

Revealing analytical blind spots

"We have so much data and we don't know what to do with it." Sound familiar? You are not alone. The enormously rich volume of data in health care can produce substantial value for most organizations. However, developing and applying an impactful analytics strategy is surprisingly uncommon among health care organizations.

High-tech, retail and banking organizations have created analytic strategies to mine and monetize data to drive business outcomes. Machine learning and artificial intelligence (AI) are becoming intrinsic to their businesses and, as the chart below demonstrates^{1–5}, beginning to have an outsized impact on financial and consumer experience outcomes.

Video streaming service	Wardrobe subscription service	Banking
Leverages recommendation algorithms and machine learning to predict demand based on customer information about tastes, habits and interests.	Combines expressed preferences, artificial intelligence (AI) and human stylists to create personalized wardrobe recommendations.	Uses machine learning and AI to power chatbots, fraud protection and trading to protect consumers and improve the customer experience.
REPRESENTATIVE BUSINESS PERFORMANCE		
H1 2018 YOY revenue growth: 40% to \$7.6B	2018 YOY client growth: 25%	Doubling of stock price: 2014–2018

By these standards, health care may be lagging. But there is a clear path forward for payers, providers and life sciences to tap into the exponentially growing wealth of health care analytics.

Imagine what success looks like for your stakeholders

Consider three scenarios among countless opportunities:



Health plan

Al can streamline and accelerate how claims are handled. Payers can implement advanced analytic solutions that scan provider-submitted claims as they come in, and return claims with potential errors at the time of claim receipt prior to claims processing.



Provider organization

Al can improve the detection and treatment of patients with costly and easy-to-overlook diagnoses, such as atrial fibrillation.



Life science organization

Genomics discoveries are turbocharged through curated sequencing data from clinical trials, academic collaborators, and raw DNA sequences. These terabytes of sequencing data fuel new therapeutic insights.

An explosion of data

The amount of health care data that continues to amass cannot be overstated. This includes genomic, lab, imaging and consumer data — as well as the volume of external data available for thoughtful integration.

The insights embedded within hold tremendous promise for your organization. However, they are only as useful as the structure and baselines you apply to make them relevant and actionable for your objectives.

That wealth of data creates as many challenges as opportunities — from how to organize and enrich the data to how to even get started. But health care leaders are committed to doing what it takes to reap the benefits that have proven so valuable to other industries.



Blind spots that derail a successful analytics strategy

Despite optimism around the potential of analytics, many well-intentioned efforts fall short. What common issues contribute to an ineffective analytics strategy?

- Lack of business clarity into how analytics will drive value, such as no clearly defined use cases for analytics.
- Fragmented capabilities spread across organization, such as no centralized analytics function driving the capability.
- Lack of top team alignment on what to do with analytics and not enough investment into the analytics function by the executive team.
- No clear approach for data management, such as fragmented data assets, no investment in external assets, limited integration, etc.
- Limited talent in key areas such as solution architects, translators, data scientists.

Building a strong health care analytics foundation

Best-in-class companies that have successfully embarked on analytics transformation have overcome these blind spots in part by having a clear understanding of their baseline — including, talent, technology, data assets, and maturity of current analytics use cases. They also have made it a first priority to engage executive leadership in the strategy and champion it throughout the organization.

These and other essential steps, like those noted at here, provide the depth of understanding that enables an organization like yours to build a strong health care analytics foundation.

According to a study of health care chief information officers (CIOs) and other executives:⁷



of health care executive respondents agree that AI technology is the most reliable path toward equitable, accessible and affordable health care.



of respondents are currently in the process of or plan to implement an AI strategy.



expect to see an ROI after four years, with the average expected period being five years.

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Essential first steps

Assess

- Have a clear understanding of your current assets data, people, technology.
 Understand their level of maturity and how easily they can be scaled.
- Create a baseline of current analytics activity across your organization.

 Consider what types of programs, use cases and experiments are happening.

 How fragmented are they, and where may there be redundancy across groups.
- Get a clear perspective of how analytics is linked to your business strategy and goals, to understand how it can enhance what you need to achieve in short and long term, and define the use cases that you are prioritizing in the organizaiton.

Plan

- Develop a set of pilots that test your priority use cases, focusing on quick value versus boiling the ocean to get all the possible use cases.
- Develop a talent plan by defining the greatest talent gaps. Identify core leaders — such as chief analytics officer (CAO) or chief data officer (CDO) — and define integration with core functions, including information technology (IT) teams and business leadership.
- Define a roadmap for your analytics transformation with clear expectations for what you want to achieve.

Act

- Create an investment and return-on-investment (ROI) model for analytics to help establish buy-in that, despite the investment required, ROI will be there.
- Develop an operating model to integrate analytics within your business workflow.
- Clearly commmunicate, socialize and get stakeholder and executive buy-in for your transformation roadmap.

Blind spots revealed, lessons learned

There is a great advantage in having others pave the way for a successful analytics strategy: You don't have to repeat the mistakes they made to apply the knowledge they gained. For example, adoption of analytics programs happens through engaging business leaders and front-line personnel, not through the acquisition of large technologies. So think of your analytics strategy as a business opportunity, not a technology problem.

Similarly, make it your objective to establish an innovation backbone, not a centralized control center. That means don't focus fully on centralizing all resources. Instead, allocate high-priority resources such as data scientists and architects in a center of excellence.

Experience has also shown that the key to getting value from analytics is through experimentation and quick pilots on prioritized areas. This enables you to capture value quickly and show the ROI of analytics for your business. Put simply, don't focus on a 10-year roadmap and expect to get value at the end of the 10 years.

Perhaps most importantly, to derive the most value from analytics in the short term, focus on select use cases — those areas where you likely only need 5 percent of data in your organization. Like best-in-class companies before you, you will find that you don't need to revamp and clean all the data in your organization to get started and get value.

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The power of partnership

Some organizations staff up to build the internal competencies. Others seek partners to guide them in their analytics transformation. Whether pursuing an analytics strategy independently or through partnership, organizations must hone the following foundational capabilities:













PROPRIETARY ANALYTICS

DATA ACCESS

TECHNOLOGY/

TALENT

ALGORITHMS/ MODELS

SERVICES

MANGEMENT AND REPORTING

Consider where it makes sense to invest internally and where you can gain value quickly by partnering. Some capabilities such as technology, talent and analytics services require significant time and investment to build in house. The ability to "lease" instead of build your foundational capabilities enables you to jumpstart access to mature platforms and algorithms.

Your path forward to success

The path to developing and applying an impactful analytics strategy doesn't have to be perilous. Harvesting the insights embedded in your data to yield true ROI can be achieved through strategic partnership, paving the way for you to advance your analytics transformation sooner than you thought possible.

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