Vitellus – Democratisation of Analytics

By Tata Consultancy Services | Category: Implemented Innovations

Enterprises often fail to realise the tangible business value from soaring volumes of data as they grapple with traditional information representation techniques that are difficult to interpret, thereby leading to extended cycle times. The scarcity of data visualisation and data scientist skillsets across the globe further aggravates the situation. The solution to these challenges is encapsulated in TCS' vision of Democratisation of Analytics or in other words, giving the power of analytics into the hands of the business/end users who are the real decision makers, at all levels - right from rank and file to CxOs. To enable this, a unique solution – Vitellus© (Visual Intelligence TELLS US) was developed. Vitellus is a consumerised, holistic and self-service knowledge and insights discovery platform for business users to improve objective decision making, and strengthen competitive advantage. It is a futuristic solution leveraging mixed and virtual reality-based 3D visualisations that bring analytics to life.

The Context

Huge dependency on niche data visualisation and data scientist skills to conduct data analysis, rather than the real decision makers. These skills are extremely scarce across the globe (11,000 data scientist profiles out of 200,000 profiles).

Source: LinkedIn

Business users end up wasting time in manual effort and complex computations to decipher meaningful insights from data, which ultimately leads to frustration and personal stress, impacting their productivity and decision making process.

Overcoming Challenges

The solution is to democratise analytics by enabling end users with the right data and intuitive tools so that they can conduct their analysis effortlessly. The need was to build a one-stop shop solution that would address diverse business use cases, data sets and complexity and cater to a variety of analytical needs of different user profiles (analysts, data scientists, business stakeholders) across enterprises. Advanced visualisation being a niche, complex and evolving technology with limited knowledge base and skills made the situation further difficult.

The Innovation

Built on the fundamental principle that states data has shape, colour and texture, Vitellus transforms complex perception and enables one to understand hidden patterns and insights in data, effortlessly and quickly. It simplifies complex data and business problems through custom, advanced knowledge representations for both, human and machine centric, decision making enabled through AI and Machine Learning. It provides the ability to perform network and link analysis and spot many-to-many relationships, flow, hierarchical, layouts, geospatial, time-series, and correlation patterns in data. Its sensory appeal is made possible by weaving together multiple components including compelling graphics, intuitive interaction, end user centric UI/UX design, chat/voice bots and Immersive Analytics, leading to customer delight. Vitellus has applicability across industries, business functions and across the globe.

Impact of the Innovation

revenue impact

$13 mn

social, environmental and intellectual impact

pharmaceutical insights
criminal profiling
eliminates paper
promotes work-life balance