Digital Insights

Unlocking value from data to drive your business

CGI

Contents

· ·

Digital insights overview

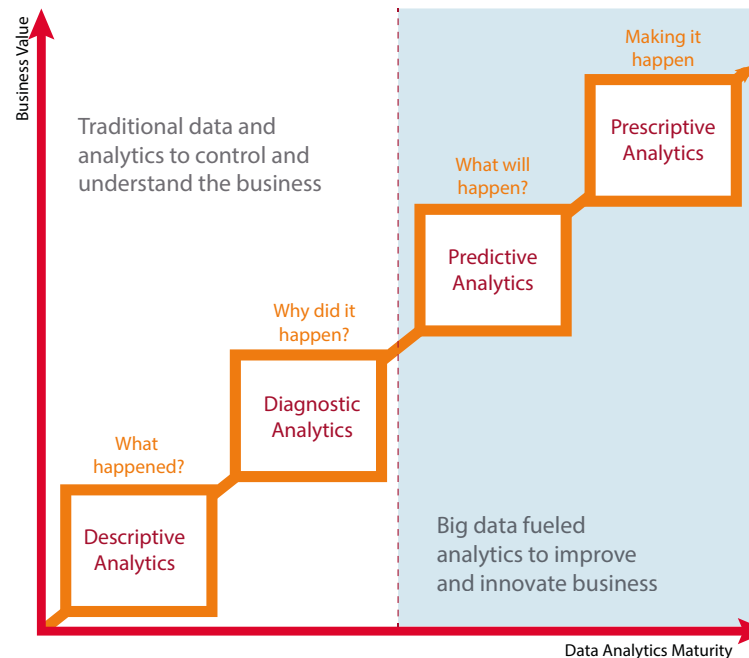## Unlocking insights to drive your organization to new heights

It's no secret that there is more data to store, report and analyze than ever before; and there is no end in sight to the proliferation of sources.

Social media, sensors, locations, public sources, enterprise data and many more data sources clamor for attention. But, how do you cut through the complexity to get to the true value—the digital insights that matter?

At CGI, we help clients answer this question every day. In industries from manufacturing to banking to healthcare to government, our clients are finding new ways to put data to work for the benefit their organizations. It takes knowledge of the business, data management skills and analytical know-how to find the right insights and use them to improve results.

We call our approach Data2Diamonds* because we see that value is the ultimate measure of the success of a data analytics initiative.

In this overview, we hope to give you a flavor for the data insights opportunities available, the Data2Diamonds approach, and some of the transformational experiences of our clients.

Business Value

Traditional data and analytics to control and understand the business

What happened?
Descriptive Analytics

Why did it happen?
Diagnostic Analytics

Predictive Analytics

What will happen?
Prescriptive Analytics

Making it happen

Big data fueled analytics to improve and innovate business

Data Analytics Maturity

*Data2Diamonds is a registered trademark of CGI Group Inc. or its related companies.

41%
of executives want **visibility across all aspects of the business**, by integrating data on customers, facilities and suppliers

62%
of executives are looking to improve **digital customer experience** using insights from customer data to personalize the experience across channels

Source: CGI Global 1000 (2016)

CGI

Business **drivers**

Addressing key priorities with data-driven insights

CGI clients interviewed in our Global 1000* outlook program identified global trends that point to accelerated digital transformation. Business and IT leaders are aligned on the top business priorities to drive growth shown in the graphic to the right.

The digital transformation journey

We believe that successful enterprises in the digital world combine a customer-centric culture with the pursuit of operational excellence. The challenge is to evolve systems and processes while focusing on integrating and using the data in those systems to improve business outcomes:

▶ Customers expect a consistent experience and an integrated data-driven approach is necessary to retain or increase business with them.

▶ Digital collaboration requires greater use and sharing of data through secure environments.

▶ An effective strategy for using data insights can drive growth from existing products and services and help to grow revenue from new ones.

▶ Data management and predictive analytics can contribute to securing enterprise and customer/citizen information.

▶ The right data strategy can optimize your operations and improve how you run your organization. This can reduce the costs associated with delivering existing products and services, and make it more cost-effective to bring new products and services to market.

* The CGI Global 1000 outlook brings together the findings, insights, and CGI's point of view on the strategic topics that emerged through face-to-face interviews CGI's consultants conducted with more than 1,000 business and IT leaders across 10 industries and 20 countries between January and April 2016.

Our clients' key business change initiatives based on digital insights

▶ Digital customer experience

▶ 360° enterprise visibility

▶ Harnessing the Internet of Things

▶ Monetization: new data-based services

Source: CGI Global 1000 (2016)

Digital insights strategy

The Data2Diamonds approach

An effective digital insights strategy should draw upon the multiple dimensions of people, process, data and analytics. CGI's approach to the design and implementation of digital insights initiatives is called Data2Diamonds.

Digital enablers such as cloud, social media, mobility and the Internet of Things require the availability of data, along with the capacity to consume, process and analyze that data to produce valuable business insights. Our Data2Diamonds approach is all about practical solutions that achieve material business value from the use of data.

The essential idea behind Data2Diamonds is that data contains valuable insights ("diamonds") that can produce business improvements when put to work. The more high-quality data you can access, and the better you can analyze it, the greater the potential for value. Our methodology comes from decades of experience implementing systems that derive value from data. Its high-level principles are:

Collaboration: understanding and bridging the business domain and the technical side of data and systems

Evolutionary approach: pursuing big data opportunities while leveraging existing investments

Customer and user experience: recognizing that people will adopt what they can easily use and what brings them value

Agility: being highly adaptive to changing business environments and needs

Sustainability: designing for quick outcomes, as well as long-term goals

How we work together

CGI collaborates with your team to create a digital insights solution that works for your organization.
Our approach balances customer demand-driven agility at the front-end with the need for integration, compliance and security at the back-end and across the organization.
We also provide a forum for bringing insight and practical experience to promote meaningful dialogue between the business, operations and IT.
Finally, we can assist in making critical connections across industries technologies and partners to link data sources and data scientists to deliver value to customers, citizens, suppliers and employees.

CGI

Insurance

Insurance companies can now combine knowledge gained from their IT systems with the processing of new external and heterogeneous (open data) sources. Analysis of digital behavior will:

► Increase flexibility in service models and the availability of low-cost options through self-service

► Maximize the business value chain to reduce treatment costs and infrastructure

► Enrich the patterns and trends of qualification fraud and fraud prevention

Health

The hospital of the future will be one where continuous improvements in patient experience and operational efficiency are informed by data. The sources, types and availability of data will continue to grow rapidly. Providers must address:

► Integration of data from "silos" to measure outcomes and create 360 degree patient profiles

► Cultural barriers and changes to governance

Banking

Digital channels and social media combine to create both opportunities and challenges for banks' product lines. Behavior patterns and consumer preferences sourced from all digital channels will allow banks to align their channel strategies to match customer needs while optimizing costs.

Priorities include:

► Meeting shifting regulatory compliance demands with agile data reporting and analysis

► Achieving real-time trading risk management with comprehensive analytical views across the business

► Identifying suspicious and fraudulent trading early to minimize exposure to loss and reputation damage

► Enabling a client-centric model where clients see and get what they want

► Satisfying corporate client needs for more timely information

► Enabling a faster and smoother onboarding process for corporates and consumers

Banking

Health

Insurance

Dig
insigl
prac

Utilities

Smart meters and grids create a massive flow of data with a high granularity that has to be analyzed in near real-time. Data analytics offers further opportunities in the utilities value chain to:

► Optimize production performance by collecting sensor data and building predictive models

► Secure efficient and reliable networks by using intelligent analytics on meter and data technologies

Retail and consumer goods

Retailers need to use purchase and inventory data to optimize supply chains and manage sale prices to continually raise the competitive bar. Key challenges include:

► Improving the accuracy of product data to support cross-channel merchandising programs

► Enhancing the reliability of vendor information to support pricing

Manufacturing

As product designers home in on the most important and valuable features based on concrete customer inputs, they must also reduce development costs through nontraditional approaches including open innovation.

Key opportunities include:

► Intelligence for smart manufacturing is key to reducing downtime and breakdowns in the supply chain

Government

Budget pressure and cost reduction are key drivers for governments seeking innovative solutions to transform public services by:

► Improving outcomes through multi-agency data sharing

► Enhancing the citizen experience through services and digitalization of citizen relationships

► Enabling more citizens and enterprises to interact with governments through multi-channel self-service

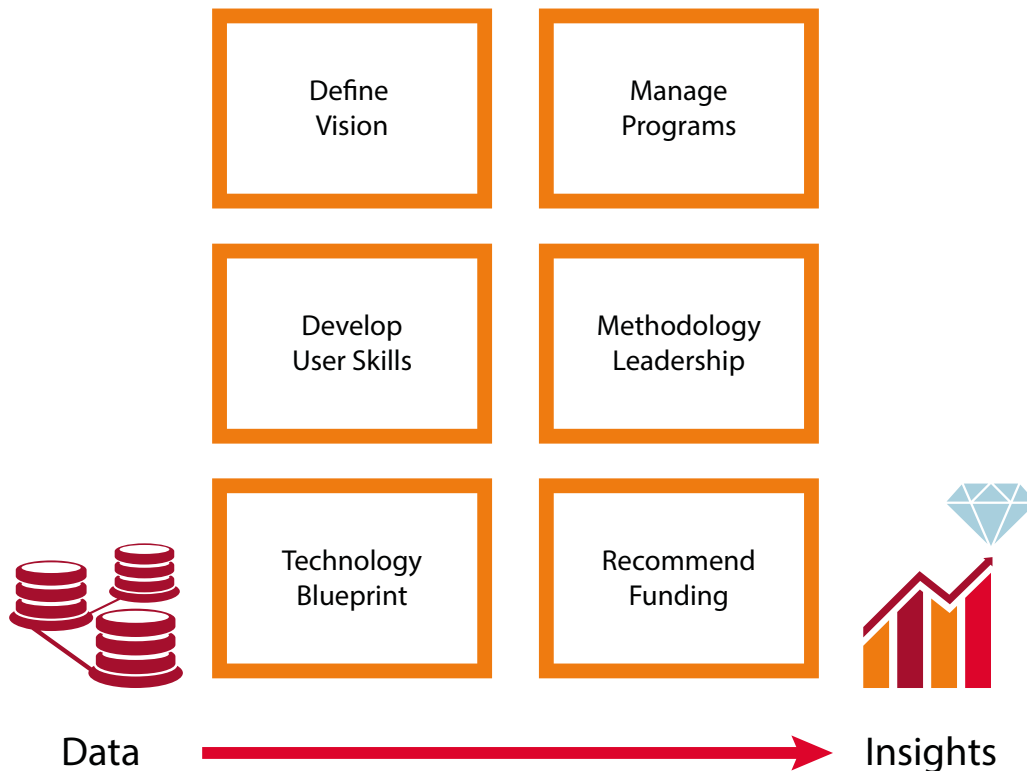► Leveraging intelligence for security using predictive data management

Utilities

Retail and consumer goods

Manufacturing

Government

gital hts in ctice

7

CGI

Discovering the **diamonds**

Putting business value first

Business functions such as performance reporting, compliance reporting and drill-down analysis provide essential information for day-to-day management, but focus primarily on past events and do not produce material competitive advantage. Realizing value from data involves linking the insights and predictions produced through analytics with the real economics and mission of the business. The key is to take a practical approach that is focused completely on business results, to create an insights-led enterprise.

Define Vision	Manage Programs
Develop User Skills	Methodology Leadership
Technology Blueprint	Recommend Funding

Data ➡ Insights

Our principles

We base our approach on the following principles:

▶ Business outcome focus to ensure tangible capabilities are created

▶ Business value focus to ensure financial returns are achieved

▶ Hypothesis driven to ensure rapid testing and validation of options

▶ Connecting business strategy through information and value, to ensure the correct solutions are defined, established and adopted

CGI's approach

▶ D2D Quick Scan measures the maturity and quality of your existing data and analytics landscape, involving all relevant stakeholders from the IT, analytics and business sides of the organization. This results in a shared understanding, setting a baseline for measuring future performance (e.g., business value and adoption, organization and processes and technology), and recommendations for improvements and cost savings.

▶ D2D Proof of Value (PoV) – So you can see the potential before you begin implementing a digital insights program, CGI helps evaluate the value of your data sources with a PoV. A PoV provides visibility and awareness into the value of a data and analytics use case for your organization. We provide an expert overview of solutions and potential benefits, enabling you to discover the potential business value, address data and analytics challenges with key stakeholders, and establish a shared view of the business case. We connect business value impacts to the critical information needed to support your business goals, enabling you to make timely and informed decisions. We test the use case of your choice in our lab, delivering results within 4 to 6 weeks.

▶ D2D Roadmap offers a balanced approach to building your roadmap for success in data and analytics, addressing key elements such as: reducing total cost of ownership, improving quality of service, and embracing industry and technology trends.

CGI

Why **CGI?**

Collaboration. Experience. Value.

▶ We co-create digital insights working closely with your business and technology stakeholders.

▶ Our experience delivering complex, mission-critical systems ensures the roadmaps we develop are realistic, achievable and effective, and the solutions are scalable and secure.

▶ With 5,000 experts in data integration, management and analysis across multiple industries, we understand the unique challenges that organizations face in each sector.

▶ We can assist with your digital insights strategy wherever you are on your journey—whether you're at the start, or you already have a strategy and just need help evaluating and implementing it.

▶ Our starting point is your business strategy. You can be confident that our work is aligned with and informed by your business goals.

▶ We have the cross-industry expertise it takes to identify and exploit opportunities.

▶ As one of the world's largest independent end-to-end services firms, our expertise across the legacy and digital environments uniquely enables us to help you at every point in your digital transformation journey.

Driving your digital transformation

CGI helps clients achieve superior value through end-to-end digital transformation. Our expertise across legacy and digital environments uniquely enables us to support clients at every point in their digital transformation journeys.

We have the methodology and capabilities to assist clients in defining their digital strategies and roadmaps, as well as the breadth and depth of experience to deliver their transformation through key enablers. CGI's enterprise digital transformation capabilities and industry expertise help clients embark on their transformations and succeed in becoming customer-centric digital organizations.

Learn more about our digital transformation capabilities and industry expertise by visiting:

cgi.com/digital-transformation or by contacting us at info@cgi.com.

Learn how CGI can help your organization gain valuable digital insights:

Web: www.cgi.com/data-analytics
Blog: www.cgi.com/blog/data-analytics
Email: data2diamonds@cgi.com

CGI

About **CGI**

Founded in 1976, CGI is one of the largest end-to-end IT and business process services providers in the world, helping clients become digital organizations through high-end consulting, enabling IP solutions and transformational outsourcing. With a deep commitment to providing innovative services and solutions, CGI has an industry-leading track record of delivering 95% of projects on time and within budget, aligning our teams with clients' digital transformation strategies to help them better run, change and grow their businesses.

CGI

www.cgi.com