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SUMMIT
2017



AIeye

Artificial Intelligence
Supercharging Knowledge and Decision Making



Keeping A-Eye on Engagement

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AIEye

Artificial Intelligence
Supercharging Knowledge and Decision Making

The Fourth Industrial Revolution is Upon Us!

“Just as about 100 years ago electrification changed every single major industry, I think we’re in the phase where AI will change pretty much every major industry.”

- Andrew NG

*Co-Founder VP & Chief Scientist of Baidu
Proud Parent of “Google Brain”*

“Evolution to AI will be more radical than
ape-to-human.”

- Max Tegmark
Co-founder, Future of Life Institute

“Whether it’s blockchain, drones or the IoT, a handful of innovations are promising to reshape the competitive landscape of the information age. But artificial intelligence sits at the apex of them all with the potential to disrupt every industry.”

- Heath Terry
Head Internet Analyst
Goldman Sachs Research

Working Definitions

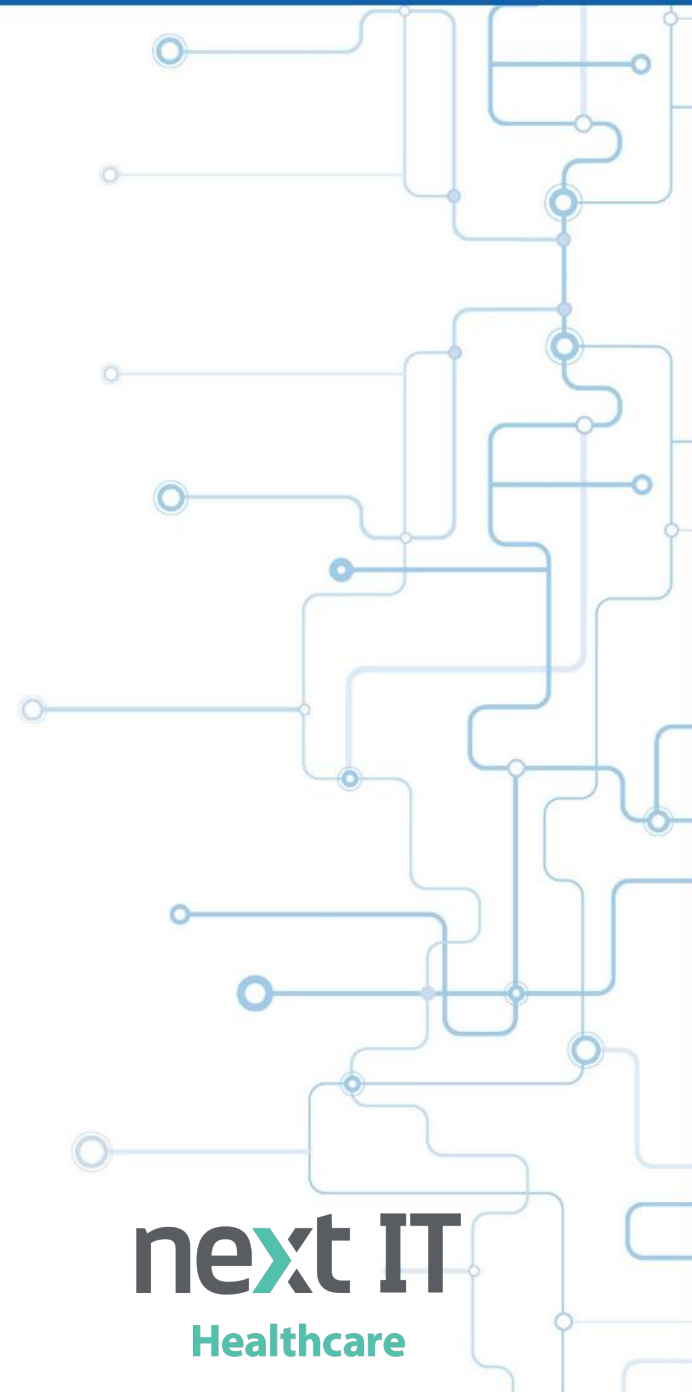
Artificial Intelligence

The theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and natural language processing (NLP)

Working Definitions

Machine Learning

A way to achieve AI by giving computers the ability to learn using algorithms that can parse data, learn from and make predictions about something in the world without being explicitly programmed



Working Definitions

Deep Learning

More complex machine learning achieved via layers of neural networks modeled loosely after the human brain

Natural Language Processing (NLP)

A specialized form of AI

1. Ability to understand natural language and discern user intent
2. Connectivity/integration with client IT infrastructure, apps, remote monitoring devices, etc.
 - Comprehensive user ecosystem
 - Highly contextual relationship
3. Facilitate real-time, tailored resolution and interventions



ROI²

1. Significant operational savings
2. Better -
 - Customer experience
 - NPS/CSAT
 - Top line revenue
 - Health outcomes

MEET SGT STAR

- Complete command of website resources
- Increased stickiness over **2.5x**, increased engagement from 4 to 11 minutes, answered over **16 million** questions
- Replaced live chat and the work equivalent of **more than 70 FTEs**
- Get to know SGT STAR at GoArmy.com



"We threw a lot of challenges at Next IT and they handled them all, while still meeting a tight deadline and established budget. In my mind that is the very definition of a successful project."

-Paula Spilman, IT Project Manager, U.S. Army Accessions Command



next IT
Healthcare

“Patient engagement will be the blockbuster drug of the century.”

- Leonard Kish
Health IT Strategy Consultant



Cognitive technologies for health plans

Using artificial intelligence to meet new market demands

New developments in cognitive technologies can help health plans use artificial intelligence to help improve cost-effectiveness, customer service, and population health.

WRITTEN BY

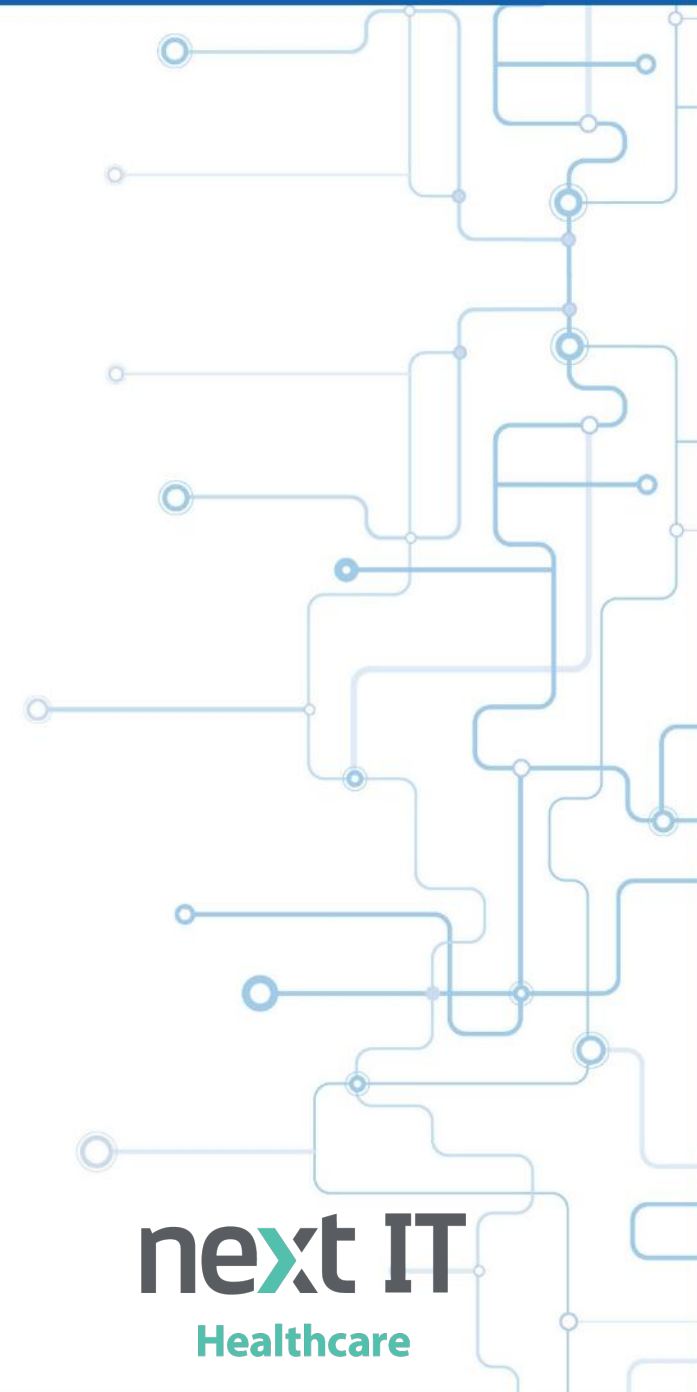
David Schatsky, Plamen Petrov, & Rajeev Ronanki

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March 27, 2015

Navigating Major Trends

- **Rising retail consumerism** as individuals seize greater control of their healthcare.
- **Growing interest in value-based care** models from health systems, providers, and health plans.
- **An increased focus on transparency and quality.**
- **Intensifying competition**, both from incumbent plans and from new players such as provider-sponsored plans.



Use Cases	Applications
Automate prior authorization process	<ul style="list-style-type: none"> Automatically read and analyze treatment requests, patient clinical information, and clinical and policy guidelines Generate preauthorized recommendations
Improve care management	<ul style="list-style-type: none"> Identify high risk patients Identify effective interventions Personalized engagement Develop holistic view of patients
Improve population health management	<ul style="list-style-type: none"> Identify high-risk population Identify effective interventions
Detect fraud, waste and abuse	
Automate de-identification of patient records	
Automate member services	<ul style="list-style-type: none"> Enable members to interact with virtual agents using natural language Automatically provide relevant, personalized answers to member questions
Support market and product strategy	<ul style="list-style-type: none"> Identify customer segments Design products tailored to segments
Enhance provider networks/create value based	
Manage pricing and risk	<ul style="list-style-type: none"> Augment actuarial capabilities
Marketing and sales	<ul style="list-style-type: none"> Analyze customer sentiment Automate marketing processes Automate sales process using guided selling

Music
Calendar
Search

Personal Assistant

Case Mgrs
Nurses Physicians
24/7 Hotline ER

EHR

Block Chain

Behavioral Optimization System

mHealth Apps

Digital Health Coach
Patient

Vision Health

Virtual Reality

Health Literacy Content

Interface

IoT

Vision Retail

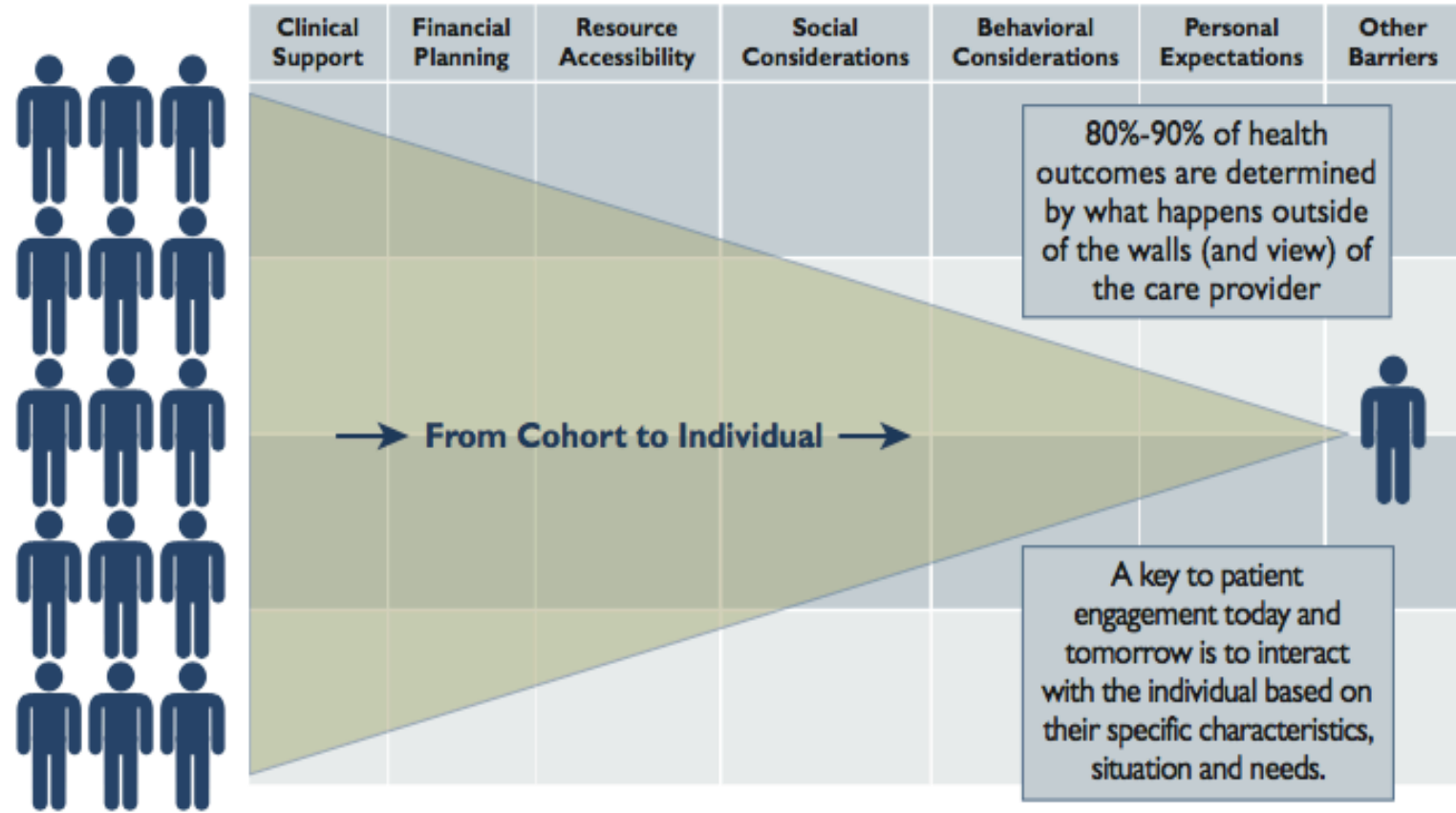
Virtual Coaching

Disease Management

Backend Data Systems, API, CRM

Figure 2: Engaging the Person, Not the Disease Sufferer


Consumerism in Healthcare: Layers to Personalization of Health and Wellness Platforms



Source: Frost & Sullivan

“A virtual medical coach that will access a person’s sensor data, be aware of the person’s medical information—diagnoses, medications and lab results — and understand the individual’s lifestyle, including activity and sleep patterns, will be part of a system of continuous review and prompts to a person to improve health, metrics and diet.”

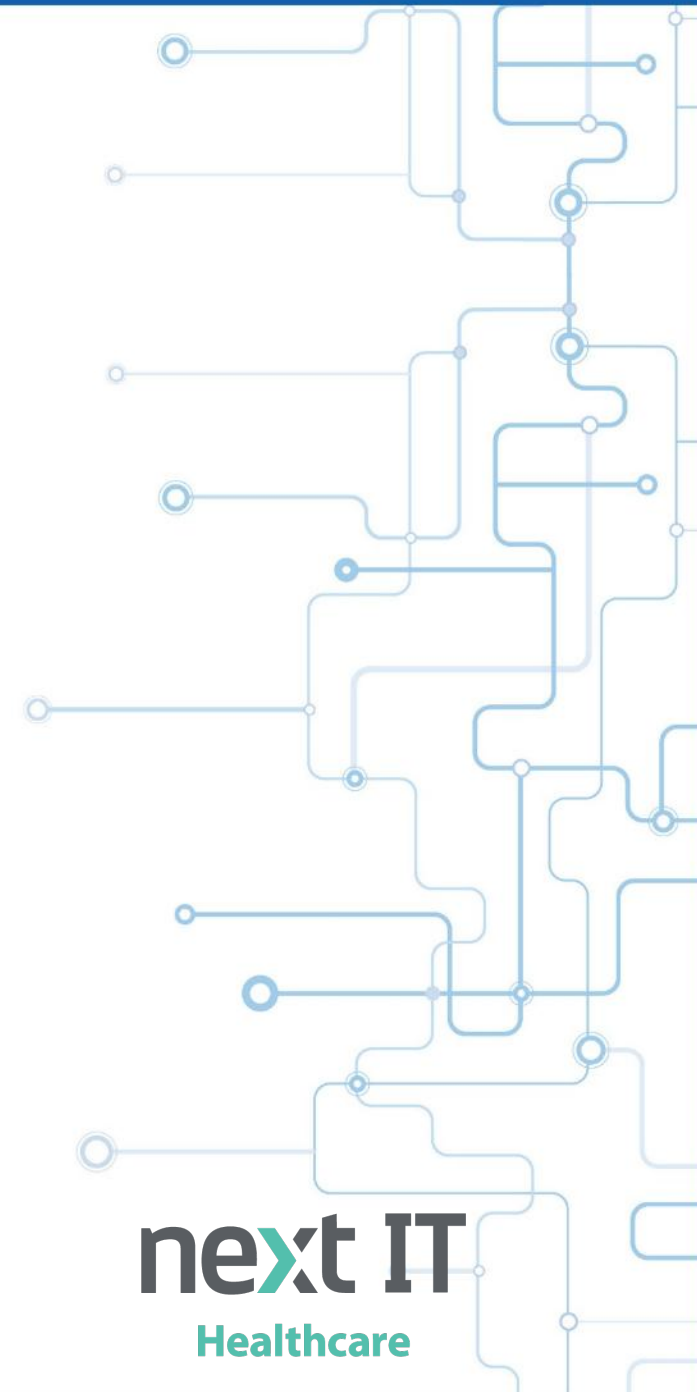
- Eric Topol, MD
Scripps Translational Science Institute

A close-up, low-key photograph of a black coffee machine dispensing coffee into a white ceramic mug. The scene is dimly lit, with a bright window in the background creating a strong contrast. To the right, a glass jar containing coffee filters is visible. The overall mood is quiet and domestic.

Life with a Virtual Health Assistant

A Bold Prediction!

Gartner predicts that by 2025, 50 percent of the population will rely on virtual personal health assistants (VPHAs) for primary care, finding them more responsive and accurate than their human counterparts.



Augmenting Your Current Strategy

“I recommend that business leaders hire a senior AI leader—a chief AI officer or a VP—to sort this out for them. Recruiting AI talent is so difficult that having a centralized AI function would be the best way to have consistent hiring and promotion and management standards for an AI team. This team can then work cross-functionally to figure out how to fit these technologies into your business.”

- Andrew NG
VP & Chief Scientist of Baidu
Proud Parent of “Google Brain”