



Of interest to:

Financial Services, Accountants, Consultants, Compliance, Regulators, Fraud Detection, AML Teams

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Novel Visualisation of Financial Data for Distributed Teams

Collaborative interaction with multidimensional data in virtual reality (VR) for fraud prevention.

Background

Fraud prevention requires remote and distributed teams to interact with large quantities of complex, multi-dimensional data which is time consuming, costly and prone to error. The exercise often requires teams to co-locate to ensure effective collaboration and secure data management.

Solution

A VR prototype to enable analysts to collaborate in the VR space.

Input: Real-time stream of financial transaction data connected to a database of people and organisations together with meta information around types of transactions, frequency, categories and territories.

Technology: 'Unity' was used to create a 3D world in which data was represented as physical entities that could be filtered in several ways. Natural Language Processing (NLP) is employed to understand news articles and connect events to specific data points. The VR environment offered a much wider field of view and the benefit of depth to reflect the priority or urgency of the information visualised.

Output: The application allows financial fraud investigators to collaborate securely in real-time within the same VR environment. This can be done without the need to be in the same physical location.

Challenge

Exploit the opportunities provided by VR to quickly filter through large quantities of multi-dimensional (internal and external) data, visualise connections between people and organisations, and highlight suspicious content based on real-time parsing of relevant news stories.



Results and Benefits

- Supporting global team engagement and collaboration
- Visual representation of large and complex multi-dimensional data
- Novel data visualisation and animation opportunities
- Secure access and presentation
- Supported a "mind-shift" to enable new ways of thinking about data interaction and visualisation

Use Cases

Financial Services, Accountants, Consultants, Compliance, Regulators, Fraud Investigation, Collaborative Problem Solving and Analysis

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