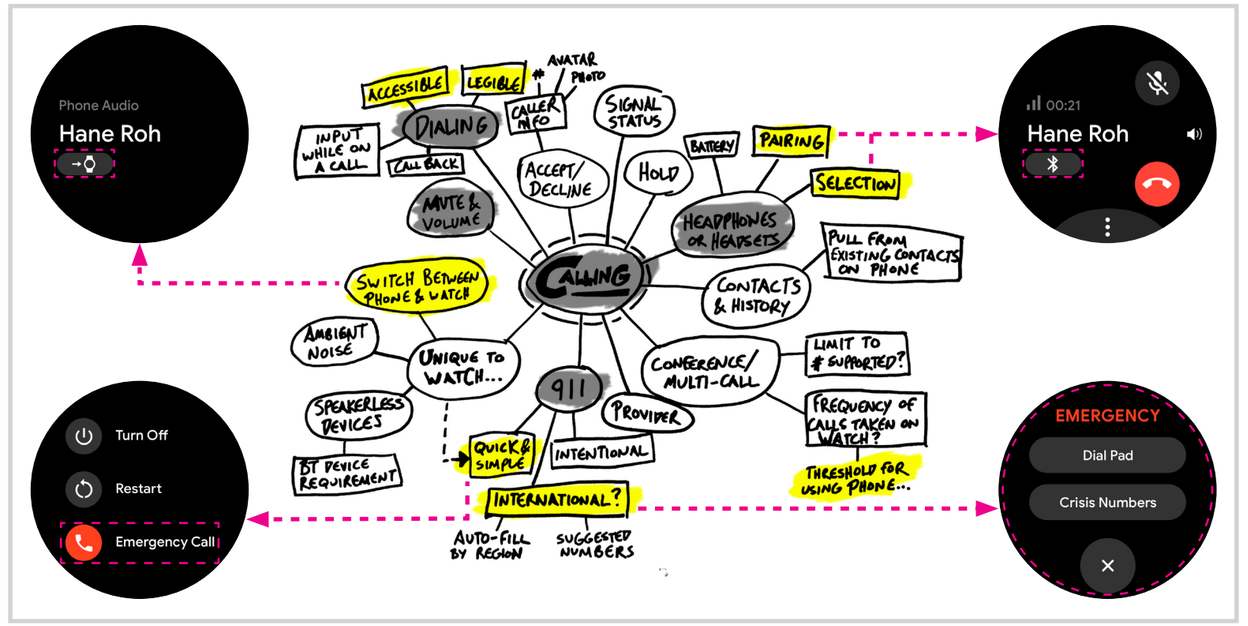
RESULT
Quicker use of more standard phone services like audio source switching, muting, and multi-call functionality is enabled; keypad buttons increased in size by 25%, improving legibility and interactability; and emergency calling is immediately accessible and simplified.

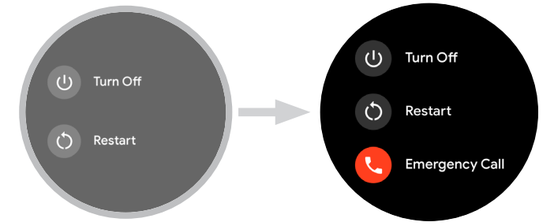
Google plans to implement similar changes to the standard Wear OS app.

1. Relevant call metrics expanded
2. Larger text that scrolls for longer names
3. Alignment of digital and physical buttons with shared functionality
4. Volume control moved from submenu to crown and active screen









Battery Life | Wear OS

TASK
Address the poor average battery life for Wear OS devices without direct support from Google.

CHALLENGES
- Conduct user research into user behaviors and smartwatch habits.
- Identify triggers for real-time battery saving opportunities.
- Simplify controls for average users.
- Use fixed battery size and capacity.
- Avoid hindering usage of common apps and features.
- Control system settings without full access to the operating system.

RESULT
Average battery life with regular usage increased from 18-20 hours to above 26 hours using the Smart Battery Modes app. The app was hailed by users and tech reviewers as elevating Fossil Group devices closer to our competitors as well as used to highlight the missed opportunities of Wear OS.

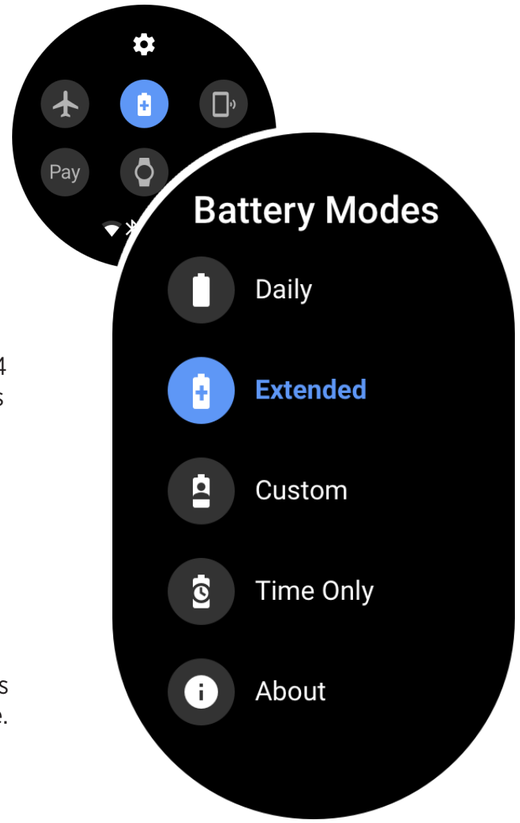
The Fossil Group-ie

Active, casual, and often juggling roles – they want quick, simple assistance but appreciate some control.

AVERAGE	ACTIVE	ADVANCED
"My watch is an elevated accessory."	"My watch is an assistant, a coach, and a phone."	"My watch is a tool, tailored to my specific needs."
Mode | **Daily**	Mode | **Daily + Extended**	Mode | **Custom**

Quick Access

The modes are accessible from the Quick Shade Settings with a single swipe and can be changed with a tap.



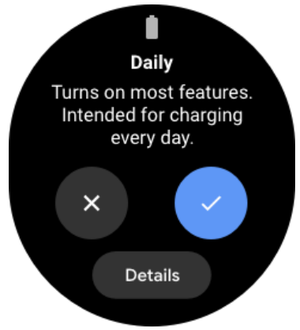
Adaptive Switching

Mode switching occurs automatically to achieve 24 hours minimum and adapts to the individual user's habits. A user could never interact with the app and still benefit from the battery savings.

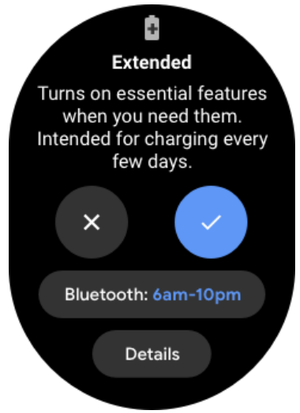
Optional Control

Backend triggers control many features, but adjustable schedules help conform to a user's particular needs. Additionally, Custom Mode allows for a level of system control previously unavailable.

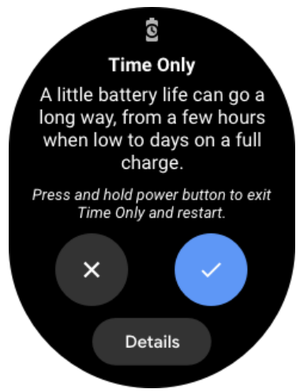
Daily



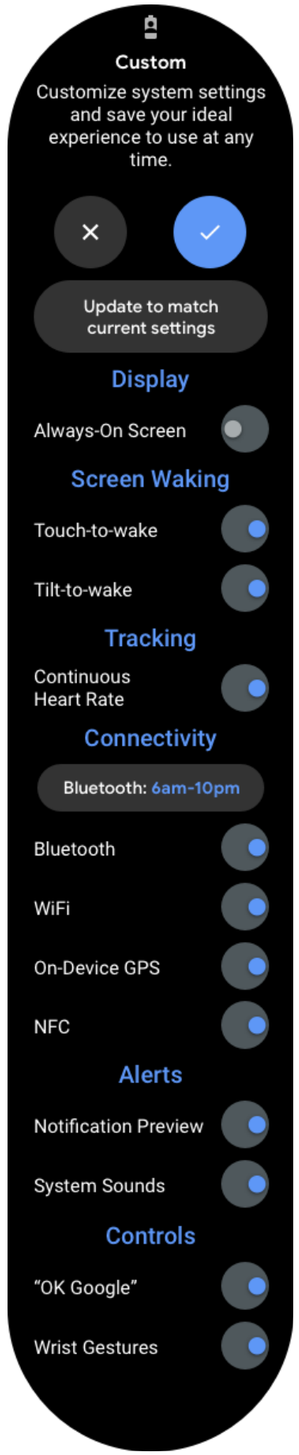
Extended



Time Only



Custom



Health Kit | Wear OS

TASK
Update existing and enable new user requested health tracking capabilities currently missing from Google Fit.

CHALLENGES
- Design within the Qualcomm Snapdragon 3100 platform limitations for battery optimization.
- Use monospaced text on circular screens.
- Visually unify multiple features under one app suite.
- Utilize Wear OS' new Tile feature.
- Provide users sufficient data control without the support of a companion phone app.

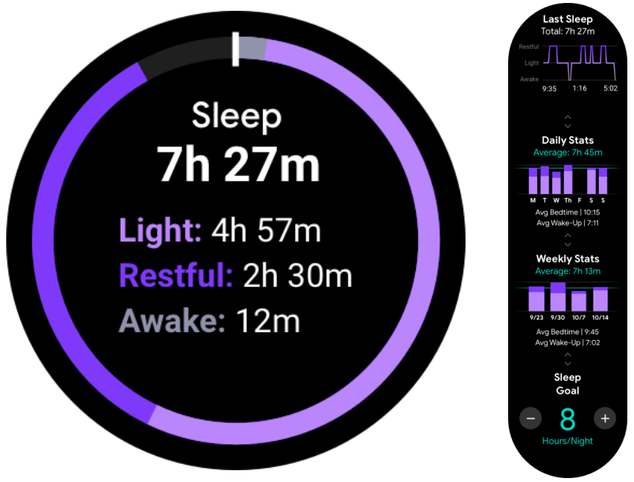
RESULT
Activity consumes only 33% of the energy of Google Fit and allows for up to 4 hours of continuous GPS tracking. Sleep and Cardio Fitness tracking are enabled by the improved +24 hours of regular battery life, providing previously unavailable analytics on Wear OS devices.

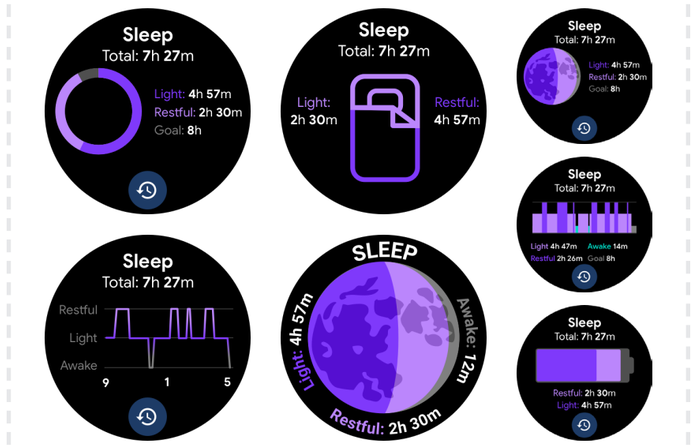
Activity

Through rounds of technical analysis, the final design optimizes active pixels and monospaced text to save battery while still providing essential metrics (per activity) legibly, even mid-workout in direct sunlight.

Sleep

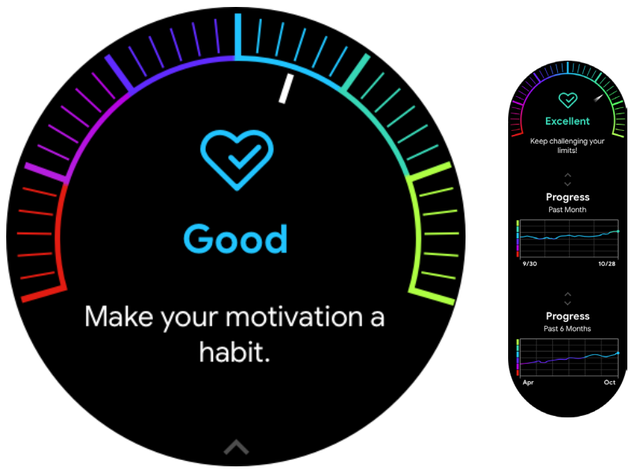
As a screen to be viewed daily and often upon first waking, the data is clear and glanceable with a "filling" animation to provide character and engagement that is lacking on most (static) tiles. Deeper analysis is available with a simple tap to open the app itself.

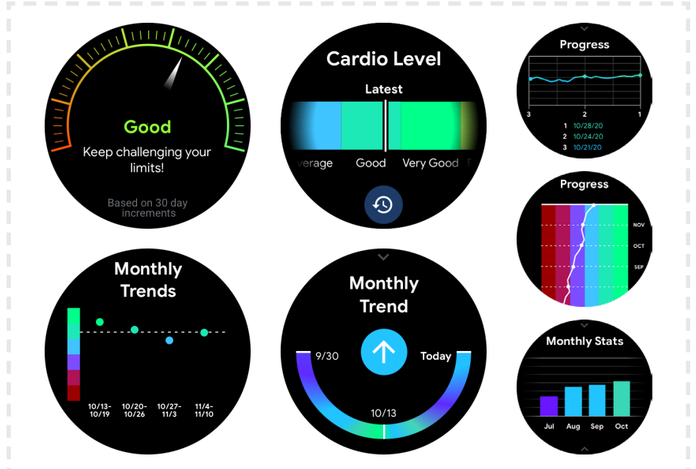




Cardio Fitness

Through guided onboarding, motivational messaging, and an approachable gauge design, this largely unknown metric is broken down into a more digestible format – how fit are you for your age.





Companion App Redesign

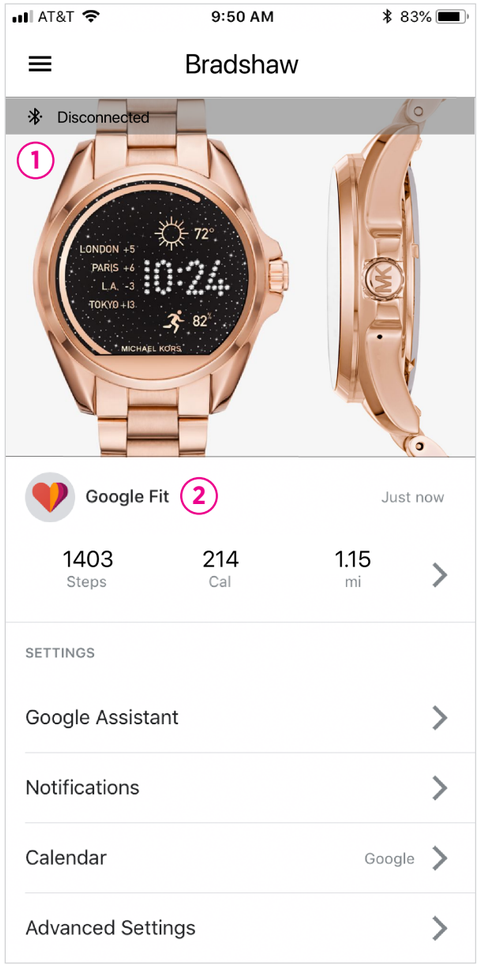
TASK
Upon Google's request, propose updates to the Wear OS companion phone app to increase usage.

CHALLENGES
- Build upon existing layout, not redesign it completely.
- Incorporate new and missing features.
- Improve association between branded devices and the general Wear OS app.
- Maintain iOS and Android parity.

RESULT
3 tiers of update options presented to Google, each with opportunities for brand customization to elevate the app beyond a glorified connection status indicator. Google immediately investigated all Tier 1 improvements and the watch face feature from Tier 2 with plans to implement the other proposals as time allowed.

Tier 1 | **App Updates**

Basic functionality improvements.

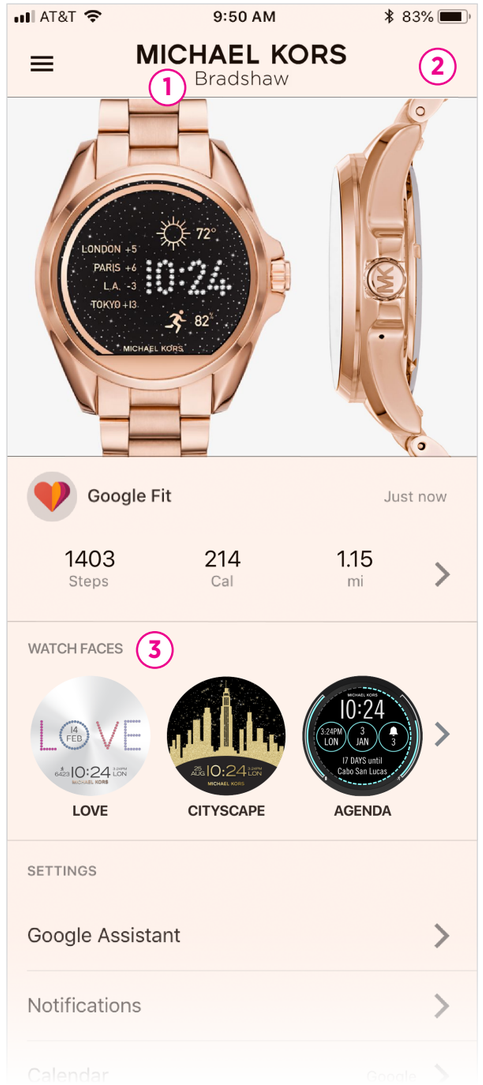


Estimated Effort: **2-3 Weeks**

1. Status bar only appears when there is an issue (i.e. disconnected).
2. Fit data available on iOS for parity with the Android app.

Tier 2 | **Branding**

Customization of generic elements.



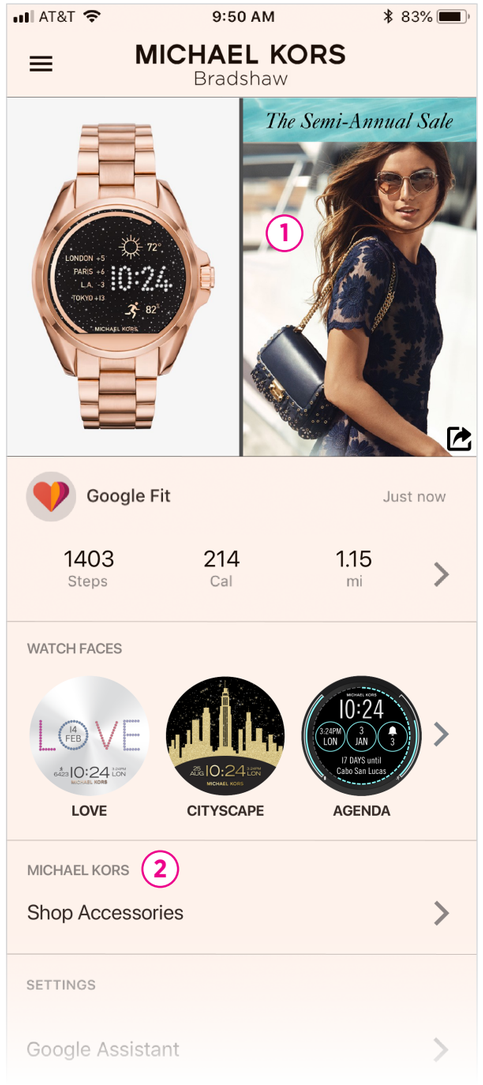
Estimated Effort: **5-6 Weeks**

1. Identify brand with logo and font.
2. Control app background colors.
3. Watch face preview and selection tool.

- Includes Tier 1 Features.

Tier 3 | **Marketing**

Supplemental features to increase engagement.



Estimated Effort: **8-10 Weeks**

1. Allow for frequent, external updates to content to encourage engagement.
2. Enable brand resources – ads, sales, and direct links to brand websites.

- Includes Tier 1 & 2 Features.

A Screenless Smartwatch

TASK
Clearly communicate and enable smartwatch functionality on a new analog watch design.

CHALLENGES
- Lead design for ID, UX, and UI.
- Utilize limited input and output options – 2 pushers and 3 hands – for 10 unique features.
- Balance the design needs of both hardware and UX, fitting within the Misfit brand identity.
- Future-proof for developing features.
- Create language agnostic graphics.

RESULT
Misfit Command garnered significant attention for its comprehensive interface given the simple controls, receiving 2 style refreshes since release. In addition, my “atypical” method of day/date communication is now the standard approach across Fossil Group.

Concentric metrics create visual balance while clear hemisphere and radii differentiation avoids unintentional hand overlap.

The subdial indicates status through iconography, letting the hour and minute hands communicate the relevant information.

Combinations of unique haptic patterns, button presses, and hand movements communicate +10 features and statuses.

Misfit Vapor GUI

TASK
Design a smartwatch operating system and interface from scratch, entirely independent of Google/Wear OS.

CHALLENGES
- No prior experience designing for circular displays, smartwatch apps, or full GUIs.
- Highlight the new AMOLED display, downplay the large display border.
- Create a full suite of smartwatch apps.
- Rethink traditional swipe and crown-twist navigation for a circular display.

RESULT
After winning 6 “Best of Show” awards at CES 2017 and being touted as a “credible threat” to Android Wear, Google struck a deal to merge the two interfaces to create Wear OS and give Fossil Group creative input on future development. Numerous features – particularly the curved menu navigation – are still defining elements of Wear OS.

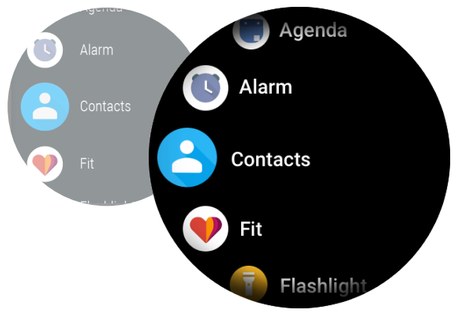
HOW DO YOU BEST USE A CIRCLE?

EMBRACE THE SHAPE

Layout

Every screen designed to optimally display information on a circular screen.

Vertical scrolling replaced with curved interface – more information, legible for longer.



Interaction

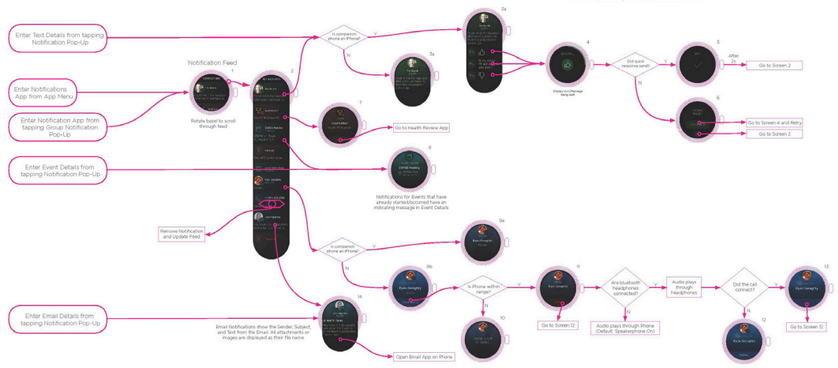
“Dead space” around display repurposed as control input that doesn’t cover the screen.

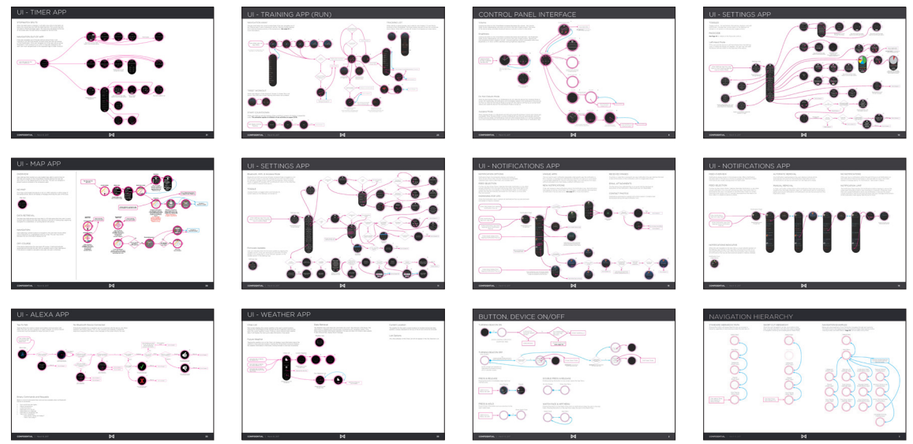
Aesthetics

Faded borders disguise the sharp display transitions, blending hardware and software.

Shadow, smoke/vapor, and particle effects play up style and take advantage of display quality.

Full System Flow





THANK YOU

More projects and details available
at **RyanGeraghty.com**