

Data analytics and visualization

Data analytics and visualization involve more than drawing a chart or picture. Visualization enables us to more effectively process large volumes of information, identifying trends and areas for improvement. A multi-dimensional image can be rotated and twisted to uncover relationships among groups of data rather than focusing on individual occurrences.

Presenting new perspectives to identify trends

Data visualization is a powerful technique, and the ability to form hypotheses and produce simple, informative graphics is more important than technical wizardry. The most successful pictures are those that lead to new insights and actions.

By presenting data in such dynamic ways, data visualization techniques enable analysts to discover new trends or patterns in less than half the time of traditional statistical techniques.

More important, because analysts can "see" their data and follow how the patterns emerge, they are likely to have greater confidence in the meaning and reliability of the results.

In addition, interactive visualization, in-memory technology and mobile enablement are important advancements, enabling self-service business intelligence and analytics. Today's users expect information on the right device at the right time and location.

How CGI can help

CGI helps organizations identify patterns in data, and display those patterns visually. We take large volumes of business and customer records and apply sophisticated statistical and visualization techniques to present a new perspective.

We work with clients to develop a wide array of visualization products—geospatial, temporal, multidimensional, hierarchical, network and other special-purpose visuals—created by our experts or via data analytics-as-a-service solutions.

Our portfolio of business intelligence services includes consulting, integration of all major technology applications, managed services and cloud-based systems.

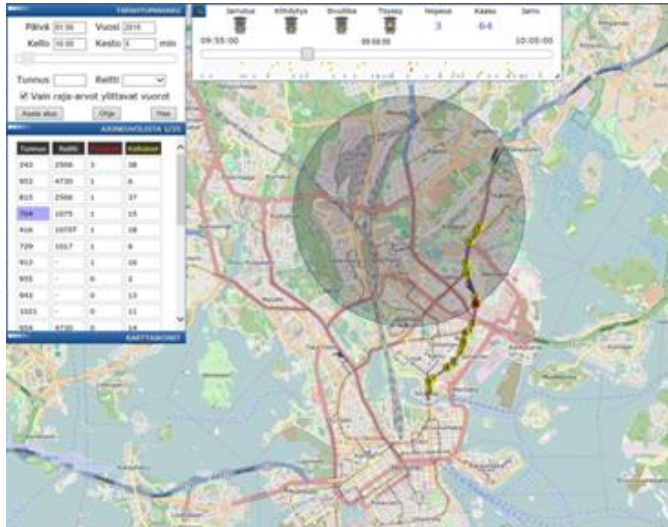


MAKING INSIGHTS ACTIONABLE

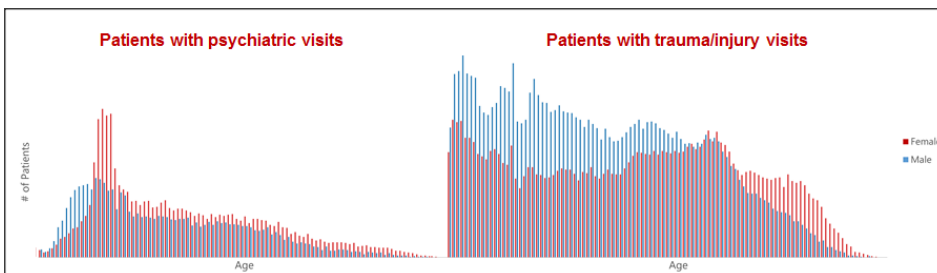
Valuable insights can be made actionable by delivering them to the right person, at the right time, on the right channel. This can be done by leveraging advanced visualization techniques and self-service BI technologies.

CASES IN POINT

CGI and a city bus operator visualized and analyzed large quantities of data from sensors, connected to their ERP system, on a map to identify areas for improvement.



CGI and a hospital district collaborated on a clinical data study to visualize and understand patterns in healthcare visits. The focus was on psychiatric, trauma, injury and circulatory visits with strong cause-and-effect links to patient behavior and controllable lifestyle factors.



CGI assists organizations with transforming various sensor inputs into visualized actionable insights in real time. In this example, we demonstrated this capability for better management of office space.



ABOUT CGI

Founded in 1976, CGI is one of the world's largest IT and business consulting services firms. We help clients achieve their goals, including becoming customer-centric digital organizations, through high-end IT and business consulting, systems integration and outsourcing services combined with a unique client proximity model and global center of excellence network.

For more information about CGI, visit www.cgi.com/data-analytics or email us at info@cgi.com.