



Data Analytics CASE STUDY

Sundale partners with WARDY IT Solutions to harness the power of Business Intelligence Visualisation

About Sundale

- Established in 1963
- 600 employees
- Health Services
- www.sundale.org.au



Sundale is a venerable institution located on the Sunshine Coast in Queensland, Australia. The not-for-profit organisation has been providing services that encompass Retirement Communities, Care Centres, In-Home Care, Rehabilitation Centres and Childcare that have been improving the lives of residents for more than 50 years. The organisation operates from 12 locations and mobile carers travel more than 1.5M kilometres annually providing in home services. Sundale strives to improve processes using technology as an enabler that helps make a real difference to the wellbeing of the thousands of residents who depend upon their services to maintain an independent lifestyle.

Executive Summary

Data visualisation provides the tools for business managers to remove the complexity between relationships in data and analyse the correlations between cause, effect and outcome. Sundale was unable to integrate its data and present a uniform view of employee engagement in a simple format. Partnering with WARDY IT Solutions, Sundale identified their core requirements and defined a proof of concept to connect their disparate systems and visualise activities using Microsoft's Power BI.

Working interactively with Sundale's source data, WARDY IT Solutions worked with Sundale staff and used Power BI's modelling and visualisation capacity to understand areas of weakness within processes and implement immediate changes needed to improve service and efficiency. To keep driving improvements that deliver better client outcomes, the system capabilities are now focused towards trend and Bayesian probability analysis. This helps to guide decision making and operational support while improving client engagement.

- Interactive visualisation provides analysis enabling immediate improvements to business processes
- Costs are contained and immediately identifiable from a transactional level which delivers a swift boost to the bottom-line
- Cost centres and business units are rapidly benchmarked providing valuable comparative insights for management
- Reports that previously took 2-4 weeks to complete are now published in 1-2 hours
- Visual analysis reveals patterns and relationships between operational and business activities that helps deliver better lifestyle outcomes for residents
- Proof of concept was quickly translated into production with the results exceeding business expectations

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WARDY IT Solutions provide a gold level service standard that others should emulate. They do exactly what they say they are going to do.

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*Gavin Tomlins
Chief Information Officer
Sundale*

Client Challenge

Sundale is an organisation focused on delivering excellent standards of community care at unrivalled performance levels. Consideration for their clients is hard wired into Sundale's DNA with business processes under constant review and relentless improvement. To more effectively measure and benchmark service levels, the organisation faced the challenge of aggregating data from a number of disparate systems. The rendered presentation output was unique to each process and no common format could be created to offer "like-for-like" comparisons that offered meaningful insights for a non-technical audience. Data visualisation was an ideal solution, but the market leader's product was prohibitively expensive to purchase, with no guarantee it would meet Sundale's business needs. Business Intelligence (BI) specialist WARDY IT Solutions were asked to review the environment and offer a suitable solution.

Solution

Microsoft's recently updated Power BI was trialled in the evaluation phase of the project. Power BI integrated easily with Sundale's production SQL Server, Dynamics AX and CRM systems after custom data connectors were created to couple the systems. To refine the testing requirements, business case scenarios were created and testing undertaken to prove the modelling was accurate. Custom real-time visualisations were tailored for either business units or a specific audience type while user feedback was canvassed to tweak and improve the interface and usability features. WARDY IT Solutions' team of analysts' prototyped a number of visualisations to support the proof of concept resulting in management extending the evaluation into a live production rollout across the organisation.

Implementation

The project was deployed over a staggered six-month period in close collaboration with Sundale management and technology teams. Individual visualisations were created and connectors to systems and services scripted to capture the data required for visualisation. Regular meetings between WARDY IT Solutions analysts and Sundale stakeholders were held to refine the user interface design and test data integrity as each step was completed.

Outcome

The ability to capture the data in real-time brought a new responsiveness to business operations. Errors in data entry from operational systems were quickly remedied because data anomalies were easily distinguished when visualised - unlike complex spreadsheets containing erroneous tabular data. Improving client care was a high priority with new analytical tools visualising nurse call data for assisted caregivers. Sundale sets a 15 second response time for patient calls but lacked the compliance tools to benchmark how well they were meeting this performance target. The data visualisation highlighted over-servicing, under-servicing and identified potential client behavioural anomalies that skewed the overall KPI's. Armed with this data, social challenges like melancholia were addressed. Modified service delivery methods are being trialled to remedy the ongoing issues revealed from visualising BI. Cost containment was improved with daily reconciliations replacing the traditional end of month processes while flawed input data was rapidly identified and corrected immediately.

About WARDY IT Solutions

- Established in 2005
- 65 employees
- Information Technology
- Australia & USA
- www.wardyit.com

WARDY IT Solutions are Australia's leading SQL Server and Business Intelligence specialists. The company creates solutions that enable businesses to maximise returns on their investment in knowledge management. Through the extensive use of Business Intelligence, WARDY IT Solutions help their clients to realise the best possible dividend from their data assets.

WARDY IT Solutions have received numerous industry accolades, most notably the prestigious Microsoft Global Data Platform Partner of the Year in 2013. The organisation is recognised internationally for their innovative solutions, training skills and unwavering commitment to education and furthering the interests of the broader Microsoft SQL Server community. WARDY IT Solutions deliver:

- Project Delivery based on time and resources
- Consultation and Gap analysis
- SQL Server database design and programming
- Support services
- Managed Services and Business Intelligence Solutions
- Business Intelligence Consulting, including strategy, review, design and implementation of Business Intelligence Solutions

Technical Overview

The core of the solution was built upon Microsoft's Power BI. The application enabled SHA to search and explore their data from within Excel and work seamlessly with SHA's Office 365 cloud applications. This simplified creating interactive 3D modelling and visually representing complex relationships. Power Map enabled this data to overlay with target maps and create granular demographic presentations that assisted delivering targeted campaigns.

Conclusion

The ability to correlate disparate data and present it in a meaningful way to a non-technical audience completely redefines how stakeholders engage with management. Complex datasets presented in a graphical format can illustrate how transactions interact and how even minor improvements can deliver big savings in operating costs. More importantly for Sundale, incremental improvements in care levels can improve perceived and measurable resident outcomes. Bettering the quality of life for residents is enshrined in the philosophy that underpins Sundale's vision to focus on the independence, lifestyle and wellbeing of their residents. Collaborating with WARDY IT Solutions helped Sundale's IT professionals to quickly prototype and deliver a full production system. This improved Sundale's bottom line and provided tangible proof that technology improved service levels and lifestyle quality for Sundale residents.

- A "single pane of glass" makes management and data analysis intuitive and easy
- Reduced operating costs and improved employee productivity have been achieved
- Better management of resources, assets and people has been delivered
- Real-time reporting replaces outdated end-of-month processing cycles
- A future ready framework can rapidly adapt to improving new system and process requirements
- Incremental service improvements have been easily achieved with data visualisation gaining broad stakeholder acceptance

Products and Services

- WARDY IT Solutions Virtual DBA
- DB Monitor
- SQL Server Business Analytics
- Microsoft Power BI
- Integration Services