

Deloitte Flash for Construction

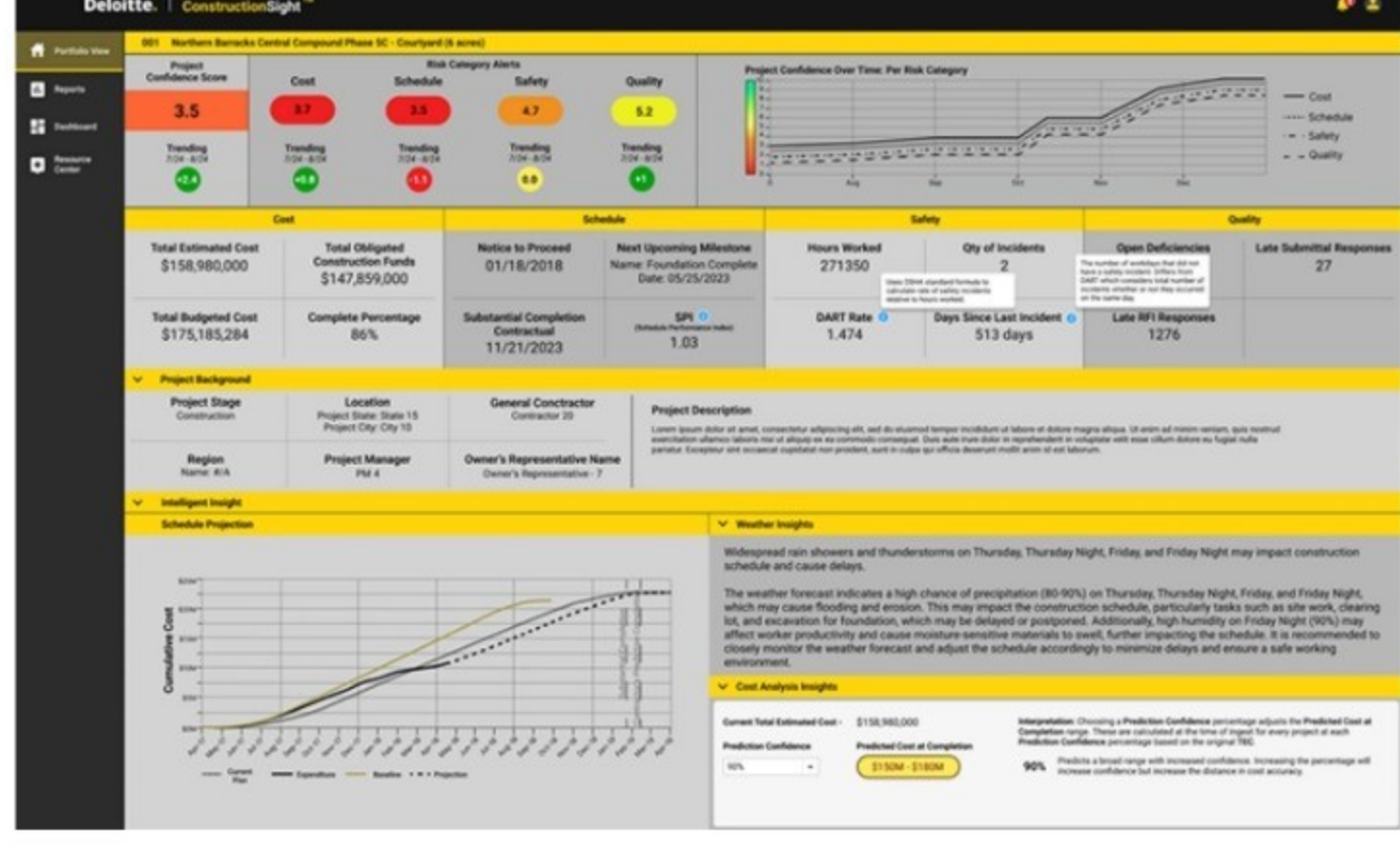
Welcome to the Deloitte Flash for Construction – a quick read from Deloitte

designed to provide you with insights into today's business issues related to construction. Our current Flash highlights strategies for data analytics and storytelling in construction.

THE ISSUE:

Data is fundamental

data related to construction. Although businesses invest in widely available data visualization tools, organizations often face slow adoption, underutilized dashboards, and challenges in converting data into actionable insights. Gaps in data capture and visualization capabilities can lead to operational inefficiencies and missed opportunities for growth and innovation. In today's dynamic digital landscape, construction executives are seeking to leverage data analytics to optimize construction costs and schedules, reduce risk and carbon footprint, and improve safety and productivity. Savvy organizations are leveraging advanced analytics, developing dynamic command center dashboards (as seen on the right), and integrating generative artificial intelligence (GenAI) for data storytelling and to support decision-making, leading to improved efficiency, more timely and accurate reporting, better project outcomes, and increased user adoption.



INSIGHTS:

Advanced analytic capabilities enable GenAI by providing the necessary data insights and patterns that GenAI uses to create compelling and accurate narratives. These capabilities are designed to ensure that the data fed into GenAI models is clean, relevant, and comprehensive, allowing for more precise and impactful storytelling and reduced time spent in reviewing and honing GenAI outputs.

Converting complex data into compelling dashboard narratives can capture the attention of executive stakeholders and help project managers interpret data insights with greater confidence. When data is more reliable, teams can align strategic decisions across various elements of project delivery, act on priorities, and drive faster decision-making due to the increased precision and trustworthiness of the insights. Incorporating GenAI-powered insight narratives can enhance strategic decision-making for organizations.

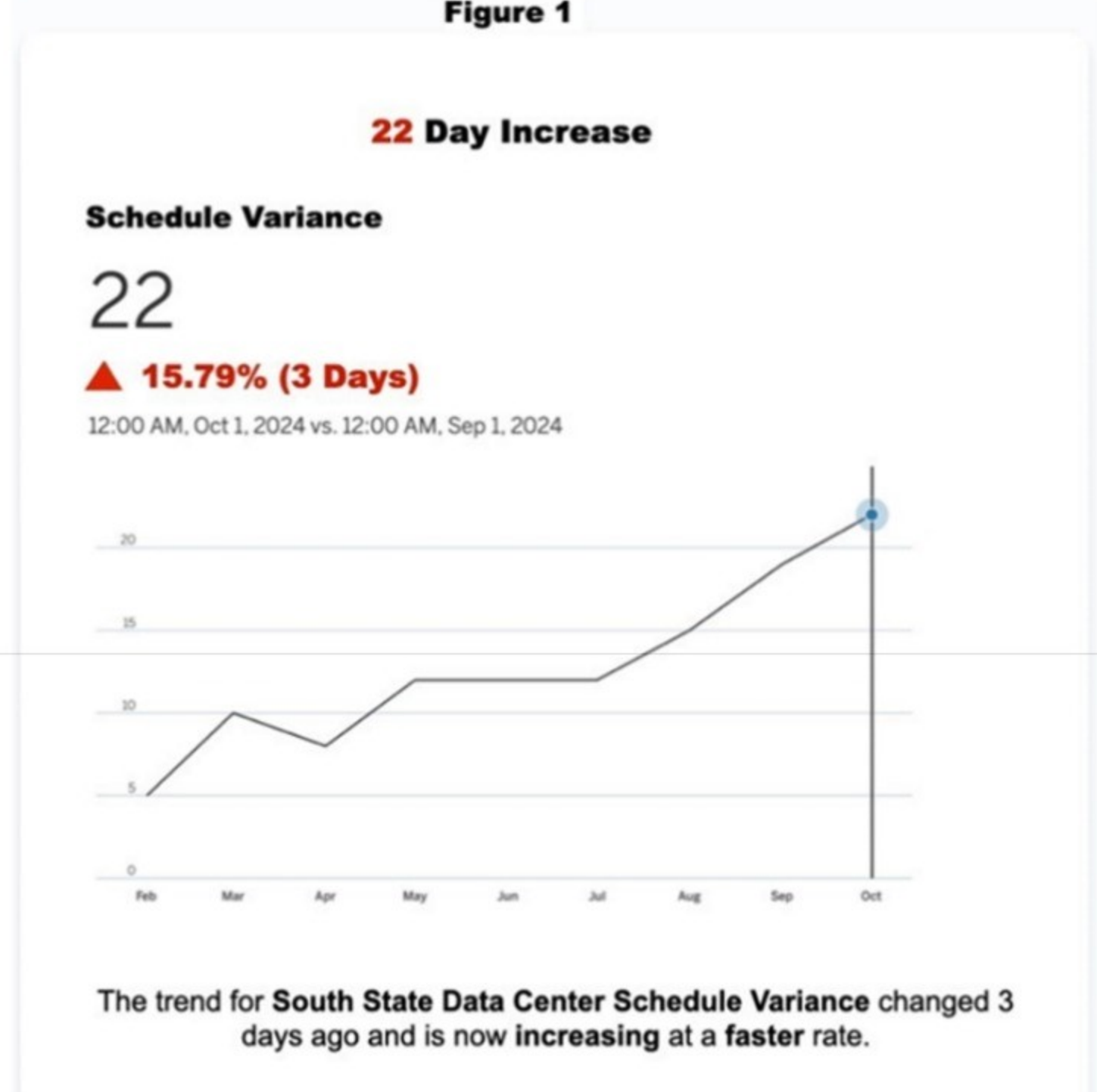
Project managers can use GenAI to generate project dashboards with

Perspective: Deloitte Flash for Construction

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information that aligns with user needs and preferences.

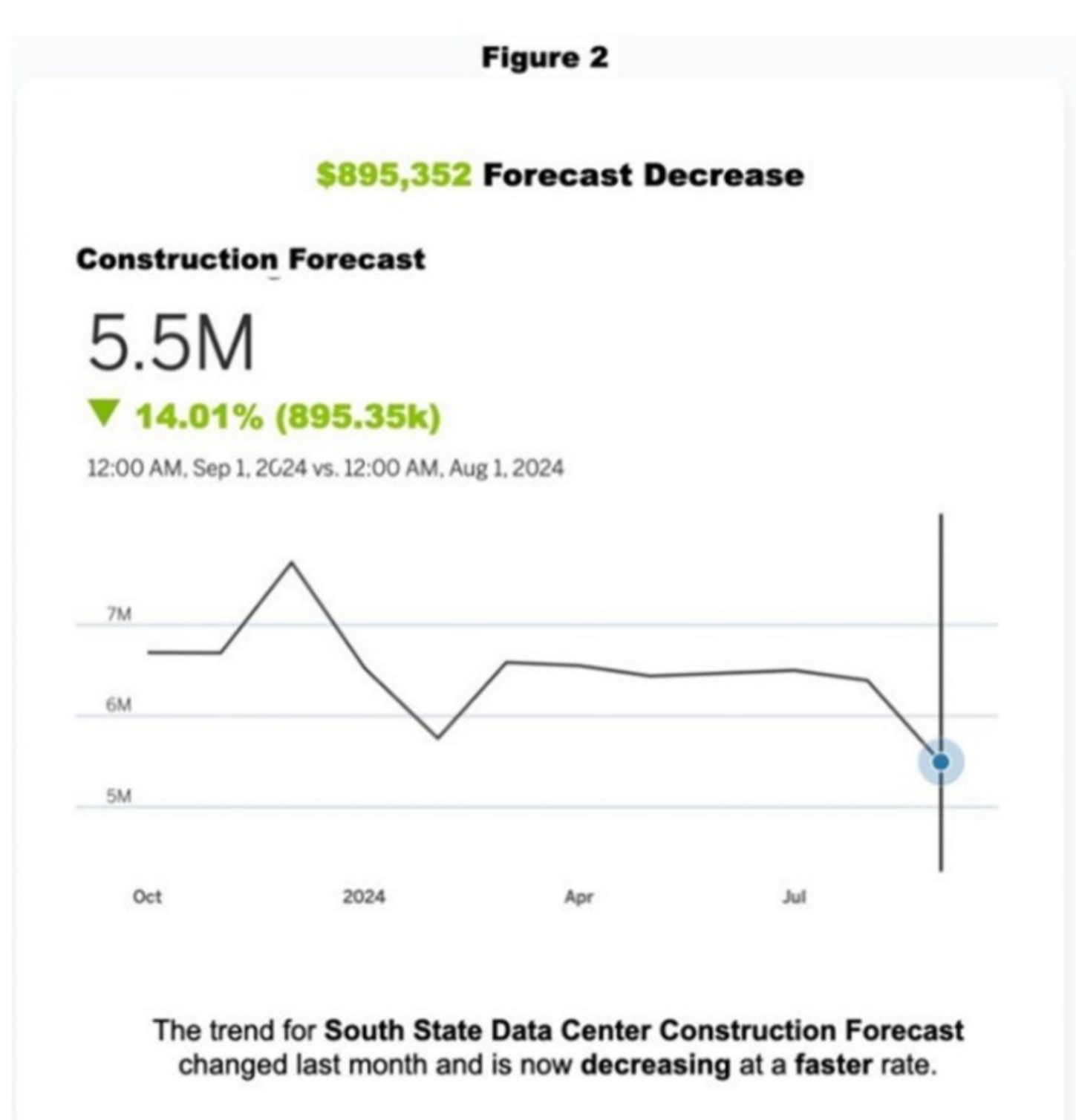
For a key performance indicator such as schedule performance, insight narratives can enhance clarity by providing explanations about each visualization that helps users grasp the significance of the data, reducing confusion and increasing confidence in using dashboards. In figure 1, the data visualization tells us that the schedule for this project is 22 days behind the baseline schedule, and the reviewer can see how the delays are building up over time. The insight narrative in this example helps the end user uncover nuances by explaining the schedule trend changed three days ago and delay is now increasing at a faster rate.



Another key metric for construction teams is budget adherence, which can be challenging to monitor proactively without actionable insights and real-time data. Metric-based GenAI narratives (figure 2) can provide context-specific insights that are relevant to the stakeholder's role or business function. The data visualization in this example shows an \$895,352 decrease in budget forecast and a favorable downward trend over time. The insight narrative provides additional context by unlocking potentially hidden details for the reviewer, showing how the forecast changed last month and is now decreasing at a faster rate. By explaining key findings and trends, narratives guide stakeholders on how to respond based on the data. This actionable guidance can drive decision-making and encourage users to include personalized user experiences in addressing their strategic needs, leading to higher engagement and frequent use of digital platforms.

While the value of the insights provided and the time freed up to allow users to focus on higher-impact activities are major factors in the extent of user adoption of new technologies, the level of executive buy-in greatly affects user adoption and ultimately the successful implementation of new technologies. Deloitte discovered that although the CEO acts as the primary advocate for analytics in only 29% of companies it surveyed, these companies are 77% more likely to have substantially surpassed their business objectives.¹ Executives are in critical positions to generate enthusiasm and inspire commitment by articulating how new technologies

Project sponsors should engage senior executives early in the technology adoption process to secure their support and commitment. Additionally, executives should communicate the benefits of the new technology and support organization-wide training programs developed and led by technology enablement teams. Leaders who link overall business strategy to well-defined performance metrics using advanced data capabilities can offer a clear vision of success and empower teams to create personalized user experiences, resulting in significantly higher user adoption rates.



HOW DELOITTE CAN HELP:

Deloitte's *Infrastructure & Capital Projects* team has specialized experience essential for helping the construction industry enhance data analytics capabilities and leverage GenAI to optimize project management and improve operational efficiency. Deloitte can assist construction organizations in overcoming dashboard utilization challenges by providing a comprehensive data strategy and advanced analytics solutions. This holistic support empowers construction executives to drive innovation and achieve significant improvements in project outcomes and overall business growth.

Deloitte can

- Facilitate workshops tailored for executives to demonstrate the value and impact of advanced data analytics and GenAI on business outcomes.
- Assess the current state of business processes, technology landscape, data ecosystem, and organizational culture. We can produce a vision and roadmap for digital transformation to include GenAI capabilities aligned with your strategic objectives.
- Assist in selecting fit-for-purpose technologies that align with business needs and digital transformation goals. This includes evaluating and recommending software, platforms, and tools.
- Incorporate GenAI into dashboards to generate narratives, transforming complex data into actionable stories that enhance decision-making and user understanding.
- Assist with organizational change management by engaging key stakeholders early and throughout the digital transformation journey to earn their buy-in and support.
- Develop and execute a communication plan to keep stakeholders informed about the transformation process, its benefits, and progress.
- Provide training programs and resources to help users become comfortable and proficient with new technologies.
- Focus on user experience (UX) and user interface (UI) design to make new systems intuitive, user-friendly, and able to meet the needs of the end users.

- Implement our ConstructionSight™ tool for your portfolio.

For more information, please contact one of our leaders. We look forward

¹ Tim Smith et al., "Analytics and AI-driven enterprises thrive in the Age of