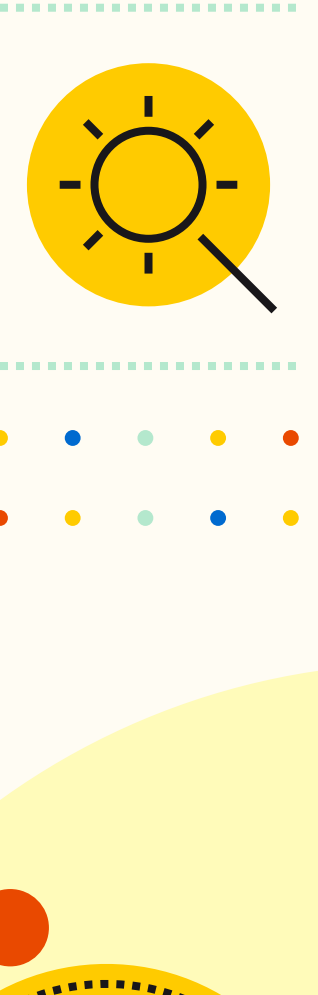




# Technology Megatrends

Guidestars for how technology is likely to evolve over the coming decade

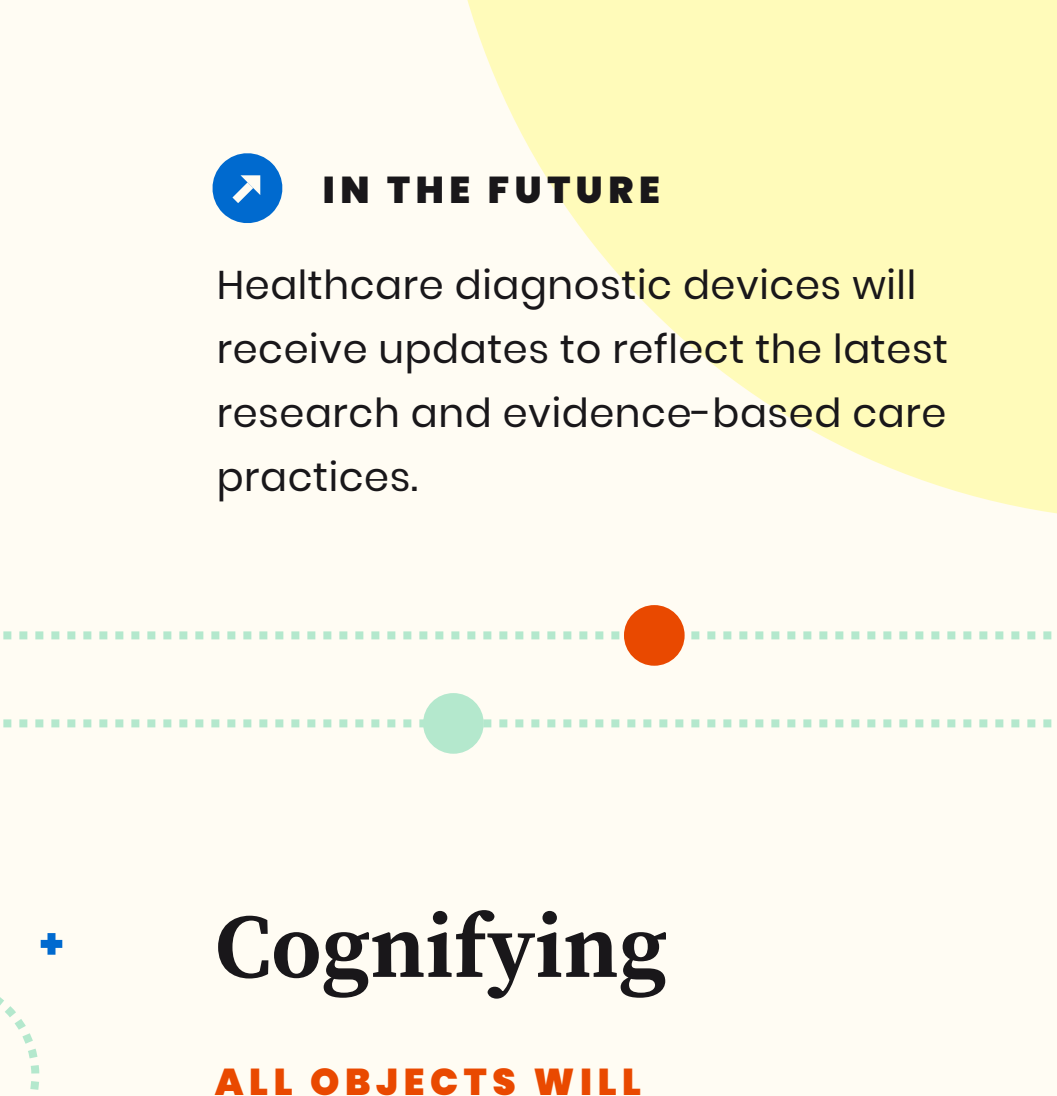
**When imagining the future of any sector, it's useful to start with a series of technology trends that are sector-agnostic. These guidestars are based on content from *The Inevitable*—a book by Wired co-founder Kevin Kelly—and are helpful for thinking creatively about how digital tools are likely to evolve over the coming decade.**



## Becoming

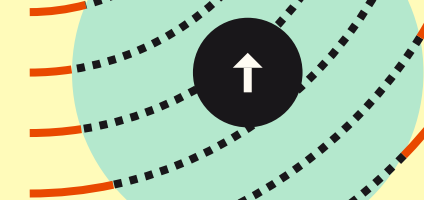
**OBJECTS WILL BE IN A PERPETUAL STATE OF ALWAYS "BECOMING"**

As more devices become connected to the Internet, they will receive constant software upgrades in the background, in small and mostly imperceptible increments. Products will always be in a perpetual state of slow improvement—and they will be able to quietly adapt as user needs change.



**TODAY**

Smart phones and TVs receive constant background upgrades with incremental features and improvements.



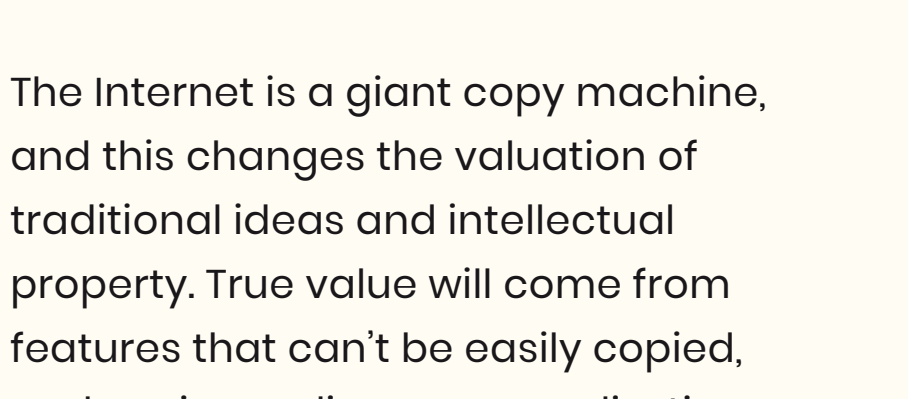
**IN THE FUTURE**

Healthcare diagnostic devices will receive updates to reflect the latest research and evidence-based care practices.



**TODAY**

Amazon's Alexa is just a dumb speaker and microphone—until it connects to the Internet.



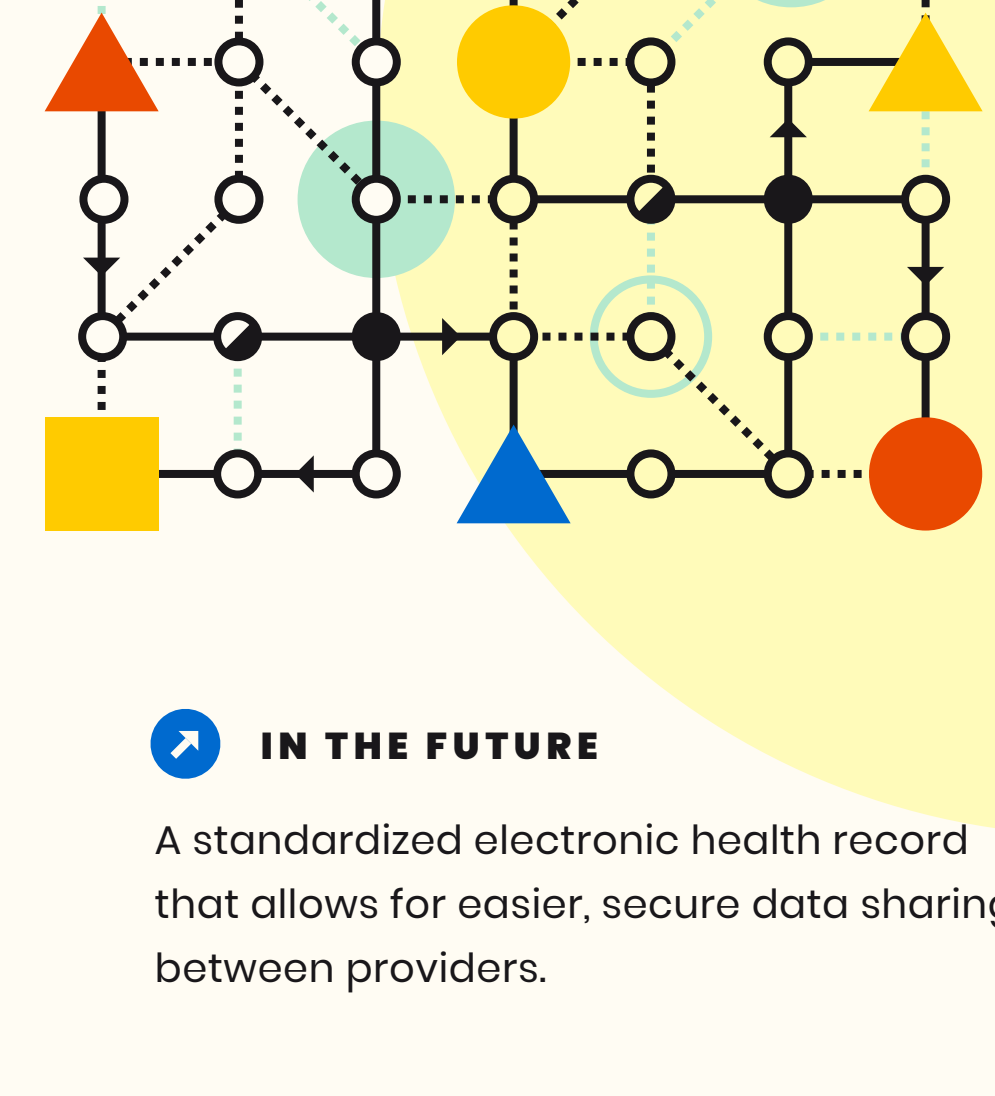
**IN THE FUTURE**

Diagnostic equipment will make predictive decisions, such as identifying a personalized level of fetal distress based on the mother's data stream.

## Flowing

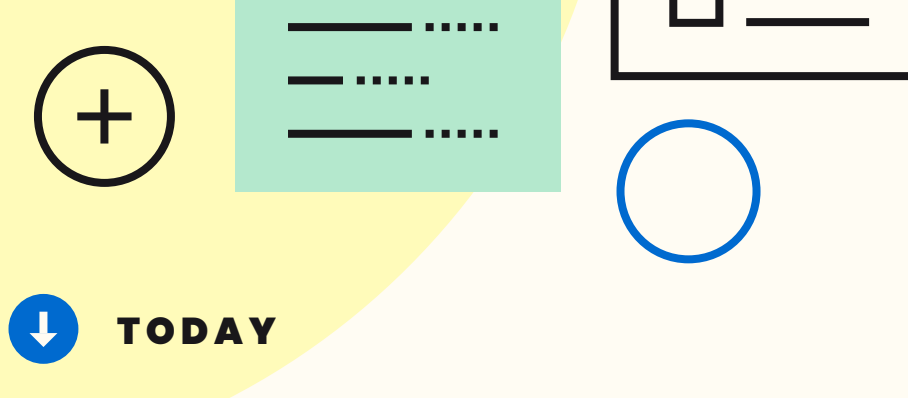
**DATA AND INFORMATION WANTS TO FLOW FREELY ACROSS ORGANIZATIONAL, GEOGRAPHIC, AND PLATFORM BOUNDARIES**

The Internet is a giant copy machine, and this changes the valuation of traditional ideas and intellectual property. True value will come from features that can't be easily copied, such as immediacy, personalization, authenticity, and physical embodiment.



**TODAY**

There is a democratization of access to knowledge, such as via Wikipedia, iTunes University, and YouTube.



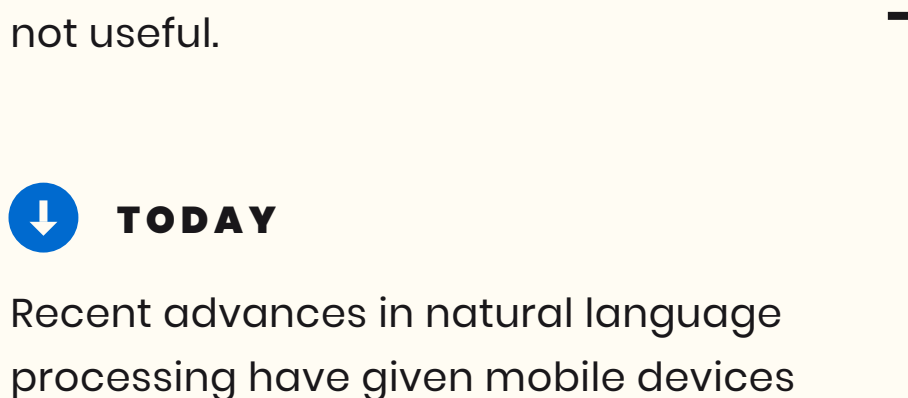
**IN THE FUTURE**

A standardized electronic health record that allows for easier, secure data sharing between providers.



**TODAY**

Screens are already starting to replace banal analog displays: in car dashboards, elevators, and even on shirts.



**IN THE FUTURE**

Small, flexible screens on medications could display key information about the contents and the patient.

## Interacting

**THE MOST VALUABLE OBJECTS WILL BE INTERACTIVE**

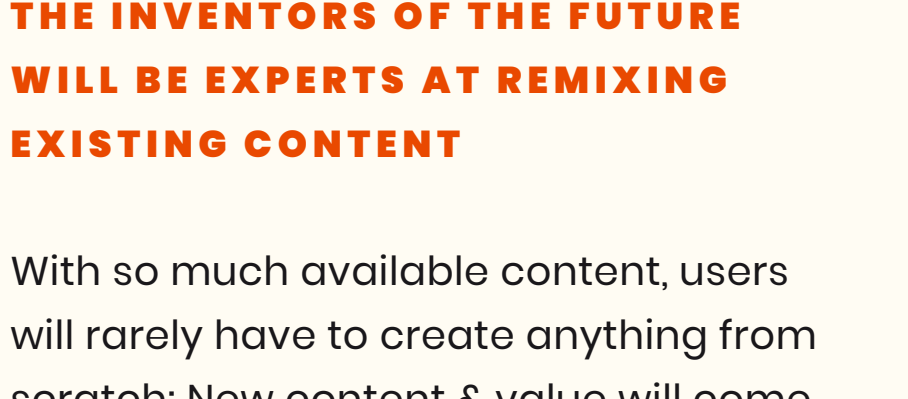
The most useful objects will interact with the user; they will recognize and understand us. For efficiency, we will mostly interact with these devices the same way we do with other humans: primarily via voice and facial expressions with limited hand motions.

Objects that can interact will become more valuable; anything not interactive will be considered outdated and thus not useful.



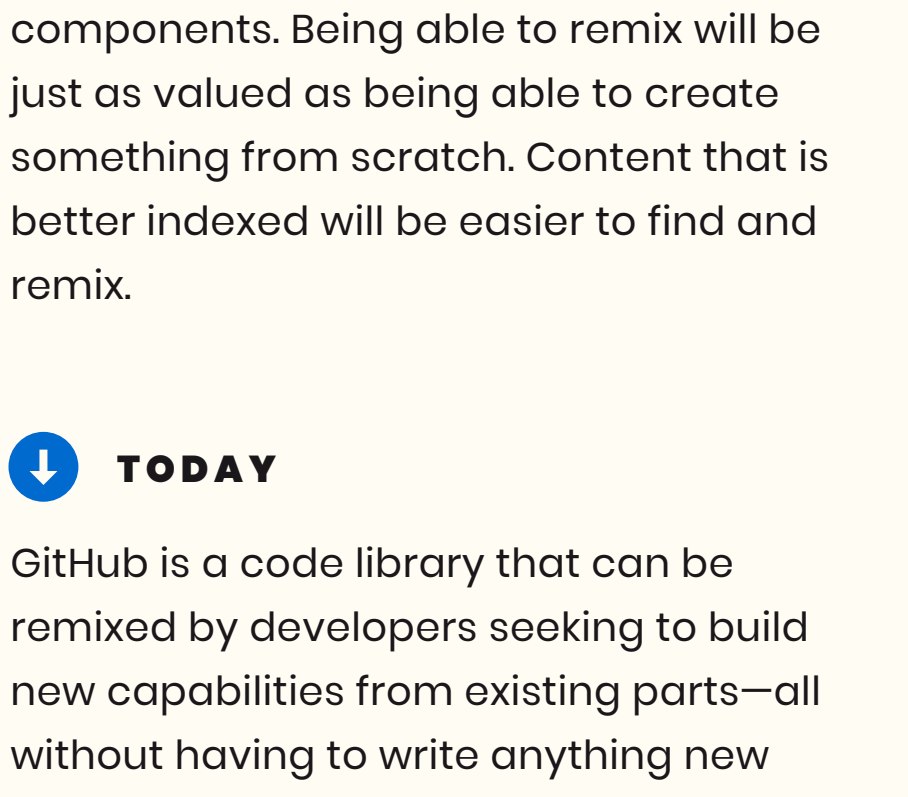
**TODAY**

Recent advances in natural language processing have given mobile devices (even our cars) the ability to engage in rudimentary question-and-answer sessions.



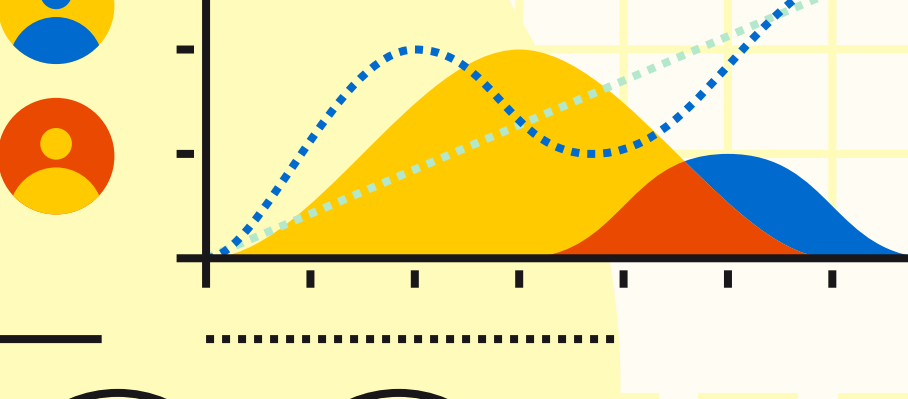
**IN THE FUTURE**

Instead of charting by hand (or speaking into a recorder for later transcription), doctors can use voice commands to fill out charts as they are examining patients.



**TODAY**

Hulu, Netflix, and Amazon rely on filtering to help customers navigate among deep libraries of content and products.



**IN THE FUTURE**

Machine learning algorithms will search databases of symptoms to more quickly and accurately diagnose patients.

## Remixing

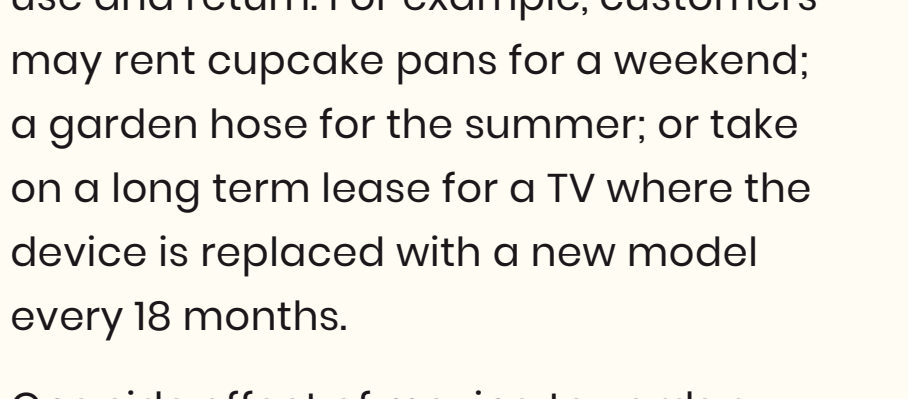
**THE INVENTORS OF THE FUTURE WILL BE EXPERTS AT REMIXING EXISTING CONTENT**

With so much available content, users will rarely have to create anything from scratch: New content & value will come from creating new mash ups of existing components. Being able to remix will be just as valued as being able to create something from scratch. Content that is better indexed will be easier to find and remix.



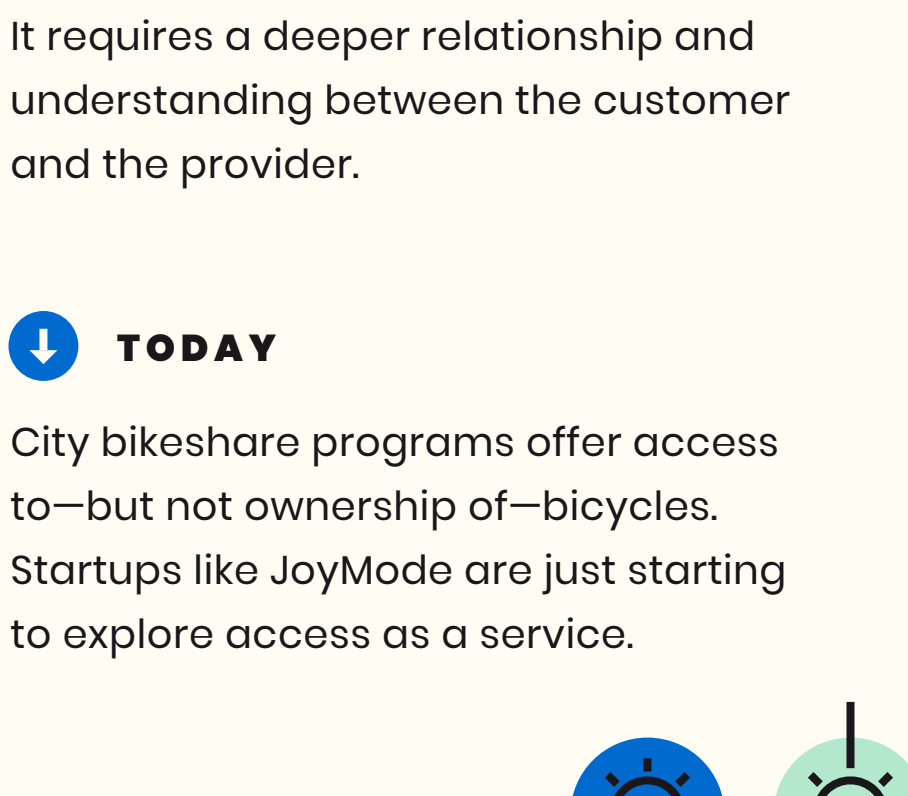
**TODAY**

GitHub is a code library that can be remixed by developers seeking to build new capabilities from existing parts—all without having to write anything new from scratch.



**IN THE FUTURE**

Pharmaceuticals with useful side effects (akin to hormonal birth control's origin story) will be identified and repurposed quickly.



**TODAY**

Apple Watch and FitBit track daily activities and heart rate, enabling a personal health data stream.



**IN THE FUTURE**

Patients will have 24/7/365 vitals and "synthetic senses," such as knowing when they are low on iron or when they have high blood pressure.

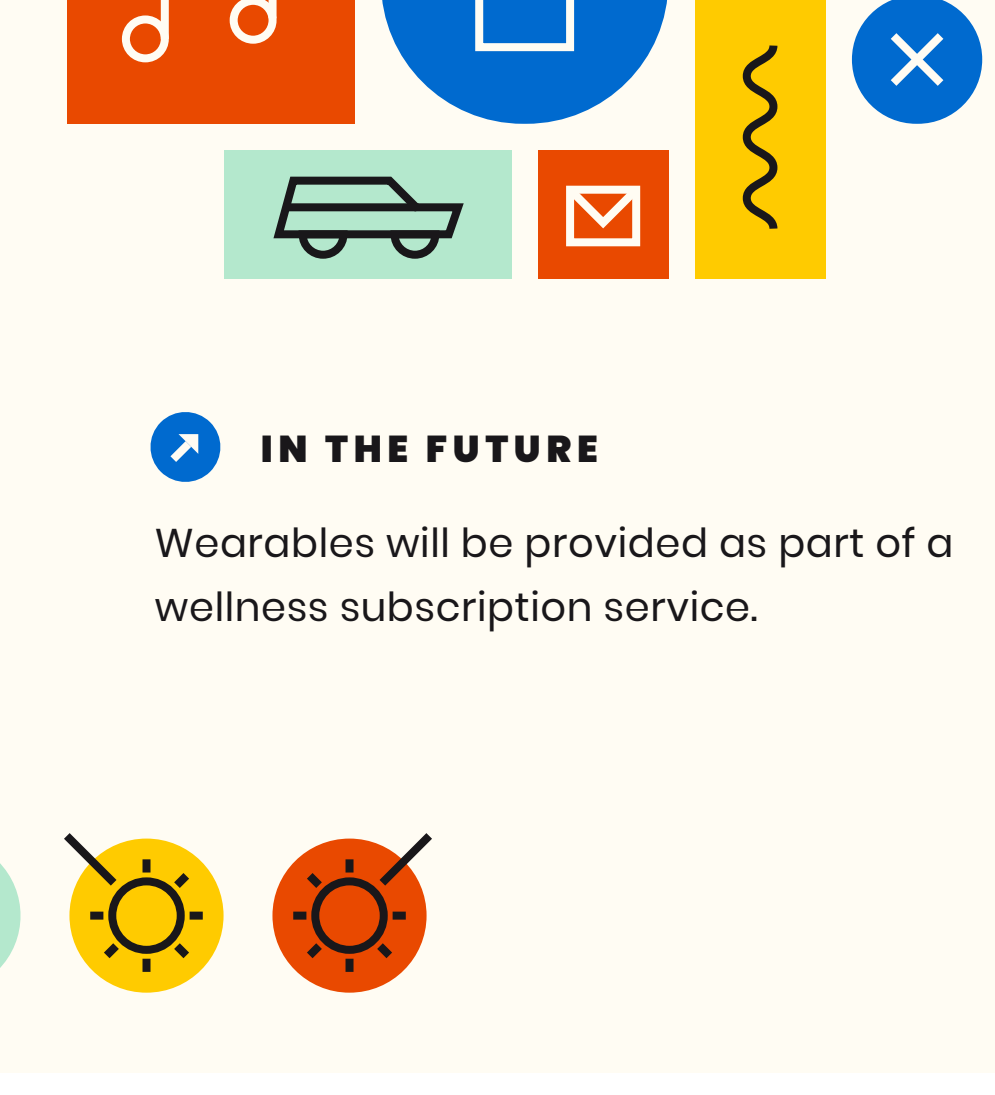
## Accessing

**ACCESS WILL BE MORE VALUED THAN OWNERSHIP**

We're moving from "ownership that you purchase" to "access to which you subscribe," and the reason is easy to see: Subscription services give instant access to an endless collection of objects (that are becoming). This trend is happening on the platform side, too: Uber doesn't own taxis; AirBNB owns little to no real estate; Twitter creates no original content.

In the future, having Amazon Prime will mean 1 hour delivery, and instead of delivering goods to keep, customers will get access to products that they will use and return. For example, customers may rent cupcake pans for a weekend; a garden hose for the summer; or take on a long term lease for a TV where the device is replaced with a new model every 18 months.

One side effect of moving towards a service-oriented model (vs ownership): It requires a deeper relationship and understanding between the customer and the provider.



**TODAY**

City bikeshare programs offer access to—but not ownership of—bicycles. Startups like JoyMode are just starting to explore access as a service.



**IN THE FUTURE**

Wearables will be provided as part of a wellness subscription service.

