



Unleash Data Potential

Investing in the Right Technology Partners

Healthcare data has the power to transform healthcare delivery; it is the catalyst that will enable providers to administer care that is more preventative, predictive and personalized. However, harnessing the potential of the data coming out of healthcare and in particular medical imaging is a massive challenge due to the volume, velocity and variety. A staggering 75% of all healthcare data is unstructured and unusable,¹ leaving providers drowning in data, lacking information and turning to investments in big data analytics and AI to unlock the potential of their data. Those that effectively exploit AI and smart analytics across medical imaging will create a competitive advantage by uncovering waste, unwarranted variability and translating new knowledge for improved clinical and financial outcomes. With the various analytics solutions available today that vary in scope and capabilities, collaborating with the right technology partner is critical to building a bridge between medical imaging data, business strategies, tactics and outcomes.

Investments that Create Long-term ROI

Technology investments in advanced analytics that will create a lasting ROI are ones moving far beyond traditional reporting, data manipulation and dashboards to deliver deep learning algorithms supporting predictive and cognitive learning (see Figure 1: Moving to Cognitive Learning).

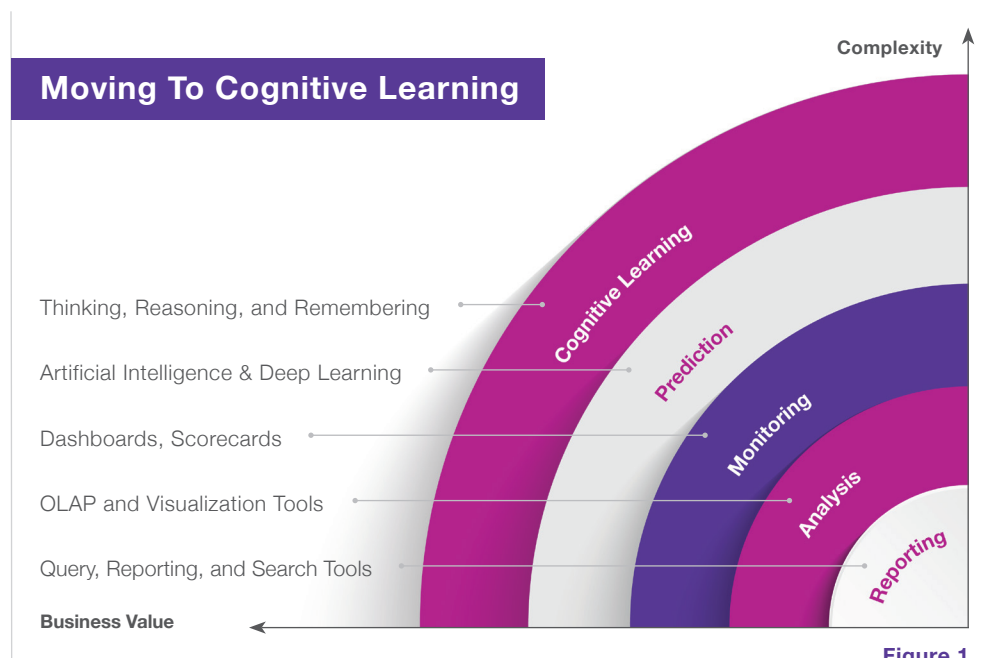


Figure 1

1. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4371483/>

Deep learning algorithms are vital for driving improvements in healthcare. A more advanced subset of machine learning, deep learning algorithms create neural networks that are continuously learning and improving as more data comes into the system which are delivered direct to users. This enables healthcare resources to shift their focus from analysis paralysis to implementation of intelligent insights.

Deep learning neural networks bring the art of what's possible to imaging data. It simply becomes a challenge of asking the right questions to use big data analytics and smart algorithms to uncover where and how an organization can improve. Hidden answers in data can reveal what the safest and most efficient care pathway may be for a disease, how to deliver more throughput with less rescans, when to upgrade equipment and so forth.

Smart Data Requires a Foundation of Standardized Data

Deep learning algorithms require a foundation of big data aggregated from a variety of sources that is standardized to be accurate, reproducible and consistent. Without this, even the most advanced data analytics tools will simply get users to the wrong outcomes faster. There is currently no industry mandated terminology or common data elements standardizing imaging data. If unaddressed by technology platforms, this limits capabilities to go beyond basic reporting metrics.



Setting a New Standard with Comparative Analytics

Comparative benchmark data will change the paradigm of how healthcare providers view and interpret data, made possible by the cloud. Solutions delivering big picture benchmarking and peer comparison provide dimension to the magnitude of accomplishments as well as insights into the gaps hindering how an organization can achieve next level performance. At a glance, healthcare executives and administrators can effectively assess performance across an enterprise, individual hospital and department and identify improvements as close to real-time as possible. Comparative benchmark data combined with predictive analytics is key to ensuring and sustaining high-value care delivery.

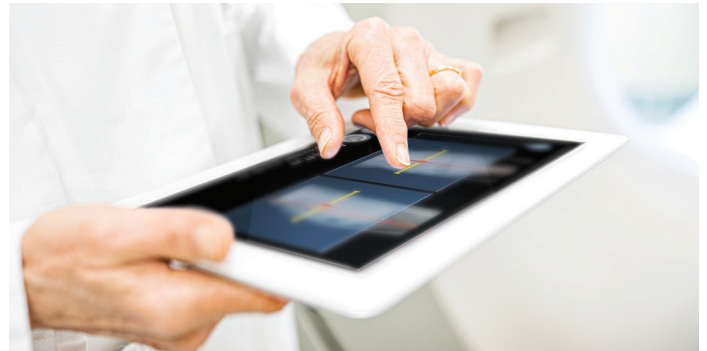
How to Find the Right AI Analytics Solution

For organizations looking to move beyond traditional analytics to capitalize on the advances in AI and smart analytics, it is critical to ask the following questions regarding the technology of potential partners:

- How big is the dataset? Confirm the dataset is not based on a single enterprise data. The bigger the data, the smarter and more accurate the AI.
- How diverse is the data? The accuracy of predictive analytics vastly improves with data diversity.
- How is data normalized across the dataset? Is this done automatically through AI or is this determined by the end user? If normalization of data is set by the end user, there will be limitations in the software solution such as the inability to deliver comparative analytics.
- Are models built by skilled data scientists with a background in healthcare?
- Is the solution cloud-based to manage the diversity and massive data storage requirements of data required to deliver deep learning and cognitive analytics?
- What is IT involvement in the installation and maintenance of the solution?

AI-powered analytics solutions that deliver more than just hype-driven transformational improvement— clinically, operationally and financially. Understand if the technology can uncover and address important questions:

- Where is there healthcare waste?
- Where are there opportunities to grow a service line with solutions to implement necessary changes?
- How can diagnostic accuracy be improved without compromising patient safety?
- How can workforce performance be elevated to ensure consistency of high-quality standardized care?
- What tools are available to bring learnings and best practices to users for continuous improvement?
- Does the solution deliver comparative analytics to peer groups?



Get Smart About AI Powered Analytics in Imaging

Learn how Imalogix can help you set a new standard in your imaging department today with its ever-growing and evolving neural network. Fuel smart decisions to improve patient safety and deliver care more efficiently by unleashing your data.

Contact us today >
to get started.