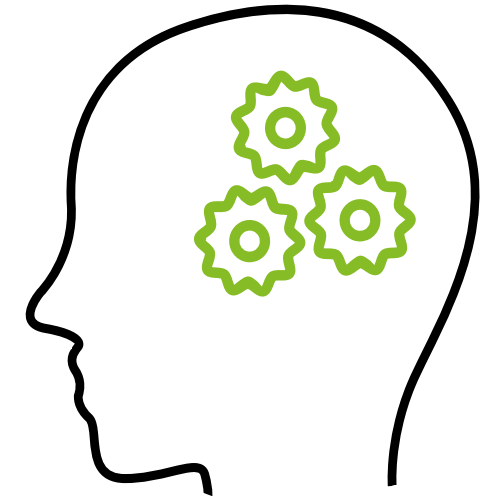# Deloitte.

Predictive Project Analytics 2.0
Keep your project on target with
Deloitte's data-driven insights

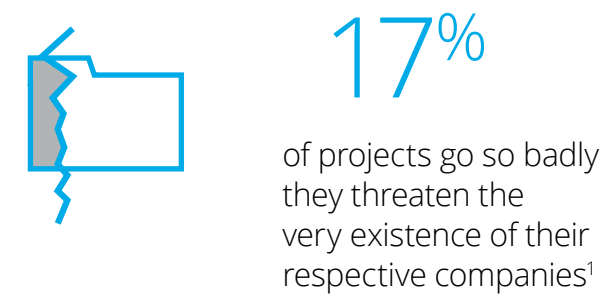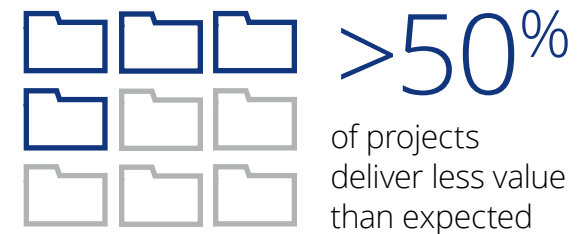Risk Advisory ●

It's time for a
new methodology

According to Project Management Institute Research

>50%
of projects
deliver less value
than expected

45%
of projects go
over budget

17%
of projects go so badly
they threaten the
very existence of their
respective companies[1]

The cost of project failure can be significant and leave your organization at a competitive disadvantage, burden it with inefficiencies, and damage its reputation. And yet, even with this common knowledge and with dedicated teams of qualified individuals, organizations still see their projects continue to fail at a shocking rate.

Deloitte's research shows that the more complex a project is, the lower the chances it will achieve its desired outcome—after all, with heightened complexity comes heightened risk. To avoid project failure, you need the ability to objectively assess when projects are at risk of underperformance, and the capacity to proactively correct course and improve project delivery—before things go off track.

Deloitte's Predictive Project Analytics (PPA) is an objective, holistic methodology designed to mitigate risk and enhance visibility on complex projects, enabling organizations to make better decisions and achieve better outcomes. PPA allows for a comparison of a project's in-place controls against those required to fully mitigate its unique set of risks. From this analysis, we are able to identify any areas of insufficient control and provide specific, informed, and scientifically valid recommendations for improvements in real-time.

Data-driven decision making to achieve better project outcomes—welcome to PPA.

1. "Delivering large-scale IT projects on time, on budget, and on value" - Michael Bloch, Sven Blumberg, and Jürgen Laartz, 2012

Why projects fail

No clear strategy/poor business case. The project's strategy is not well understood or is misaligned with corporate strategy. Project business cases overlook important risks or requirements, laying the groundwork for budget and scheduling issues before the project even starts.

Inadequate governance. Organizations use a risk management framework or process that doesn't suit business requirements, or lack effective processes to monitor and control the project. Roles and responsibilities are not clearly defined, leading to confusion over accountability.

Inefficient capital allocation. Inadequate or inefficient project frameworks, a poorly chosen tax structure, or weak controls can compromise project outcomes and overall success.

Unsuitable skills. Project team members cannot effectively manage and execute the project. Staff incentives focus on the wrong metrics or fail to encourage required or desired performance. Cultural differences among team members hamper the project's effectiveness.

Lack of quality data to support decision-making. Key performance indicators do not link to the right outcomes. Project teams lack access to the timely, accurate data they need to make smart, well-informed decisions. Decisions are based on qualitative, anecdotal evidence rather than hard facts. Time and cost data are not available, or even visible, to the right people.

The PPA difference

You no longer need to rely on the highly subjective experience and knowledge of your project team or advisors. PPA's true differentiator is its ability to help organizations achieve project success by predicting challenges and risks associated with project implementation. Not only does it identify what these challenges are ahead of time, it also provides your organization with actionable recommendations to mitigate these risks before they materialize and throw the project off-course.

Each control factor in PPA is evaluated based on real-world examples and observable attributes, with measurement scales derived from project management theory, behavioural science, and other disciplines. That means it can be used to supplement existing project management methodologies and control functions, resulting in a host of benefits unattainable through traditional methods. Specifically, PPA can position you to ensure all project insights are current and sharp. This flexible and scalable solution is constantly updated with data from new projects and the latest academic research—meaning it's always "learning" about what contributes to project success.

Whether you're launching a new project or managing one already underway, PPA can help you outline your key project risks and, if necessary, help you determine when, where, and how to intervene to get your project back on track.

- Improve your capital efficiency and realize a tangible ROI.
- Identify and resolve existing project management challenges.
- Leverage quantitative and defensible data points to drive project/program management decisions.
- Capitalize on what others have learned, leveraging the PPA algorithm built on millions of project data points from thousands of successful projects.
- Assess the level of project complexity and risk your organization can manage based on its current capabilities.
- Enhance transparency and integration across your various project control functions.
- Reduce subjective bias when monitoring and reviewing project performance.

Mitigate the unforeseen

① Input complexities

Establish the complexity profile
- Review key project documentation.
- Interview core project members.
- Conduct project complexity assessment.

The inputs are measured using the complexity framework to establish the project's unique, inherent risk profile.

② Expected controls

Determine expected levels of controls
- The unique complexity profile is exported into the PPA analytics engine, which uses an algorithm that correlates complexity characteristics to performance drivers.

This correlation determines the expected level of project controls required to achieve success.

③ Performance controls

Assess current project performance and controls
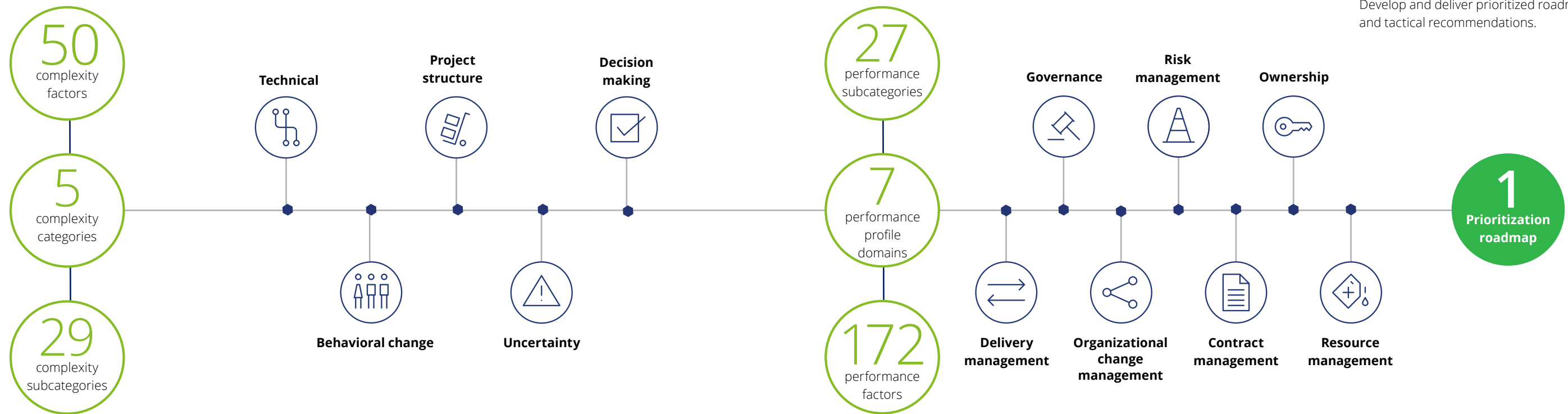- Understand the project controls in place and compare them to those expected based on the complexity.

Variance in actual vs. target maturity of the project controls is determined and validated with stakeholders.

④ Prioritization roadmap

Deliver prioritization roadmap
- Develop view of the key unmitigated project risks.
- Identify systemic issues and root causes of challenges.
- Leverage the analytics to identify recommendations that fit the organization and its project maturity.
- Recommend control improvements most correlated with a successful outcome.

Develop and deliver prioritized roadmap and tactical recommendations.

50 complexity factors

5 complexity categories

29 complexity subcategories

Technical

Project structure

Decision making

Behavioral change

Uncertainty

27 performance subcategories

7 performance profile domains

172 performance factors

Governance

Risk management

Ownership

Delivery management

Organizational change management

Contract management

Resource management

1 Prioritization roadmap

Deloitte's PPA solution offers a customized approach, providing you with the objective, data-driven insights you need to anticipate, manage, and mitigate the risks that could derail your project.

Our holistic process starts with a thorough review of your project and its risk profile via the complexity assessment, which is dependent on an initial investigation phase including the examination of key documentation and interviews with core team members. With this information in hand, we generate a detailed project complexity profile that is exported into our advanced PPA inference engine.

The PPA inference engine processes the complexity profile and generates expected levels of performance across the seven project management domains shown above.

By comparing the expected levels against what is in place, we can identify potential roadblocks and take steps to remedy project management derailment risks — before they grow into major problems.

The Deloitte difference

To date, PPA has helped organizations bring over $120 billion of project investment to a successful and effective conclusion.

Traditional tools and methods can be great for tracking project progress, but they are not designed to help project teams identify or mitigate unforeseen factors. Such factors can heighten project risk, lead to delays and cost overruns, or cause projects to under perform. That is why we have devoted years of research and effort to develop a smarter, better approach— one suited to the demands of the exponentially increasing complexity of projects today.

Deloitte's PPA goes well beyond traditional benchmarking, which tends toward "one-size-fits-all" best practices. The powerful algorithms at the heart of PPA have been developed with years of project data that have been carefully analyzed and dissected to help projects succeed. Through an extensive set of complexity factors statistically proven as most significant in imposing risk, and more than 170 controls proven to be most critical in managing this risk, we help you identify what's most relevant to—and most effective for—your organization's project.

This unique solution has already been successfully applied in over 350 complex capital projects, technology implementations, and organizational change initiatives around the world, for companies of all sizes and in every industry.

Client A

The challenge

A lack of organizational standards for project management processes and controls.

Siloed business units across geographies made it difficult to standardize processes.

Increasing competition for skilled resources drove heightened emphasis on effective resource allocation.

The result

The PPA methodology provided insights that:

Equipped Internal Audit and PMOs with timely, specific, benchmarked, and actionable recommendations.

Identified critical systemic issues related to project management and developed an action plan based on industry project benchmarks.

Provided a holistic and robust framework to assess project portfolio complexity that assisted in the yearly audit planning and resource allocation.

Client B

The challenge

Implementation of a technology or business transformation program with significant pressure to deliver on time, and in scope.

A large number of stakeholder groups involved in governing the program added complexity to the project and challenged the delivery team to meet required timelines.

The result

An assessment conducted using PPA provided:

A current-state analysis that showed that current performance was meeting the lower range of acceptable project practices, leaving the project exposed to significant negative impacts if any of the key risks materialized.

Practical recommendations to improve performance and mitigate risk, enabling the client to take immediate and targeted action to increase the likelihood of project success.

Client C

The challenge

Mid-way through deploying a multi-year, multi-phase clinical information system, unexpected and significant delays occurred, consuming a large portion of their overall contingency budget.

The result

An assessment conducted using PPA determined an overall PPA score, which:

Identified project complexity and gaps in the project structure, governance, and practices.

Measured the project's probability for success.

Provided recommendations to minimize the total overruns and cut off systemic under performing areas from causing additional delays.

Adjusted the contingency budget allocation for probable risks.

Contact us

To learn more about Predictive Project Analytics and how it can help your organization keep projects running smoothly, on time, and on budget, please contact us at riskadvisory@deloitte.ca.

Notes

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