

How to Succeed with AI

AI is a decision-making technology. A focus on decisions, not a separate AI initiative, delivers business value and a strong ROI.

As companies invest in AI technologies, it is clear a technology-led approach does not work. To get business value from AI, companies should focus AI efforts on improving business decisions.

A recent survey¹ of executives adopting Artificial Intelligence (AI) provides critical context for companies considering how best to invest in AI:

- ▶ Few companies have made much progress to date -- most are experimenting. You still have time to consider how best to invest in AI.
- ▶ AI works best in companies that have already invested in digitizing their business as it enhances digital channels, digital decisions and digital processes.
- ▶ While there is plenty of hype, AI works when it is implemented correctly.

This brief lays out a clear, straightforward approach to succeeding with AI by leading with business decisions. It can be applied if you have not yet begun or to focus and reset efforts that aren't making the progress you desire.

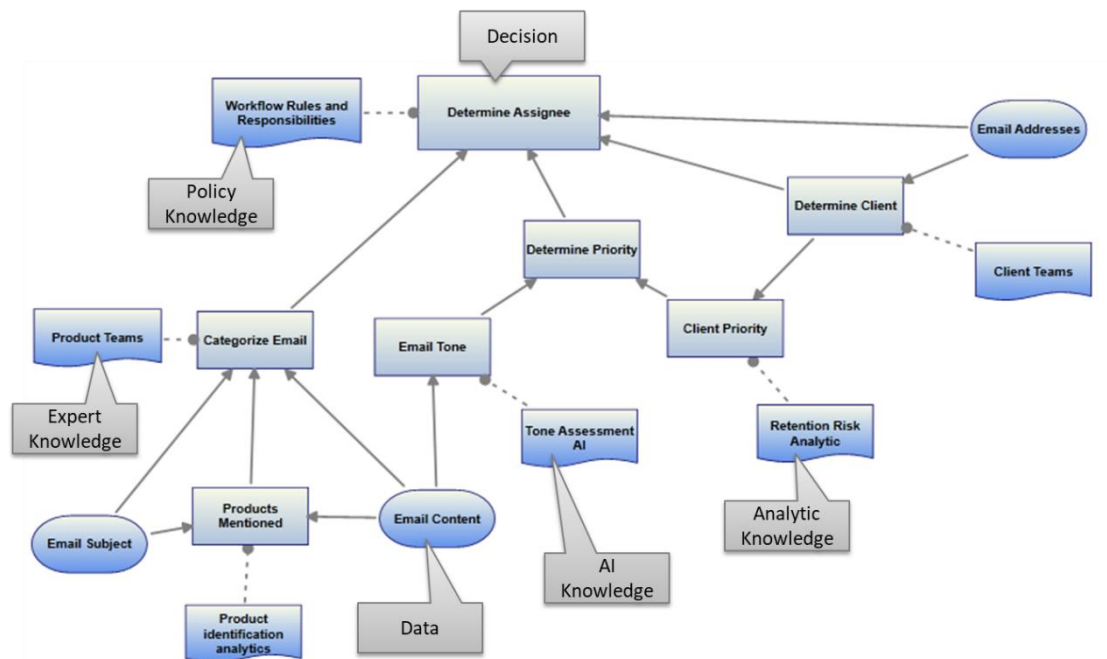
Business-led Not Technology-led

The #1 key to success is to have AI programs sponsored, owned and led by **business** executives. It is essential **not** to put technologists in charge. A technology-led approach focused on AI as a technology won't work. Instead, put business decision making first. Have executives identify the decisions they want to improve. Work with these executives to describe how improving these decisions will help them meet their objectives and exceed their metrics. This builds engagement and keeps the focus on business results.

Decision Modeling for Engagement and Transparency

Decision modeling with DMN² is a powerful tool for AI projects. Working with the business experts to build a model of the decision to be improved drives engagement and commitment. A decision model lets everyone examine the decision, participate in defining it, and understand it. The graphical notation makes it easy for the whole team -- business, analytics, AI and IT -- to define opportunities, deployment context and measures, and readily agree on the go-forward approach.

A decision model also helps with transparency and accountability. It captures any need for explicit control and human involvement in the decision, so the AI component of a solution can be balanced with other elements. A decision model clearly shows what the AI will do in a business context, building trust and pre-empting compliance issues.



A decision model orchestrates all the elements of effective decision-making

Cross-functional Teams

As with analytics projects, cross-functional teams work best for AI efforts. The team needs business, operations, technology and AI professionals from day one. A focus on decisions aligns these disparate groups around a shared objective—better decision making. Using decision modeling to describe the decision-making you plan to improve ensures the whole team, regardless of background, understands the intent of the project in non-technical terms.

Put AI into a Digital Decisions Context

A focus on decisions, unlike a separate AI initiative, puts the focus on business value and allows you to mix and match technologies. AI can be used with data science and predictive analytics, explicit rules-based processing and human decision-makers. Most business decisions involve a mix because:

- ▶ Business rules express the regulatory and policy-based parts of a decision.
- ▶ Data science and predictive analytics turn historical data into future probabilities and meaningful classifications to improve the accuracy of a decision.
- ▶ People make the parts of decisions that involve interaction with the real world or that are hard to scope or define.
- ▶ And AI handles natural language, image processing, complex pattern matching and deep learning,

Include Continuous Improvement

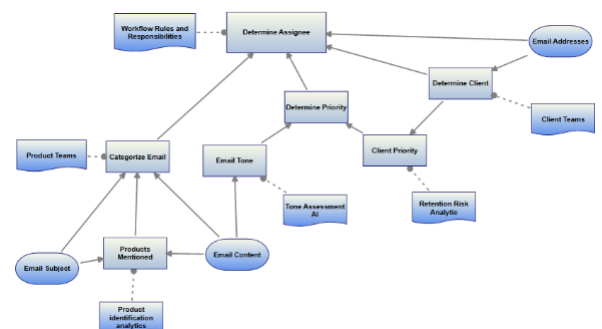
It's important to focus on continuous improvement from the beginning of an AI project. AI is most powerful when applied continuously rather than as a one-off effort. Use a decision model to see what data to capture about decision-making. Integrate this decision outcome data with business results as well as AI model feedback to see how to keep improving results and to spot potential problems early. Engage subject matter experts in reviewing this data so they can drive change and improvement in their organizations.

An Example

Here's an example of how AI can be integrated into an overall decision-making approach. This financial services company received thousands of emails every day and needed to automate the assignment of emails depending on who sent the email, what it was about, and how urgent it was:

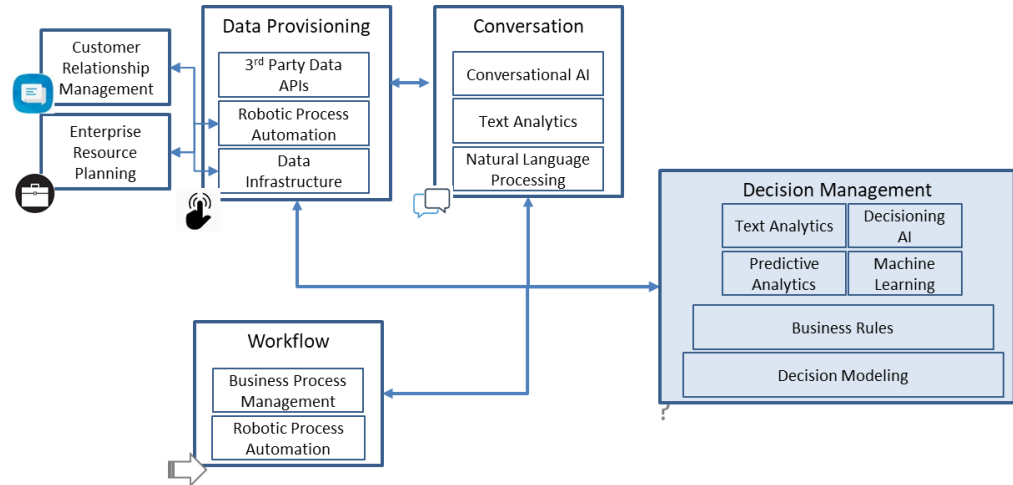
Decision	Decision-making Technology
Which client sent this email?	<i>Business rules</i> about the sender and sender's domain.
What is the topic of the email?	<i>Business rules</i> about senders (some automated emails always use the same sender for the same topic) and subject lines (some topics have fixed format subject lines).
What products are mentioned in the subject and the text (to better identify the topic)?	<i>Text analytics</i> to see which products were mentioned in the email to identify them (analytically) as the subject of the email.
Is this email urgent because it's from an at-risk client?	<i>Predictive analytics</i> to see which clients were a retention risk based on historical data. This retention score was used to increase the urgency of any email from a client predicted to be a retention risk.
Does the tone of the email make it more urgent?	<i>AI</i> was used to see what the tone of the email was—was the email a complaint or a problem or just a description? The more likely it was to be a problem or complaint, the higher the urgency.

Each technology was applied to different sub-decisions and they were orchestrated into a single decision-making approach using a decision model.



Different AI Technologies

There are two kinds of AI technology: decisioning and conversational. Decisioning AI like image recognition, machine/deep learning should be grouped with other decision-making technologies. Conversational AI focuses on interactions like speech recognition, chatbots and Natural Language Processing and should be considered separately.



Next Steps

- ▶ If your firm has already begun exploring AI and has an AI program, immediately identify the business decisions being targeted. Pick an initial decision to improve with each AI technology you are evaluating and get the business owner of the decision engaged now with a decision modeling workshop.
- ▶ If you are considering AI, identify operational business decisions that impact your key metrics. Model these decisions with the business owners to see exactly how AI might help. Then pick the AI technology that will work in each case.
- ▶ If you already practice Decision Management, then you have an advantage as AI complements your use of business rules and advanced analytics, adding a new tool to your decision management toolbox. Integrate AI into your existing decision management projects.

AI is a powerful decision-making technology. A focus on improving decisions delivers the business value. Using decision modeling delivers transparency and trust and defines how AI fits into your digital strategy.

¹ Harvard Business Review; [A Survey of 3,000 Executives Reveals How Businesses Succeed with AI](#); Jacques Bughin, Brian McCarthy, Michael Chui

² [Decision Model and Notation](#). An open, industry standard for modeling business decisions.

Contact Us

Email : info@decisionmanagementsolutions.com
 Web : www.decisionmanagementsolutions.com

