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Elevating asset management through contractor collaboration

How to enhance system interaction, data exchange and communication with contractors to get the best outcomes in asset management

Introduction

On a daily basis, asset managers face complex operational challenges, from managing aging assets and ensuring performance standards are met, to keeping vast amounts of asset data up to date. In a sector that's always trying to do more with less, outsourcing work to contractors continues to gain traction as asset managers look to better streamline their operations and improve efficiencies.

Contractors play a crucial role in supporting asset management by providing specialised services, expertise and resources that help organisations manage and maintain their assets. Whether hired short-term or long-term for a project, contractors are an ideal solution for asset managers looking to plug talent gaps or acquire specialised skill sets.

While contractors bring many benefits and expertise, using external resources to track or input data can pose challenges in maintaining a centralised asset management repository.

This guide explores proven strategies to help enhance system interaction and contractor collaboration to drive efficiency, reduce manual data errors and create a single source of truth to support informed decision-making.

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1. The role of contractors in asset management

Contracting companies provide additional labour and expertise as needed, allowing organisations to scale their operations without having to maintain a large, permanent workforce.

A key benefit of using external contractors is that it shifts the administrative responsibility of people management to the supplier. This is especially beneficial when there is a need for short-term or highly specialised skills, such as during peak maintenance periods, condition assessments or data collection. By using contractors, organisations don't have to worry about hiring or training talent, overseeing jobs, or managing people-related issues like sick leave and vacation.

The top five areas contractors are most commonly hired to help with in asset management are:

Data collection - Asset-intensive organisations must constantly collect information about the condition, performance, and location of assets. This data is crucial for organisations to make informed decisions regarding maintenance, repairs, and long-term asset planning. A contractor might conduct inspections of infrastructure assets like bridges, roads, or utility poles, documenting their condition and reporting back to the asset management team.

Basic and specialised maintenance - There is a trend towards using external contractors for maintenance given it can be such a time-consuming part of operations. Contractors also provide specialised expertise and equipment for maintaining assets that the organisation may not have in-house. This is especially useful for technical or complex maintenance tasks that require highly skilled personnel.

Defect and condition assessment - Sometimes infrastructure organisations decide to conduct a sweep of their operational environment to gain an up-to-date picture of their assets and any defects to help prioritise maintenance and repairs. For example, a contractor might be hired to assess the current condition of assets based on a scale of 1-5. Or, they may be asked to evaluate the defects – such as identifying potholes, cracks or other road defects, which are then ranked based on severity to aid in planning road repairs.

Capital works projects - Contractors are often involved in large-scale capital works involving construction, refurbishment, or significant asset upgrades. Their expertise ensures that projects are completed on time, within budget and meet technical specifications.

Decommissioning assets - Contractors may also support the safe and efficient disposal of assets that have reached the end of their useful life, ensuring that the process is carried out in compliance with regulations and cost-effectively.

2. Key trends in contractor engagement

Several key trends have emerged in the way asset managers collaborate with contractors, driven by technological advancements, an increased focus on data-driven decision-making, and a need for greater efficiency.

These include:

Greater integration between contract and asset management systems - More organisations are seeking integration between their contract management systems, which record details like work permits, qualifications and compliance certifications, and their asset management systems to create seamless workflows.

Ports Victoria automates compliance checks for work orders

Ports Victoria uses integrated systems to validate contractor permits and licenses before they are assigned a work order. If contractors do not have the requirements for the job, they are automatically blocked from the work order, making the work order process far more efficient while ensuring compliance.

More contractors accessing client systems - We're starting to see an increase in contractors using our client's asset management systems to enable real-time data entry and updates, removing the need for manual data handovers. Smaller contractor businesses tend to work this way by logging into asset management platforms like Brightly's Confirm or Assetic, where they update work orders directly from the job site, improving data accuracy and timeliness.

Data synchronisation with large contracting businesses - Large contractors are moving towards B2B data synchronisation, allowing their internal systems to interface directly with the client's asset management system. This reduces manual data entry and ensures that data flows seamlessly between the contractor and asset owner. For example, a contractor may have their own systems in place to record data. This is then automatically synced with the client's asset management platform, creating a streamlined data exchange process.

Adoption of AI and automation - Artificial intelligence (AI) and automation are playing a larger role in contractor collaboration. AI tools can analyse contract data, validate contractor inputs, and even rank asset defects through image recognition, reducing human oversight and speeding up workflows. AI-powered contract analytics can also validate asset condition data collected by contractors, ensuring that all data complies with predefined standards without the need for manual review.

Real-time data exchange via APIs - Asset managers are increasingly using APIs (Application Programming Interfaces) to facilitate real-time data exchange between their systems and contractor systems. This allows contractors to upload and update data, including images and reports, without delays or manual intervention. For example, contractors can use mobile devices to take before-and-after photos of maintenance tasks, which are uploaded in real-time to the asset management system through an API, providing instant visibility to asset managers.

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3. Checklist for successful contractor engagement

How asset managers collaborate with contractors is critical for aligning expectations, improving asset data quality and optimising overall asset performance. Poor communication can lead to a mismatch between asset management goals and contractor execution, resulting in data gaps, project delays and increased costs.

Here's our checklist for engaging and communicating with contractors to ensure a successful relationship, reduce risks and achieve project success:

☑ **Define clear communication methods at the start**

- It's vital to document communication methods and system usage for contractors in tender documents to clarify the scope of work, data standards to follow, reporting protocols and key deliverables.

- If you want to make use of Application Programming Interfaces (API's) available within software to push data between systems, include this detail in the tender so that it is clear, and that work can commence quickly and seamlessly without any data exchange issues.

☑ **Centralise information in one place to create a single source of truth**

- Create a single source of truth for your asset portfolio by ensuring that all data contractors collect is centralised in one place.

- Ensure everyone has access to the knowledge they need at all times by creating a real-time view of your asset environment.

☑ **Use collaborative software tools and integration**

- Use software tools and APIs that allow both internal teams and contractors to track progress, report issues, and share updates seamlessly.

- Make sure APIs can do what you want to do before you work them into a contract. You may also want to put information about the APIs into a tender specification. Brightly has a team of people dedicated to helping you describe the business requirements that are needed.

☑ **Provide multiple ways for supplying and receiving information**

- The most successful contractor arrangements are when there is some degree of flexibility for supplying and receiving information, such as using a contractor portal, manual file swapping, APIs or using mobile devices to access the system.

☑ **Schedule regular check-ins and open feedback**

- Hold regular meetings or check-ins to review project progress, discuss potential challenges, and ensure that contractors are aligned with asset management goals.

- Create a culture of open feedback, where contractors feel comfortable reporting issues or suggesting improvements to the workflow or asset management processes.

City of Sydney streamlines contractor communication

The City of Sydney has rolled out a contractor mobile app and portal, using APIs and file swapping to integrate contractor work order data into its Brightly Confirm platform. Contractors can log into the portal to update their work such as when they started and how far they are in completing the task.

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4. Manual vs automated interactions with contractors

Surprisingly, many organisations still send jobs to contractors manually and receive data back in the same way – via paper. We also know of a handful of organisations who still like to use fax. Unfortunately, data that's collected manually can not only easily get lost, but it can take hours for teams to reconcile.

The problem with manual interactions

The double entry of information into an organisation's asset register can create opportunities for typos and errors, such as recording information against the wrong asset or misinterpreting information. Moreover, it can create a backlog of work orders because the user must react to each task. Add other people-related issues on top like sick leave or vacations, and things only pile up more.

If there's one major takeaway, it's this: manual interaction with data creates high opportunities for single points of failure. Organisations need to get rid of these where they can by automating data entry and integrating systems where possible so that data and pictures can be easily captured and entered from the job site.

How automating data exchange helps

If you have partial or fully automated information entry, there is very little to no admin overhead for employees. Using APIs or contractor portals means that there is only one single point of information entry by the contractor. Manual errors shrink because the user is not having to enter data into multiple systems. And, instead of having to react to hundreds of inspections, the user only has to react to exceptions or errors. If that user goes on holiday or gets sick, there is very low risk for the organisation as reaction to exceptions is an easy job to delegate.

What if there is already a contract in place?

If you decide to make the shift to automating some or all of the data interaction with contractors, be aware that you may need to wait. The onboarding process for an automated system can be quite complex and must be negotiated as part of contracts. If there is a large contract

already in place and you wish to roll out a new system for contractor collaboration, sometimes it is best to simply wait out the terms of the contract. Typically, contracts extend over multiple years, so it can take time.

The upside is that once the contract is finished and you can start afresh with a new system, all of the admin overhead and risk of using manual interaction will be rapidly reduced. Everything you need to onboard contractors, such as APIs, secure contractor portals, file-swapping with the system and mobile working, are tools that come with the Brightly Confirm and Assetic platforms, so you can get up and running quickly and with no additional cost.

Redland Council connect the field and office with the Brightly Assetic mobile app

Redland Council uses the Brightly Assetic mobile app to assign work to its contractors. The Council is gradually adding more contracting firms to the app as old contracts expire, enabling it to amend clauses on contractor engagement. Contractors are onboarded quicky by downloading the free mobile app, with plenty of support offered via its user guide and an employee dedicated to contractor onboarding. Since making the shift to Brightly Assetic for contractor collaboration, Redland Council have found that communication with contractors is easier and quicker and helps them achieve the data outcomes they require to support planning and decision-making.

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5. Data specifications

It's important that contractors have a specification or standard to align their data capture with, to ensure all stakeholders get the data they need – the first time.

Many organisations have instructed contractors to go out and collect data, only to then try and perform modelling with the data and find that it isn't fit for purpose. The problem was that they didn't define upfront what data they wanted and which asset attributes they were interested in, resulting in the contractor having to complete the task again – becoming an unnecessarily expensive exercise.

The same goes for condition or defect assessments – organisations must specify what a defect is and have guidelines around what constitutes a good or bad condition so there are no grey areas for the contractor. This includes defining the intervention levels for initiating a capital works program.

It's worth implementing data specification as part of the vendor contracts based on industry standards. The most widely used data specification standards in Australia include:

A-SPEC

For example, A-SPEC by GISSA International is a suite of data specifications that supports the delivery of machine-readable data relating to Australian infrastructure assets.

A-SPEC captures the correct data and ensures it is in the correct format, making the process much simpler and more efficient. On completion of a project, a contractor must submit 'As Constructed' infrastructure asset information in the A-SPEC digital data specification format via an online portal before being issued a certificate of Practical Completion.

ADAC

Another is IPWEA's Asset Design As Constructed (ADAC) standard to assist local government and utilities in capturing and managing consistent data for public works infrastructure. It is open source and adopted widely by councils and utilities across Australia.

Other commonly used standards

Other standards include B-Spec for buildings, D-Spec for stormwater drainage & telecommunications (optical fibre), O-Spec for open spaces, R-Spec for roads, S-Spec for wastewater and W-Spec for water – all providing a great benchmark for capturing data.

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6. Engaging contractors across the total asset lifecycle

While contractors are most often used to support work orders or specialised maintenance, sometimes organisations may assign contractors the management and responsibility of entire preventative and maintenance programs. For total asset management contracts, it is critical that your outcomes are specified, and that roles and responsibilities are well defined.

If the asset is to be managed over the course of its life, detail who is responsible for it, what condition you expect it to be handed back in at the end, and who is responsible for any capital works planning. You don't want to hand your asset over to someone to maintain for a five-year contract only to find out that all they have done is basic maintenance and run it into the ground – giving you back a liability.

Specify what data you have ownership of. At the end of the contract, you want to obtain the data that the contractor has been collecting about your assets over their lifecycle.

There are potential dangers of outsourcing total asset management, such as if the contractor goes broke or doesn't deliver. Therefore, any total asset management contract must be monitored and managed on an ongoing basis.

Conclusion

To ensure infrastructure reliability and performance, asset managers need the operational capabilities, resources and technology to deliver on their long-term goals. From helping to maintain aging infrastructure to capturing condition and defect data, asset management contractors play a critical role in ensuring the right skills are available, at the right place and at the right time.

Getting the best outcomes from a contractor relationship requires organisations to consider how they collaborate from the very start – ensuring all communication methods, system integration and data standards are specified in tender documents.

In recent years, there has been considerable advancement in technology and the convergence of systems making engaging with contractors easier, with multiple integration methods making engaging and communicating with contractors simpler and lower risk.

By well defining your contractor relationship, communication methods and data exchange, organisations can eliminate double handling, reduce manual errors and admin burden, and ensure timely updates on asset condition and maintenance tasks. Most importantly, seamless contractor collaboration allows for better decision-making and quicker responses to asset-related issues – ultimately leading to higher asset reliability, fewer operational disruptions and happier, safer communities.

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