PERSPECTIVE

Visual Analytics - Point of View
In the business intelligence (BI) space, there is a paradigm shift in the market, as BI evolves from static reporting and dashboards, to churning contextual insights and providing cognitive intelligence. Now, users would like to discover patterns and insights from within the vast amounts of data the organization has gathered over the years. They also need quicker answers to make smarter decisions – at the speed of thought. This evolution is catalyzed by two key phenomena. The first is the advent of next-gen technologies that have provided a host of new capabilities and have created a new age user wish list that includes abilities to search, discover, and collaborate. The second is the sudden spurt in data pouring in from different directions and growing rapidly. This, in turn, has created new possibilities of gaining deeper insights into customers, organizational processes, market dynamics, and monetizing information assets.

The enabling of analytics and insights-driven enterprises has created new opportunities to drive superior business performance by empowering users with rapid and actionable insights. Today, organizations face three major challenges while taking an enterprise-view of BI applications. Firstly, not all the users are data analysts; so the organizations need to provide users with ways to consume data in an impactful and intuitive manner, instead of just stand-alone insights. This empowers even an average, not-so-tool-savvy user to make informed decisions.

Secondly, users have diverse needs and no single tool can cater to all of them with purely out-of-the-box functionalities.

The third challenge is with enterprise adoption of BI self-service models. A complete adoption, throughout the enterprise, can empower end users to reduce dependencies on IT and make the organization more agile.

At Infosys, we consider visual analytics to be a key enabler for this change. The power of visual analytics can be leveraged in weaving the story together – from data discovery and point analytics to creation of an actionable storyboard – along with effectively diagnosing as well as solving business problems for the users. Hence, it enables enterprises to become insights-driven by broadening the scope and reach of BI to enterprise-wide users through:

- **Enhanced enterprise adoption:** Infosys believes that ensuring enterprise-wide adoption of BI tools is key to making enterprises ‘insights-driven’. Visual analytics heavily propagates and facilitates self-service, empowering users to make their decisions with minimal dependencies on IT or power-users. As a result, it takes BI usage to all the levels of an organization, even to the frontline users, thus expediting enterprise-wide adoption.

- **Intuitive intelligence:** Another key element in evangelizing the benefits of BI across the organization is to make its usage intuitive, so that the users can gain insights as well as actionable information to perform their jobs effectively and efficiently. Visual analytics goes beyond just slick graphs and leverages interactive and advanced visualization techniques to provide actionable insights through visually intuitive and interrelated data representations.
• **Enriched end user experience:** Another aspect in improving BI effectiveness is to make insights available anytime / anywhere and improve the time to insights, so that the users have enough time to take actions based on them. Visual analytics focuses on optimizing the number of clicks, optimizing the reports and dashboards space, and providing thematic interactions to reduce the time to insights.

While enterprise BI tools are constrained in their data representation capabilities, specialized tools in the visual analytics space, lack enterprise scale. The Infosys visual analytics offering bridges this gap effectively, maximizing ROI from clients’ existing BI investments:

a. **Enriching and scaling the current investments** – Through pre-built advanced, open source visualization plugins, enterprise BI tools can be scaled and enriched to meet the current ROI requirements. With mobility applications and governance frameworks added to support the coexistence of next-gen visualization tools with enterprise BI platforms, we can double the returns. Not only do we reap the benefits of both worlds, but also help in evangelizing the benefits of BI across the enterprise.
b. Enabling BI adoption across the enterprise – Through pre-built assets, such as iGuide (a glossary to enable users to understand the content) and the UX Playbook (best practices for visualizations-driven analysis) that are based on industry best practices and vast engagement experience. Infosys has partnered with its clients and enabled them to reap the benefits of BI at all levels, by applying visual analytics components in different situations.

A networking products major had a big repository of non-standardized reports – visualizations. Infosys contextualized its pre-defined UX Playbook for enterprise and mobility users to deliver organizational standards for data representation and visualization. The standards became a reference point, and the approach is now used across various initiatives to make BI more inclusive, including analysis, data plays, and tool interactions.

The senior executives at a US-based fashion specialty retailer were unable to access performance reports on the move and had to rely on manually created ad-hoc reports or hardcopies. The existing tools lacked the ability to drill down into organization or merchant hierarchies. The Infosys team engaged with the client to enable mobility for the users along with the ability to drill down to the details, without impacting the visual settings of the report. This provided the executives the capability to not just access but also analyze the information on-the-go.

Infosys partnered with a leading legal information publisher in a major transformational program, where user adoption was a key success factor. Infosys offered an innovative solution, whereby the team prepared knowledge capsules and compiled ‘tool tips and tricks’ that were further compiled into user guides and were made available on the enterprise portal for ready reference. This ensured a smooth transition to the new tool and high levels of user adoption.

About the Authors

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