

Introduction to

Data consulting

The complete enterprise visibility solution for construction



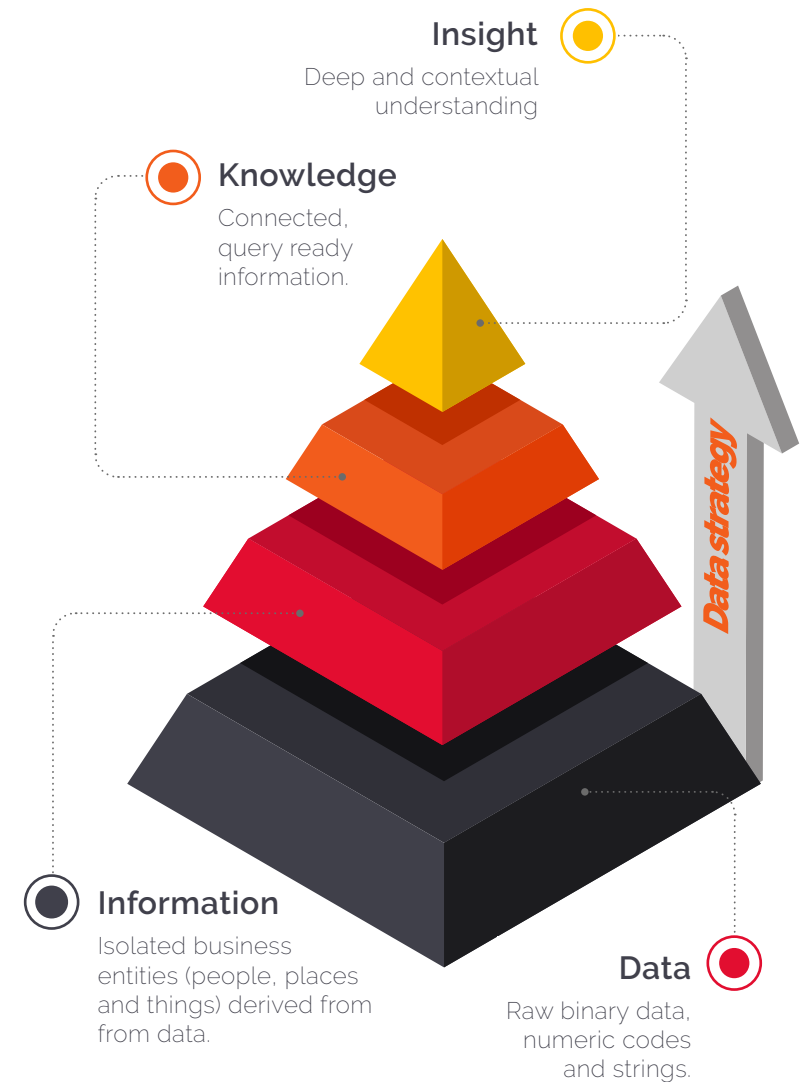
Introduction

Running a construction business at sustainable margins while maintaining a stable pipeline of work is more difficult than ever. Familiar challenges such as downward cost pressure; intermittent and unpredictable demand patterns; isolated command structures and a shortage of capital for reinvestment continue to afflict the industry. Meanwhile executives are confronted with an array of new obstacles including materials shortages, supply chain disruptions, rising employment costs, and mounting regulatory obligations.

These challenges make the ability to plan ahead, keep projects on track and respond to setbacks more important than ever. But effective decision making is dependent on reliable information, and while in most construction businesses there is no paucity of data, it is frequently far too difficult to find, visualise and interpret that data as relevant, reliable, clear and timely information.

In short, turning data into useful information gives executives the knowledge and insight they need to make the right decisions at the right time. That could be visibility of project risks, cash-flow fluctuations, opportunity pipeline, health and safety incidents, supply chain provenance, team performance and more.

In the past, this has been achieved (against the odds) with an incoherent mix of spreadsheets, ERP reports, project management systems and accounting tools distributed among organisational silos without integration or interoperability. But with mounting problems and an ever-expanding pool of data that fails to provide useful insights, many businesses have realised that it is time to abandon the old ways of doing things and embrace the tools and technology now available – underpinned by a robust data strategy – to improve enterprise visibility.



The challenge for construction

To stay competitive and profitable in today's market, construction businesses can't afford to overlook their data strategy. While there are multiple aspects to a data strategy, any business embarking on one should set out to answer two fundamental questions. Firstly, *what gaps in our organisational knowledge could prevent the business from achieving its strategic goals (gap analysis)?* And secondly, *what data can the business collect and analyse to close those gaps?* Considerations such as data governance, risk and security are important but they are secondary to the fundamental questions of why, what and how an organisation collects and uses data.

Once an organisation has developed a data strategy, it is important to keep on top of it, both in the back-office and on-site. Most businesses will use specific tools to support distinct processes such as managing project expenditure or logging health and safety incidents, but a lack of interoperability creates data silos, preventing sharing and reuse of data between applications, severely limiting effective decision making.

For example, the patchwork of systems used in enterprise resource planning may cause issues when coming to review business unit performance. One unit may use a specific KPI to



measure a given performance indicator while another uses a different formula to determine a similar metric. In isolation, this may be fine but it may lead to inaccurate comparisons.

Compounding the issue of disparate systems are delays in reporting and human error. These arise principally where spreadsheets are involved because they require input by staff and are notoriously prone to errors arising from broken formulas and broken queries in linked workbooks.

For example, one stray mouse click that breaks a formula and could render an entire spreadsheet useless and obscure the true picture for days or even weeks, as executives wait to receive the data. Furthermore, users may need to rework the same base data several times and, in several formats, increasing the potential for errors, delaying vital reporting and decision making.

Another issue is the temptation to manipulate figures to mask cost overruns. With manual systems this may go unnoticed as business unit executives typically only see high-level figures, with a significant time delay and without the ability to drill down into detail, leaving them incapable of effectively interrogating the data or observing when and where figures have been altered. When problems do eventually come to light, teams must devote considerable time investigating mismanagement and misrepresentation of project finances.



A complete enterprise solution for construction

With Inventt's data consulting service, executives can integrate, track, visualise and analyse data in real-time, providing construction executives with the flexibility, transparency and agility they need to thrive in today's market.

Properly curated dashboards make the interdependencies that exist between business units, projects, software, databases and spreadsheets cleaner and more cohesive, providing an accurate and complete picture of a firm's current position.

Systems that pull data and analyse in real-time give executives the right information at the right time, providing a platform for better decision making by avoiding misleading statistical errors and outdated information.

Creating a single source of truth with traceable logs and the ability to easily interrogate figures prevents creative accounting that masks poor project performance and enables easy comparison of project and business unit performance.

Too much data, not enough insight.



Data refers to the unstructured mass of facts, figures, signals and measurements that businesses generate in their day-to-day operations. Once this **data** is **collated and categorised it becomes information** and once this **information** is **analysed and compared it becomes knowledge**. Finally, once statistically significant patterns are identified and it is **presented in context it becomes useful insight to enable better decision making**.

Too much data, not enough insight.



Robust strategy that leverages the power of corporate data

Develop a data strategy that harnesses the power of data to deliver corporate objectives



Real-time monitoring and predictive analytics

Manage cash flow, identify cost overruns, minimise rework and deal with business risks before they spiral out of control



Unify and aggregate data from multiple systems

Integrate data from multiple business units/departments and overcome the siloed nature of construction businesses



Transparency and auditing

View figures in real time, prevent misrepresentation of internal and external accounts and improve project performance



Scalability and flexibility

An inherently scalable solution that can and accommodate structural changes and business growth



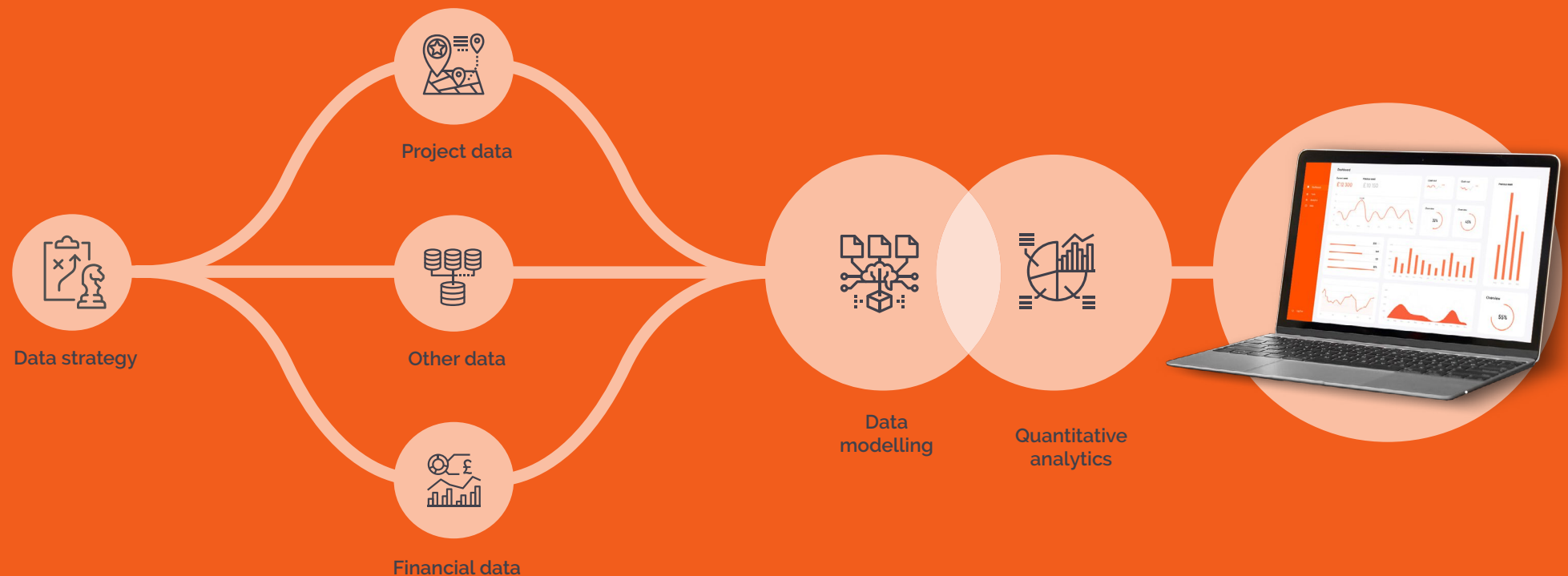
Invennt's data consulting service structures and organises construction businesses' data, providing the c-suite and executives with the confidence to make informed decisions based on transparent and contextual, data-driven insights.



How it works

Invennt's data consulting service is tailored to the needs of your business, and from the outset we focus on creating a robust and comprehensive data strategy and technical solution that is the best-fit solution for your needs. Our consultants work with you to establish your data needs in respect of strategic goals and then carefully process map relevant areas of business operations to determine where data is generated and how it can be captured.

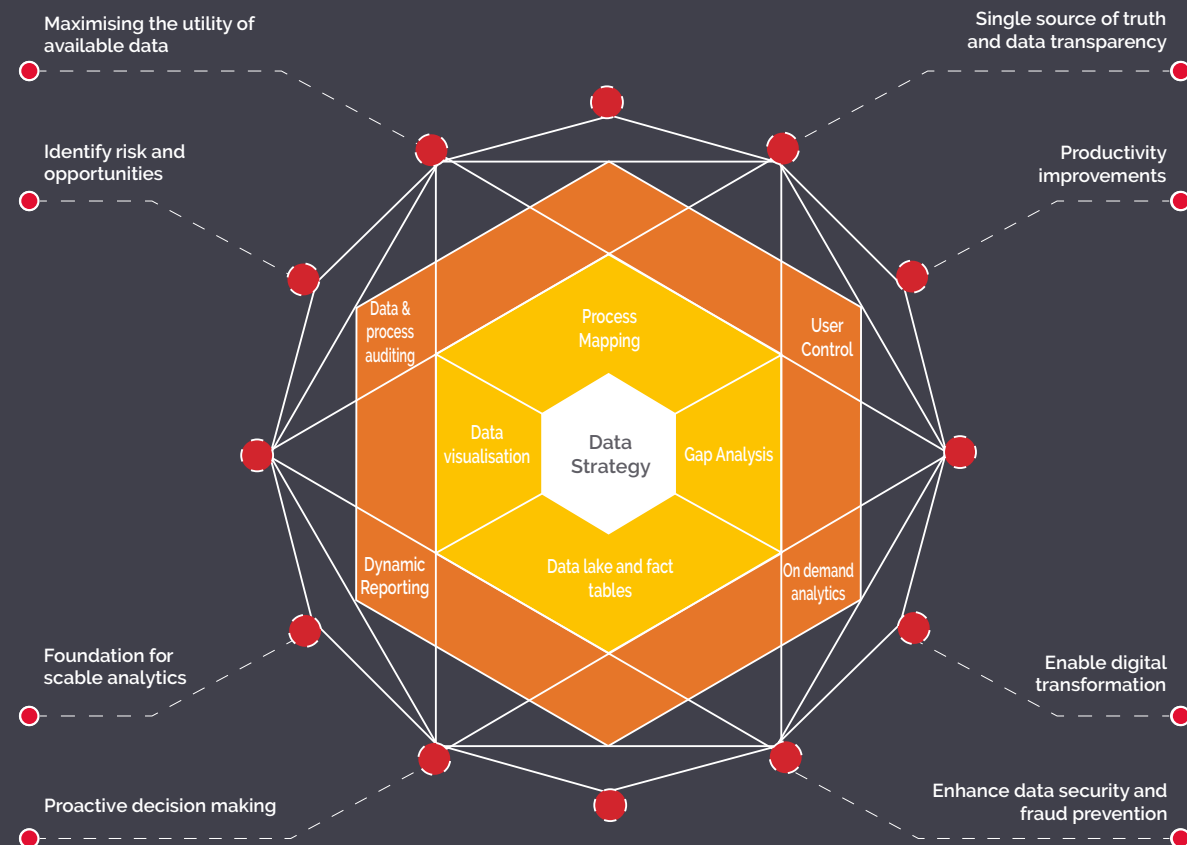
There are many aspects to building a successful data strategy and implementing an effective technical solution but the diagram below describes in broad terms the inputs and processes that our team undertake to deliver insightful dashboards that provide a single source of truth for executives making difficult decisions every day.



In summary

Gain total visibility and control of all business information

- Operate more efficiently with greater visibility and tighter cost control.
- Measure, track and analyse productivity and review across the business portfolio
- Collaborate more efficiently throughout the enterprise
- Respond to cost overruns quickly
- Manage KPIs more efficiently
- Making data more accessible across teams



Choosing the right partner

Investing in data systems can be a daunting prospect and choosing the right partner can make the difference between success and failure. As the world's leading specialist business consultancy for construction, we have no shortage of experience when it comes to working with main and specialist contractors and our team understand the nuances of doing business in the sector and are acutely aware of the needs of senior executives.

Any solution we develop will take into consideration your long-term growth ambitions, so the system can scale as your business grows. Finally, our expert team does all the heavy lifting during the development phase and supports you throughout implementation period, providing user training and tech support to ensure you get the most out of the solution.

Contact Aidan or Vinayak to book a consultation.



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