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Unlocking the value of data in healthcare

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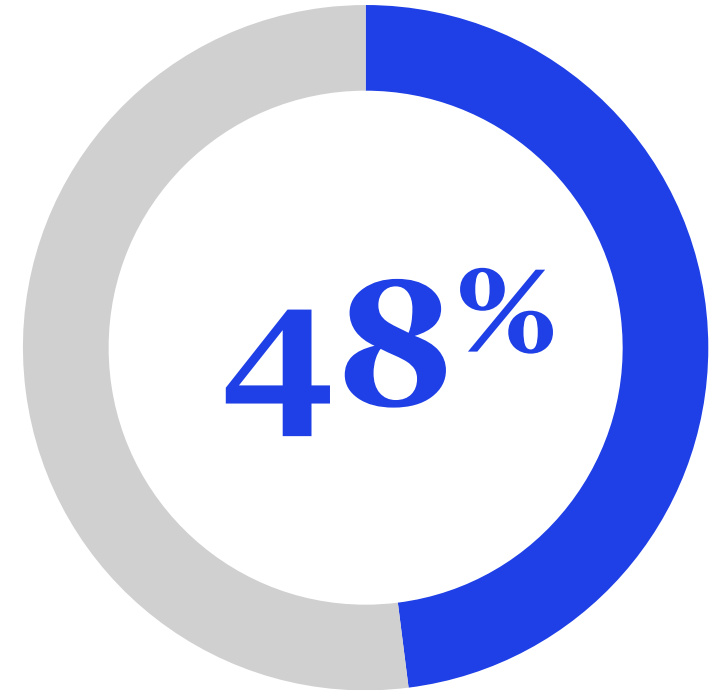
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Opportunity to tap the unexplored data frontiers in healthcare

Globally, healthcare data is being accumulated at an astronomical pace

2314 Exabytes¹ of healthcare data are expected to be accumulated globally by 2020.

To put it in perspective, the digitization of the entire Library of Congress is ~10 exabytes.



CAGR from 2013 – 2020²

¹ One exabyte = 10¹⁸ bytes

² IDC Research

Historically, there has been uneven progress in capturing the value of data in all industries; major barriers remain in ability to maximize capture

	Value captured, %	Major barriers:
Healthcare	10-20	<ul style="list-style-type: none">• Lack of ability to leverage large data sets• Interoperability and lack of infrastructure
Location-Based Services	50-60	<ul style="list-style-type: none">• Penetration of GPS-enabled smartphones, especially in emerging markets
Retail ¹	30-40	<ul style="list-style-type: none">• Lack of analytical talent• Siloed data within companies
Manufacturing ²	20-30	<ul style="list-style-type: none">• Siloed data in legacy IT systems• Leadership skeptical of impact
Public sector ³	10-20	<ul style="list-style-type: none">• Lack of analytical talent• Siloed data within different agencies

¹ EU and US retail sector ² Manufacturing levers divided by functional application ³ High-income country governments SOURCE: McKinsey Global Institute

Healthcare data originates from multiple sources and is collected by multiple parties, thus increasing complexity in usability.

Healthcare players face a number of challenges in driving value out of untapped data sets

Key Challenges



Data piracy concerns



Lack of infrastructure



Defining a clear view of the agenda



Inadequate technology platform



Ability to convert data into useful insights

Telcos can help healthcare players capture the value of healthcare data by leveraging emerging technologies

Emerging technologies	Data challenge addressed	Data-enabled business models
5G	Infrastructure investment	E2E hospital-wide automation
AR/VR	Remote healthcare technology enablement	Massive healthcare data sharing
Blockchain	Security and data piracy	Remote robotic surgery
ML/AI	Technology platform to unlock data insights	Remote patient monitoring services
Robotics	Specialized remote healthcare enablement	Autonomous emergency services

Some telcos are already looking beyond connectivity, aiming long-term, and expanding partnership ecosystems to capture the healthcare data opportunity



Basic Connectivity

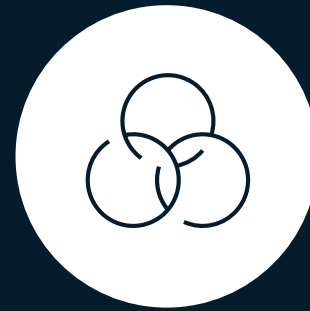
Beyond Connectivity

Mass-scale healthcare data integration with services

Telecos need to transform into a new way of working if they are to go beyond basic connectivity and unravel healthcare data potential



Telco operators lack capabilities to build on their strength in basic connectivity



Structural solution to go beyond basic connectivity involves multi-faceted approach

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