

EXECUTIVE PERSPECTIVE

KNOW-WHAT BEFORE KNOW-HOW

Decision architecture starts with the business problem, not the technology diagram.

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what I like to focus on. Those topics tend to put people asleep. Instead, I try to understand a customer’s business problem first, then the *personas* in the room, and then show them a process that will help guide them toward making the right decision quickly.

So I like to focus on *People* and *Process* and less on *Technology*. Decision architecture helps people make good decisions without removing their choices.

Explain the Rapid Prototyping process.

Sure. We try to scope the business problem down into something that we can solve in three days. Not Monday, Tuesday, Wednesday, but three days over the course of maybe a month or two. Why? In 2025, the biggest reason for data project failures is still *data acquisition*. It takes time.

As we progress through the RP, we are constantly getting feedback from stakeholders, learning about the data, and refining the business problem. Occasionally we learn that we just can’t solve the given problem, and that’s valuable learning too. We can cancel the RP—or, as we usually do, pivot to a different problem.

What I’m describing is *Lean Management Principles*: fail fast, continuous learning, value maximization. We do all of this without a huge investment in either time or capital.

lem via *Design Thinking* (DT) so we roughly know what data we need and approximately how we *might* solve the problem.

If you’ve ever done a DT session, you know they can be a lot of fun. We structure ours to foster open dialogue about the business problem and try to gain consensus. Then we try to solve the problem via a three-day rapid prototype (RP).

Can you describe the process you use?

Many of our customers are new to Prescriptive Analytics and AI, and they tend to focus on the wrong things. They are concerned with “How do we set up an analytics environment?” or “How do we secure our data?” or “How do we ingest our Salesforce data to our data lake?”

While those topics are important, we still haven’t talked about the business problem to be solved. So many data professionals start first with the mechanical, IT concerns of a data project—do I need a data lake or a warehouse, how do I do the semantic modeling, and so on.

I show them a different way. Start first with a business problem. Let’s assemble the business people in a room and discuss the prob-



The IT people love this approach; it’s much more *agile* than what most data teams do today. But while we are focused on solving the business problem, invariably all the *IT concerns* will be surfaced organically: How do we secure this data? Do we even need a data warehouse? How do we build this sustainably? What technology do we need to deploy?

We effectively defer all of those decisions until we actually need to make them. Most IT teams instead focus on architecture diagrams and upskilling their staff. These activities could take months, and meanwhile no business value is being created.

And how do you think project sponsors react when they see the complex and busy Visio diagrams proposed for a solution? They think, “Wow, this looks complex and expensive, and I’m not sure my existing talent can do this. This seems like it will be another failed data initiative. I’m not going to fund this.”

With our DT/RP process, we effectively flip this paradigm on its head. And do you know what I say to those complex Visio diagrams? YAGNI—You Ain’t Gonna Need It. Start small, show value, iterate.

How does AI fit into all of this?

Every customer we’ve talked to for at least the last 10 years tells us the same story: “We want to be a data-driven company, we want self-service analytics, we want our departments to own and share their data and insights—data democratization—and we want to build *data products*.” The theme here is *decentralized analytics*.

Before AI, this was possible, but difficult. To really create business value, you need to understand what I call “the data analytics process.” Roughly, you have to think about data like a data scientist does. But not every company has a team of data scientists that can do this.

You can’t give a business person unfettered access to a data lake and a dashboarding tool

and expect them to create value. For years I would give customers a template for how to think through any data problem, ensure the data was accurate, and show them how to think through problems, but it wasn’t easy.

With AI, it actually *is* easy. Today we give the AI the context of the business problem and the data we have available. We tell the AI to think like a data scientist, confirm the data, and begin exploring it with us.

We then tell the AI to have an “interview” dialogue with the business people to help them clarify their thinking and help the AI understand the context of the data better. This process works surprisingly well. As the user/AI dialogue advances, we begin to get to true “What do we do now?” prescriptive guidance.

Can you give us a recent example where this process worked?

A construction supply company came to us with supply-chain problems due to recently enacted Chinese tariffs. “We can’t ship all of the items by the RequiredDate, and is this affecting sales? How might we solve this?”

We spent about half a day doing DT on the problem, and they quickly came to the hypothesis that simply missing the promised delivery date likely wasn’t affecting sales as much as they assumed. But we needed to test that.

On the first day of the RP, we confirmed with the data that missing the RequiredDate for many customer segments just didn’t matter. This was eye-opening. We quickly pivoted to focus on the customer segments where it *did* matter.

We used AI to help guide our conversations and analyze the data with us. It helped us uncover anomalies that no one anticipated. We paused the RP so the customer could gather additional data and interview some of their users. Why was the data telling us this?

“Start small, show value, iterate.”

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THE DISCOVERY

Too many custom orders for custom parts were being placed with the Chinese supplier because users could not effectively search the product catalog for existing in-stock items. The team now knew what it needed to fix: the website’s search capabilities. AI to the rescue again; the RP shifted to solve that problem instead.

The customer said they would never have uncovered that problem without looking at the data with us.

What closing advice can you give our readers?

First, in the Era of AI, stop thinking in terms of big IT capital projects. Focus on quick wins and incremental gains until you uncover the truly big problems that require the capital project. Ensure you are getting continuous feedback and *failing fast*.

Second, leverage your cloud vendor and its AI tools. Most of these things can be spun up in a day, and if you determine your use case isn’t feasible, you simply shut it down. There’s no need to worry about IT architecture, infrastructure, and security *until you actually need to*. If a vendor proposes an expensive six-month capital project to solve your problem, run—don’t walk—the other way.

Lastly, customers ask me daily to help them find the best use cases for analytics and AI. Don’t overthink it. Find out where your business people are using Excel today. They are probably using it for the wrong reasons.

Most folks use Excel to gather data from disparate systems, harmonize it, do some rudimentary analytics, and then share it. We can do it much more accurately, better, and repeatably with AI.

That’s great advice. Thanks Dave!