Predictive Project Analytics (PPA)

Enabling Project Success through Analytics

Fact:

~42 percent of projects fail to meet their objectives

The Challenge

Projects overall - According to PMI only 55% of projects are completed on time and 58% on budget.

• 42% - late, over budget or fail to deliver
• 21% - cancelled or never deployed
• 46% - cost overrun (systems development projects)
• 71% - need extra time to deliver
• 74% - requirements actually delivered

The Opportunity

PPA - an analytical project assessment capability that examines project characteristics correlating complexity factors and likelihood of success using a probability distribution.

Using a proprietary database of thousands of successfully completed projects, PPA provides clear insights as to the specific level of governance required throughout planning and execution to achieve project objectives,

• Enhanced internal project control function frameworks
• Targeted turnarounds for high risk projects
• Integration planning and execution support
• Independent verification and validation project oversight
• Risk intelligent resource allocation across portfolios
• Organizational Performance Cliff analysis

The Value

Business transformation - Combining project risk and governance expertise with a powerful analytical capability enables pragmatic solutions, enabling long-term program and project success.

• Improved capital efficiency
• Flexible and scalable solution to supplement existing methodologies
• Effective near term benefits
• Quantitative and defendable data to drive project/program management decisions
• Analytical analysis assessing 2000+ successful projects
• Insight into level of manageable project complexity and risk
• Improved transparency and integration
• Decrease subjective element
• Meet compliance requirements and deliver expected business specification

Complexity Fingerprint

Predictive insights linking project(s) complexity fingerprint to its required performance execution controls.

Research correlates complexity to project outcomes. Each project dictates its own degree of:

• project management/governance
• skilled teams and
• control levels

What’s your project’s fingerprint?

+250MM possible permutations of unique project complexity profiles

Performance Cliff Analysis

Seven control areas

Governance

Ownership

Risk Mgmt.

Contract Mgmt.

Delivery Mgmt.

Resource Mgmt.

Business Units

Comprehensive assessment focused on the control areas that make a significant difference to project performance

Demonstrated Success

Conducted a proof-of-concept pilot to demonstrate PPA could predict the weaknesses in control area that ultimately affected the success of a key defense project. Using predictive analytics, the team evaluated 172 critical factors and provided specific recommendations for attaining the level of controls needed to meet time, cost, and quality goals. PPA’s diagnostic capability accurately identified program management factors that contributed to the termination of the project.

Gartner recognition

"Deloitte is consistently working toward finding and producing new Risk Management solutions, using analytics to help clients solve complex risk problems. The latest example is Project Predictive Analytics, which applies risk analytics to large projects and internal audit planning and offers a risk-sensing analytics solution."

Gartner: MarketScope for Global Risk Management Consulting Services 2013

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What if there was a way to predict and avoid performance strains in projects? There is!

PPA has proven to identify performance shortfalls, decrease likelihood of cost and schedule overruns, and improve chances for success.

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Gartner: MarketScope for Global Risk Management Consulting Services 2013
PPA is an analytical project risk management capability that examines a project’s characteristics and assesses whether it has the appropriate level of oversight and governance linking complexity to project execution. Identification of challenges in project controls allows adjustments to be recommended to improve performance and probability of success, lessen the likelihood of unforeseen setbacks that lead to cost overruns, and preserve project schedules improving on time to delivery.

### PPA Assessment Process (4-6 weeks)

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<th>Stage I:</th>
<th>Stage II:</th>
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#### Description
- Collection of data through stakeholder sessions, and document review.
- Identification and sourcing of documentation for the complexity assessment.

#### Activities
- Develop an understanding of the organization’s project(s) and portfolio.
- Interviews with core project team members.
- Interviews with key stakeholders.
- Detailed review of core documents (e.g. plans, reports and logs).

#### Outputs
- In-depth understanding of the project and organization.
- Data and documentation necessary for the complexity assessment.

#### Benefits
- A new way of relating risk to other projects that is based on project’s specific setup, challenges, and requirements.
- Allows user to look at the portfolio and compare like components of different projects.
- Analytical analysis benchmarked against 2000+ successful projects in the database.

#### Interviews & Document Review
- **Description**
  - Detailed complexity assessment based on a series of complexity factors to compare the project to a portfolio of like-projects (with similar complexity).
- **Activities**
  - Perform Complexity Assessment to understand the project’s unique complexity profile measured across 29 factors and five domains.
  - **Factor Examples**: Level of Accountability, Schedule Complexity, Financial Cost, Stakeholder Alignment, Risk, Impact on Infrastructure.

#### Complexity Assessment
- **Description**
  - A comprehensive review of the health of a project in relation to projects of similar complexity.
- **Activities**
  - Assess project execution performance using Predictive Analytic capabilities.
  - Actual project controls assessed for 172 project management characteristics across 7 domains based on industry leading practices such as PMBOK and PRINCE2.
  - Using the expected level of project controls generated from project complexity, a comparison between actual and expected project controls is generated for each characteristic.

#### Project Execution Health Assessment
- **Description**
  - Expert analysis and synthesis of the Health Assessment to develop trends and themes from the data.
- **Activities**
  - Analyze output from interviews, document review and predictive tool.
  - Develop broad and deep view of the key mitigated project risks.
  - Identify control improvements most correlated with a successful outcome.
  - Identifies governance and performance execution areas that need to be adjusted, implemented, monitored or enforced to enhance the likelihood of project success.

#### Analyses and Synthesis
- **Description**
  - Final project assessment report with issues, observations, impacts and recommendations for improvement.
- **Activities**
  - Analysis highlighting organizational project management capability strengths and weaknesses.
  - Identify key project areas driving complexity.
  - Identify areas that are consistently over controlled and identify ways to improve efficiency.
  - Prioritized recommended actions to inform risk based resource allocation and continuous improvement.

#### Reporting
- **Description**
  - Improved transparency and integration amongst Project Control Functions.
  - Improved capital efficiency with tangible ROI for various stakeholders.
  - Improved transparency and integration amongst Project Control Functions.

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