



BigTechs in Healthcare: Reimagining the Ecosystem

Healthcare IT Services

Market Report – November 2019: Complimentary Abstract / Table of Contents

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 Healthcare IT Services (ITS)
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- Accelerators™
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- Workshops

Custom research capabilities

- Benchmarking | Pricing, delivery model, skill portfolio
- Peer analysis | Scope, sourcing models, locations
- Locations | Cost, skills, sustainability, portfolio – plus a tracking tool
- Tracking services | Service providers, locations, risk
- Other | Market intelligence, service provider capabilities, technologies, contract assessment



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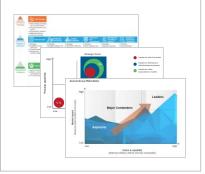


Our research methodology is based on four pillars of strength to produce actionable and insightful research for the industry

- Market thought leadership
- Actionable and insightful research
- Syndicated and custom research deliverables

Robust definitions and frameworks F&A pyramid, multi-process

F&A pyramid, multi-process FAO definition, Total Value Equation (TVE), PEAK Matrix™, market maturity



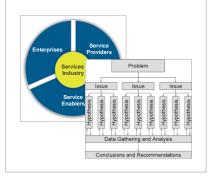
Primary sources of information

Annual contractual and operational RFIs, service provider briefings and buyer interviews, web-based surveys



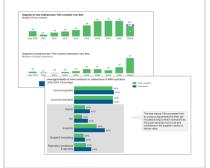
Diverse set of market touchpoints

Ongoing interactions across key stakeholders, input from a mix of perspectives and interests, supports both data analysis and thought leadership



Fact-based research

Data-driven analysis with expert perspectives, trend-analysis across market adoption, contracting, and service providers



- Proprietary contractual database of healthcare IT Services (ITS) contracts (updated annually)
- Year-round tracking of all the major healthcare IT service providers
- Large repository of existing research in healthcare IT services
- Dedicated team for healthcare IT services research, spread over two continents
- Over 20 years of advising clients on healthcare IT services related decisions
- Executive-level relationships with buyers, service providers, technology providers, and industry associations



Background and methodology

BigTechs such as Amazon, Apple, Facebook, and Google already have a track record of disrupting major industries such as retail and telecommunications. These technology giants are now invading the healthcare industry – with many already making/announcing significant investments for transforming the industry.

While factors such as increasing healthcare spend, demand for data analytics, and higher member/patient expectations are driving BigTechs' entry in healthcare, they are also facing multiple challenges due to the complex and highly regulated nature of the healthcare space. To unlock the impact, these organizations are creating in healthcare and their effect on the ecosystem, Everest Group has assessed the state of the market by analyzing healthcare investments of 11 large technology firms.



In this market report, we have analyzed technology investments made by 11 BigTechs in the US healthcare industry





Change/shift in the healthcare supplier ecosystem



BigTechs use cases across the payer and provider value chain

Scope of this report:





Industry Healthcare (payers and providers)



BigTechs evaluated

Amazon, Apple, Facebook, Google, IBM, Lyft, Microsoft, Oracle, Salesforce, SAP, and Uber

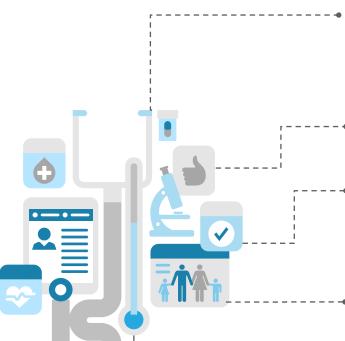
Includes healthcare data & information services and medical products distribution



Overview and abbreviated summary of key messages

BigTechs in healthcare

With digital transformation happening across industries, members/patients are demanding increased engagement, control, convenience, quality, and affordability through better tools and solutions. This, coupled with the fact that healthcare is one of the fastest growing industries, presents a business opportunity that is too lucrative to ignore – especially for global technology companies.



BigTechs entry in healthcare

BigTechs are in the quest to becoming the leaders in the healthcare industry by leveraging their core business strengths to develop healthcare-specific solutions. Leveraging the vast data they have access to, BigTechs offer personalized services, raising the customer-satisfaction bar. Also, technologies such as wearables and remote patient monitoring can significantly impact care cost

Partnership ecosystem

BigTechs are entering into partnerships and sourcing/ developing the right kind of talent (technical and domain-specific) to aid their vision of expanding further into healthcare

Capability maturity and impact

While BigTechs serve both payers and providers, providers emerge to be their major customer segment, with the greatest impact being created in the areas of diagnostics, treatment, and monitoring. Providers are utilizing their cloud-, AI-, and analytics-based solutions to analyze massive volumes of data and gather insights to reduce cost, generate better outcomes, and improve customer experience

Current role in healthcare

While BigTechs are making big bets in healthcare, their current market share lies largely outside the traditional (payer, provider, PBM, etc.) scope of the healthcare industry – in areas such as data and analytics, consumer devices, and transportation services

Outlook for BigTechs

BigTechs need to address for challenges such as data privacy, regulatory compliance, and domain complexity to further invade the space – especially in healthcare delivery



This study offers multiple distinct chapters providing a deep dive into key aspects of BigTechs' role in healthcare market; below are four charts to illustrate the depth of the report

BigTechs are connecting to gain headway in healthcare

- The payer sector has witnessed limited invasion by BigTechs
- · However, BigTechs' focus on customer-centric solutions has begun to alter members' expectations
- · Payers are increasingly collaborating with technology firms to digitize their operations by investing in solutions such as health insurance platforms and analytics





Members/patients

- · BigTechs are evidently aiming at meeting the changing needs of patients/members by providing them better ways to communicate and access the information they
- · With their focus on technologies such as smartphones, tablets, and laptops, BigTechs have become the torchbearer for consumerism in healthcare







- · Competition in the healthcare markets benefits consumers because it helps contain costs, improve quality, and encourage innovation
- . The collision of service providers and tech vendors exploits synergies between these two groups by brining together modularized platform designs and next-generation technologies with deployment, execution, and post-implementation support services



Healthcare providers

- · BigTechs are actively seeking involvement from researchers and hospitals to develop solutions
- · Several innovations from BigTechs have already been implemented within major healthcare systems. For instance, Humana has integrated Apple's HealthKit with its health app, and Renown Health uses Uber Health platform to provide transportation to patients
- . Hospitals need to upgrade their technology and internal systems to keep themselves in the game

BigTechs are creating the maximum impact





- . BigTechs in healthcare are succeeding because of their ability to collect and integrate data from a
- These firms are collaborating with providers and pavers to build solutions on top of their core platforms (such as AWS and Azure) to aggregate data and design tailored analytics/AI models for complex use
- · A large subset of BigTechs is focusing on consumer healthcare products, with use cases ranging from managing fitness level to remote monitoring
- For instance, Apple's HealthKit provides a central repository for health and fitness data on iPhone and Apple Watch and offers informed health and fitness solutions to users
- Some of these companies are adding healthcare-centric functionality to their core set of products to offer personalized patient/member experience. For instance, Salesforce has bet big on verticalizing its customer relationship management strengths to help deliver personalized patient experiences







Technology firms such as Uber and Lyft are enabling providers to improve healthcare access to patients by coordinating their rides to and from appointments. For instance, in March 2018, Uber introduced Uber Health, a dashboard enabling healthcare provider to coordinate rides on behalf of patients

Value chain analysis

Extent of offering maturity: High Addium Low Very low









	Patient engagement	Care/case management	Diagnostics, treatment, and monitoring	Financials & network management	IT infrastructure	Business processes
	•					
Sample use cases	BigTechs are supporting providers in improving patient engagement by offering customer-centric solutions, such as transportation facilities to help patients get to and from care, and customer-facing apps and portals	Providers are improving their operational efficiency by using solutions from BigTechs. For instance, these solutions help doctors access and organize data from patients' wearables to improve the ways hospitals communicate with their patients and better manage care	Providers are utilizing cloud-, AI-, and analytics-based solutions from BigTechs to analyze massive volumes of data and gather insights more effectively and efficiently, to improve diagnostics and treatment processes while also reducing costs	Providers are leveraging cloud- and Al-based platforms to streamline management and processing of invoices, resulting in improved operational efficiency	Providers are investing in IT infrastructure by moving data to the cloud and deploying internal communication platforms to bring operational efficiencies, save cost, and increase security	BigTechs provide products/platforms to improve business process operations in areas such as finance, human resource, and customer support. For instance, providers use cloud-based HR and marketing platforms to drive the hiring process better
Key players	IBM, Uber, and Lyft	IBM and SAP	Google, IBM, and Microsoft	Oracle and SAP	Google, Microsoft, Amazon, and Oracle	
Maturity rate ¹	19%	20%	34%	7%	14%	6%

Key challenges

Care cost and

quality





Complexity of the healthcare space



While BigTechs have superior technology, they need access to patient/member data to build solutions to help providers improve care delivery. Although, mass adoption of EHR and electronic Health information Exchange (HE) systems in the US and movement of its till lies unstructured or captured/stored in several different formats and standards (medical imaging, genomic sequencing, payer records, pharmaceutical research, data from wearables and medical devices, etc.). On top of it, the use of this data is regulated by sriticip rivacy laws in the healthcare industry.	Given the highly regulated nature of the industry, it is imperative for BigTechs to build deep healthcare domain knowledge a across healthcare standards, applications, worklows, and regulations, to win the trust of healthcare enterprises as well as of the current stituation is that technology firms do not understand medicine and traditional healthcare system in depth	

In addition to healthcare enterprises and IT service providers, industry regulators are also moving toward product/technology vendors to investigate the usage of patient/member data. With this, BigTechs are expected to face an increasing number of regulatory issues in the coming years (with data privacy being the center of attention). There are other regulations that restrict these technology companies' entry in core healthcare. For instance, in order to sell and distribute drugs, there are complex laws overseen by regulatory bodies including the FDA and the Drug Enforcement Administration (DEA), Similarly, technology companies looking to enter into the payer industry have to abide by state regulations

Regulatory approval



Research calendar - Healthcare IT Services (ITS)

Flagship Healthcare ITS reports

Release date

Healthcare Payer Annual Report 2018: Payers Look at Digital to Reinvent in a Turbulent Healthcare Market

Healthcare Payer Digital Services PEAK Matrix™ Assessment and Service Provider Landscape − 2019

Healthcare Provider Digital IT Services − Service Provider Landscape with Services PEAK Matrix™ Assessment 2018

Healthcare Payer Payment Integrity Solutions PEAK Matrix™ Assessment 2020

Healthcare Security − Service Provider Landscape with Services PEAK Matrix™ Assessment 2020

Q4 2019

Healthcare Payer Digital Services PEAK Matrix™ Assessment and Service Provider Landscape 2020

Q4 2019

Thematic Healthcare ITS reports

Note: For a list of all of our published Healthcare ITS reports, please refer to our website page



Additional Healthcare ITS research references

The following documents are recommended for additional insight on the topic covered in this report. The recommended documents either provide additional details on the topic or complementary content that may be of interest

- 1. Healthcare Report Card 2018 A Guidebook of Key Trends and Service Provider Performance (EGR-2019-20-R-3117); March 2019. In this report, we talk about key themes that dominated the U.S. healthcare market in 2018. On one side, payers continued their quest for consolidation across the value chain by merging with PBMs and investing in technology consortia; on the other side, healthcare providers too tried to expand their influence through large mergers as well as by acquiring small physician practices. The ongoing issues pertaining to value-based care transition, and cybersecurity also continued to push the payers and providers to invest in new technologies (analytics, automation, IoT, cloud, etc.).
- 2. Guidebook for Blockchain Adoption in Healthcare and Life Sciences: A Compilation of Insights from 40+ Blockchain Projects (EGR-2019-46-R-3103); March 2019. The Healthcare and Life Sciences (HLS) industry is adopting blockchain technology as a lever to redefine processes and drive efficiency and transparency. It has witnessed adoption of multiple use cases such as cold chain logistics, device condition provenance flow, provider credentialing, and healthcare record interoperability. Some of these use cases have started to show early signs of blockchain business value realization. Enterprise investments in blockchain technology were at an all-time high in 2018 and we expect it to more than double in 2019.
- 3. Healthcare Payer Payment Integrity Solutions PEAK Matrix™ Assessment 2020 (EGR-2019-32-R-3371); October 2019. Claims processing is becoming ever more complex for payers given issues such as the need to transform healthcare plans' business models to accommodate new markets and new lines of business; and increasing inflow of members; and, increasing regulatory mandates. Payment integrity can reduce rising healthcare waste and fraud to ensure that the medical claims are paid correctly and free of wasteful and abusive practices. In this report, we analyze 11 payment integrity solutions vendors' capabilities and map them on the Everest Group PEAK Matrix™.

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About Everest Group

Everest Group is a consulting and research firm focused on strategic IT, business services, and sourcing. We are trusted advisors to senior executives of leading enterprises, providers, and investors. Our firm helps clients improve operational and financial performance through a hands-on process that supports them in making well-informed decisions that deliver high-impact results and achieve sustained value. Our insight and guidance empower clients to improve organizational efficiency, effectiveness, agility, and responsiveness. What sets Everest Group apart is the integration of deep sourcing knowledge, problem-solving skills and original research. Details and in-depth content are available at www.everestgrp.com.

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