CLOUDERA | AMD

Answering the Call: The ESG Imperative

How the Healthcare Industry Can Become ESG-Powered

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Introduction

Every year since the height of the COVID-19 pandemic, healthcare organizations, from pharmaceuticals to life sciences and hospital networks, are discovering that the key to resilience is in people and technology. Indeed, the pandemic ignited a push for modernization to support valuable research and development (R&D), digital patient experiences, and the growing influx of data. Yet it also exposed industry shortcomings.

With environmental, social, and governance (ESG) efforts also being energized by modernization and post-pandemic realities, the Healthcare industry historically supports the social pillar of the framework. Providing patient care services is often an inherent motivation, if not the soul of official mission statements. In addition, it's no stretch to link climate change to health concerns.

So, how does ESG fit into the Healthcare industry? ESG is the framework hospitals need to further the support of work within the social pillar. Leveraging an ESG framework also will help layout strategies for addressing a growing need for environmental and governance goals.

The key to resilience is in people and technology.

The Healthcare Industry Now

MODERNIZATION

The push for modernization is sweeping across industries, and healthcare is uniquely positioned to capitalize on modernization for the benefit of society at large.

32% of business decision makers have digital transformation as their top priority[1]

91% of business decision makers believe, to at least some extent, that there is a need to use AI to deliver more sustainable business practices that benefit their organizations and the communities they serve[2]

1 in 5 Almost one in five knowledge workers does not believe their company is doing enough ESG or corporate social responsibility (CSR) work[3]

Technological advancements present an unprecedented opportunity to enrich capacity for patient care while defining environmental and governance initiatives at the same time.

DATA

Data growth is generally taking industries by storm, especially the Healthcare industry. Medical technology such as patient messaging, symptom-tracking apps, and wearable technologies securely gather patient-reported outcome metrics (PROMs). These technologies and others are known as the Internet of Medical Things (IoMT) and produce a substantial amount of important data. Managing IoMT data growth in the industry requires technological resources to unlock the value for both patients and the health systems responsible for them.

OPERATIONAL AND FINANCIAL INSTABILITY

The impact of COVID-19 drastically changed the healthcare landscape. Specifically, many hospitals continue to struggle with revenue goals and staffing shortages. However, technology and digital tools are offering some relief by helping to save on cost, improve care and outcomes with analytics, and even solve supply chain shortages. There's even a story of a medical center in New Hampshire entering the test-making business by default to help solve the issue of COVID test shortages. In addition, COVID-19 has contributed to operational instability by impacting staff sizes, resulting in shortages.

ESG

Though healthcare services have a history of primarily embracing the social aspect of ESG, they are increasingly being called on to address other areas of the framework. For example, not-profit hospitals are subject to government scrutiny regarding the validity of their tax-exempt status. Embedding ESG principles and enacting a framework could assist a better response to these responsibilities.[4]

Pharmaceutical organizations have long been appealing to ESG investors, particularly as early innovation adopters, robust R&D, and the success of delivering a COVID-19 vaccine. Despite already having the eye of investors, there is still room for important ESG goals in pharma organizations, such as equal representation and access to clinical trials.

"The idea here is for healthcare to be much more on the forefront of these things. Our fundamental mission is to take care of communities, and that extends beyond our walls… The question for health systems is, are we going to be a follower or are we going to be a leader? We want to be a leader, so let's get on top of it, and let's begin to have these discussions."

Randy Oostra, CEO of ProMedica[5]

Industry Opportunities

Despite security challenges and the slower adoption of technologies like AI and ML, the Healthcare industry is faced with an opportunity to make vital data more actionable. This includes creating a data culture that better positions data analytics and interoperability for improved patient care, operational efficiency, and ESG reporting.[6] But it's not only about using technology to drive improvements. It's also about creating an atmosphere that combines trust and value to foster partnerships across the organization and data chain.[7]

Data represents a huge opportunity. Specifically, big data analytics in healthcare helps:

- Reduce the inefficiencies in clinical operations, R&D, and public healthcare

- Conduct comparative effectiveness of research for more cost-effective and clinically relevant ways of diagnosing and treating patients

- Enables operators to create predictive models for lowering attributes and producing more targeted R&D pipelines in drug and devices

- Tracking disease patterns, outbreaks and transmission, and improving healthcare surveillance

Using technology also enables healthcare organizations to embrace broader ESG initiatives and goals.

ESG opportunities for the Healthcare industry:

Environmental

- Carbon neutrality
- Advanced waste management, including improved disposal of toxic waste

Social

- Expand healthcare access to underserved communities
- Robust supplier diversity
- Comprehensive DEI programs
- Equitable access to clinical trials and programs
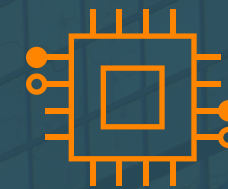- Invest in tech and talent to support cybersecurity

Governance

- Track and share ESG reports and progress
- Appoint ESG leader
- Ethics compliance and fraud policies

Using Technology to Improve Care

From compliant, secure and accessible storage of data in one place, to tools that quickly analyze patient information, technology already has an important role in healthcare. And, there is considerable room for growth and the potential—if not reality— for technology to continue to improve patient care and better support industry employees.

Consumers and industry leaders alike are also advocating for better ESG initiatives.

Cloud technology has clear advantages for supporting organizations as they become data-centric and work to increase ESG efforts. Because of how this technology can connect, store, and process data in addition to supporting analytics, there is greater capacity, increased transparency, and improved insights—all of which positively impact patient and employee experiences and business outcomes.

In addition to ESG-related Cloud benefits such as improved data management and governance, Cloud technology offers important business value. From real-time actionable analytics to comprehensive security and automation, Cloud technology is ideal for industries like healthcare to meet organizational and ESG goals.

Cloudera and AMD: Working Together for the Healthcare Industry

Cloudera Data Platform (CDP) addresses social and governance issues by delivering every data service you need in one secure platform, lowering TCO and saving IT teams from technical debt accrued from disconnected, redundant solutions. Organizations in healthcare need a way to connect disparate data sources for actionable, secure, and compliant analytics. CDP can help these organizations manage data loads to be secure yet flexible and accessible yet adaptable.
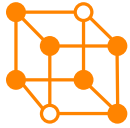
AMD's platform is phenomenal regarding the need to improve performance and environmental efficiency. According to the November 2022 Green500 lists, AMD products are in seven of the top ten, and 15 of the top 20 most efficient in terms of speed and energy usage. In addition, AMD EPYC™ processors and AMD Instinct™ accelerators are on the Green500 list, and now power 6 of the top 10 most efficient supercomputers in the world. It comes down to performance per wattage, and AMD can bring that powerful efficiency to the Healthcare industry.

As of October 2020, AMD Powers Critical Technology for COVID-19 Research

"AMD is proud to deploy, along with LLNL and Supermicro, the technology devoted to accelerating this critical COVID-19 research. With the high-performance computing capabilities offered by AMD processors, we aim to help researchers find creative ways to fight or cure COVID-19 much sooner."

Brad McCredie, Corporate Vice President, Data Center GPU and Accelerated Processing at AMD

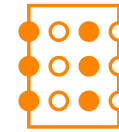The combined power of Cloudera and AMD means improved:

Performance

- Cloudera's data and AI platform paired with hybrid data cloud allow data practitioners to optimize their cloud journey by moving vast amounts of data, no matter where it resides for experimentation and insights.

- Workload performance for genomics and life sciences.

Security Features

- Cloudera Shared Data Experience (SDX) brings an always-on security and governance layer built into CDP so that data access and usage across deployments are continuously maintained without compromise.

- AMD Infinity Guard* delivers a leading edge set of modern security features that help decrease potential attack surfaces as software is booted, executed, and processes your critical data.

Data Management and Insights

- AI / ML on CDP help manage data and provide the opportunity to act as early as possible, improving data governance, processing, and engineering.

- AI and ML create operational efficiency and ease decision-making burdens.

*AMD Infinity Guard features vary by EPYC™ Processor generations. Infinity Guard security features must be enabled by server OEMs and/or Cloud Service Providers to operate. Check with your OEM or provider to confirm support of these features. Learn more about Infinity Guard here.

Read more here.

A Tech-Powered Industry

As the Healthcare industry advances, data management, governance, and analysis will continue to be critical for patient outcomes. Data growth, cybersecurity, and compliance are issues that will need immediate action/steps to manage effectively.

Of additional importance is the ability of the Healthcare industry to embrace ESG initiatives as technology continues to advance.

The Healthcare industry needs to become data-centric and leverage technology to improve treatment and care. Cloudera and AMD are leading from the front, enabling solutions that will help healthcare companies achieve ESG and operational goals easily, quickly, and confidently.

Together, they open a world of possibilities for healthcare organizations to launch world-changing and life-changing innovations.

Unlock the benefits of Cloudera and AMD for your organization.

Learn More

Learn more about how Cloudera and AMD can help your Healthcare organization here.
You can learn more about AMD EPYC Server Processors here and the AMD Data Analytics Hub here.

About Cloudera

At Cloudera, we believe that data can make what is impossible today, possible tomorrow. We empower people to transform complex data into clear and actionable insights. Cloudera delivers an enterprise data cloud for any data, anywhere, from the Edge to AI. Powered by the relentless innovation of the open source community, Cloudera advances digital transformation for the world's largest enterprises.

Learn more at cloudera.com | US: +1 888 789 1488 | Outside the US: +1 650 362 0488

Sources

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[6, 7] Health IT Analytics. How to Create a Healthcare Data Culture. https://healthitanalytics.com/features/how-to-create-a-healthcare-data-culture

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