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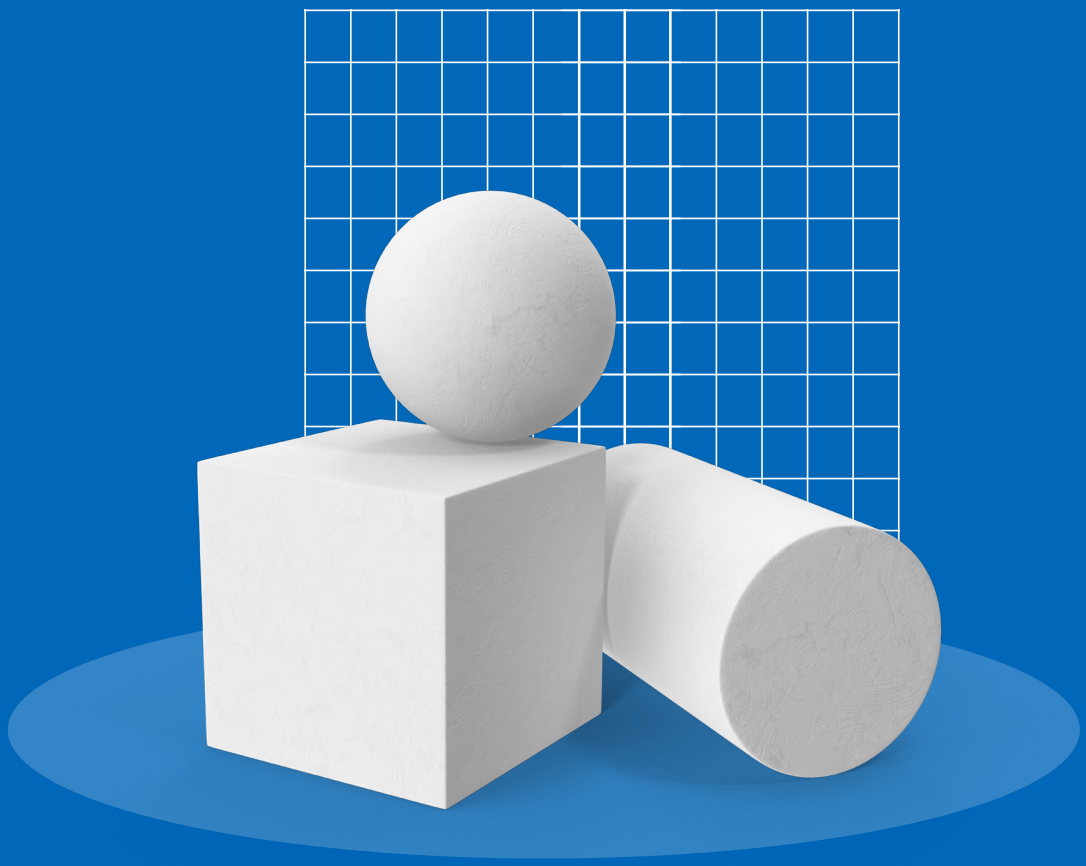
EBOOK

Best Practices for a Successful AI Center of Excellence

A Guide for Both CoEs and Business Units



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Introduction

When it comes to AI initiatives, everyone talks about building a so-called Center of Excellence (CoE). However, doing so successfully is easier said than done. It requires tight coordination and collaboration not only among the CoE itself, but with business teams around the organization.

This piece provides best practices from two different perspectives to better ensure success of CoE initiatives:

- A guide for CoEs themselves on how to collaborate with the business to ensure success.
- A guide for business units on how to collaborate with a CoE for the best results.

As a prerequisite to this white paper and to further understand the "how" behind building a CoE (as well as the different types of AI operating models), we recommend watching Beyond the Center of Excellence: Operating Models for the **Data-Driven Organization**, a webinar featuring VP & Principal Analyst at Forrester Research Mike Gualtieri that delves into these details.

Best Practices for Centers of Excellence

Find the Right Teams, Create Structure, Generate Demand, & Promote

For Centers of Excellence (CoEs), the key to success lies in creating early wins, building demand, and then being able to scale out to more and more use cases (without growing the CoE staff exponentially, which necessarily means introducing efficiencies).

In order to do all of these things, there's nothing more important than collaborating with business teams and units — they are critical to this picture of success. But with different teams juggling different priorities and directives, getting business units on board can be a challenge. Here are four best practices for CoEs to follow that will ensure business units are on their side.

1. **Find the right team(s) to start with.** Working with the wrong teams to begin can mean false starts and roadblocks along the way, whether because that team lacks the budget, the mindset, motivation, or the people. In other words, collaborating with the business will go more smoothly if the team wants — and has the resources — to collaborate mutually.

The first team (or teams) are instrumental in getting AI initiatives off the ground, and there are many different strategies for finding the right partners-in-crime. The more boxes a team checks, the better the candidate they might be:

Strategic Approaches	Tactical Approaches
Collaboration Pitch Find a team that requires cross-profile collaboration.	***Budget and data Lake Tactic*** Find a team with an existing analytics initiative and its associated budget.
Democratization Pitch Find a team that wants to do more than Business Intelligence (Excel users, Power BI users, etc).	***Tool Decommissioning Tactic*** Find a team whose current analytical tool is being decommissioned.
Platform Pitch Find a team that suffers from operationalization delays or challenges.	***Top-Down Tactic*** Find a team whose MD is new and wants to make a difference.
IP Loss Risk Pitch Find a team whose manager experienced or is afraid of IP or knowledge loss (i.e., they can benefit from a CoE offering a centralized data science and machine learning platform).	***Employee Churn Tactic*** Find a team with issues related to employee turnover.
Insdustry Pitch Find a team in charge of non-critical but important industry-specific use cases (e.g., client segmentation, operations and control reinforcement, regulatory agility, etc.).	***Data Access Tactic*** Find a team in need of self-access data.
Business Pitch Find a team with a business problem that needs to be resolved.	***Junior Team Tactic*** Find a team with younger team members, expecting to work on newer and more exciting technologies.

2. **Create a structure of support and enablement.** Business units will want to work with the CoE if there is adequate support and enablement that makes it easy for them to understand how to get started as well as the resources they will need to commit upfront.

   Tips from Dataiku customers with successful CoEs, including UBS, Rabobank, and GE Aviation, for creating structure that, in turn, generates demand to support the business include:

- Setting formal objectives. There should be agreed-upon service level agreements (SLAs) with the business for project delivery as well as established measures of success. From the CoE perspective, this prevents AI projects from dragging on with continual feature creep. For the business, because they know what to expect (and when), they can devote the right resources — from budget to staff. Hear from **Rabobank** on how they accelerated their AI efforts through a CoE.

- Gamifying adoption. When it makes sense, gamification can be a low-cost program that adds structure by encouraging individuals on the business side to enhance data quality. For example, a large, global oil and gas organization rolled out a points system such that each time someone completed training, tags a dataset, creates new documentation, etc., that person receives a certain number of points, creating a competitive spirit with a leaderboard and prizes.

- Formalizing training. If members of the CoE have to onboard and handhold each individual new user, scaling can become inefficient quickly. More importantly, it can become frustrating for the business if it's done poorly. Creating a community of people working on AI initiatives that are able to help each other (particularly with the support of early super users) can offer some relief to support demands on the CoE itself. GE Aviation went one step further with 100- 200- and 300-level courses to onboard end users to their self-serve data efforts plus a full-day executive training available to anyone that wants to take it. Read more in-depth about **GE Aviation's approach**.

- Providing technology that allows for scaling. Reuse is the simple concept of avoiding rework in AI projects, from small details (like code snippets that can be shared to speed up data preparation) to the macro level (like ensuring two data scientists from different parts of the company aren't working on the same project). Capitalization in Enterprise AI takes reuse to another level - it's about sharing the cost incurred from an initial AI project (most commonly the cost of finding, cleaning, and preparing data) across other projects, resulting in many use cases for the price of one, so to speak. For more strategies on this topic, check out the white paper **The Economics of AI**.

3. **Generate demand.** Creating a support system, as discussed in the previous section, can help ensure lasing adoption, but it won't necessarily automatically create demand. One big factor in demand generation is around use cases.

   Ideally at the beginning of a CoE's life, a pipeline would be seeded with carefully curated use cases that have both high business value and a high likelihood of success (otherwise known as "quick win" or "low hanging fruit" use cases). Having people from the business side transfer to the CoE to work on these types of use cases to get the group started can be very successful.

   Additional strategies for generating demand include:

Being programmatic in the approach to evangelizing the CoE and the value of AI. This includes defining and communicating the CoE's value proposition, being clear and outspoken about what the group can provide and what the goals are both short- and long-term.

Running AI ideation workshops to both help evangelize and find additional use cases from across lines of business that might be good candidates for the CoE to support.

Strongly supporting first use cases done by the lines of business. This may seem like a lot of hand holding at first, but it will give the business the confidence and resources to keep moving forward. Eventually, they will be able and willing to become more independent.

Leveraging and nurturing AI champions. Work hard to establish footholds in lines of business through the use of champions, who can continue to provide quality use cases and support.

Building communities around each profile to be enabled — for example, a community of analysts, data scientists, etc., for sharing ideas and best practices.

4. **Promote.** It's often difficult to isolate the contribution of data alone to improvements, especially larger business outcomes (like higher profit margins, lower costs, etc.). The calculation is complicated because the value isn't all in one number — it can be spread across multiple departments and teams. For these reasons, measuring ROI for data projects can end up being a data project in and of itself, which is often difficult to justify.

However, just because it's hard doesn't mean that it shouldn't be a priority, and business value — not simply innovation — must remain the focus. Creating more business value over time is the goal. That means CoEs starting out need to choose a flagship project and communicate on the value to garner more support, and mature CoEs still need to do the work to not only quantify their impact, but make sure everyone at the organization understands it. If business units see success and value, they will be more willing to collaborate more or get started with the CoE if they haven't already.

More established CoEs can evolve their quantification of value — think bigger picture than just ROI for specific use cases. This might take the format of benchmarking AI maturity, setting concrete goals for where the company would like to be on the AI maturity curve, and then re-assessing the progress on a quarterly basis. Bigger-picture value will encourage business units across the organization to get on board in hopes of moving the needle.

For example, Dataiku has developed a five-step Enterprise AI maturity model (Figure 1) that multinational companies worldwide are using as a framework to measure and communicate value at a more macro level across the business.

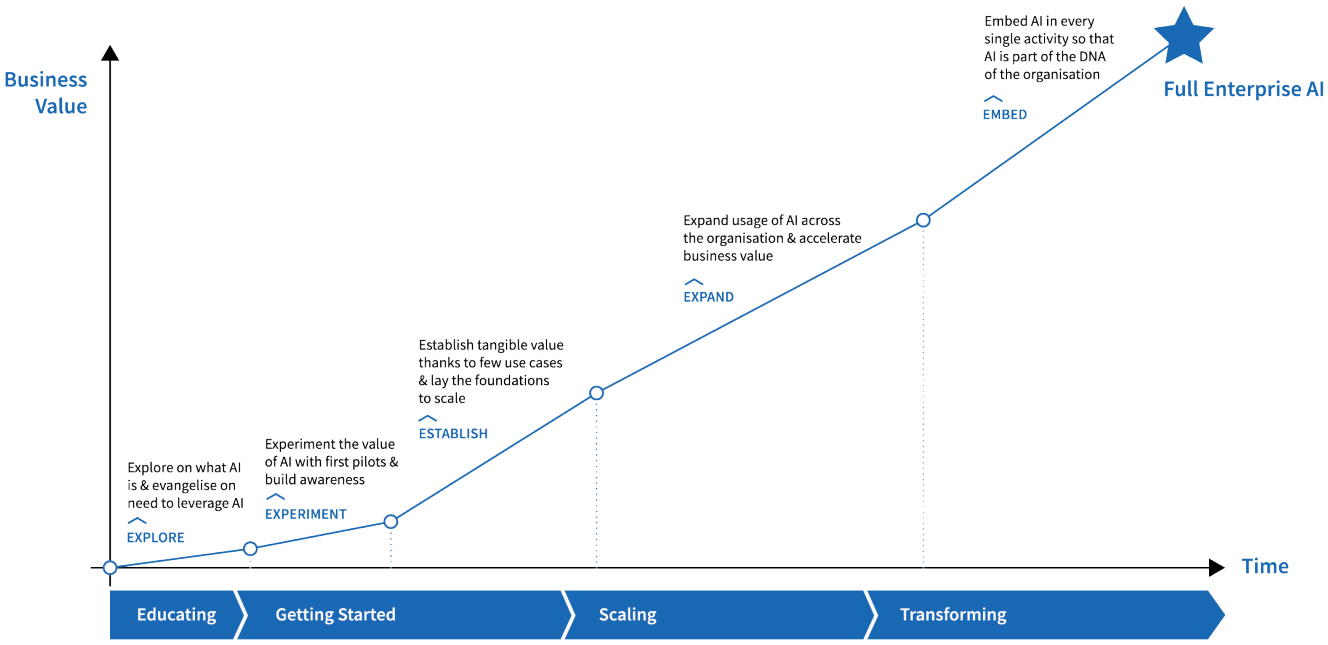


Figure 1: The five-step Enterprise Ai maturity model by Dataiku.

Best Practices for Business Units

Partner, Establish Clear Responsibilities, Take an Active Role, & Be an Evangelist

Ultimately, it is in the best interest of business units that CoEs scale. Spinning up AI efforts within business units alone can be extremely costly, on top of other potentially insurmountable challenges, like hiring or upskilling the right staff and choosing the right projects. From an organizational perspective, CoEs provide a more unified approach to AI projects (think preventing repeated efforts across the company) and can also bring a more innovative mindset.

For those on the business side, know that the best outcomes come from working with Centers of Excellence (CoEs) toward a shared view of success — it takes effort on both sides in order for CoEs to function efficiently. Here are four best practices for collaborating with CoEs to ensure mutual benefit.

1. **Partner.** View a CoE as a partner, not as a service provider. That means instead of throwing AI projects or initiatives over the fence and expecting the CoE to deliver a result, the teams should commit to working together. In looking at a simple AI project lifecycle (Figure 2), business is obviously involved at a bare minimum in the scoping portion.

   However, subject matter experts on the business side should also be heavily involved in design and even production phases. For example, only someone who knows the use case can decide if batch or real-time scoring is an appropriate business solution, and no one knows the data being used better than analysts from the line of business itself.

   Ultimately, whether the CoE is providing a platform, enablement measures, support, operationalization of projects, or the final products for the business to use — or some combination of some or all of these — there should be strong collaboration not only in terms of sharing business objectives and challenges, but in the full creation from start to finish.

Working with CoEs from start to finish will garner better results that are more closely aligned with business goals. And bonus: working with CoEs also helps upskill members of the business team, who will be more familiar with the process for the next data project and are more empowered to work with data on their own. This close collaboration is what will allow AI projects to succeed and CoEs to scale widely across the enterprise.

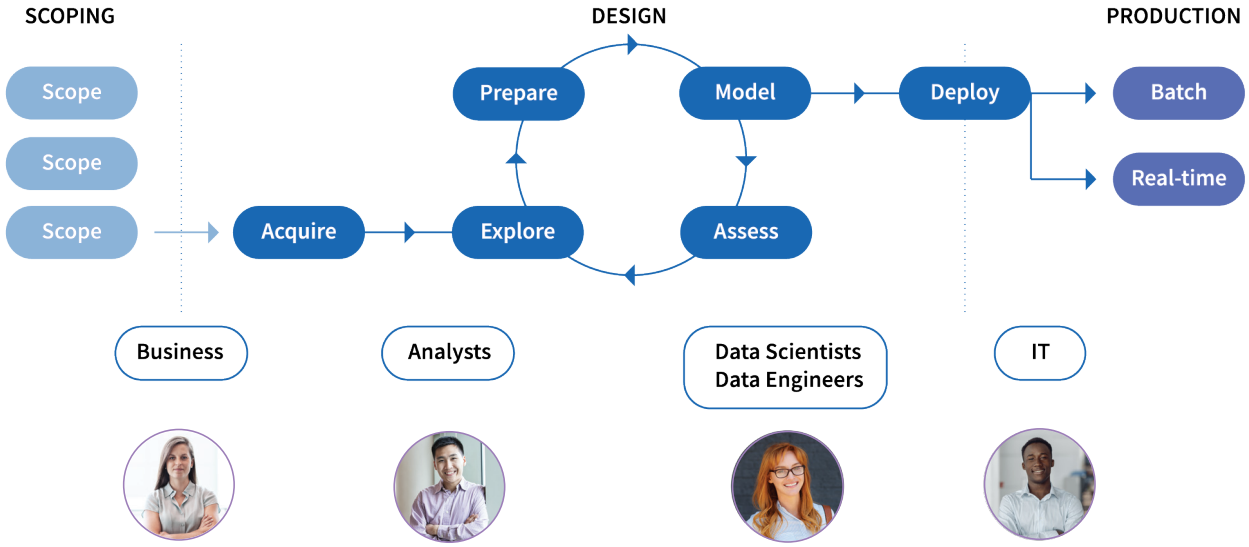


Figure 2: An example AI project lifecycle

2. **Establish clear responsibilities.** Not all AI operating models are created equal — as mentioned in the previous section, some CoEs take ownership of project operationalization, enablement initiatives, training, etc., and for others, this falls on the business. What's more, AI initiatives are new for most organizations, which means operating models and processes are likely to shift over time.

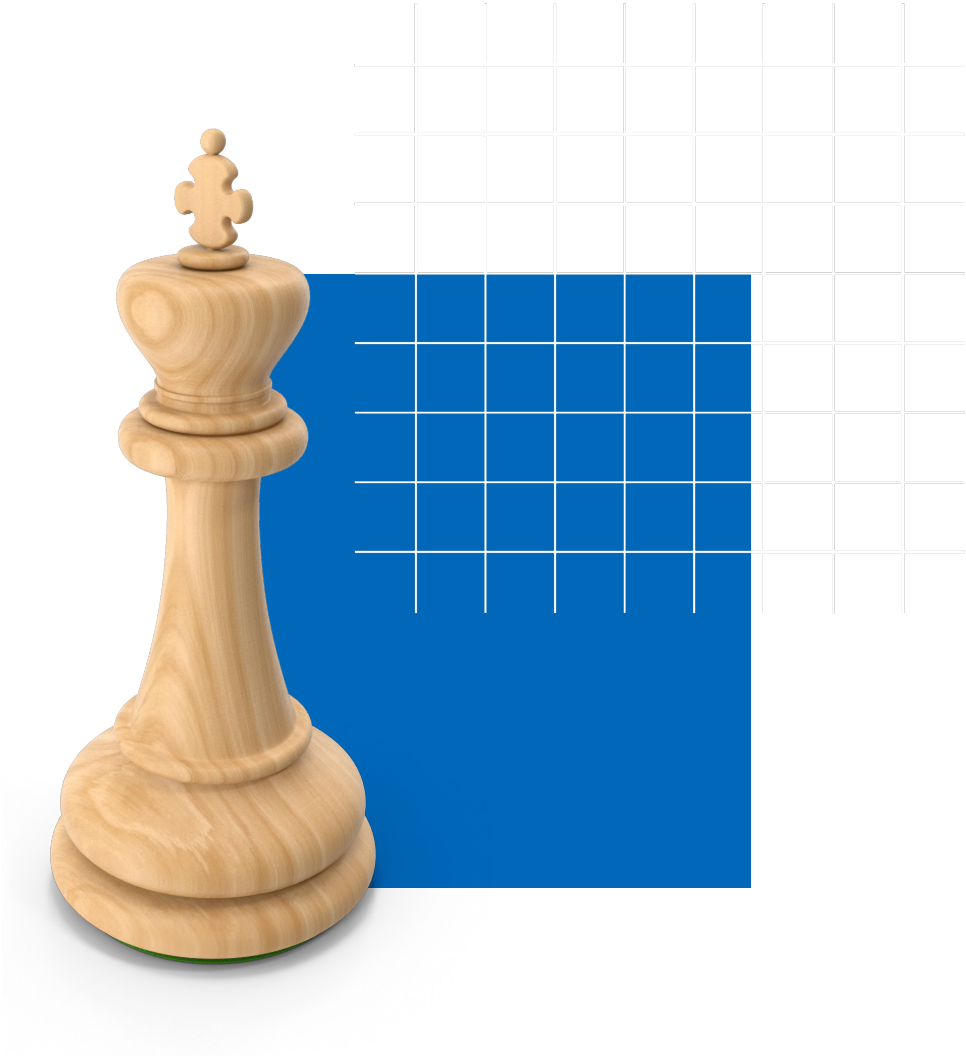
   Therefore, it's important to understand from the business side which roles and responsibilities fall with the CoE (and which don't) to devote sufficient time and resources to ensuring AI project success. This helps both sides budget resource needs upfront and also avoid conflict during the course of AI projects — not having clear owners for tasks can result in either projects that never make it to completion or, by contrast, that suffer from having too many cooks in the kitchen, so to speak.

3. **Take an active role in your organization's AI transformation.** CoEs can't make up their own use cases without support from the business, so to survive, they need demand. While part of the onus lies with CoEs themselves, the business also has a role to play. For example, it can:

- Establish and support AI champions that explore and vet use cases, ensuring that CoEs have a steady stream of quality business problems to address.

- Provide executive support, painting AI initiatives as a priority and thus building awareness and excitement for everyone.

- Think beyond the dashboard, searching for more creative and cutting-edge use cases that the CoE will be excited to work on. Note that to generate demand for the CoE, the business doesn't need to come up with a fully baked solution — even bringing simple business problems and then, as in the previous section, partnering with the CoE to solve them can reap quality results.

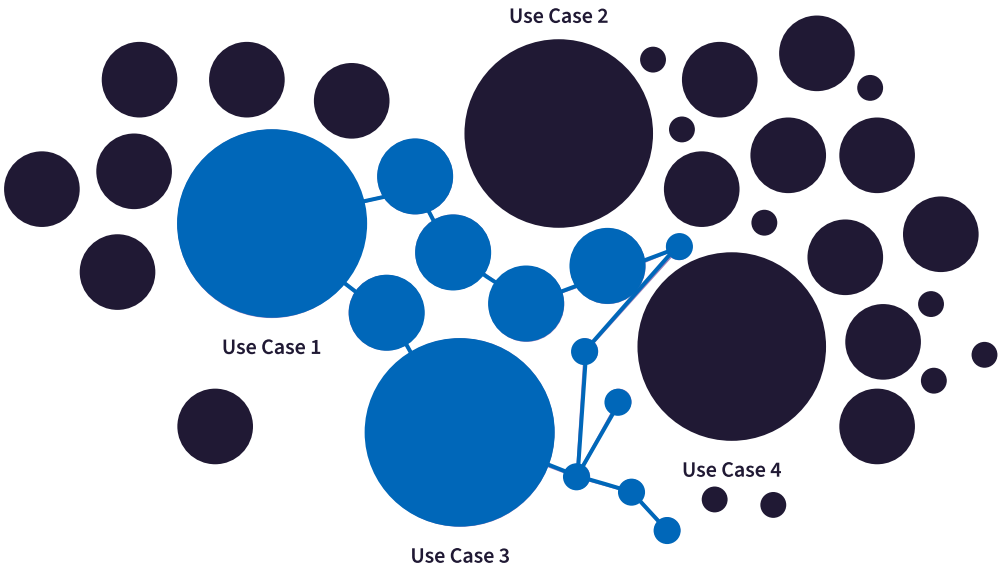


4. **Be an evangelist.** Evangelism is about two things: first, communicating the business value and results the team has seen by partnering with the CoE on specific use cases, and second, about being a cheerleader for AI initiatives at the company at a larger scale.

   Regarding the first point, keep in mind that while the CoE and technical experts can communicate on technical matters (like model accuracy, for example), they likely don't have the proper resources to flesh out business value without your help. Only business teams can evaluate and quantify the value — both implicit and explicit — that they're seeing in ways that will resonate with other teams in the business unit as well as other business units around the company.

   When it comes to the second point, one might ask: why does proliferation of AI matter? Well, when AI is widespread, there can be reuse and capitalization. While tackling larger, high-priority use cases, the organization or even other teams in the business line can also take on lots of other smaller use cases by reusing bits and pieces, eliminating the need to reinvent the wheel with data cleaning and prep, operationalization, monitoring, and more (Figure 3).

   This is the crux of being an AI innovator. It's not about just one successful use case, but seizing the AI wave to create lots of successful, business-impacting use cases throughout the company. However, this longer-term goal starts with AI evangelists talking about their triumphs — what use cases worked, how they were executed, and what the results ultimately were for the business.



AI overall becomes less costly when more groups are involved and piece can be reused among them

Conclusion – Bonus!

One Best Practice for Everyone

Whether part of an AI CoE or a business unit leveraging a CoE for AI initiatives, both sides must treat the initiative with an open, change-management mindset. Becoming a mature AI organization means democratizing the use of AI throughout the company, and realizing this goal means fundamentally changing the way people work.

Of course, some teams and people will be more impacted than others, but the ultimate vision is to have a company where everyone's daily job is intertwined with and enhanced by data, analytics, or AI in some way.

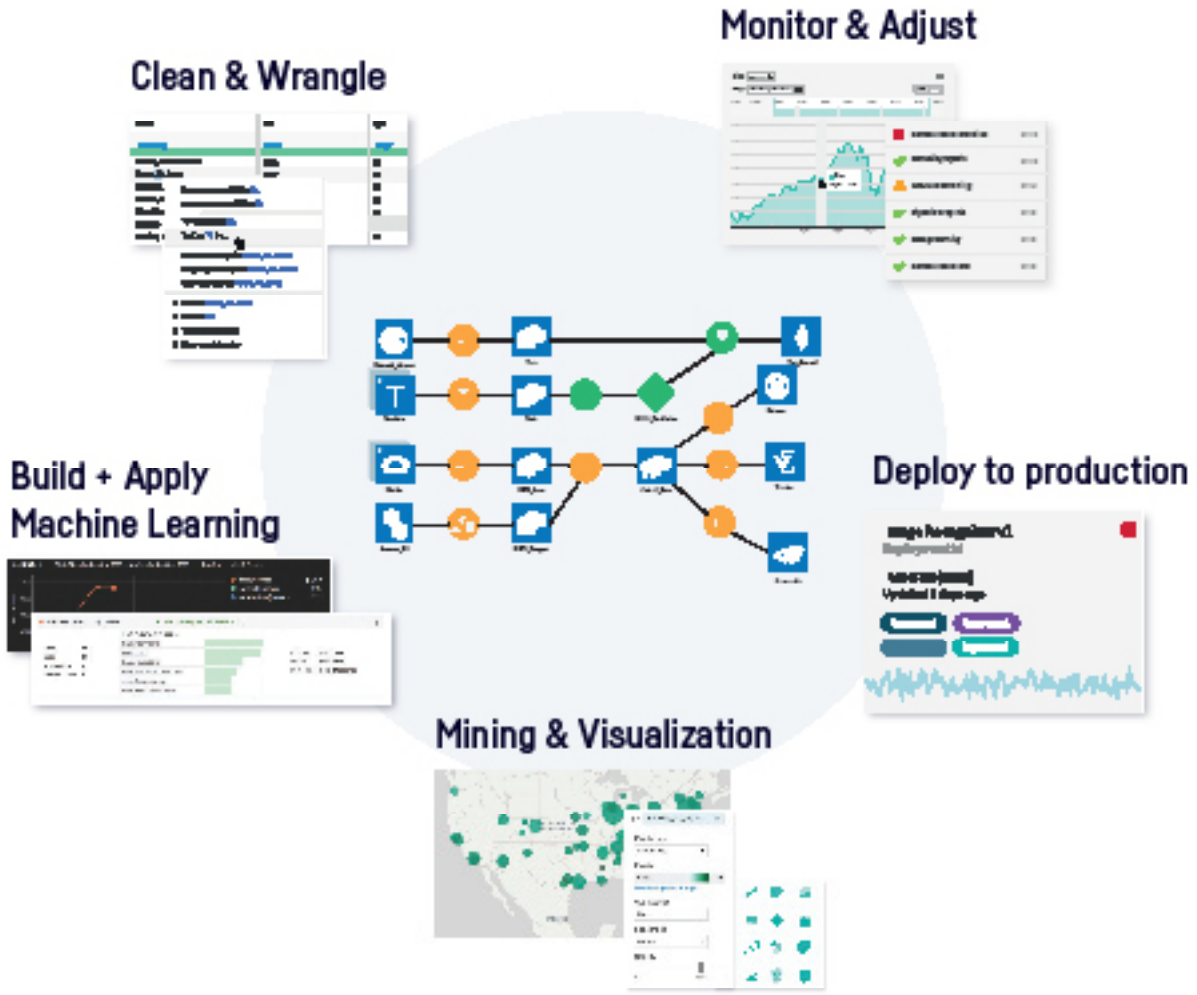
> "We've surveyed thousands of executives about how their companies use and organize for AI and advanced analytics, and our data shows that only 8% of firms engage in core practices that support widespread adoption. Most firms have run only ad hoc pilots or are applying AI in just a single business process.
>
> **Why the slow progress? At the highest level, it's a reflection of a failure to rewire the organization."**
>
> *- Harvard Business Review, Building the AI-Powered Organization[1].*

When taking on an initiative to bring AI to an organization, one must be prepared with the right mindset. There will be resistance at every level, and transformation will not be quick. Those that expect rapid success and change can become easily discouraged, quitting before the company has a chance to succeed.

As a next step, we recommend Accelerating AI Maturity, a guide to reducing costs and creating value with AI applications that helps smooth the transition from the first to the second phase of AI maturity.

[1] *https://hbr.org/2019/07/building-the-ai-powered-organization*

Your Path to Enterprise AI



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