SMARTBEAR

WTF – What's the Future?
IOT – Revolutionalizing Healthcare

The endless options of a connected world

SMARTBEAR

We provide tools for development, testing, and operations teams to create great software, faster than ever.

- Accelerate SDLC Workflows
- Improve Quality at Every Stage
- Realize Rapid Time-to-Value

6.5M+

Users

194

Countries

22K+

Companies

- HQ in Boston, MA, USA, with
 9 offices around the world
- Founded in **1998**
- Over 400 employees and growing by the day
- Open Source Innovator (Swagger & SoapUI)





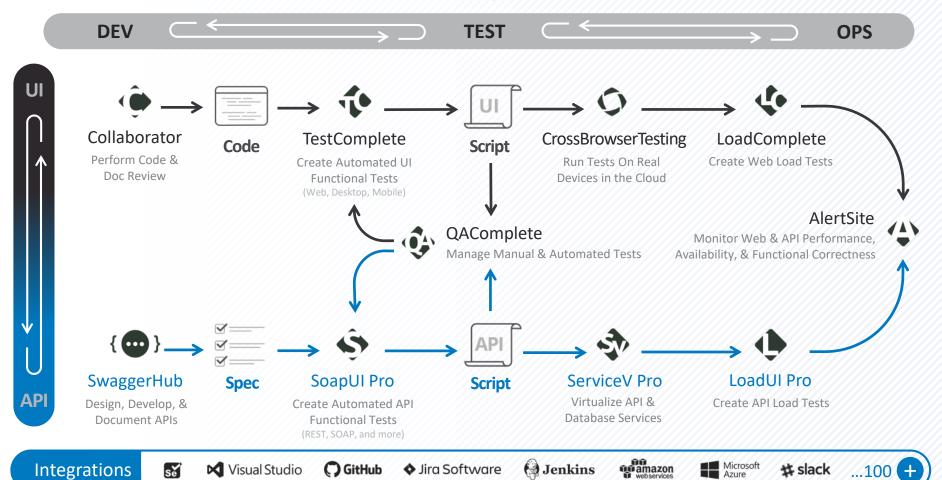








Create Great Software, Without Tradeoffs



What's an API again?



Not this... This is an IPA.

According to google an API is a set of functions and procedures that allow the creation of applications which access the features or data of an operating system, application, or other service.



Lets simplify that ...

An API is the messenger that takes requests and tells a system what you want to do and then returns the response back to you.

Think of being in a restaurant. You request something from the menu and the food is made in the kitchen... the waiter is kinda of a like an API – he takes your order (request) to the kitchen and returns with food... simple eh!







WTF is IOT?

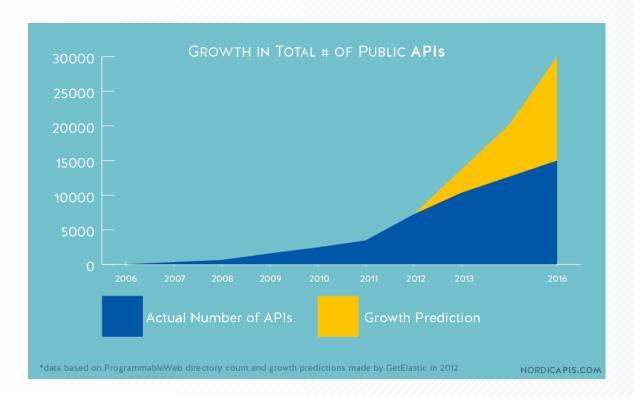
The Internet of things is the network of physical devices, vehicles, home appliances, and other items embedded with electronics, software, sensors, actuators, and network connectivity which enable these objects to connect and exchange data

APIs Have Been Around For A While

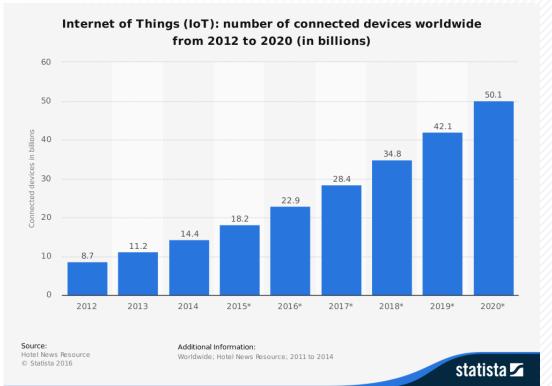


Architecture

APIs are Everywhere!



Number of Connected Devices



No. of devices/person
7 devices

APIs are at the center of your digital ecosystem









Web

Mobile

IoT Devices

Service Components

1

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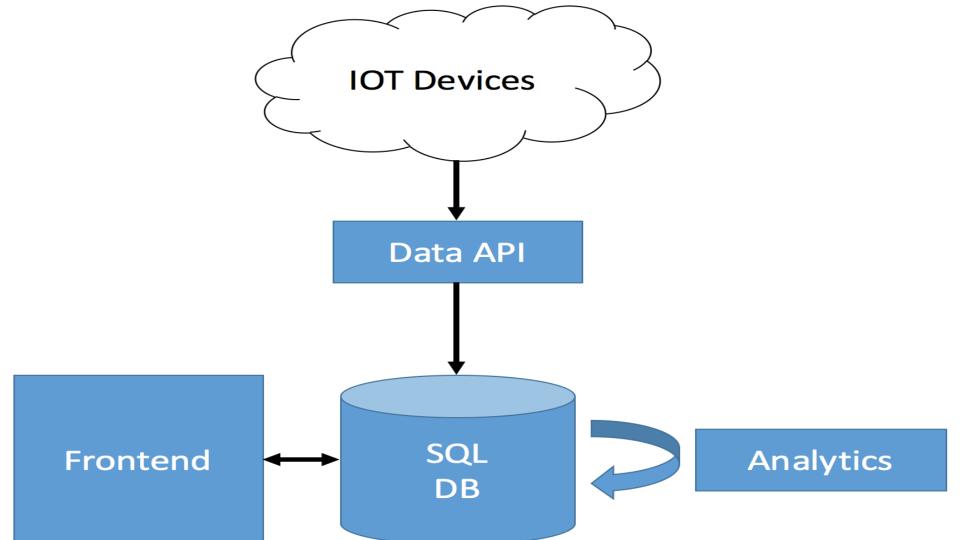
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API Layer

Database

Backend language

Application Servers



IOT in the world of Healthcare



Lets look at a typical scenario

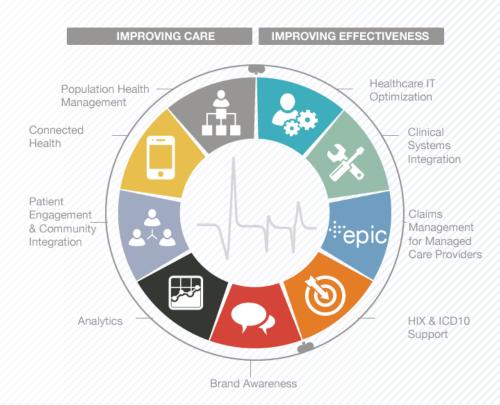


The good news is that this is all achievable ..

Through connected devices, micro-services, sensors and technology

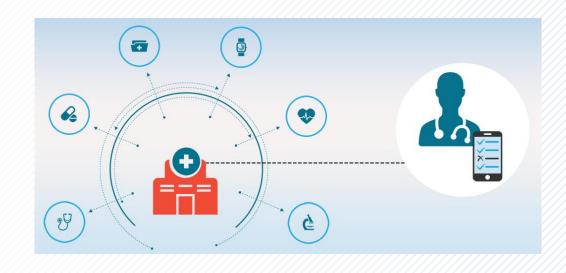
3 Ways that IOT can help healthcare..

Healthcare workflow optimization



3 Ways that IOT can help healthcare...

Medical Device Integration



3 Ways that IOT can help healthcare..

Data Handling



Although it's exciting to be in the era of Smart homes, smart cities and self-drive cars..



 It's is not walking up to my front door and it automatically opens



• Or asking Alexa to order a Pizza or a Cab.

The potential life changing effect of IOT from a healthcare perspective is what is really exciting...

how **sensors**, **devices**, and **machine learning** can provide real-time, round-the-clock symptom

information to researchers and consultants so that they can control or even eradicate disease.



What if your children could be told that...

- Due to the information that has been collated on you and based on other information such as genetic make and family medical history up that you had a 90% risk of getting Alzheimer's in 15 years?
- but because of all this data collection and analysis you could do something about it now in order to avoid or curtail the disease?
- In the same way complex algorithms are used to dispatch jobs to Uber drivers. It will be complex algorithms and Big Data that will potentially revolutionize healthcare

Where are we now?

Hospitals are running trials with a wide range of health conditions, including diabetes, cancer, cystic fibrosis and arthritis.

For example -

- Hospitals are using Fitbits with Obese pediatric patients
- Using Fitbits to increase activity for young cystic fibrosis patients
- Patients using Fitbits after weight loss surgery
- Preventing diabetes in adolescents with Fitbit devices
- Using Fitbits to evaluate cancer patients' fitness for chemotherapy
- Using the Fitbit to find connections between sleep, physical activity, and asthma
- Increasing physical activity in patients with arthritis using Fitbits
- Evaluating **not only a Fitbit**, but also an iHealth glucometer and a Withings blood pressure cuff

Source: mobihealthnews

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Questions?