



Healthcare Digital Transformation

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HUNGARIAN
GOVERNMENT

NATIONAL RESEARCH,
DEVELOPMENT AND
INNOVATION FUND

INVESTING IN YOUR FUTURE

What happened when 1B people became connected?

**Social
marketing
emerged**

**Communication
s mobilized**

**IT architecture
virtualized**

**Retail & ad
transformed**

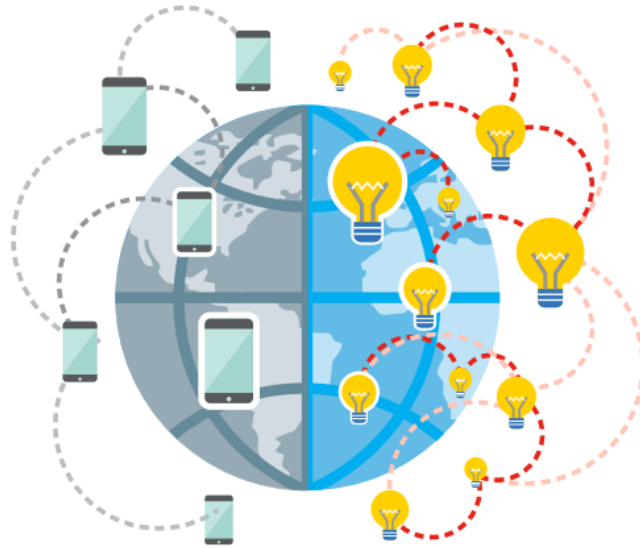
**Consumer
Internet**

**Entertainment
is digitized**



What happens when 50B machines become connected?

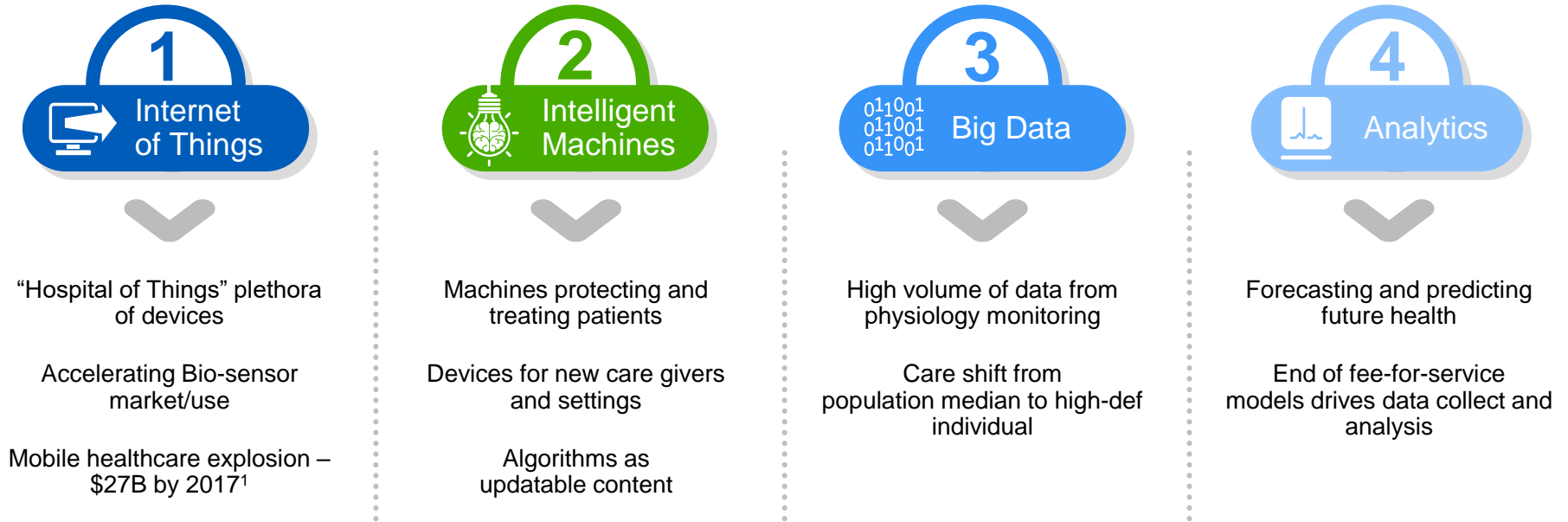
In 2015
there were about
5 billion
TOTAL
Internet-connected
devices.



While in 2020,
50 billion
machines will be
online.



A convergence of enabling technologies is setting the stage for industry transformation



¹ \$27B by 2017 for Mobile health services:

The market for mHealth services has now entered the commercialization phase and will reach \$26 billion globally by 2017 according to new “Global Mobile Health Market Report 2013-2017” by research2guidance. The report is one of the leading publications in the mHealth market. Companies that have purchased previous editions of the report includes: Agfa Healthcare, DTAG, Fresenius, Fujitsu, GE Healthcare, LG, Nokia, Novartis, Pfizer, Qualcomm, Roche, Roland Berger, Sanofi Aventis and many more.



Challenges of Healthcare

Patient records not easily available when needed

Increasing cost and burden of managing data growth

Lack of systems' interoperability resulting in workflow inefficiencies

35%



of patient cases misdiagnosed, contributed by lack of collaboration and access¹

153
exabytes



2013



2020²

50x

Healthcare data growth by 2020

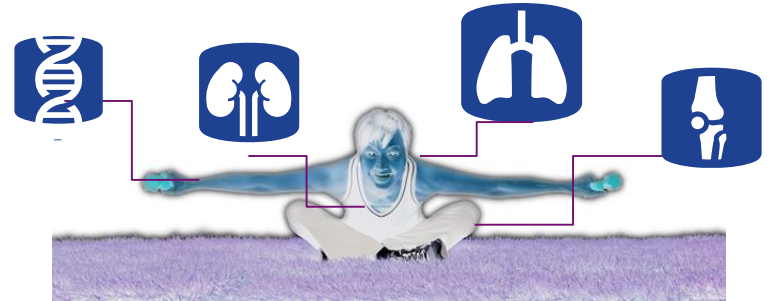
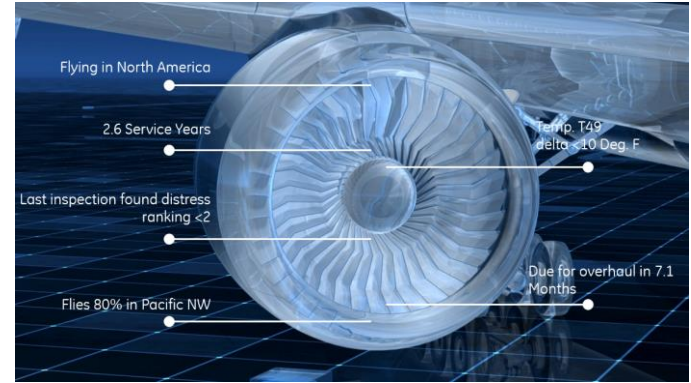


Interoperability of systems could save healthcare ecosystems \$30 B year³

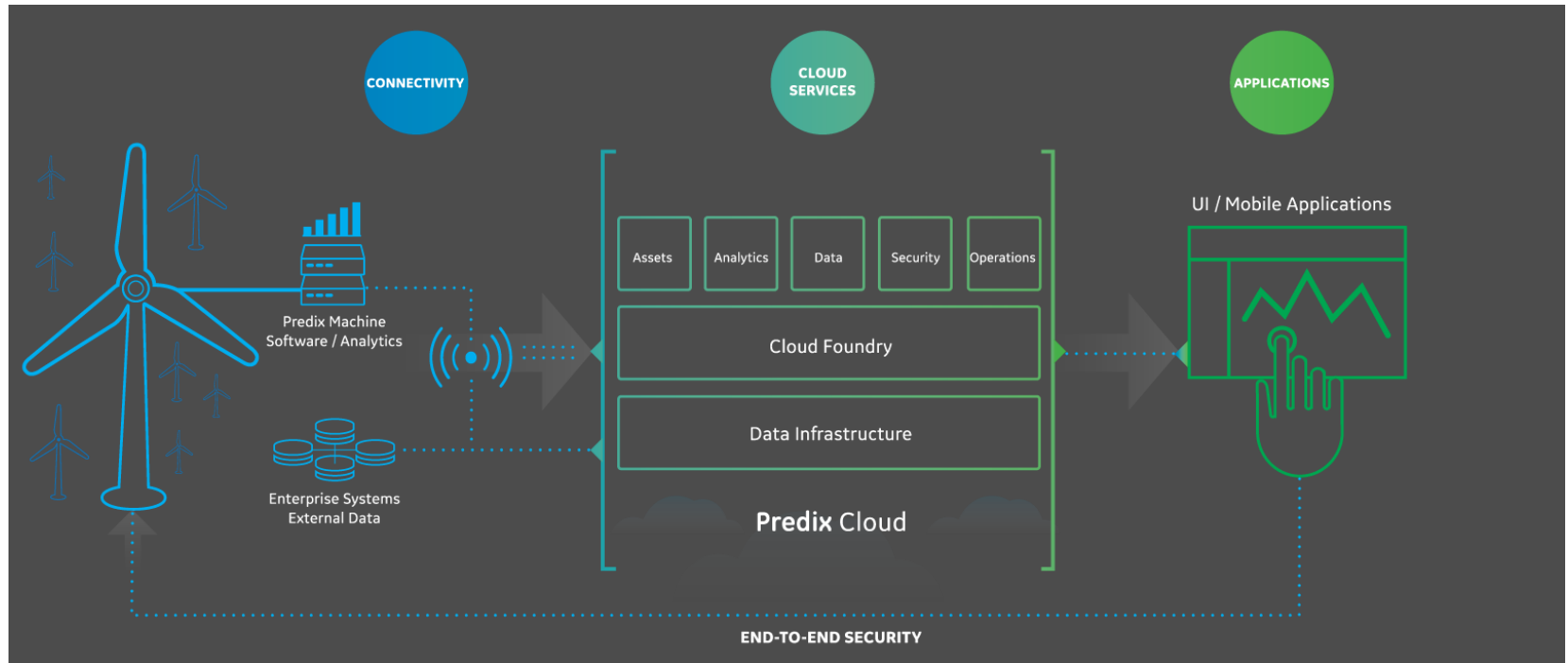


¹ "Types and Origins of Diagnostic Errors in Primary Care Settings," Journal of American Medicine, 2013
² <http://www.cio.com/article/2375691/healthcare/healthcare-why-health-data-is-a-big-data-challenge.html>
³ <http://www.westhealth.org/sites/default/files/The-Value-of-Medical-Device-Interoperability.pdf>

Digital Twins



The Digital Industrial Platform



Healthcare Digital Layer & Ecosystem Vision

Scalable, secure and connected ecosystem designed to deliver healthcare specific software functionality and applications 'as-a-service'

On-Prem connectivity and managed compute for data access and analytics at edge

Cloud Apps deliver new business use cases that can cut across care boundaries

Open ecosystem fuels contributions and added value product adjacencies



Fuel business growth by addressing new digital opportunities and supplementing core business product lines



Take away messages

- Digital transformation is happening in every industry
- Cloud based storage, access and analysis provides potential benefits for healthcare
- Open ecosystem fuels collaboration

