



ASSET DATA CAPTURE CASE STUDY:

Transforming Asset Data Management for the South Australian Government

Project Background

The South Australian Government's Across Government Facilities Management Arrangements (AGFMA) are essential to the state's commitment to maintaining, managing, and improving government building assets.

These assets **support critical community** services across over 45 participating agencies, including:

- ✓ Department of Health
- ✓ Department of Corrections
- ✓ Department of Education
- ✓ Department of Treasury & Finance
- ✓ TAFE SA
- ✓ Department of Environment & Water
- ✓ Courts Administration Authority

In 2021, the South Australian Government transitioned from a long-standing **mixed model** of in-house and outsourced facilities management to a **fully outsourced model**, marking a significant shift in how these vital assets were managed.

Ventia, an ASX-listed infrastructure services provider with a \$5 billion turnover, won the bid for the new FM contract, supported by *Kairos*, as their **asset data validation partner**.



“Kairos **listened to our needs and took the time to understand** both our (and our client’s) specific contractual deliverables and expectations.

They proactively ensured alignment at every step, **avoiding misunderstandings or assumptions** that might cause delays or add unnecessary costs.

In previous projects with other providers, we were forced into standard processes that didn’t suit our needs, often resulting in costly rework. Kairos was different—**they conducted a pre-commencement "Standardisation Session"** with us, the client, and their team.

They audited a test location, ran reports, and confirmed the outputs met our expectations. This gave us confidence that **the final data would be accurate and in the required format.**

Their professionalism made us comfortable including them in all client interactions. We received comprehensive dashboards that enabled **transparent progress reporting**, ensuring the auditing program **stayed on track and was delivered on time.**

The post-project reports allowed us to create a detailed pipeline of Capital Improvement Projects, ensuring **accurate budgeting and better asset spending.**

Due to the success of the AGFMA project, we’ve continued to engage Kairos for **precision asset data capture** on large commercial and government contracts.

They provide us with the audits and reports we need to **confidently begin large FM contracts.**

Their detailed asset lists and reports have fostered positive relationships and established clear plans with our clients for **improving asset maintenance.**

On the basis of the success of this project, **I highly recommend Trent and the Kairos team.**”



Brett Smith
Director of Mobilisation, **Ventia**



The Challenge

When *Ventia* engaged *Kairos* for the AGFMA project, the initial brief was to **validate existing asset data** across some of the state's **most complex and asset-dense sites**, including:

- ✓ **17 hospitals:** Major medical centres with stringent requirements for operational continuity.
- ✓ **5 prisons:** High-security environments where reliable asset management is crucial.
- ✓ **13 TAFE institutions:** Spread across the state, each with unique infrastructure needs.
- ✓ **Key commercial assets:** Parliament House, the State Library, and the South Australia Museum, among others.



*The project scope covered over **4.5 million square metres of building space.***

However, the initial data from previous contractors was **fraught with inaccuracies, inconsistencies, and missing information.**

Data Discrepancies & Initial Discovery

Kairos quickly discovered that the existing data was **far more problematic than anticipated.**

The data was not only inconsistent but also incomplete. For instance, records frequently lacked specific locations for critical equipment, stating only that certain assets were present without detailing where they were located within the facility.

This made accurate validation impossible.

Moreover, the government's own audits and data capture efforts had introduced further discrepancies, complicating the data landscape. Reconciling these conflicting data sets required more than just validation; **it required a comprehensive overhaul.**

Making The Case For A Strategic Pivot

Realising that validation alone would be insufficient, *Kairos* proposed a **complete data capture from scratch.**

This pivot was crucial but required careful negotiation with *Ventia* and the government, who were initially reluctant to expand the project's scope.

Naturally, we sympathised with their situation, especially after a lengthy go-to-market process. But unless the data issue was resolved, there was no way they could effectively manage the assets.

Kairos had to present compelling evidence of the data's deficiencies, demonstrating how a more extensive effort would ultimately save time, money, and operational risk.



Project Execution

With the revised scope agreed upon, *Kairos* embarked on one of its **most challenging projects**.

The execution phase involved several key strategies designed to address the unique challenges of the AGFMA project.

1 Comprehensive Data Capture

Kairos deployed a team of 32 auditors who were recruited locally. This included:

- ✓ **4 Project Managers:** Each responsible for overseeing specific sectors (e.g. hospitals, prisons, education).
- ✓ **4 Quality Assurance (QA) Officers:** Dedicated to ensuring the accuracy and reliability of the data captured.
- ✓ **24 Field Auditors:** Primarily trade-based professionals with extensive experience in critical infrastructure environments.

The team's task was to **capture new data across the most complex and critical sites**, a process that involved physically locating and documenting every asset.

This was especially challenging in **high-risk environments like hospitals and prisons**, where operational constraints and strict security protocols required meticulous planning and execution.

2 Leveraging Local Trade-Based Auditors

Kairos recruited **local trade-based auditors** with the technical expertise needed to navigate complex infrastructure environments.

Their hands-on experience in similar environments meant they could identify and document HVAC systems, electrical equipment, and other critical assets with a level of detail and accuracy that might have been missed by less experienced personnel.

This might seem like a small detail, but the benefits are significant:

- **Enhanced Data Coverage:**

Our team of trade-based auditors provided a deeper understanding of system components, resulting in **more thorough asset discovery**. For example, our auditors knew that multiple sprinkler heads meant a fire panel, a fire pump, and a non-return valve could be nearby. This systematic approach ensured all relevant assets were identified and documented, significantly **improving data coverage**.

- **Increased Data Accuracy:**

Trade specialists ensured high data accuracy by knowing exactly what to collect. Where non-specialist auditors might mistakenly record a unit's power as 240V - a detail that's inconsequential - our **team focused on the critical information**, such as kilowatts (e.g., 6.5kW or 4.5kW).

- **Actionable Condition Ratings:**

Non-trade auditors often rely on "average" ratings, which makes it hard to prioritise maintenance. Our trade-based auditors used their hands-on experience to **assess assets more precisely**. This expertise resulted in a wider range of condition ratings, allowing for more effective resource allocation.

- **Reduced Data Noise:**

Our auditors' ability to filter out inconsequential assets meant the data was focused and relevant. By reducing "noise," we made it easier to **prioritise key assets**, ensuring critical components received the attention they required.

3 Multi-Layered Quality Assurance

Ensuring the accuracy of the data was paramount given the critical nature of the assets involved. Kairos implemented a **robust QA process** with multiple layers of checks and balances:

- **Initial High-Level Checks:**

Each day, the QA team performed **high-level checks on newly captured data**, focusing on critical information such as QR tags, equipment specifications, and location details. This allowed for immediate corrections and ensured that errors or oversights were caught early - especially for regional sites where re-work and backtracking could result in significant setbacks.

- **Weekly Deep Dives:**

At the end of each week, the QA team conducted **a comprehensive review of the data captured** over the previous days. This included a detailed analysis of condition ratings, defect reports, and other key metrics. The team cross-referenced the data with on-site photographs to verify accuracy and completeness.

- **Innovative Use of Technology:**

One of the unique aspects of the QA process was the use of helmet cameras that recorded every detail of the on-site audits. This footage provided an additional layer of verification, particularly in high-risk environments where accuracy was crucial. The ability to review video footage allowed the QA team to ensure that all assets were correctly documented and that no details were missed.

- **Redundancy and Oversight:**

After the initial QA check, a secondary QA officer reviewed the data. The project manager then conducted a final on-site verification, **ensuring that nothing was overlooked**. This multi-layered approach to QA was essential for maintaining the highest standards of data accuracy.

4 Specific Tools & Technologies Used

The project faced significant technical challenges, particularly with the external software provided for data capture.

This software was prone to delays, with data sometimes taking up to four weeks to sync with the backend system. These issues created a **substantial risk of data loss and corruption**, necessitating alternative approaches.

- **Manual Data Management:**

To mitigate the software's shortcomings, *Kairos* implemented manual data management techniques. This included using spreadsheets and local databases to temporarily store and organise data until it could be properly uploaded.

- **Ad Hoc Solutions:**

Kairos developed several ad hoc solutions to address the data capture challenges. For example, when unexpected assets were discovered on-site, the team created custom data capture templates to ensure these assets were accurately documented without disrupting the project's timeline.

- **Continuous Stakeholder Engagement:**

Kairos maintained close communication with Ventia and the government throughout the project. This involved **regular updates and transparent reporting** on the challenges being faced and the steps being taken to address them. This proactive approach helped maintain stakeholder confidence and kept the project on track despite the technical hurdles.

// Despite these challenges, *Kairos's ability to adapt and innovate ensured that the project continued to progress smoothly.*

The team's willingness to go above and beyond in managing these technical difficulties was a testament to their commitment to delivering high-quality results.

Key Outcomes

The successful execution of the AGFMA project resulted in **several significant outcomes:**



1. Unprecedented Data Accuracy and Completeness

Kairos documented over 500,000 lines of asset data, **// identifying 25% more assets than were originally recorded.**

This included previously undocumented critical equipment, such as HVAC systems, generators, and fire safety equipment.

The improved data allowed the government to develop more accurate asset management plans, reducing risks associated with unplanned equipment failures.



2. Long-Term Asset Management Benefits

The enhanced data set provided by *Kairos* enabled the South Australian Government to make **more informed decisions about asset maintenance and replacement.** This allowed for more efficient budgeting and resource allocation, particularly in high-risk environments like hospitals.

By accurately documenting asset conditions, the government could prioritise maintenance activities, extending the life of critical infrastructure and reducing overall lifecycle costs.



3. Strategic Value of Trade-Based Expertise

The reliance on trade-based professionals ensured that the data captured was not only accurate but also nuanced and actionable. Their hands-on experience provided a deeper understanding of asset conditions, leading to **more reliable condition ratings and defect identification.**

This expertise was particularly valuable in environments like hospitals and prisons, where the stakes for asset management are exceptionally high.



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Conclusion



The AGFMA project showcased *Kairos's* ability to deliver **exceptional results in one of the most challenging facilities management projects in South Australian government history.**

It highlighted the critical importance of accurate data and the value of trade-based expertise in high-risk environments.

Through adaptability and a commitment to quality, *Kairos* laid the foundation for improved facilities management across the South Australian Government.