

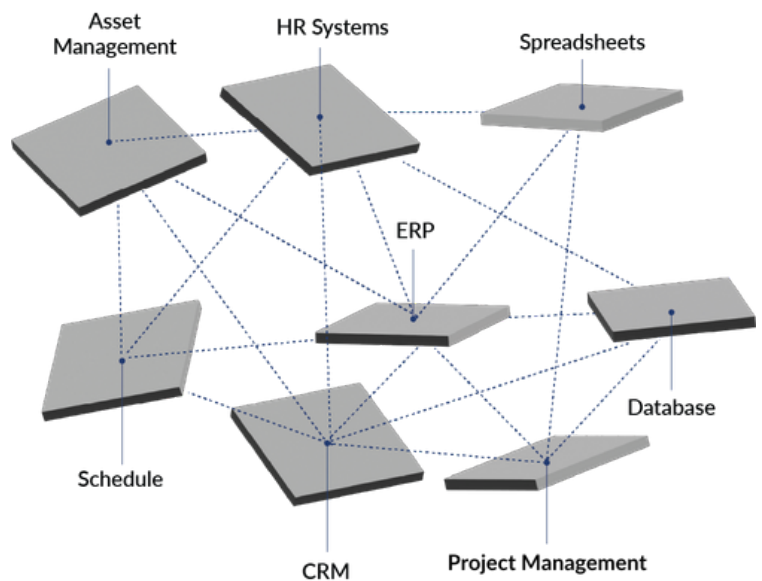
Data Vegetables, Before AI Desserts

Contractors often ask us when and how to unleash the power of AI to improve productivity, enable better business insights and automate manual processes. Yet all too often they are held back because their data and systems are disjointed. You can't dive into the fun, exciting parts of AI without first putting in the hard work of organizing your data. Think of this as eating your data vegetables before you get to enjoy the sweet rewards of AI desserts.

Good Data is the Backbone of AI. Just like a healthy meal starts with fresh, quality ingredients, AI starts with clean, well-structured data. If your data is disorganized, incomplete, or inaccurate, your AI model will end up underperforming, no matter how sophisticated it is.

Achieving good data quality is difficult for contractors due to the information silos between disparate applications like CRM, Excel spreadsheets, ERP, Estimating and Project Management tools. It takes work to break down these silos and drive a unified data model that enables AI. Historically, no single technology has been available to govern the end-to-end data and process, making it difficult to fix these challenges.

The good news is that solutions have recently become available using Universal Platforms that unify enterprise data across disparate systems and make AI adoption more seamless. Runding's approach leverages open architecture tools from Microsoft as the Universal Platform to extend, connect and control data. With the data governed and harmonized construction organizations are truly AI-ready.



Once a Universal Platform Approach is Adopted, the Following Readiness Recipe can be Followed for Long-term AI Success:

Data Cleaning & Organizing: The Crucial First Step

Cleaning data is like washing your veggies before cooking—they may not be the most fun part, but it's necessary. You'll need to remove duplicates, fill in missing values, and standardize formats. This step ensures that the data you're working with is consistent and reliable, giving your AI the best possible start. Thorough data cleansing is inherent in the Universal Platform approach.

Just like sorting your ingredients before you start cooking, organizing your data is key. Group related data points, categorize them appropriately, and ensure it's structured in a way that aligns with the task at hand. Whether it's organizing customer and subcontractor records, product offering categories, project location data, subcontractor safety and insurance record status, or Account Receivable status, having a clean structure makes it easier to extract insights and build models.

Labeling: Making Sure Your Data is Ready for Supervised Learning

For supervised AI models, labeling your data accurately is like seasoning your dish just right. The labels are what guide the model toward making accurate predictions, so they must be clear and consistent. Skipping this step can lead to an under-seasoned model, making it less effective in its predictions.

Data Augmentation: Adding a Little Flavor
Sometimes, your data needs a bit of a boost—like adding spices to a bland dish. Data augmentation techniques, like rotating images or generating synthetic text, can increase the variety of your dataset and help your model generalize better to new, unseen data. For the construction industry, this could take the form of supplementing historical project cost data with weather conditions or material price trends that can enhance AI models' forecasting accuracy.

Storing and Managing Your Data: The Recipe Book

Once you've prepped and organized your data, you need to store it in a way that makes it easy to access and manage. Think of this as having a well-organized recipe book: You want to be able to easily retrieve your ingredients (data) when needed. Version control, cloud storage, and proper data management systems will help you keep track of your data's evolution. This is where the true power of a Universal Platform is unlocked through enterprise-level data unification. Think of it as the "Dewey Decimal System" for your data.

Conclusion: The AI Dessert Is Worth The Effort

So, while the data prep and unification may not be the most glamorous part of AI, it's absolutely essential. Fortunately, the technology has evolved with an open architecture Universal Platform approach that can eliminate system and data silos and bring your business together into a single pane of glass. It's the foundation that allows your AI data models to flourish and deliver the results you're looking for. Put in the effort to "eat your data vegetables," leverage a Universal Platform, and when it's time to enjoy the AI desserts—insights, predictions, business automation and breakthroughs to your bottom line—you'll appreciate the hard work that went into making them possible.

