

Capital Projects and Infrastructure Case Study



Vincent Jiang
Risk Assurance Director



+86 (21) 2323 3446



vincent.y.jiang@cn.pwc.com

PwC's Capital Projects and Infrastructure team consists of professionals with a wealth of experience in construction, risk management, internal control and internal audit. We provide end-to-end solutions to support the entire life-cycle of a construction project. We help our clients to achieve their goals of construction management, including timeliness, economic assessments, compliance, safety, quality, etc. We consider the liabilities at each stage of the construction to improve the project management with risk-based internal controls and processes.

Case Study 1

Client's challenge/pain point

The client was a foreign investor looking to build an office building in Shanghai. As an investment company, they do not have any knowledge or experience in construction management in China. Given the large investment involved and tight schedule, they were concerned about how to control the inherent risks in the construction project. They wanted a team with vast experience in both construction and risk management to review the controls when the project is halfway through, to identify existing or potential risks and provide recommendations for improvement.

What's our approach?

We formed a team with expertise in cost engineering and construction project management. We performed our review by conducting face-to-face interviews, data analysis, walk-through tests, benchmark and detailed sample tests.

We also visited the construction site to check on the status of the project, reviewed site management controls including physical assets (architecture and construction, equipment, etc.) controls and quality monitoring.

After a comprehensive understanding and assessment of the client's control design and execution, we identified significant deficiencies, with high risks, in the project's cost, schedule and compliance. We provided the management with recommendations to solve these critical issues of cost overrun, schedule delay and non-compliant behaviours.

What's the impact?

The client accepted our recommendations and directed the contractor to make the required improvements. Because of the timely remediation, the client saved several million in cost, and sped up the construction schedule. More importantly, they avoided more risks afterward.

Case Study 2

Client's challenge/pain point

As a listed real estate development company, the client formulated a strategy for rapid expansion. However, they faced challenges from their staff's inexperience and inconsistent process in construction projects. The client would like to standardise their construction project management internal control processes in a short time.

What's our approach?

We have a good understanding of the client's business. We discussed and assessed their operational risks. Using the team's combined knowledge and experience, we performed a diagnosis on the client's existing processes and identified key control deficiencies.

We reported our findings and proposals to the management, which were accepted. We mapped out key controls to all the risks and provided suggestions on management structure changes, control improvements and system function development.

We created an internal control manual with flowcharts, risk and control mapping tables, key control matrix, authorisation matrix and segregation of duty tables. To facilitate the implementation of the new internal control mechanism, we also provided our recommendations on the upgrade of department policy and monitoring tools.

What's the impact?

By using the internal control manual, the client could easily instruct their staff to do their assigned job accurately and measure their performance using consistent standards. The client repeated this internal controls system with each construction project, allowing them to expand their business with confidence.

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