

As an industry, construction is at a crossroads. Generational environments, and increasing project complexity mean that companies are under immense pressure to get the best out of their most valuable asset — their people.

Technology is a key lever that construction executives can pull to drive growth and maximize their workforce's potential in today's evolving landscape. At the forefront of this tech

technology that has the potential to reshape the way construction projects are planned, executed, and managed. With implications reaching every corner of the industry, from an ongoing reality for our industry to take advantage of.

there's machine learning, which is typically used to predict project outcomes, helping to foresee potential issues and optimize planning. Then, there is robotics, which generally

precision.

Computer vision is another key technology, with a lot of insights on the project's status. Natural language processing is often used to extract contract details or summarize reports, making it easier to handle large volumes of textual data.

monthly summaries from daily logs or create schedules from



Data is plentiful in construction today but often isn't accessible, clean, or fully utilized. Data maturity is a concept used to measure an organization's capability to manage and utilize data into a strategic asset.

understand where they lie on the data maturity scale and

bring across the various phases of a construction project.

EXPEDITING PRECONSTRUCTION PROCESS

enables the automatic generation and optimization of designs

project planning by predicting the likely outcomes of different

mitigation.

SUPPORTING DECISION-MAKING DURING THE COURSE OF CONSTRUCTION

vast amounts of data to generate actionable insights and

professionals, on an average 18% of the total time on a project

43% of respondents felt they would make better decisions if

on project performance.

analyze project timelines, resource allocation, and performance

role in reducing risk by helping stakeholders make data driven decisions.

sites for safety hazards, while data from wearables can be

allow us to often see what can not be seen in real time by a human to help prevent accidents and improve overall site safety.

HELPING REDUCE FINANCIAL RISKS

within the construction industry, particularly in helping to mitigate risk, minimize cost overruns, and enhance forecasting

understanding of resource usage and project spending, which

and resource allocation.

evaluation, and mitigation of various project threats, helping to avoid costly delays and create safer construction environments.

forecasting accuracy, allowing for better budgeting and cost control.

THE FUTURE OF AI IN CONSTRUCTION



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