

EMERGING TECHNOLOGIES IN HEALTHCARE

March 4, 2015

Shahrokh Sayadi



1950





AMAZING
MARVELS
OF TOMORROW

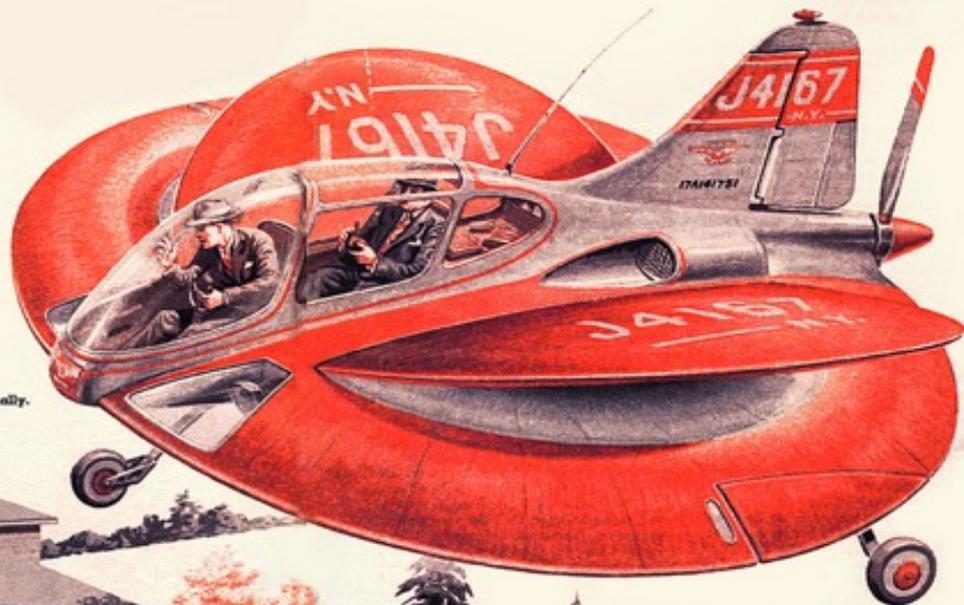
COVER STORY

FLYING SAUCERS FOR EVERYBODY!

*Within ten years you may
be commuting by plastic saucer,
flying from your backyard.*

By Frank Tinsley

SAUCER rises vertically. Sits conventionally.



IT IS a bright morning in 1965. At precisely eight a. m. Joe Lees emerges from the back door of his lakeside cottage, only 75 miles from his job in the city. In the graveled center of his backyard his jaunty new plastic saucer rests lightly on three tiny balloon tires.

Greeting his neighbor who rides with him, Joe lifts a flush flap in the saucer's rounded nose. He

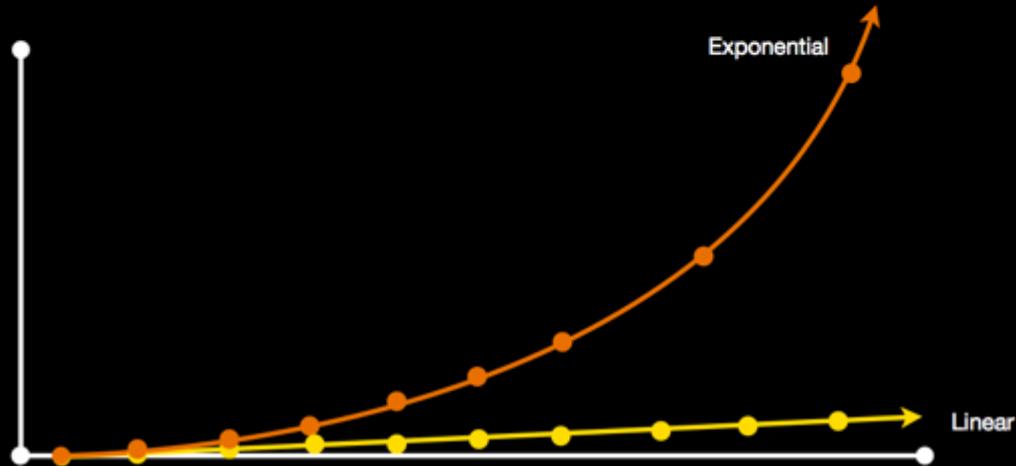
turns a recessed locking handle and throws back the bubble-like windshield. Spring loaded, like the hoods of today's cars, the enclosure lifts easily. As it does, the interlinked nose cone swings down to form a handy step.

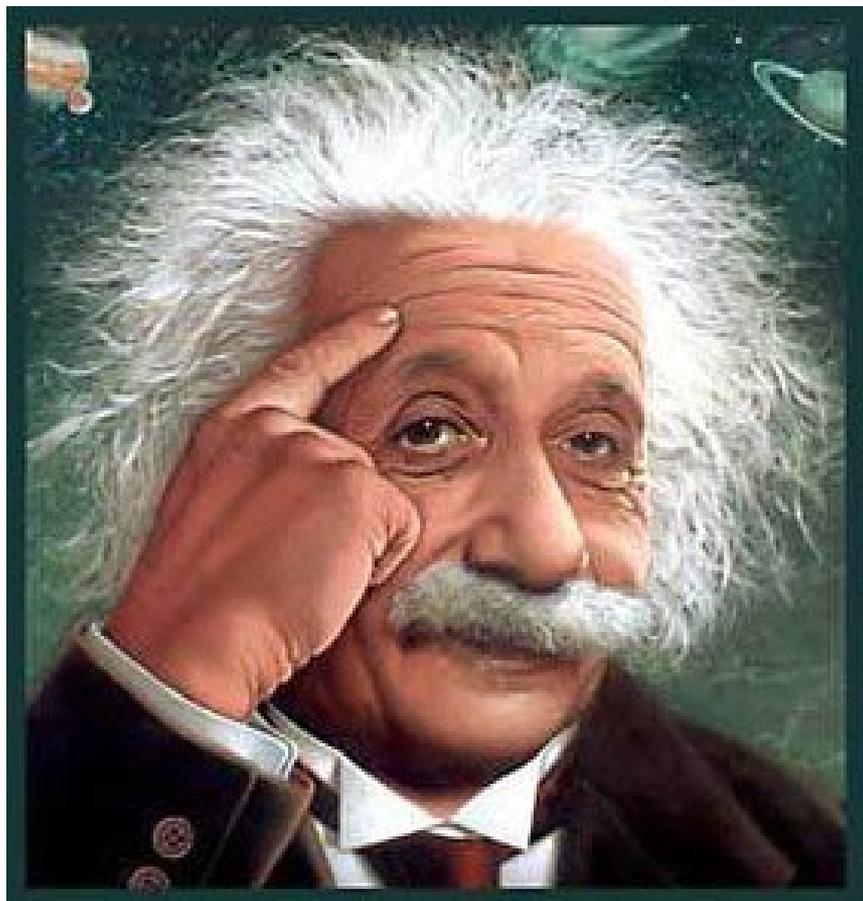
Joe's neighbor steps up over the low instrument pedestal and then across the folded pilot's seat to his perch in the rear. Joe follows, slams the windshield shut and

&

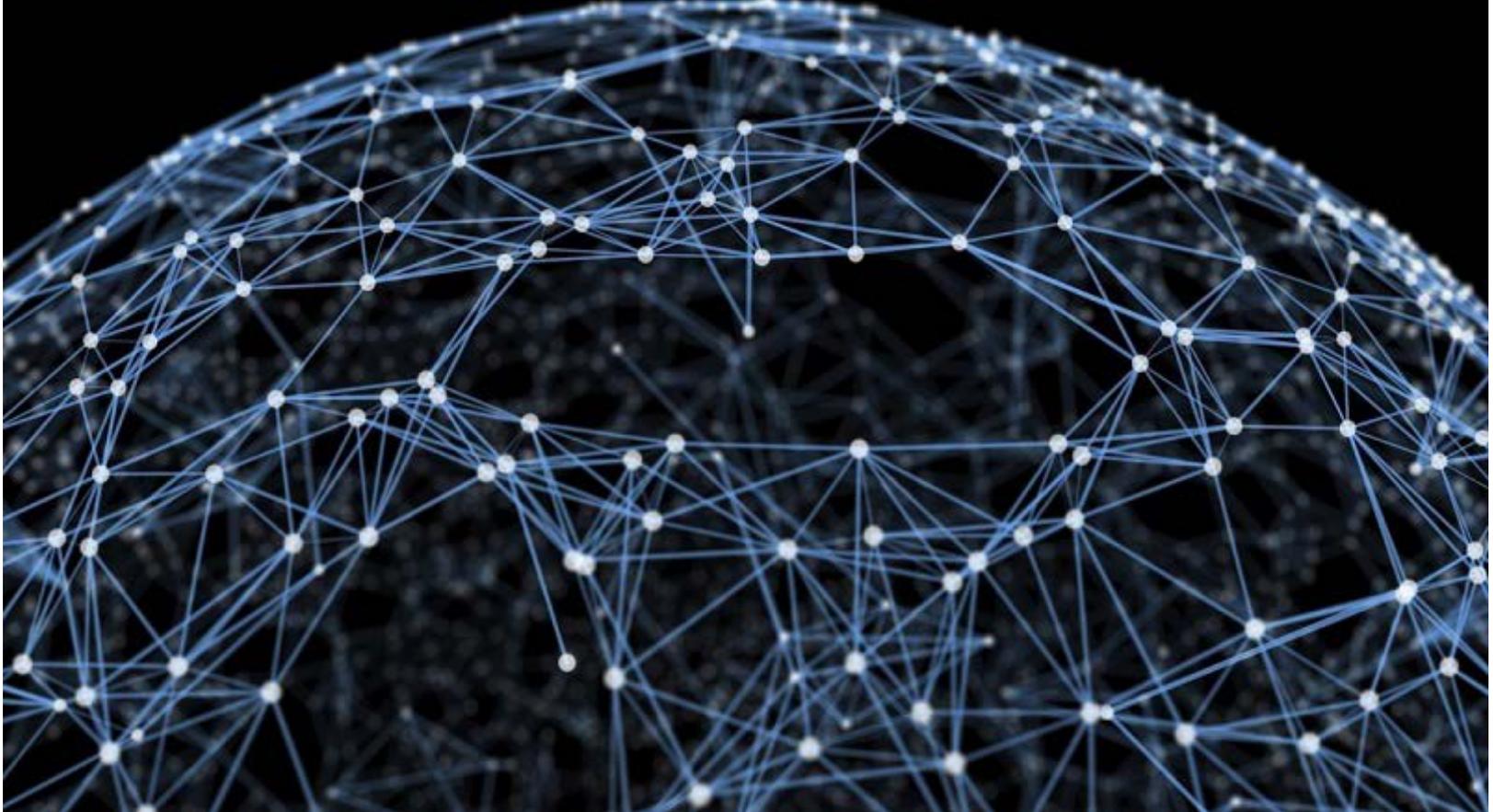
Our blind spot comes from the fact that we have lived in a linear world.

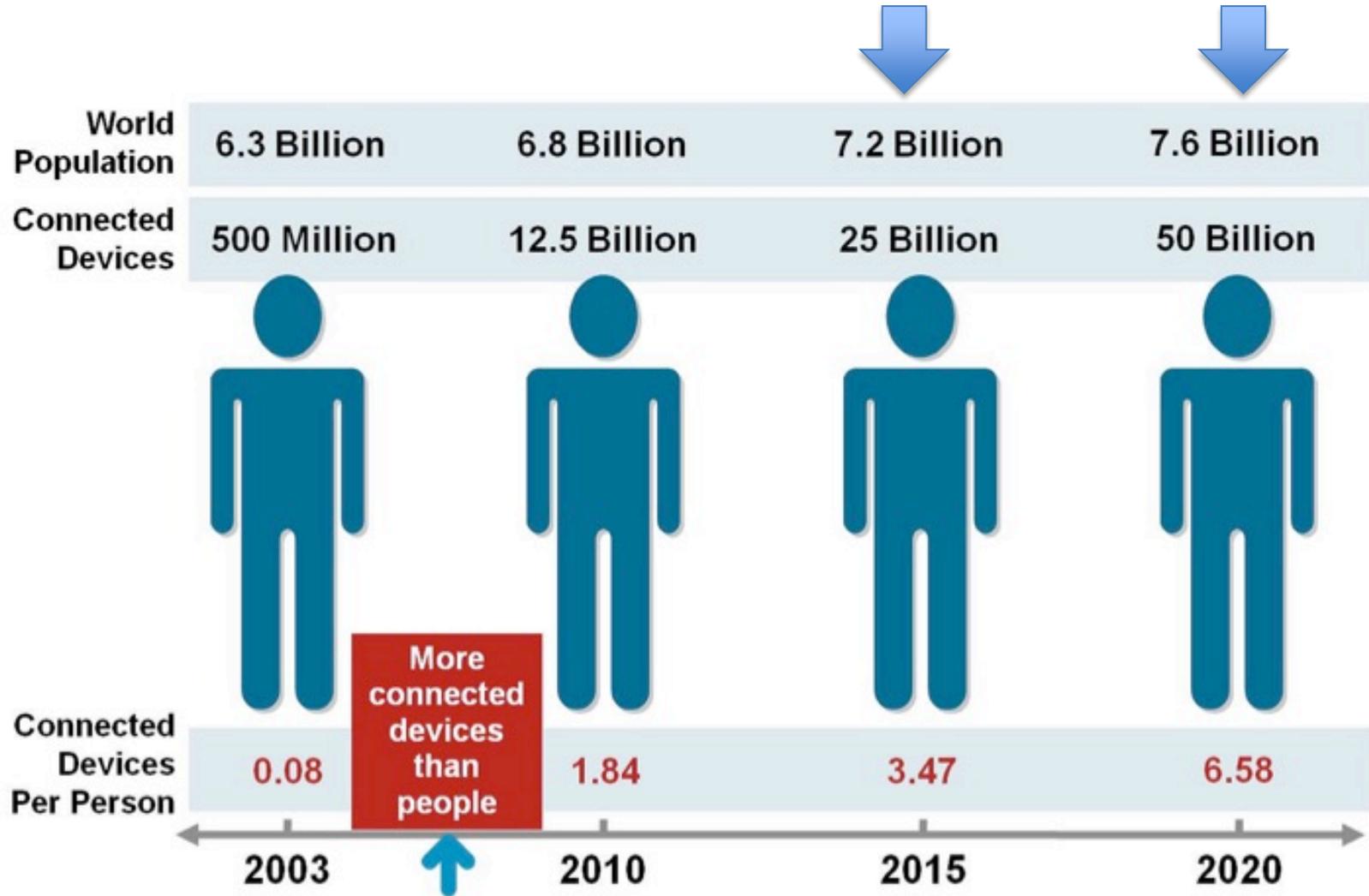
But today's changes are exponential.





The **internet** will soon reach every corner of the world





The way we access Internet has shifted dramatically



Now the Internet is moving into everyday objects and devices



What's impacting Healthcare ?

➡ Search and mobile search

- “Big Data”
- Interior Mapping
- “Internet of Things”/M2M- connected devices
- Mobile Diagnostics
- Wearable and Embedded Technologies
- Wellness Apps & Digital Experiences
- 3D Printing & Bio Printing
- Robots & Artificial Intelligence (AI)

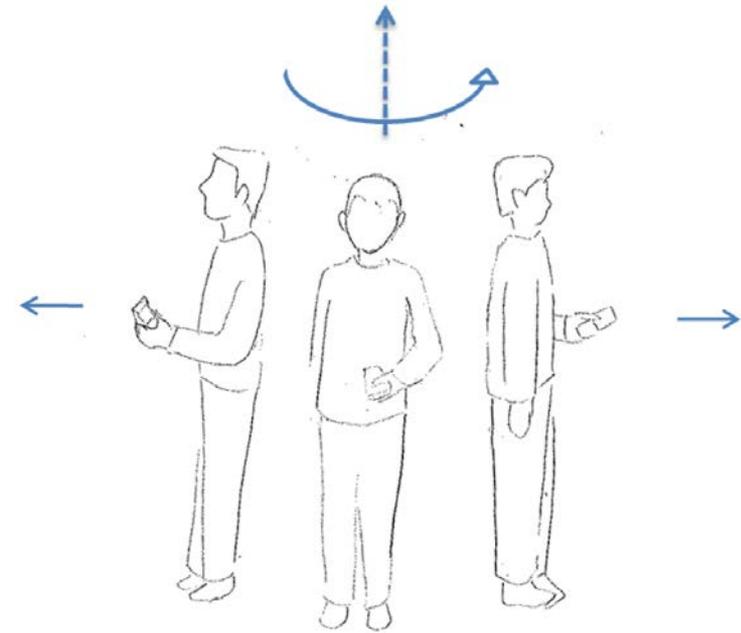
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Indoor mapping



LED lighting to detect location



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IOT - People to People



IOT - M2M Communication



IOT– People to Machine



What is next?



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Eye Exam



Heart Monitoring



Ear View



Glucose Management



Terahertz Imaging

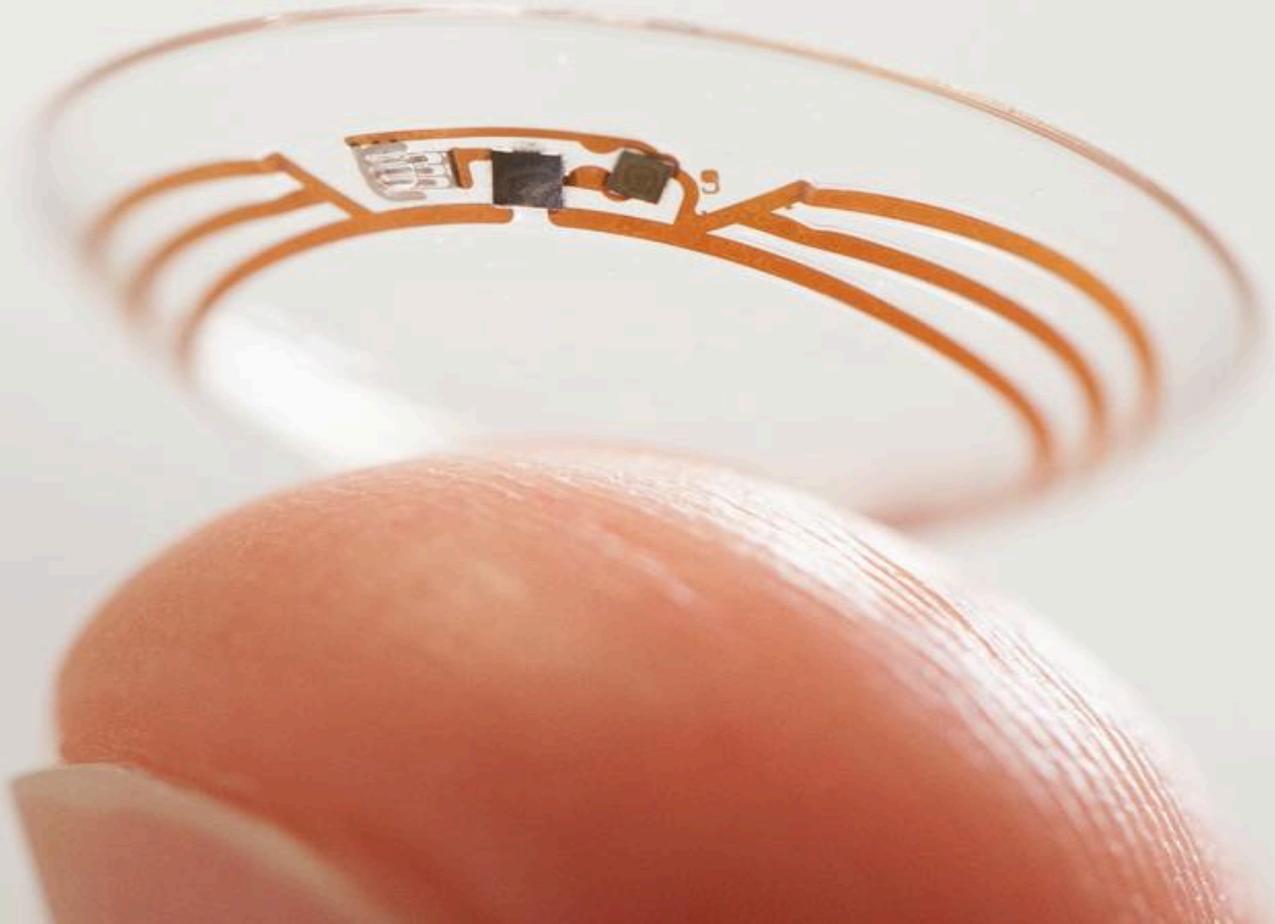


Smart pills

Connected from within



Smart Contact lens



Theranos

the lab test, reinvented



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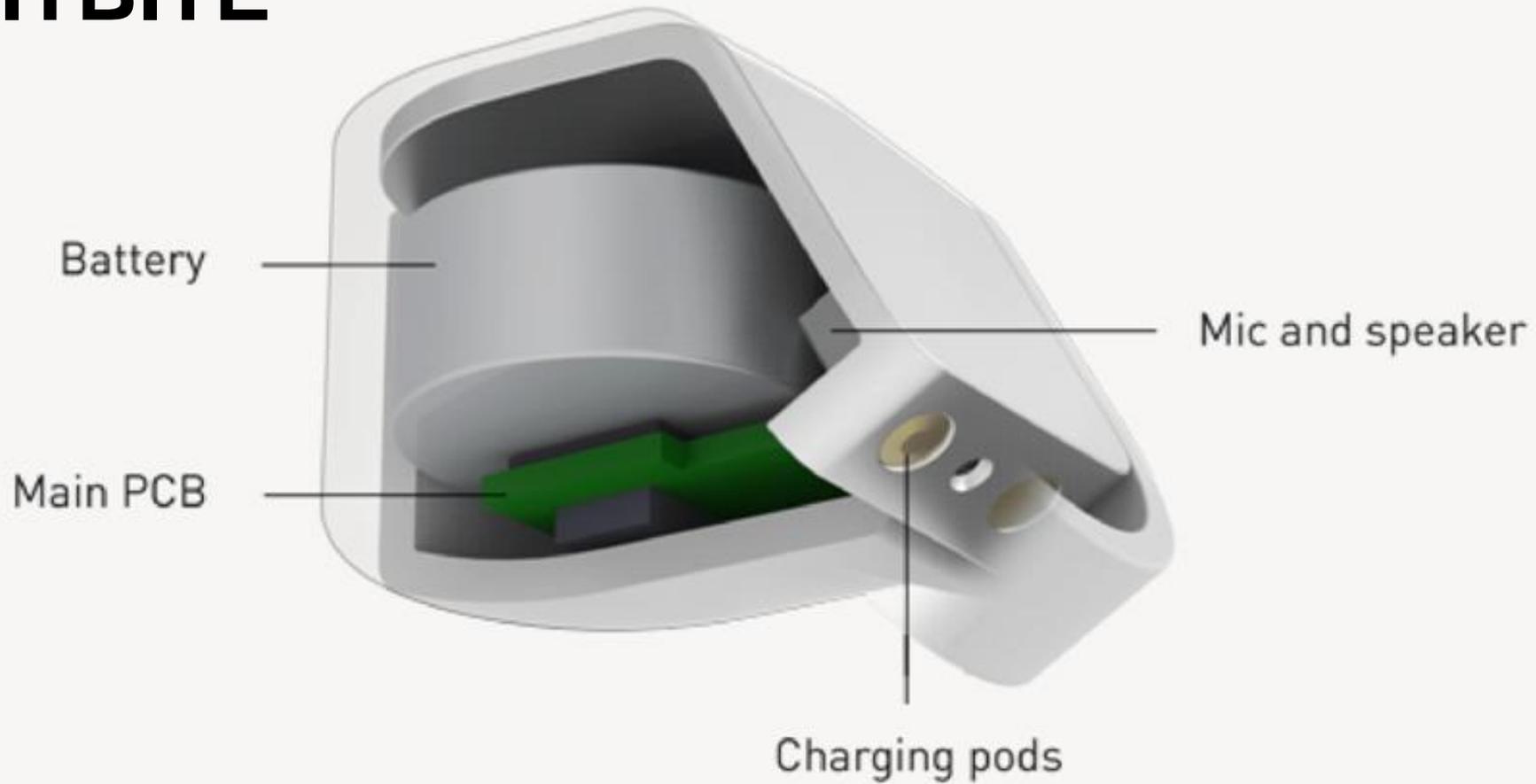
Wearable & Embedded Devices



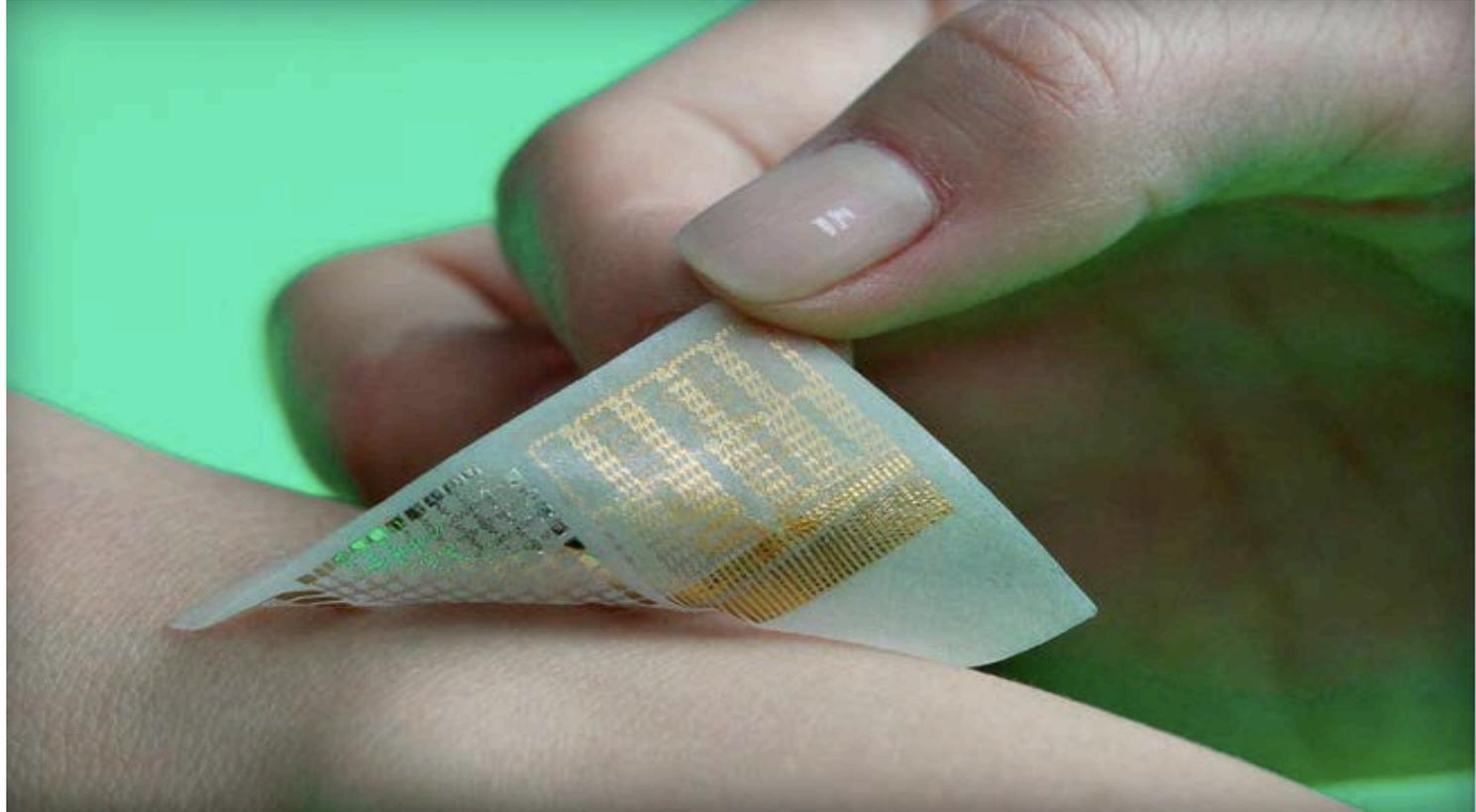
Fitness Bands



BITBITE



Biosensor Tattoos



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Wellness Apps



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A 3-D Printer Will Soon Print You New Organs



**Build your own
body**

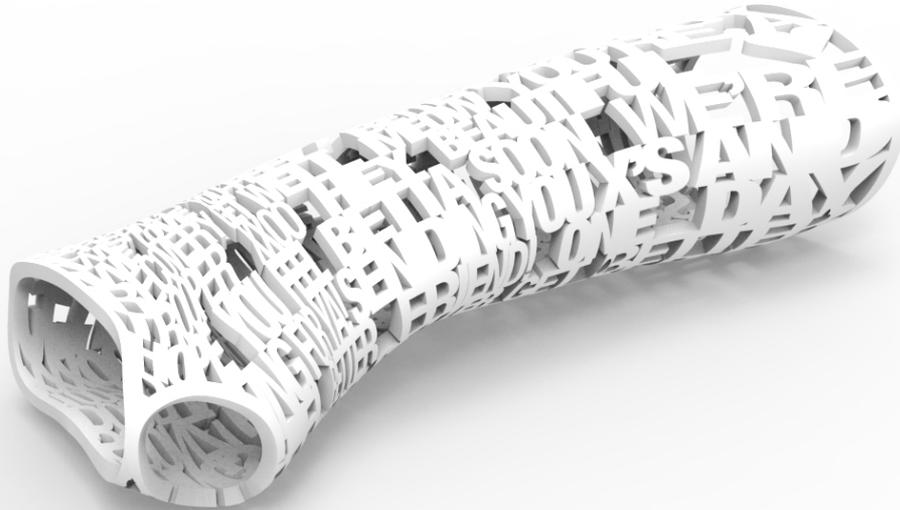


Printing Prescription Drugs



3-D Casts

so cool that you'll almost want to break a bone



3D Printing Construction Technology



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Robot RP-VITA

FDA clears first autonomous telemedicine robot for hospital

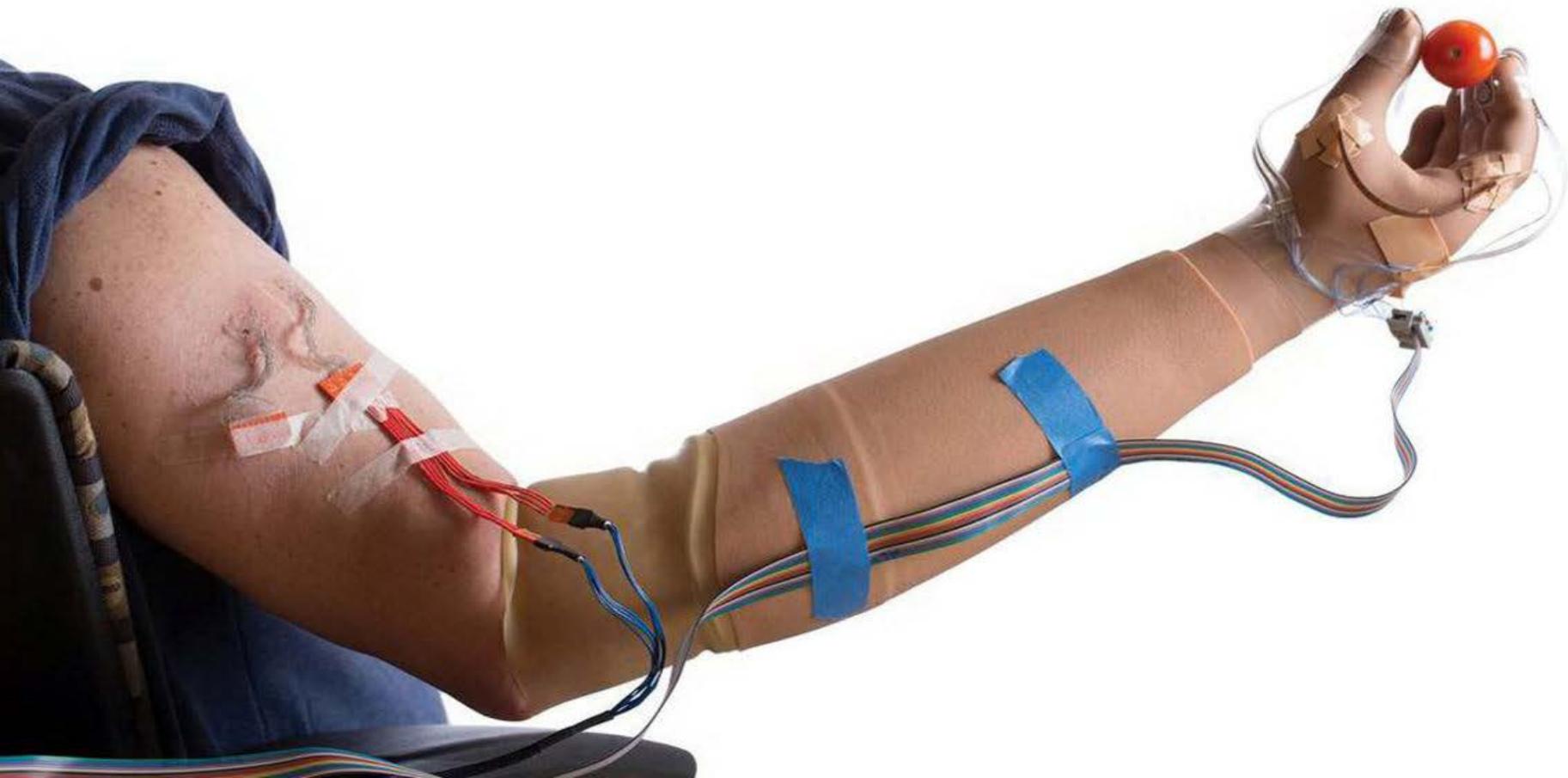


Nano-Robots



Bionic hands

mimic human control with sensation of touch



I-limb ultra



Ratheon XOS2



Exoskeleton-powered systems



Robot Security guard on duty at Microsoft



The Autonomous Car of the Future



Delivery DRONES



Delivering Medical Supplies to inaccessible Areas



Delivering defibrillator in case of emergency



2030