Institute of Commissioning & Assurance

WHY DO BIG PROJECTS FAIL - AND WHAT ARE WE DOING ABOUT IT?

The evidence is in. The standards now exist. This is how the industry moves from knowing the problem to fixing it.

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Every year, the world commits trillions of dollars to major capital projects such as power plants, hospitals, transit systems, industrial facilities, data centers, etc. These projects are promised to their investors, governments, and communities on three things: a budget, a schedule, and a benefit. Most projects miss at least one. Almost all miss all three.

Fewer than 1 in 2	Fewer than 1 in 10	Only 1 in 200
projects finish on budget	finish on budget and on schedule	also deliver the benefits promised

Source: Professor Bent Flyvbjerg's research database of more than 16,000 major projects across sectors, regions, and decades - the largest of its kind (How Big Things Get Done, 2023).

This is not a people problem. It is a model problem.

The research from the University of Oxford and from the Construction Industry Institute is clear.

"It has become apparent to CII that too often project teams celebrate completion of a project at construction completion, which is too early." Construction Industry Institute.

Projects are not failing because of bad people doing bad work, most people genuinely want to deliver good work that contributes to project success. However, projects continue to fail because the standard delivery model is incomplete. Projects are managed and governed around deliverables:

- drawings issued
- milestones met
- construction completed

On the assumption that finished deliverables automatically become a working facility and a delivered benefit.

They do not.

The step that transforms project deliverables into project outcomes is exactly where the current model goes quiet:

- nobody is formally accountable for the operational outcome
- no evidence standard exists to governs the transition into operations

And the hidden disciplines that makes this happen - commissioning and operational readiness - are treated as late-stage activities instead of disciplines that starts on day one.

The research gave us the diagnosis. Now it needs an implementation.

Professor Flyvbjerg, the Construction Industry Institute, and the wider research community did the industry an enormous service: they proved, with data, that project failure is systemic and predictable - and they gave us the principles for doing better. Think slow, act fast. Start with the end in mind. Forecast from the record of real projects, not from optimism. What research alone cannot provide is the operating layer that puts those principles to work on an actual project: the standards, the accountable roles, the evidence requirements, and the decision points a team applies week by week. Turning this research and evidence into everyday practice is the work of a professional standards body. The Institute of Commissioning & Assurance was created to do that work.

The missing standards now exist

The Institute has published an integrated, international framework that makes outcome-based project delivery implementable:
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- **Outcome Assurance (governance)**. The project's intended outcome is explicitly defined, de-risked, evidenced, and formally authorized at defined stage-gates as the project progresses - with a named leader accountable for each decision and an independent check on the evidence behind it.
- **Commissioning and Operational Readiness (implementation**). The disciplines that verify systems actually work, prepare the organization to operate them, and produce the credible evidence that outcome decisions depend on - engaged from the beginning of the project, not discovered at the end.
- **Body of Knowledge (practice)**. Plain-language guidance, vocabulary, and implementation examples that make the framework practical for real project teams

This Outcome Governance Framework (OGF), for the first time, makes available the standardized processes used by successful project teams to define the outcome, de-risk execution, evidence completions, authorize residual risk, and govern decisions at each project transition. Success on day one of operations is planned and proven - not assumed.

Proving it works - the same way the problem was proven

A framework that asks an industry to change must hold itself to the same evidence standard that exposed the problem. The Institute is working with member organizations and industry partners to capture outcome data from projects applying the standards - building the independent, auditable record that will support adoption across the industry. The research by the University of Oxford and the Construction Industry Institute defined the current problem and how to measure project success. The ICxA OGF standards give projects a governed path to achieve it. The data will demonstrate the compelling difference for adoption.

What you can do next

Wherever you sit in the capital projects world, there is a concrete first step you can take to contribute to improved project performance:

- **Project owners and executives** - become a corporate member. Align your organization with the professional body advancing outcome-based project delivery.Corporate membership signals leadership in reliable project outcomes and gives your teams access to the standards, benchmarking, and certification pathways.
- **Delivery organizations** - adopt the standards on a project. Start with one project. Apply the Outcome Governance Framework from the beginning, engage commissioning and operational readiness early, and measure the difference. The Institute supports adopters through implementation guidance and direct engagement.
- **Practitioners** - join the Institute. If you do this work - commissioning, readiness, assurance, project leadership - membership connects you to a global professional community, the body of knowledge, and the certification pathway that recognizes what you already do.
- **Researchers and institutions** - partner on the evidence. Help build the outcome dataset. The Institute welcomes collaboration with the research community, funders, and audit and assurance bodies on measuring what outcome-based delivery changes.

The diagnosis is complete, the direction is clear, and the standards are written. What happens next depends on the organizations willing to lead - and to be recognized for leading.

Learn more and get involved at www.icxa.net
Contact the institute at info@icxa.net