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A Powerful Solution for Enterprise Portfolio Management

Improving Outcomes with DashBlox

Executive Summary

Over the years, federal government programs have increased in both size and intricacy. To help manage schedules, costs, risks, and deliver positive results, federal agencies and other organizations are turning towards portfolio and program management tools.

Currently in some agencies, data representing project status, risk, performance metrics, development schedules, milestone status, project gate reviews, and others is isolated within their respective systems-of-record, making it difficult to determine a project's true status or identify threats to its success. This helpful white paper examines how IntelliDyne is using their enterprise portfolio and program management solution to communicate progress, be transparent, and maintain accountability with their stakeholders, and how other organizations can do the same.

Background

Currently in many organizations, data representing project status, risk, and performance is isolated in their respective systems-of-record, making it difficult to determine a project's true status or identify threats to its success.

PMI reports that "organizations are increasingly recognizing that one of the most effective ways to ensure projects and programs deliver expected value for the organization is through formal portfolio management."[1] More than half of respondents to PMI's Pulse of the Profession™ study reported that they frequently use portfolio management at their organizations.[2]

PM Solutions' Strategy & Projects research study identified portfolio and program management best practices. Their study found that organizations that reliably followed these best practices also ranked among the top in organizational performance. The best practices identified include:[3]

1. Document current projects.
2. Prioritize projects are using a scoring system that uses strategic alignment as a criterion.
3. Capture metrics to assess the performance of portfolios and programs.
4. Communicate the performance results of the portfolios and programs to stakeholders.
5. Review performance so that decision makers can re-allocate resources as necessary.
6. Allocate enough resources to make the projects achievable.

PM Solutions' State of Project Portfolio Management study found that organizations that invest in portfolio management long term see an increase in the return on investment (ROI) resulting from these practices. Organizations that reported investing in portfolio management practices for five or more years were nearly three times more likely than organizations with only a short-term investment (less than five years) to report an ROI of 25 percent or more from investing in portfolio management.[4]

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[1] The Project Management Institute. (2012). Pulse of the Profession® In Depth Report: Portfolio Management.
[2] The Project Management Institute. (2012-2017). Pulse of the Profession® Reports.
[3] Crawford, J. K., with Cabanis-Brewin, J., & Pennypacker, J. S. (2008). Seven Steps to Strategy Execution, Havertown, PA: PM Solutions Research. Includes data from Strategy & Projects research study.
[4] PM Solutions Research. (2013). The State of Project Portfolio Management 2013. Glen Mills, PA: PM Solutions.

The reward for consistently practicing portfolio management is clear: According to PwC's Insights and Trends: Current Portfolio, Program, and Project Management Practices survey, the use of effective portfolio management processes led to better results in key performance measures including budget, quality, and schedule.[5] PMI's Pulse of the Profession™ survey reported similar results, with respondents estimating that they could increase performance on project schedule, budget, goals, and ROI by 18 to 36 percent by practicing highly effecting portfolio management, as shown in **Table 1**:[6]

Average Percentage of Projects:	Minimally Effective Portfolio Management	Highly Effective Portfolio Management	% Increase from Minimally to Highly Effective
Completed on Time	50%	68%	36%
Completed on Budget	54%	64%	19%
Met Original Goals and Business Intent	65%	77%	18%
Met or Exceeded Forecasted ROI	48%	62%	29%

Table 1. PMI Pulse of the Profession™ In-Depth Report: Portfolio Management

However, implementing true portfolio management is not always a simple task for organizations. Even at organizations that have invested energy and resources in perfecting their project management skills, executives often report that they lack true control of portfolio management. The PMI Pulse of the Profession™ In-Depth Report: Portfolio Management found that 91 percent of portfolio managers rated their portfolio management maturity as either merely developing, or immature.[7]

A Solution for Enterprise Portfolio Management

Motivated by the benefits from investing in efficient portfolio management, executives and enterprise program management offices (PMOs) desire a way to effectively determine and communicate progress, and be transparent with their internal stakeholders.

A solution for enterprise portfolio management needs to be interactive and allow drill-down capability into underlying details to perform analysis, including root-cause. IntelliDyne believes that effective portfolio and program management is only possible when a metrics-driven approach is taken for program execution. In our experience, with the proper tools, better quality and outcomes can be achieved with less effort.

> Organizations need a solution that seamlessly bridges each of their source data systems to bring relevant project data together and present it through a single view that enables interested stakeholders to obtain situational awareness for each project.

To facility transparency, accountability, and trust, IntelliDyne has developed a platform called DashBlox® Program Assurance to directly support portfolio and program management for their own government client engagements. The platform is currently deployed within IntelliDyne serving Executive leadership and Program Management teams for each of their active government contracts. Operational data is collected from disparate data systems and reported in near real-time in an integrated dashboard.

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[5] PwC. (2012). Insights and Trends: Current Portfolio, Program, and Project Management Practices.
[6] Project Management Institute. (2012-2017). PMI Pulse of the Profession™ Reports.
[7] The Project Management Institute. (2012). Pulse of the Profession® In Depth Report: Portfolio Management.

DashBlox Program Assurance provides a data-driven, metrics-based approach for the management of, and technical execution of portfolios, programs and contracts. IntelliDyne believes the best way to achieve or exceed all contract performance metrics is through continuous monitoring and reporting, allowing course-corrective actions to be taken in time to change direction and improve outcomes.

Since its inception, IntelliDyne's Program Assurance dashboard has resulted in significant labor reductions through the elimination of manually-produced presentation materials when preparing for program review cycles. It has given stakeholders real-time visibility into project status, contract and schedule performance, milestones, staffing, and project risk.

DashBlox Program Assurance's architecture is COTS-based, extremely flexible and scalable, allowing IntelliDyne's data analytics team to quickly add additional data sources as reporting requirements grow or change. Their approach is to provide a single, multi-tabbed dashboard that cleanly integrates all required and desired reporting functionality. The graphic in **Figure 1** below provides a high-level CONOPS of the sources and uses for a proposed flow of information, with actual screenshots of the current Program Assurance dashboard as output:
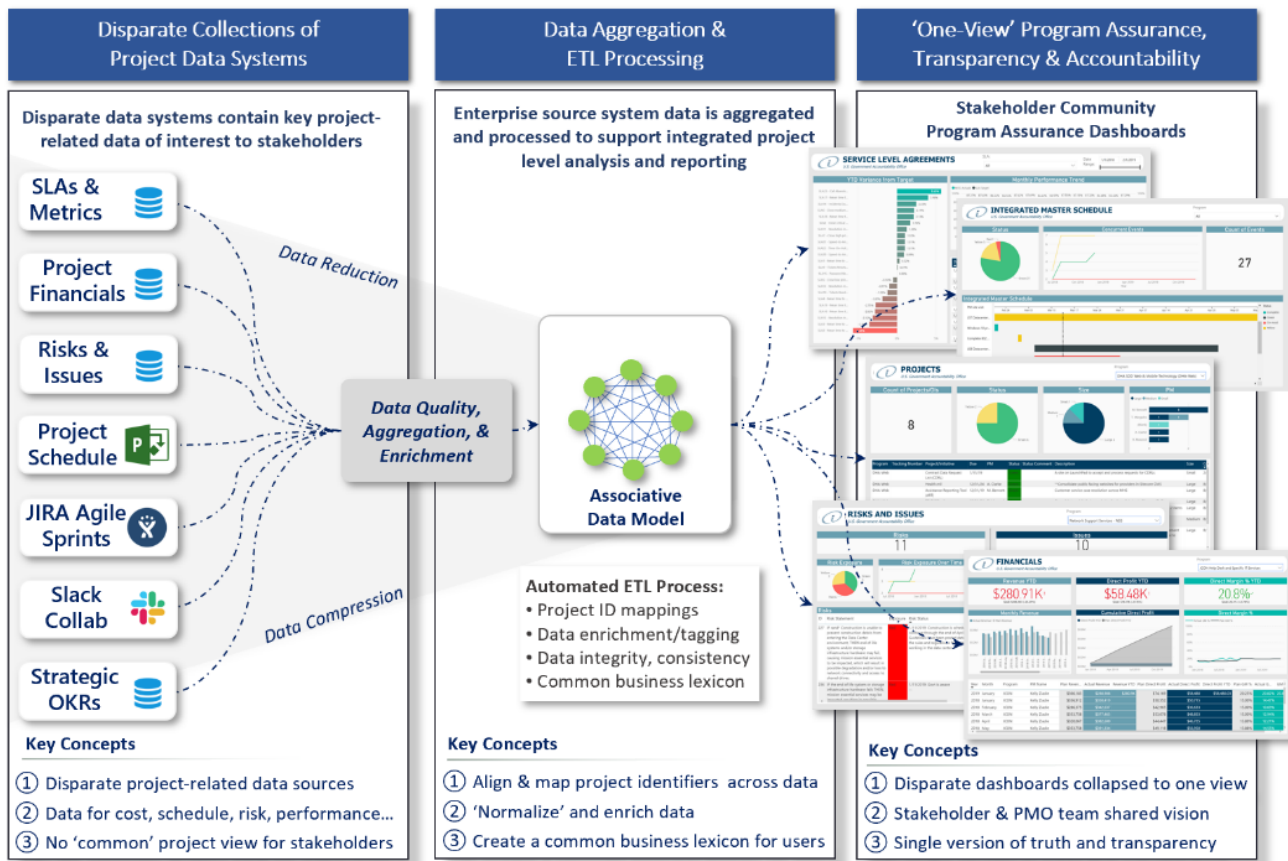

Figure 1. Concept of Operations, Data Sources and Uses

In **Figure 1**, a few of the disparate data sources are notionally depicted in the first column. The framework is flexible and can easily accommodate additional sources as needed.

At present, Dashblox Program Assurance is integrated with data sources covering the areas below:

- High-level program/project narrative and overview
- Contract or project SLA performance metrics
- Project financials and contract details
- Staffing headcount including vacancies and turnover metrics
- Project POCs
- Program status narrative
- Key events and milestones status
- Program/project risks and issues tracking
- Integrated master schedule/project schedule
- Sub-project and operational initiatives tracking
- Strategic objectives, supporting initiatives, and results tracking (OKRs)

IntelliDyne is currently using DashBlox Program Assurance to self-manage their contract performance for clients at the Defense Health Agency, the Department of Justice, the DoD Joint Program Executive Office, the Defense Information Systems Agency (DISA), and the Defense Centers of Excellence.

Recently, IntelliDyne has added a capability for defining and reporting progress against established Strategic Objectives and their supporting Initiatives (**Figure 2**). The tool enables the organization to define and publish strategic, team-based, as well as personal goals and objectives. It includes a mobile application, used by the management team, to update their daily or monthly progress against each objective/initiative and includes a dashboard that supports the review and analysis of progress-to-date.
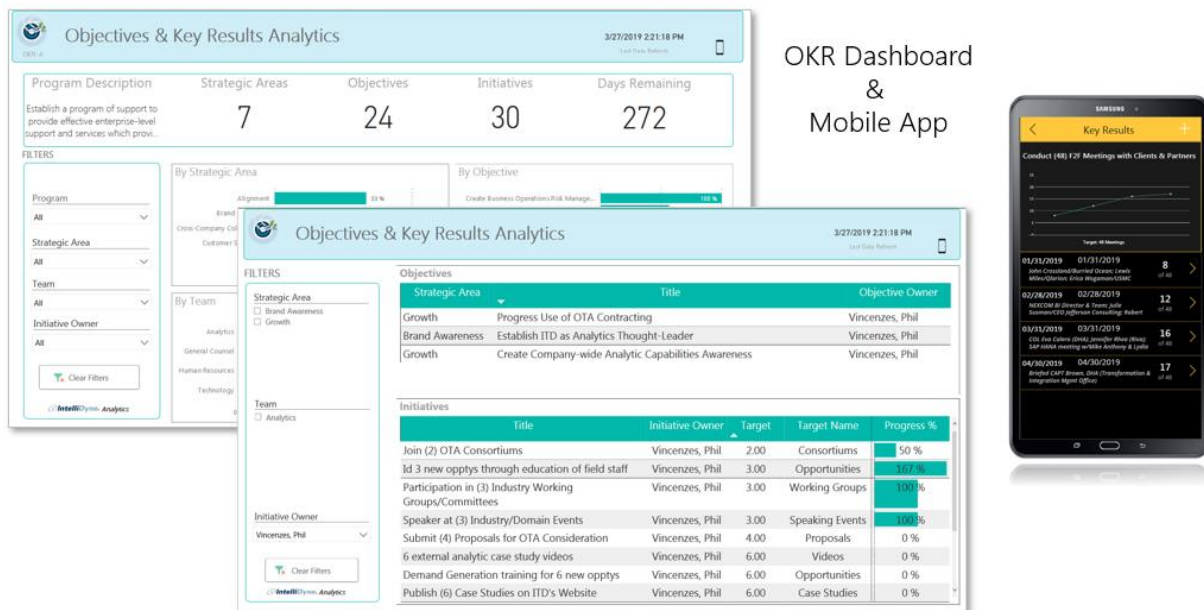

Figure 2. Objectives and Key Results Reporting

The contractual SLA performance management function (**Figure 3**) of our dashboard has been architected as a flexible, formula-driven analytic tool, that calculates and provides current and historical SLA performance for any category of operational or programmatic metric. Presently, IntelliDyne is utilizing this capability to manage and report performance for each of their Enterprise Help Desk and Call Center contracts, pulling information directly from the Agency's incident management systems.

This SLA tracking capability has allowed IntelliDyne's task area leads to monitor performance in real-time and take course corrective actions as soon as SLA metrics fall below established performance quality levels. Furthermore, underlying detail is accessible via drill-down, to support root-cause analysis.
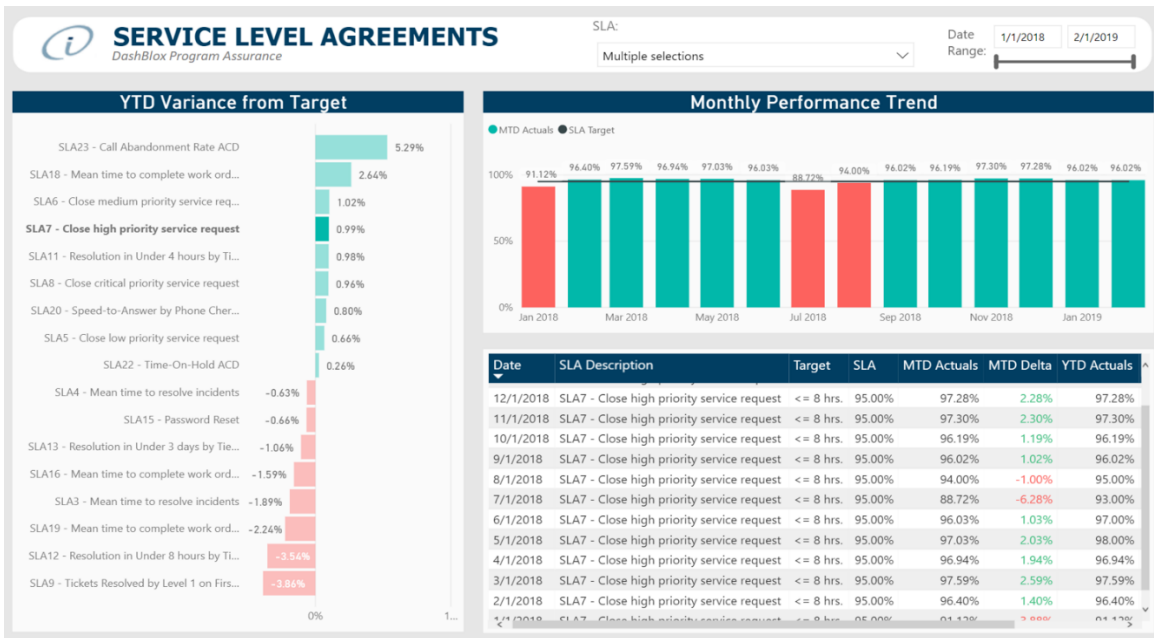

Figure 3. SLA Metric Performance Management

IntelliDyne has also integrated external project scheduling tools, such as Microsoft Project, to enable an integrated view of individual projects or to group projects into a single view to identify team or individual resource under or over-utilization. The Integrated Master Schedule example below (**Figure 4**) can be used to select one or more project schedules and isolate resources by team or name.
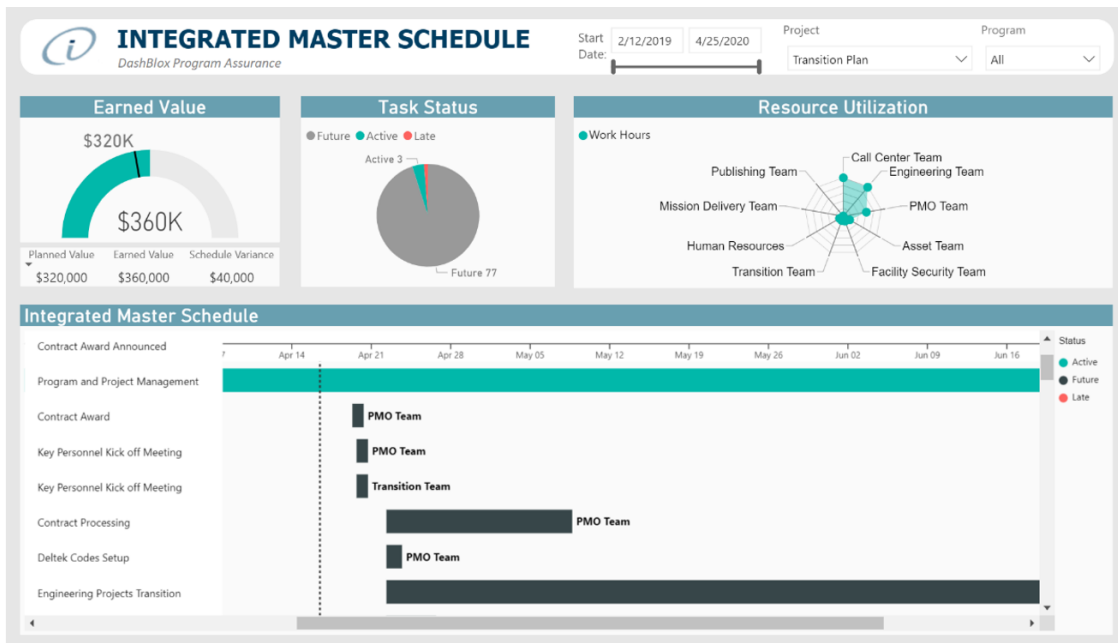

Figure 4. Integrated Master Schedule

Conclusion

DashBlox Program Assurance's architecture is purposefully designed to accommodate implementations that leverage technologies which are typically in place at IntelliDyne's own Corporate Headquarters and government customer locations to support comprehensive portfolio and program management. IntelliDyne also emphasizes user-centered design and esthetics in DashBlox to ensure usability, improve adoption, and minimize training requirements.

Additionally, IntelliDyne understands that program data sources may span multiple tiered networks and that they would need to ensure that any proposed technical architecture meets current applications technology reference model. DashBlox Program Assurance's architecture is flexible enough to allow necessary adjustments to accommodate an organization's technology and security requirements.

IntelliDyne applauds organizations with the initiative and interest to pursue the development of a centralized resource to provide project transparency and accountability for business stakeholders and development teams. IntelliDyne would be more than happy to collaborate with other organizations in a follow-on discussion to explore lessons learned through the development of their own Program Assurance platform and the potential for adapting it for others' use.

About IntelliDyne

"We fully recognize the value that analytics and dashboard reporting provides to improve programmatic outcomes, reduce project risk and cost, and serve as a communications tool between IT and the customer, creating a relationship based on transparency, accountability, and trust."

- Ed Abner, Executive Vice President and Chief Operating Officer, IntelliDyne

IntelliDyne, LLC, headquartered in Falls Church, Virginia, is a Federal IT solutions provider of advanced analytics, data visualization, business intelligence, and enterprise IT infrastructure management services. Our analytic process combines the CRISP-DM (Cross-Industry Standard Process for Data Mining) and the Agile development methodology, ensuring we deliver consistent and reliable services to our clients. We also take a user centered design approach to all our application development projects. Our processes are Capability Maturity Model Integration (CMMI) Level 3 appraised, and our project managers are trained in Information Technology Infrastructure Library (ITIL) and are certified Project Management Professionals (PMP).

IntelliDyne has taken measured steps to integrate analytics and business intelligence reporting into their day-to-day portfolio management and execution of IT services contracts. Our general approach for implementing analytic-based solutions is to build upon industry-leading COTS business intelligence and data management platforms, in which we develop fully-functioned, interactive analytic solutions for our government clients. Our work has encompassed domains such as enterprise IT, health care, financial management, tactical defense, I.O.T., behavioral sciences, and law enforcement.

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