Location intelligence
Unearthing hidden opportunities of data to improve customer experience
Driving customer engagement and innovation with unique location insights

Imagine booking a ride, ordering a meal delivery, mapping a route or making an online purchase without having to enter your location? Every minute, devices such as cameras, smart phones, cars and connected things are generating staggering volumes of location data. In this new interconnected, omni-channel world, market leaders are looking for ways to leverage location intelligence derived from geographic information system (GIS) technology to gain meaningful insights that drive customer-centric strategies.

Analytics will power the future

The 2019 CGI Client Global insights reveal that meeting the expectations of customers and citizens for digital services remains the top industry trend this year in terms of its impact on organizations across industries—as in 2018. It reveals also that applying analytics is a key lever to achieve successful digital transformation. Organizations in all industries continue to see increasing opportunity to use analytics in a promising range of ways making it the most active digital technology implementation area, the top-cited transformation initiative and the top planned innovation investment option.

Applying analytics emerges as key to competing in the digital age

Source: 2019 CGI Client Global Insights in-person interviews with more than 1,550 client executives worldwide across 10 industries.
Connecting the dots: location is the new catalyst of analytics and business intelligence

Location intelligence or geospatial analysis is a powerful data analytics multiplier for improving the citizen, employee and customer experience. However, organizations today are challenged with obtaining easy access to accurate and relevant information augmented with location data, and to the subject matter experts (SMEs) they need.

Building the right geographic information system (GIS) and location data strategy are an essential part of creating a data-driven culture that will enable operational efficiency, target customer engagement and facilitate product and service innovation.

Adding the powerful dimension of location intelligence helps to connect the dots between various data sets (that may seem unrelated) to reveal underlying patterns, connections and opportunities.

Transforming location intelligence into business outcomes

Harnessing spatial data provides the following key benefits:

- Enables the business to have a comprehensible global or local vision of customer engagement
- Streamlines workflows within and across organizational silos driving collaboration with visual analytics
- Optimizes responsiveness to customer needs, personalizes the experience, and builds loyalty
- Supports real-time risk management and smarter decisions to drive business growth
- Reveals the relationship and value of location to assets, transactions, facilities and people
- Creates and uses digital twin with location dimension to ground them in reality
- Boosts customer insight with geo-enabled business intelligence, automation and artificial intelligence
- Informs market position, lowers cost and boosts revenue with seamless indoor/outdoor high-definition location

Did you know?

80% of data captured by organizations has a location component and only 10% of this information drives business decision making
Delivering location-enhanced insights for data-driven transformation

CGI helps organizations evolve from just optimizing their operations to rethinking their products, services and experiences and driving innovation with the use of location intelligence-powered analytics. We are an end-to-end consulting firm with the experience and knowledge to leverage geospatial data assets and build a comprehensive roadmap to success in your data-driven digital transformation. As a strategic partner, we provide the means and the expertise to help you capture, process, store location data and build insights, as well as drive changes in your organization, using location-aware services. Our consultants also leverage the latest emerging technologies like digital twins, artificial intelligence and augmented reality to further analyze and create concrete business value from data.

Building meaningful value and transforming the business model one step at the time

<table>
<thead>
<tr>
<th>Quick scan</th>
<th>Proof of value</th>
<th>Vision and Roadmap</th>
<th>Sprint and Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Measure the maturity and quality of your existing GIS landscape</td>
<td>• Provide visibility and awareness into the value of location data and analytics use case of your choice</td>
<td>• Offer a balanced approach for building a roadmap for success using location data and analytics</td>
<td>• Transform your sector-oriented (cost center) GIS to an enterprise global platform (strategic value) capable of providing services to your entire organization</td>
</tr>
<tr>
<td>• Through a shared understanding, provide a baseline for measuring future performance and recommendations for improvements</td>
<td>• Provide expert overview of solutions, benefits and business value</td>
<td>• Address key elements such as:</td>
<td>• Provide expert insight on how to leverage continuous improvement, delivery and management to streamline the value delivery of geospatial applications</td>
</tr>
<tr>
<td>• Identify key areas of intervention and benefits to focus on to derive the expected business value</td>
<td>• Address challenges with key stakeholders. Establish a shared view of the business case. Test the use case in our lab</td>
<td>– Reducing total cost of ownership</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>– Improving quality of service</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>– Making information more accessible</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>– Building the customer experience</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>– Embracing industry and technology trends</td>
<td></td>
</tr>
</tbody>
</table>

CGI GEOSPATIAL CENTER OF EXCELLENCE (COE)

Accelerating time to market for insightful and meaningful geo-enabled business solutions.

With hundreds of experts across 13 countries on four continents, CGI’s global network of geospatial SMEs has delivered transformative business results for clients for more than 25 years. Today, location data is paramount for digital transformation and operations. Our COE experts help clients enhance their information assets and identify valuable synergies between geospatial solutions and other business-critical areas, such as business intelligence, advanced analytics, customer experience and remote asset management.
A geospatial analytical data warehouse helps a large entertainment organization profitability expand geographic markets

Objectives: An international entertainment industry client wanted to establish new venues around the world. To ensure the expansion would be profitable (after several costly setbacks caused by poor ticket sales), the company realized they needed more contextual data for better decisions including demographics, consumer interests and spending patterns, traffic routes and future development plans to gain a deeper understanding of potential new markets and customers. The company turned to CGI to help identify and predict the best potential venues using business intelligence and a geo-statistical approach.

Solution: CGI collaborated with the client to build a geo-enabled business intelligence solution capable of supporting advanced geospatial analytics. Using our iterative approach, our consultants first conducted design thinking sessions to help the company precisely identify its business goals. The process included identifying the right customer data to collect and developing standards for data models and attributes to ensure data from various channels, both internal (mobile applications and website) and external (ticket resellers and agencies), could be combined in a single analytical model. It also included establishing “profiles” to define and standardize marketing references to enable analyzing and cross-referencing customer information across geographies. The result was a geospatial analytical solution, which integrated data from worldwide ticket sales, company website visits and transactions, fan club mobile app usage, product revenues and monthly surveys. This information was cross-referenced with worldwide marketing segments and luxury spending data. We developed a roadmap and proof of concept demonstrating the main capabilities of the solution. Based on our recommendation, the company built a marketing intelligence competency center to support an organization-wide strategy to use location intelligence to boost their growth strategy with data-driven insights.

Key benefits: The project demonstrated that it is possible to predict the success of future venues and to personalize the customer experience in any geographies using location analytics. The location analytical solution supports advanced analytics and integrates heterogeneous data sets into a federated marketing intelligence data model, which has led to the following benefits: revenue growth, data-driven decision-making and venues aligned with customers’ expectations.
Advanced customer analytics helps a financial services firm grow market share and develop data-driven marketing strategies

Objectives: A large insurance and wealth management group wanted to build value from customer data by using location intelligence and big data analytics to identify new revenue streams and provide its sales force with high-quality upselling and cross-selling leads. The marketing department did not have the required advanced analytics expertise to use all the data sets available and to identify the relevant commercial data sets needed to acquire and create predictive analytics indicators on customers, products and services. The company turned to CGI to develop their skills, demonstrate our data-driven approach to customer analytics and help create business value.

Solution: Using our deep industry knowledge and technology expertise, CGI proposed a new way to segment customers based on demographics, income, household composition and assets (insured risks), using rooftop location from both agents and customers. We designed an analytical model and methodology to refine marketing personas, identify good quality cross-selling and upselling opportunities and create a tactical market penetration indicator (tMPI). This tMPI is a location-driven algorithm that provides insight on market performance and identifies high potential areas to focus on. CGI leveraged the Microsoft BI platform with a self-service BI approach and geospatial tools to design the solution.

Key Benefits: The project demonstrated the value of location intelligence using customer data to qualify potential leads and areas to focus business development efforts. This new approach in the insurance industry enabled our client to prioritize investments and design a marketing strategy using predictive analytics. Additional benefits included performance measurement of marketing campaigns and the ability to monitor the evolution of market penetration.

Global Leader in GEOSPATIAL SERVICES

CGI has delivered geospatial services since 1992, and is a recognized leader around the globe. We have demonstrated expertise in business intelligence, geospatial and customer analytics and an extensive track record of delivering major geospatial projects. Our intimate knowledge of our clients’ business and local markets along with vast experience in designing business-oriented solutions using geospatial technologies and know-how, geospatial analytics and collaborations with the world’s leading geospatial solution providers, help to develop actionable insights and to create value with data for clients across industries.
ABOUT CGI

Founded in 1976, CGI is among the largest IT and business consulting services firms in the world. Operating in hundreds of locations across the globe, CGI delivers an end-to-end portfolio of capabilities, from IT and business consulting to systems integration, outsourcing services and intellectual property solutions. CGI works with clients through a local relationship model complemented by a global delivery network to help clients achieve their goals, including becoming customer-centric digital enterprises.

© 2019 CGI INC.