

Adopting Emerging Tech:

How to Streamline Project Management and Boost Productivity with Generative AI

In this paper, we'll explore how Gen AI is already helping forward-thinking firms streamline operational workflows and how to give everyone access to the intuitive tools they need to deliver project success.



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The Professional Services Dilemma

Professional services firms – including those in architecture, engineering and consulting – are no strangers to innovation, but operational challenges remain a barrier to growth.

Global socioeconomic disruption has led to rising interest rates and inflation, placing pressure on firms to optimise costs and resources to stay profitable while meeting customer demand.

It's a challenge compounded by the industry's ageing workforce and widening skills gap, making it difficult to expand resources quickly. This is especially true when younger digital-natives are more likely to join firms that empower them to develop and work more efficiently in a modern, connected, sustainable environment.

Just ask the 75% of businesses that tell us they're concerned they'll be unable to recruit or retain effective employees in 2024. However, many know what needs to be done to help counter this trend, with 67% expecting to lose market share within two years if they fail to progress significantly in digital transformation.²

Emerging technologies such as AI and machine learning (ML) are driving firms to rethink their operational strategies, helping them stay competitive by empowering employees with the intelligent productivity tools they expect.

Project teams rely on actionable data to inform strategic decision-making, track KPIs and execute projects – this includes fast access to relevant information, client documentation and available resources.

That's why firms need a collaborative view of every project. One that lets them win and develop business, manage contracts and budgets, build plans, allocate resources, monitor performance and identify productivity barriers in a single location.

By augmenting that connected view with emerging technologies such as AI and machine learning, firms can automate routine work, connect and empower teams to work more efficiently and transform how they generate and share knowledge.



Our recent industry study showed that “increasing project complexity” is the number one challenge for professional services firms.

- The 5th Annual Deltek Clarity Report

How Professional Services Are Using AI Today

In this year's Deltek Clarity Study, we learned that investing in new technologies – including AI – ranked as professional services firms' number one priority in 2024.

In fact, 38% of firms already use AI technologies to automate business processes and provide insight into their operational performance. Similarly, 37% use AI to predict project outcomes, and 30% use it to detect anomalies in financial transactions.

When we look at the benefits reported, it's easy to see why so many firms are keen to invest in AI. For instance, more than half of architecture and consulting firms claim that AI improves project timelines and delivery. And more than half of engineering and consulting firms report enhanced operational efficiencies.

Further investigation revealed that improved resource efficiency helps nearly half of architecture firms reduce overhead costs, including labour costs. Architecture firms also feel AI improves internal communication, democratising actionable project insights to encourage data-driven collaboration. AI has a remarkable impact on retention, too, with 72% agreeing that successful AI implementation improves job satisfaction.

But integrating AI is easier said than done without a clear understanding of its relevance to your organisation – and what it means for everyone involved.

Overcoming the Barriers to AI Adoption

While it's true that many professional services firms already use AI, more than half of respondents said they see AI adoption as a significant challenge.

For many firms, the most common barriers to AI adoption stem from a lack of contextual understanding of what AI tools are available and what they can do for them. Many also believe a lack of workforce awareness will likely prevent them from making meaningful use of AI – and few have the time to invest in training to reverse this.

Adopting AI doesn't need to be a vast, overwhelming initiative that immediately touches every part of the business. That's why the most successful AI implementations start small. They focus first on demystifying AI by helping project teams see through the hype and contextualise the technology in relation to their day-to-day operations. If you don't define a use case built on universally recognised benefits, your teams may become paralysed by choice or even choose to ignore it altogether.

Professional Services Firms Use of AI:

- 38% use AI to automate business processes
- 37% use AI to predict project outcomes
- 30% use AI to detect anomalies in financial transactions

Establish an AI Task Force to Drive Adoption

The best way to introduce AI to your organisation is by identifying a small, low-risk, high-reward use case that demonstrates its potential long-term value.

Ideally, you should create an AI task force to help educate and lead use-case piloting across the business. Team members must include IT, legal and operations representatives to help you assess AI's potential impact on your company, employees and customers.

Involving a diverse range of talent will enable you to spot issues ahead of time, delegate duties and cover more ground, especially when time and resources are tight.

Together, task force members can share information, answer queries, perform incremental use-case pilots to minimise operational disruption, and identify the areas best suited for automation – and those best left alone. They must also ensure that all use cases contribute positively to your business goals to secure buy-in from senior stakeholders.

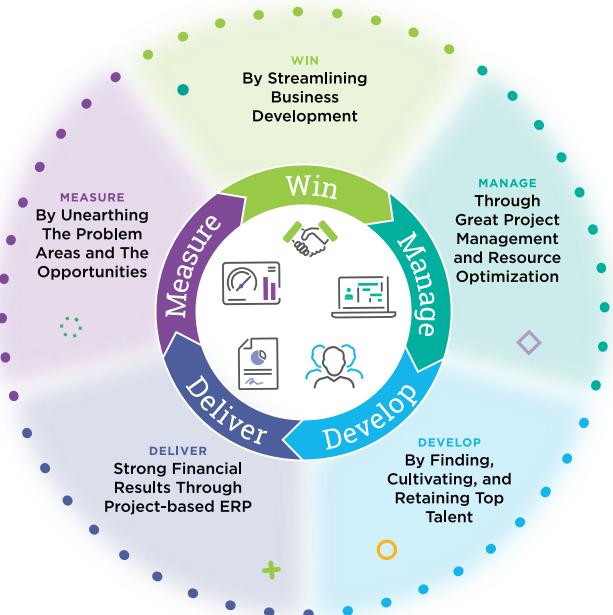


How AI Can Enhance the Project Lifecycle

No matter the nature of your projects, they all share the same ultimate goal – to deliver excellence for your clients. This means optimising processes throughout the project lifecycle and ensuring everyone can access the tools and information needed to do their best work.

That's why forward-thinking firms are embracing purpose-built AI-powered tools to increase productivity, reduce operational risk, optimise costs and improve decision-making at every stage of the project lifecycle.

Let's examine how the latest AI capabilities can help your teams work smarter and deliver more successful projects.





PROJECT PHASE: WIN

By streamlining business development

» **Predictive estimation models**

Manually estimating project costs, timelines and resource requirements can often lack the precision required to deliver projects on time and budget.

AI algorithms can process huge amounts of historical project data, factoring in potential variables and disruptions, to accurately predict project costs and timelines.

» **Generate content summaries**

Extracting data for reporting, typing up executive summaries, updating project statuses, and onboarding peers – such as before a client meeting – can be slow and divert time and resources away from more value-adding tasks.

Generative AI uses natural language processing (NLP) to read client information in your enterprise resource planning (ERP) and customer relationship management (CRM) systems to create clear, accurate, and concise summaries. For example, you may use it to create supporting content for your project proposals, such as solution summaries.

» **Interactive document chat**

It can be challenging to find the time to manually search through a large number of documents for highly specific project information, such as agreement terms and conditions or correspondence details.

AI chatbots can use NLP to scan and index documents, and quickly examine project information to answer niche queries, such as *“What did John Smith say about the site analysis survey completed in June?”*, helping people stay productive and informed.



PROJECT PHASE: MANAGE

Through great project management and resource optimisation

» **Resource optimisation**

Project success often depends on your ability to allocate the right skills and resources to the right tasks at the right time.

AI algorithms can help predict and recommend the resources you'll need based on skills, availability, project requirements, and pipeline proposals.

» **Proactive risk prediction**

Identifying project risks as quickly as possible is crucial, such as excessive spending that prevents you from meeting your profit or multiplier targets. However, you may not have the time and resources to manually assess every potential risk and its likely impact, which is where the power of AI comes in.

AI models can analyse historical project data to identify and alert you to emerging risks, helping you course correct while there is still time. This insight can also help keep team members on track for success and inform future mitigation strategies.



PROJECT PHASE: DEVELOP

By finding, cultivating and retaining top talent

» **Automated timesheets**

Completing timesheets is a slow and often disruptive process that can divert employees from other value-adding tasks. However, those who consistently neglect to complete their timesheets may inadvertently impact project timelines, billing accuracy and reporting.

With the right AI productivity tools, employees can automate timesheet completion with an accurate view of their working day. All they need to do is review it for submission to ensure everything is captured correctly.

» **Develop and retain employees**

Managing employee development is necessary to help people feel seen and valued in the organisation. However, resources don't always allow for round-the-clock support and in-person training. That's where AI-powered tools can complement your talent strategy through personalised employee training and retention support.

For example, AI-driven learning platforms can recommend training programs based on individual needs and career goals. And continuous feedback systems provide real-time insights to help drive employee growth. You can also use predictive models to help anticipate employee attrition and respond proactively to retain your best talent.



PROJECT PHASE: DELIVER

Strong financial results through project-based ERP

» **Knowledge base creation and assistance**

Siloed project knowledge and manual information management can slow time to insight, prevent collaborative decision-making and reduce operational efficiency. AI-powered knowledge bases can pool all your project information in one place, automate routine file management and alert you to any relevant changes and updates from other users.

These intuitive systems simplify version control, too, making it easier to build an audit trail when revisiting project documentation. Plus, generative AI can create personalised project summaries and documentation for seamless briefings and handovers.

» **Automated invoice assistance**

Invoicing often becomes complex and difficult to manage as projects progress and more stakeholders and partners become involved. This can make it difficult to accurately manage the invoice approval process and ensure a consistent, healthy cash flow.

By integrating AI with your ERP accounting system, it can use intelligent character recognition (ICR) to read incoming invoices, automatically enter voucher information and trigger accounts payable processes. The best AI tools will also verify if vendor details match your existing records, prompting you to enter any missing data manually.



PROJECT PHASE: MEASURE

By unearthing the problem areas and the opportunities

» **Data anomaly detection**

Combing through your project data for discrepancies and anomalies, and putting them into context, can be resource intensive, diverting people from value adding tasks.

AI and ML models can proactively track project metrics and learn from baseline dataset patterns and characteristics to identify irregularities in newly added data. For example, you may use AI to analyse expense reports and alert the approver of any that fall outside acceptable parameters.

» **Automated KPI reporting**

Manually assessing how well your project is achieving its key objectives is unlikely to be anybody's favourite job – but it is a necessary one. It also requires individuals with time to spare and a faultless understanding of your business objectives.

AI analytics tools can help relieve much of that burden, automating KPI tracking to accelerate time-to-insight and improve decision-making and project performance. First, you'll need to identify your project KPIs. After this, AI can pull together the relevant data for automated reporting and dashboard visualisation. It can also use historical data and pattern-based predictions to support scenario planning and forecasting.



Identify the Right AI Capabilities in Your ERP Solution

At Deltek, we work with professional services firms of all sizes to help optimise everyday processes, streamline operations and connect teams to the tools and insights they need to do their best work. Building on the existing capabilities found in our ERP applications, we created Dela™ – an integrated, AI-powered business companion.

Dela™ is purpose-built to make the project lifecycle smarter, helping you democratise AI capabilities in a fully integrated ERP environment. Firms can reap significant benefits from utilising AI embedded in mainstream tools, such as the ability to leverage the technology without the need for extensive in-house development, which can be costly and time-consuming. It can also give firms access to a wider range of features and capabilities that have been tested and refined over time, ensuring reliability and efficiency.

By utilising Dela™ within Deltek's ERP solutions, you can organise vast data volumes and distil them into concise insights while uniting project teams around a single source of truth. You can also add predictive capabilities to everyday processes, helping Dela™ learn from historical projects and performance data to anticipate successful projects.

By harnessing the power of data-driven AI with Dela™, you can:

- Generate succinct business summaries based on valuable project insights
- Predict project success by analysing resource use and historical performance
- Empower smarter decision-making with a natural language digital assistant transactions

Transform Your Projects with Deltek

At Deltek, we power project success for more than 30,000 organisations. After more than four decades of restless innovation, we're launching a new era of intelligent project management with Dela™.

We can connect your project teams and supercharge intelligent growth with the intuitive ERP and AI tools your current and future employees expect. And even with all the use cases we've explored in this white paper, this is just the beginning.

To learn more about Deltek's ERP solutions, or what Dela™ can do for your project teams,

Please get in touch



Deltek.

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