Zetaris

GenV Research Program Data & Analytics Platform

Zetaris Case Study

GENV

Summary

Murdoch Children's Research Institute Enables Whole of State, Multi-Generational Research Initiative with Optimised and Secure Networked Data Platform

GenV is a research initiative designed to advance health and wellbeing in smarter and faster ways. This program, initiated by the Murdoch Children's Research Institute (MCRI), and funded by the Paul Ramsey Foundation, the Victorian Government, and the Royal Children's Hospital Foundation brings together data from participants and collaborators from across the state to answer questions about preterm birth, mental health and illness, obesity, learning, allergies and more.
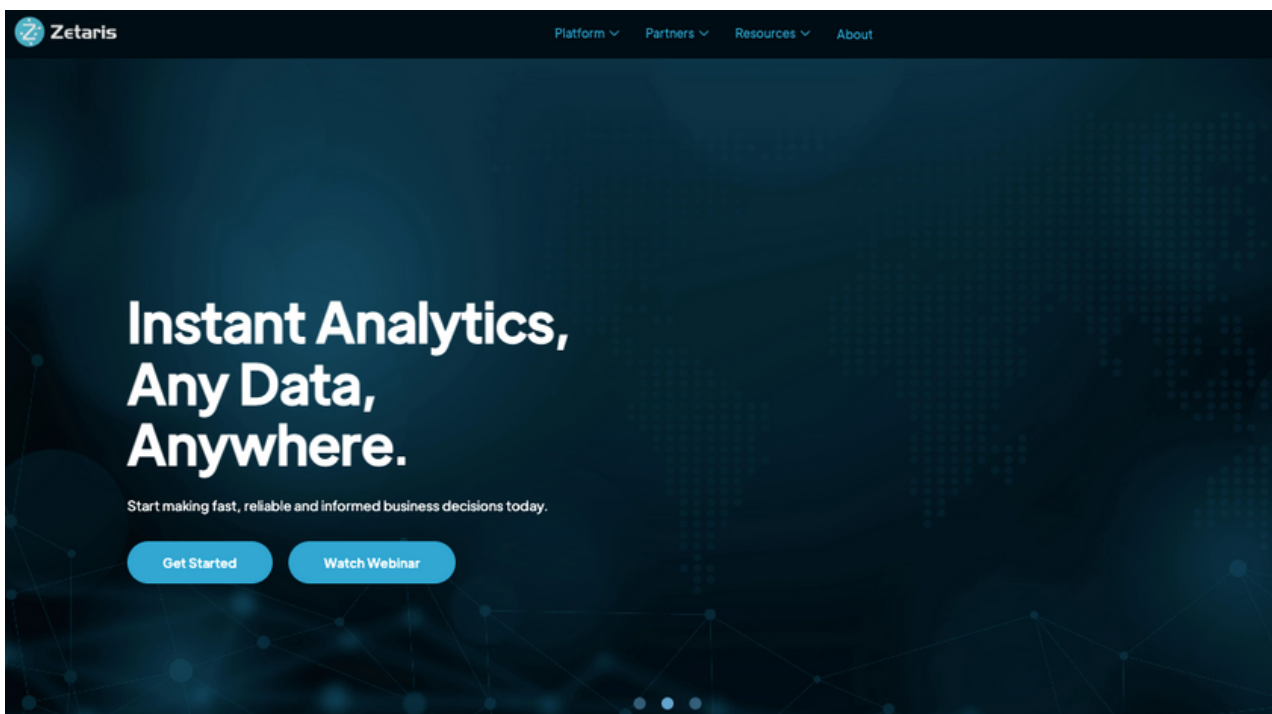
Collaborating with universities, institutes, hospitals and services across Victoria, GenV collects data from tens of thousands of families to achieve the goal of providing a better approach to child health, development and wellbeing in Victoria.

Networked Data Warehousing

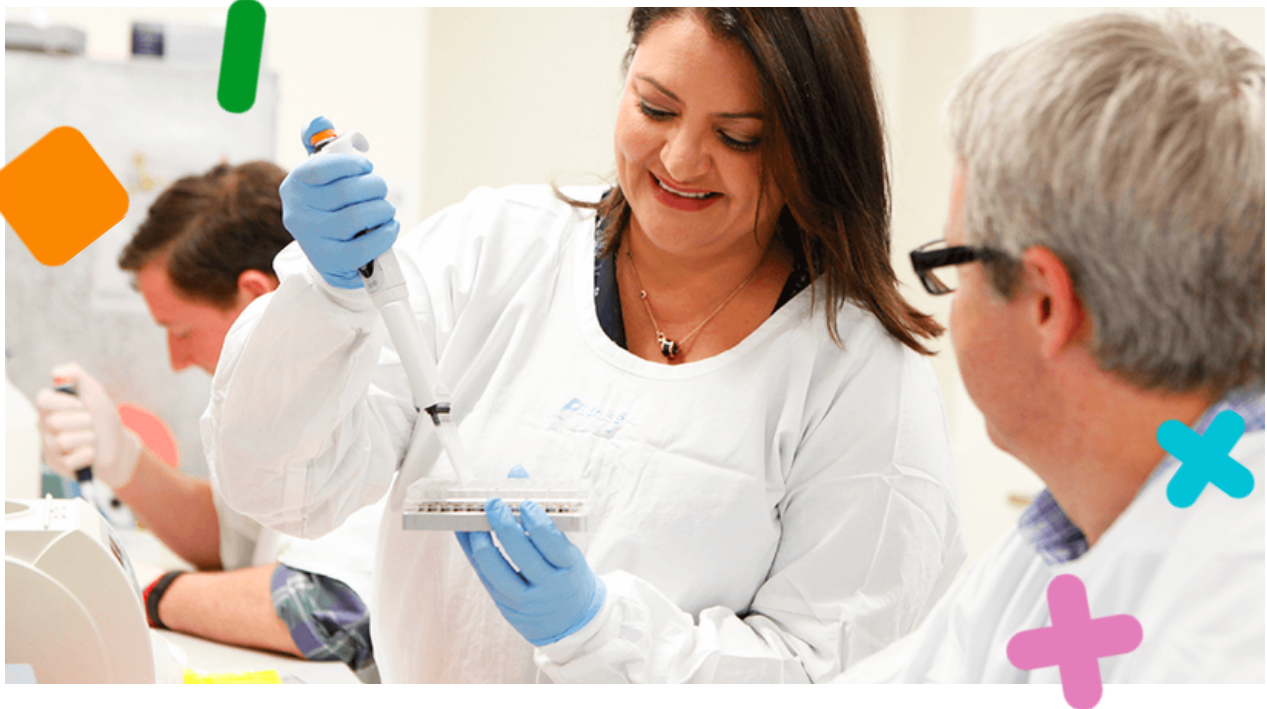**Implementing Data Warehousing without complex ETL**

The Zetaris Networked Data Platform

Data across businesses is growing rapidly in volume, scale and diversity. Despite iterations in traditional Data Centralisation technologies and methodologies, solutions just can't keep up. The Zetaris Networked Data Platform provides an end-to-end capability to network data across and outside an organisation, without needing to move data by extending your data with Analytical Data Virtualisation. Leverage existing Data Warehouses and Data Lakes, and connect data across your organisation now – not months and years down the track. Learn more at www.zetaris.com.

The Challenge

GenV knew they needed a robust, scalable and flexible data platform to facilitate a sophisticated research capability that will last generations. GenV didn't just need to bring together data from thousands of participants and collaborators on an ongoing basis, but provide a foundation through which this data could be modelled and made available for research with internal and external research collaborators in a secure and optimised way.

The scale and diversity of the research data is known to grow and change shape over the years with contributions from over 50 birthing hospitals across Victoria and tens of thousands of participants. GenV structured data and unstructured data is expected to continually grow.

GenV understood the importance of having a Data and Analytics capability that was safe, secure, and provided scalability to grow and enrich data.

Solution

The Zetaris Networked Data Platform: The complete end to end data platform

The Zetaris Networked Data Platform provides GenV with capacity and flexibility to process these volumes and complex structures and enable sharing using a common data model.

The first phase of this strategy was to deliver a foundational platform to store participant data and their response to a survey at the time of recruitment. Operational reporting was developed using a virtual data mart, with an overall objective of proving the viability and value of the overall data strategy.

GenV were able to connect and register data sources directly with participant and survey systems, including direct connections with proprietary systems by leveraging Zetaris' broad data registration capability for data ingestion. This process provides GenV with a complete Data Catalogue and Schema Store View of their data and a capability to perform cross system joins, without needing to move and store data.

MCRI opted to maintain a secure raw data store to help satisfy ethical storage obligations. To minimise the data risk landscape, de-identified GenV data was then modelled with Zetaris Virtual Data Pipelining into a standardised OMOP Common Data Model leveraging SNOMED to prove the capability for data sharing use cases.

Multiple virtual and physical Data Marts are modelled and integrated with MCRI's identity and access management policies and technology, providing quick data access and agility. Furthermore, Data Virtualisation of the sources can be made available to data owners to enrich modelled data with additional contextual raw data. Data Quality metrics and statistics are generated from the Zetaris Virtual Data Pipelines to MCRI and GenV Data Quality analysts to assess and analyse data quality though the process.

With a single technology set, MCRI delivered a complete end-to-end foundational platform to support the GenV research initiative.

Result

MCRI delivered a world class, secure, optimised, and complete end-to-end foundational data platform ready for deployment in a matter of 3 months; a portion of the time it would have taken in traditional, multi-technology, data platform architectures.

The use of a single technology set enabled MCRI to minimise complexity of dealing with multiple vendors and technologies. Furthermore, this enabled the GenV data engineering team to use existing capabilities to further develop and support the platform in-house without the need to hire specialist resources.

Customer Success

Success for GenV means providing a better approach to researching child health, development and wellbeing in Victoria. GenV is better positioned to achieve this with the Zetaris Networked Data Platform. The GenV Data Platform now supports analysis of participant recruitment to align with the Victorian population that will maximise the future value and quality of research performed. In the future, it will also help GenV work more closely with collaborators and stakeholders like the Victorian Government to optimise research and share insights that better improve the health and wellbeing of Victorians

Future

GenV will be assessing Zetaris Networked Data Platform in order to provide robust and secure linkage workspaces, monitor data quality in real-time, and provide better social awareness of the benefits of GenV research to all Victorians.

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Zetaris is a valued GenV partner that has worked with us to develop the foundational data platform. Powered by Zetaris, the GenV data platform will enable expansion to integrate with many other diverse datasets and support future research. Their Customer Experience team has been extremely proactive, supportive and accommodating to GenV's needs throughout the program

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For further information visit:

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