

20



LOGIKAL
Project Intelligence

Project Controls Survey

Contents

Foreword	2
Introduction	4
Survey at a glance	5
Participants	6
Perception of Project Controls	7
People	8
Processes	9
Systems	10
Project Intelligence	11
Benefits of Project Controls & ROI	12
About Logikal	13



LOGIKAL
Project Intelligence

Having worked for over 17 years in Project Controls, across a variety of industries and geographies, I'm pleased to see Project Controls raising its profile and becoming more prominent, as a result of its association with successful projects

Throughout the regions I have found myself fortunate enough to work within; Europe, Asia and Australia, there are varying levels of maturity when it comes to Project Controls, partially this is influenced by sector but also the region itself. What I am pleased to see is that no matter the level of maturity in relation to each other, each region is progressively moving forward and improving the prominence and effectiveness of Project Controls, enabling successful delivery.

Often, we see this improvement being client or sponsor led, creating the need for the supply chain to follow, however, no matter who has led the change there are several factors that we regularly see contributing. We are seeing an increased willingness for organisations and people to look to and learn from other sectors, regions and projects, where effective controls are positively influencing delivery. We also see increasing financial pressure throughout many regions being a contributing factor, driving the need for greater transparency, governance and control of projects to reduce financial uncertainty and risk. In addition to these, we see industry and professional groups such as the Infrastructure & Projects Authority, Major Projects Association, Association for Project Management and Project Management Institutes contributing greatly by raising awareness through special interest groups and general promotion using industry case studies to raise awareness of good practice and lessons learned.

In future, I hope to see implementation of appropriately robust project management frameworks, including Project Controls, at earlier stages of the project life cycle

to maximise the influence controls can have saving money, managing change and improving project outcomes. Ensuring the right behaviours, culture and governance are established early, through procurement strategies and supply chain requirements to enable strong, successful and efficient delivery. I hope to also see an increasing use of technology to improve performance management, analysis and communication, whether that be intelligent dashboards, 4D and 5D models or even augmented reality. Visualisation of accurate and timely project performance data is critical to improving the effectiveness of Project Controls to enable the success of projects and programmes – we all have an active role in to play in achieving that.

We highly appreciate everyone's contribution to our annual surveys and are pleased to see an even greater level of involvement this year. Your responses enable us to assist in moving industries and regions forward, communicating where Project Controls are working, de-risking delivery through improved project intelligence and decision making, enabling success. Equally important is the acknowledgement that not every project is getting Project Controls right and where it isn't contributing to successful delivery, then lessons need learning and improvements need to be made. I am hopeful that Logikal's annual surveys go some way in contributing to that process.

Thanks again for your involvement and contribution.

Bryn Lockett
CEO



Logikal conducted an extensive industry survey 12 months ago into the correlation between Project Controls and project success in organisations globally.

The survey revealed clear views that:

- Effective Project Controls are strongly associated with project success.
- Many organisations still have relatively low maturity in the way in which they set up and practice Project Controls.
- Processes and systems remain relatively unsophisticated in many organisations.

This year we have aimed to use our survey to expand our understanding of the underlying reasons which give rise to organisations driving up the maturity of their Project Controls solutions or conversely not doing so.

As before, this survey poses questions across the core areas of; people, processes & systems as well as project intelligence (reporting) and the benefits of Project Controls.

Thank you to all who contributed to this invaluable piece of research. We would encourage you to share this report with colleagues across the industry and welcome any discussions based on our findings.

Survey at a glance

How we compiled the questions:

The survey was compiled by Logikal's senior team of Project Controls experts

A total of 31 questions were asked, designed to follow on from points raised in last years' survey with the aim of providing an insight into the underlying reasons behind the Project Controls maturity of the organisations of our respondents

Who took part:

567 respondents from across the globe working in a range of industries from client/owner, contractor & consultancy organisations

Key findings:

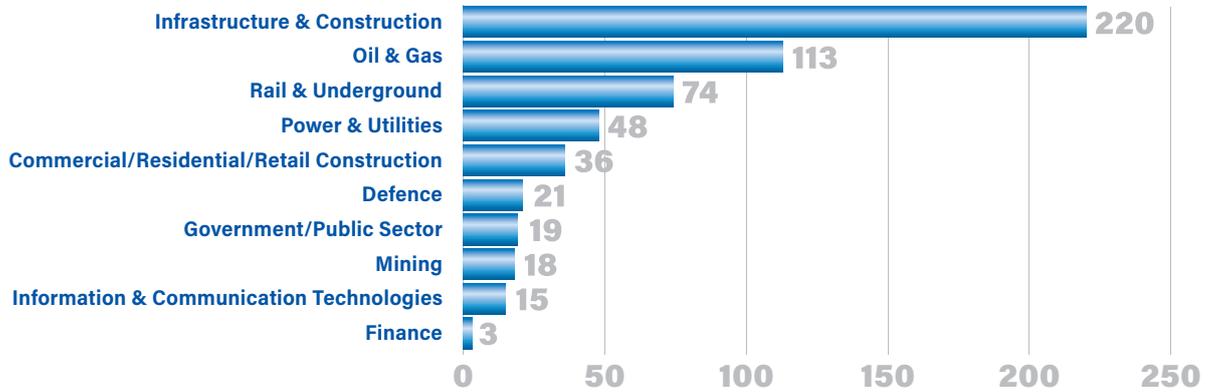
- ▶ There is a growing degree of importance being attached to Project Controls (4% rise from last year's survey) and an increasing association with project success
- ▶ Emerging awareness of the importance of Project Controls is causing more organisations to realise the need to improve – 14% increase on last year
- ▶ Organisations that recognise Project Controls as a profession have more capable Project Controls teams that are helping them achieve better project outcomes
- ▶ Lack of direction & support from management is a major issue affecting Project Controls maturity across all areas of people, process & systems. Project leaders that have not yet adopted the Project Controls agenda will benefit greatly from doing so
- ▶ Organisations with high levels of expertise in the implementation and operation of systems are more easily able to steer their projects towards success
- ▶ There is a need to raise awareness of the benefits of system integration, a lack of understanding is holding many organisations back from reaching maturity
- ▶ Performance information is still not being used constructively to manage the delivery of projects – only 7% of organisations who don't use performance information to manage delivery managed to deliver their projects successfully vs 68% project success rate for organisations who do
- ▶ North American organisations and those in the mining and oil & gas industries are leading the way in terms of overall Project Controls maturity
- ▶ Client/owner organisations are the furthest behind with a need to increase maturity across the board

Participants

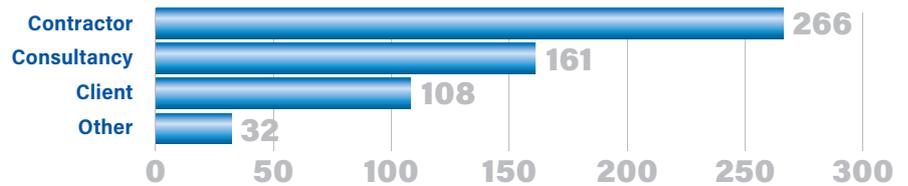
Number of responses by region



Number of responses by industry



Number of responses by organisation type



Perception of Project Controls

In line with last year's survey, Project Controls is considered to be important, very important or critical in the majority of cases

As with last year's survey, we began by asking some broad questions around the perception and general use of Project Controls in the organisations of our respondents. Once again, these questions form a key part of the survey as they will serve as a sample of comparison to highlight elements of success (& failure) in Project Controls.

Very much in line with our survey last year, Project Controls is considered to be important, very important or critical in the majority of cases (86%). One notable difference from last year's survey was the increase in respondent's whose organisations consider Project Controls to be not important at all. **These respondents also cited very low levels of maturity across the key areas of people, process and systems and only 11% were able to achieve successful projects (down a further 3% from last year).**

We then sought to find out at which point in the project life cycle Project Controls is typically first engaged. 50% of our respondents recorded that Project Controls are first engaged during the concept/definition phase of a project, 16% at the design phase, 21% at early execution and >10% seeing first engagement at the later stages of delivery & handover. **Encouragingly, 70% of those who view their Project Controls functions as critical were engaged during the concept/ definition phase of a project** allowing ample time for appropriate solutions to be implemented and delivered across the life of the project. The knowledge of what's good and what's bad in terms of Project Controls and the required spending upfront to set it up right from the beginning of a project is growing.

We then asked respondents about the level of success achieved on recent projects. 60% considered their recent projects to have underperformed or failed to meet targets, a similar level to last year.

Emerging awareness of the importance of Project Controls is causing more people to realise that they need their teams to improve

All effective Project Controls solutions need to be operated by people with the right skills and capabilities. In this section of the survey we aimed to find out the reasons for the current level of capability of Project Controls staff in the organisations of our respondents.

Surprisingly, **only 31% of respondents felt that their Project Controls staff have the skills necessary to form their functions well** with the remaining 69% reporting that there is a general need to upskill their teams. This was a 14% increase on last year's survey where 55% of respondents said there was an overall need to upskill staff. Clearly emerging awareness of the importance of Project Controls is causing more people to realise that they need their teams to improve. Project management bodies such as the APM & PMI are also increasingly pushing the Project Controls agenda which is in turn making organisations more aware of the need to upskill their teams.

For those with a high level of Project Controls capability, **recognition of Project Controls as a profession** within the organisation was identified as the key driver for this, with **investment in quality resources** closely followed in second. We need more organisations to recognise that an investment in Project Controls as a core function of their business is required to make a difference to project outcomes. Elevating Project Controls related qualifications and investing in quality resources who are not merely just "operators" but those capable of generating useful

information to provide to key stakeholders during the delivery of a project would be two of the best solutions to solve this.

For the 70% that felt a general need to upskill their Project Controls teams, **lack of direction and support from management** is seen to be the main issue affecting resource capability. This is something that could easily be addressed by leaders in the industry if we are to raise overall levels of project success and is a theme that crops up frequently throughout the survey.

Regionally, respondents located in Europe and the Middle East reported the lowest levels of resource maturity (25% & 28% respectively) with Australasia the highest at 47%.

Of the three main areas of people, process & systems, people was the area in which most organisations recorded the lowest level of maturity. Interestingly, **only 23% of both Contractor & Client organisations** reported that their Project Controls teams do not require any upskilling to be effective in their roles. As you would expect, Consultancy organisations reported the highest level of resource capability at 50% but this still leaves a lot of room for improvement.

Compliance with client/stakeholder requirements is seen as the main reason for high process maturity

Only 13% of respondents said that their Project Controls processes meet all the needs of their organisation (full maturity), 42% have processes that fulfil many needs but not all and the remaining 45% have processes that need significant improvement to be effective or none in place whatsoever (an 11% increase in the recognition that improvement is needed from last year).

It's a fair assumption to make that an organisation that has mature processes would be highly compliant with the processes they have in place. The main underlying reasons for levels of process maturity among our respondents were not as immediately clear as for the areas of people & systems, however for those with a high level of maturity in this area, **compliance with client/stakeholder requirements** was the reason that was mentioned most frequently. It's important to note that compliance and maturity are not the same thing; organisations can comply with poor processes, and many do, however organisations that are more mature will be more inclined to ensure that processes are being followed. These organisations are likely to be more successful just because they are more fastidious about trying to ensure that things are done well.

Having well-structured and integrated processes is one thing, but ensuring they are consistently followed by all involved in the project is another. Of the 45% who said

there was a need for significant process improvement (11% increase from last year), the two main reasons they cited for this were due to **a lack of drive from Senior Management and a lack of governance to ensure that processes are followed.**

It is worth noting that process maturity levels in Client organisations were lower than those in Contractors & Consultancies and interestingly, our North American respondents reported very high levels of process maturity (73% effective). As the birthplace of Project Controls, North American organisations are seemingly leading the way in its adoption; this does not come as too much of a surprise. Our North American respondents cited **compliance with corporate standards/best practice** as the main reason for their high levels of process maturity.

The notoriously process-driven industries of Mining and Oil & Gas came out with the highest levels of process maturity and respondents from these organisations also cited **compliance** as the main reason for this. The nature of the projects in these industries (high value, high risk) and the fact that they are often funded by public sector funds means that failure to deliver these projects will hit the shareholder directly. Due to a need for greater control, Project Controls has been embedded in many of these types of organisations for some time and they are generally more committed to good process to ensure successful project delivery.

A lack of understanding of the benefits of system integration is holding many organisations back from reaching maturity

Project Controls systems are at the core of any effective project management function. 15% of our respondents felt that their organisation had a robust, fully integrated Project Controls system in place that meets all needs (fully mature), 50% agreed that there are appropriate systems in place for managing cost, risk & time but with little or no integration and the remaining 35% are currently using Project Controls systems that are not fit for purpose.

The respondents with high levels of maturity in the systems space attributed this to a **high level of expertise in the implementation and operation of these systems**. We can all agree that getting a Project Controls system set up correctly from the outset and possessing skilled system operators in a project team are two things that have a massive impact on the effectiveness of the system over the life of a project and are the two main criteria organisations should be looking at in a bid to achieve maximum system maturity.

Those respondents with inappropriate systems in place felt that this was due to two main reasons; **a lack of commitment to systems investment and development & a lack of understanding of the benefits of integration.**

In our experience, the hardest part of effecting a system change in a business is the implementation and support phase of it.

85% of our respondents told us that the systems they have in place on their projects have little or no integration between them. This echoes our findings from last year where the majority of our respondents identified Excel as their main tool for controlling cost, risk and change. There is clearly still a massive need for organisations to optimise and automate their flow of project information so as to avoid any human error in transferring information from one system to the other and drastically minimise the time spent managing data allowing more time to analyse it.

Again, as with process maturity, respondents from North American organisations reported the highest levels of systems maturity (77% have appropriate systems in place) with their main reason for this being a **high level of expertise in implementation & operation of systems**, tying in with the bulk of our respondents.

Performance information is still not being used constructively to manage the delivery of projects

In this section of the survey, we aimed to find out about the use of reporting & performance information in the organisations of our respondents.

22% of respondents said that reporting systems are efficient, and regular reports are produced allowing for plenty of time to take any corrective actions, 47% said that they produce useful reports but they are not always used constructively, 24% said that reports are only produced to meet client/ stakeholder demands and the remaining 7% said that reports are only produced on an ad hoc basis and not used constructively.

We then asked our respondents how performance information was used in the management of their projects. Interestingly, 50% of respondents indicated that performance information is comprehensively or routinely used to manage the delivery of projects and the remaining 50% indicated that performance information is not generally

used to manage project delivery. The respondents who indicated that performance information is used to manage project delivery reported a 54% project success rate whereas the **respondents who indicated that performance information is not used reported only an 18% rate of project success.**

Respondents who said that their reporting systems are efficient, and regular reports are produced allowing for plenty of time to take and corrective actions and that performance information was used to manage project delivery recorded very high levels of maturity across people, process and systems (64%, 97% and 97% respectively).

It's important for project decision makers to remember that cost & performance information are two different things and it is the latter that should be used to make decisions regarding the delivery of a project.

Benefits of Project Controls & ROI

New to this year's survey, we were keen to establish what our respondents saw as the main benefits of Project Controls. We started by asking our respondents at what levels of their organisation Project Controls is seen to be of most benefit. They were in general agreement that the **Management Team, Client Team & Delivery Team** were the 3 levels that found Project Controls most beneficial. In our experience, we have found this to be the case as client teams tend to be more committed to the use of Project Controls. In recent major projects such as the 2012 Olympics, HS2 and Tideway, the drive for standards in Project Controls have all come from the client side, in many cases with the contractors struggling to keep up or work effectively to their requirements. The Last Planner approach also promises to have a lot of impact, helping site personnel to deliver the project and sparing those at board level from excessive detail.

Only 17% of respondents said that they find it very easy to demonstrate the ROI of Project Controls

We then asked our respondents what they found to be the top 3 benefits of Project Controls. From a selection of 8 available answers, there were 4 that were comfortably clear of the others:

- ▶ They provide reliable and timely project performance information
- ▶ The impact of any project changes can be easily understood and managed
- ▶ Root causes for any delays and cost overruns are identified and minimised
- ▶ Enable appropriate decision-making in a timely manner

The benefits listed above could all be considered of massive importance to the success of a project and can also be used as a starting point in demonstrating the value of Project Controls which leads us on to our next survey question.

Demonstrating ROI is not always an easy thing to do and we were keen to understand how many Project Controls practitioners are working for organisations who recognise the value that it brings and are able to demonstrate this themselves. Only 17% said that they find it very easy to demonstrate the ROI of Project Controls, 42% said that some value can be proved but not widely recognised as essential and 5% are unable to demonstrate the value of Project Controls.

12

About Logikal

Logikal has been helping clients reduce the time and cost it takes to deliver complex infrastructure projects since 2002. Logikal's point of difference is built around the principal that highly effective Project Controls are central to optimal and repeatable project delivery outcomes. This belief has been borne out of proven experience, gained on some of the world's most progressive and complex projects.

Logikal develops strategies to enable their clients to stay in control of projects via a three-prong approach of improving performance management and control; maturing organisational delivery capability and digitally integrating systems to establish a seamless flow of information and business intelligence from the work-front to the boardroom.

Engagement Models



Consulting & Advisory involves close working with client leadership teams to establish a baseline position and strategic plan to deliver measurable, sustainable improvements to their ability to deliver programme/project objectives. Commencing with a Discovery/Maturity Review, Logikal draws on their suite of proprietary diagnostic tools to establish a baseline maturity level against industry norms, as well as identify the key blockers and issues impacting project delivery. A strategy is developed drawing on and applying Logikal's best practice industry experience. The implementation is monitored against the baseline position to demonstrate both the improvements are delivered and desired outcomes are being achieved.



Management Information Systems are at the core of any effective project management function. Logikal has developed a systems team that can enhance and integrate existing client systems and overlay Business Intelligence (BI) tools like QlikView® and Tableau® to provide a "single-source of the truth" solution that is a highly efficient. Working with management teams they are able to bring decision-making information faster and in a more intelligible way to the delivery teams, enabling better informed decision making.



Managed Services are individual and teams of professional Project Controls experts who seamlessly integrate with an existing project delivery team, and take on accountability for a role or entire function. A highly effective development and mentoring program ensures all Logikal consultants are not only proficient and proactive members of the team from the outset, but they continue to develop during the commission and they and the client benefit by drawing on the expertise and experience of the wider business. All client engagements benefit from a range of "behind the scenes" activity that delivers improved client outcomes and which has seen Logikal enjoy long term, repeat engagements with clients.



Training & Capability Development services have allowed Logikal to have both a more rapid and longer lasting effect on the wider client team by developing and deliver training and coaching programs aimed at improving both individual competency but also importantly to align project delivery team members with common understanding of the project's framework, procedures and systems. Logikal is accredited as an RTO, AIPM and PMI Accredited Training provider.



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