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Is your AI center of excellence still a center of experimentation?

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Artificial intelligence (AI), data, and analytics are central to all strategic imperatives. Organizations aspire to embed them in their business decisions and make their businesses more intelligent. We've been tracking executive sentiment on AI every year since 2017 through Deloitte's *State of AI in the Enterprise* study, and the trend is clear. The view has evolved from "AI is important" to "AI is strategic."

In the latest edition of our study, 94% of business leaders agree that Al is critical to success over the next five years.¹ Increasing investments in Al and a significant rise in the number of use cases show that organizations have committed to their Al and analytics journey.

Yet the outcomes from AI investments are varied, and several companies have not been able to realize the impact they envisioned.² Even as organizations invest in AI and fathom the real-life implications of its scaled deployment, sustained and broad-based success has been sparse.

In our experience, a persistent issue is the model of AI adoption. The value derived from AI is predicated on the role entrusted to AI efforts. Often, business leaders take an anecdotal, need-based approach to AI when they should be taking a holistic, *all-in* approach instead.³

An intelligent enterprise has AI embedded into its business

An intelligent enterprise is an organization that consistently bases its decisions on data-driven insights.⁴ One of the key enablers of such organizations is an AI centerof excellence (CoE). An AI CoE is embedded and close to the strategic business imperative and delivers measurable outcomes continuously. It enables an intelligent enterprise by seamlessly assimilating data into an insight-generation process. However, for this success to be achieved, the organization needs executive sponsorship and effective change management.

To highlight some illustrative examples:

An AI CoE can create and manage hundreds of models that are core to the business, from pricing strategy to supply chain management and the customer experience. A global pharmaceutical company's AI CoE delivered 20-plus advanced machine learning (ML) services, more than 50 conversational AI bots, and hundreds of robotic process automation bots.

- An Al CoE can **drive margins**. A quick-service restaurant chain realized more than \$500 million in incremental margins from AIpowered pricing strategies.
- To support the multi-geography omnichannel strategy of a major life sciences company, the AI CoE influenced \$800 million in global sales by operationalizing ML algorithms and placing the right intelligence in the hands of the company's sales force.
- An evolved AI CoE can **provide opportunities for experimentation and innovation**. A thought-leading technology company (which has smartphones to its credit!) has an AI CoE that builds and operationalizes AI models. Among other things, this CoE provides operational insights, enhances trust and safety, and takes friction out of the customer experience.⁵

These are just a few examples. If you can imagine it, a fully functional AI CoE can make it happen—and in a way that's faster, better, and more efficient than an ad hoc effort.

An Al CoE can deliver an intelligent enterprise

Al isn't one-and-done. Most data or analytics modernization efforts take place in one large implementation. However, AI efforts are a series of implementations bringing together multiple technologies across value streams.

Al implementations need to address a set of use cases catering to the interconnections among business functions. This approach requires tying AI to businesses and their processes, and designing it for business outcomes. By embedding it in the businesses, AI becomes the way to work and not just an intervention, forming the basis of a scaled intelligent enterprise.

Against that backdrop, how does an AI CoE operate? Although each one is tailored to the unique needs of the business, they do have certain operating principles in common. An effective AI CoE unifies value creators with a:

- Clear plan for AI embedment into the core business and strategic plan.
- Focus on observable business impact.
- Comprehensive view of the foundational technology stack in the data and analytics functions.
- Lookout for external disruptions, *technology trends*, and competitor activity.

Businesses that align a CoE with *all* their AI efforts benefit from a synergistic evolution in which the enterprise and the AI CoE build on each other iteratively as the business grows.

Should AI be centralized or federated?

At many companies, each function and division tends to develop a planning approach in a silo, even though there are obvious linkages to upstream and downstream processes and allied functions.

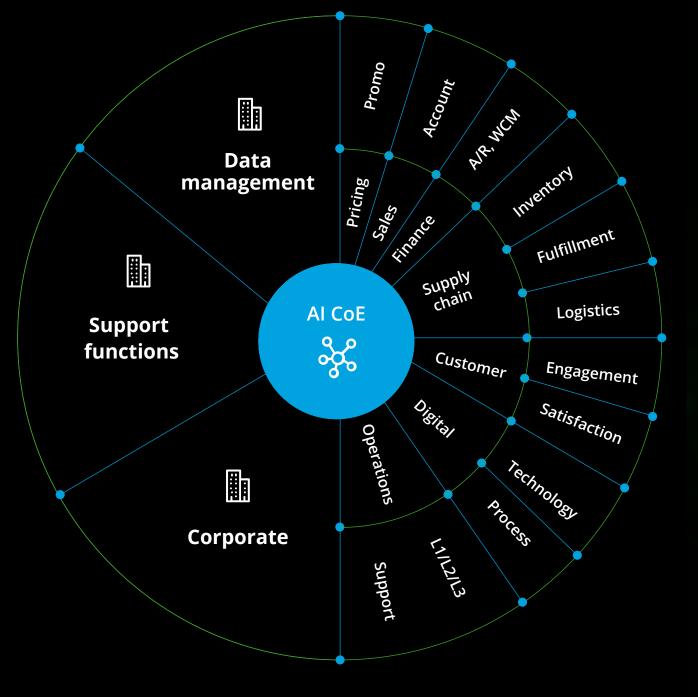
Data sourcing and computational methods aren't always defined or consistently used across groups, making data comparisons and crossfunctional insights difficult to understand. Access limitations further create barriers to collaboration.

Many organizations operate in multi-vendor scenarios with several consultants and systems integrators. Oftentimes, the tech stack in data and analytics is vast, with different parts of the same company having different tools. This results in nonstandard outcomes from AI, data, and analytics investments. It also impedes knowledge sharing and burdens staff, who end up spending a lot of time with software vendors simply because there are so many of them. Meanwhile, as AI gets closer to the core of the enterprise, standardization and governance needs increase. That makes centralization of analytics and AI helpful to organizations that can crossleverage resources, talent, and technologies.

That said, function and industry-specific nuances should be carefully embedded into the CoE. Examples include supply chain or customer management for functional expertise and health care or energy utilities for industry expertise.

An AI CoE functions best when aligned to the organizational matrix. The key here is to strike the right balance between centralization of a function and organizational flexibility. Outline which components or activities are most effectively performed by a centralized construct versus those that can be owned by—or carried out in collaboration with—the business units, functions, and IT teams. To maximize return on investment and speed to market, build once and use many times wherever logical.

The AI CoE in action



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Have you come across an AI CoE that is a center without the excellence?

An AI CoE brings together multiple sources of value to address challenges, minimize replication of effort and the proliferation of unmanaged data, and bring the focus back to where it needs to be: insights delivery as close to the decision points as possible.

With that, how can organizations put the "excellence" in their CoE? Consider the following lessons from a company whose AI CoE wasn't working out. What went wrong?

- 1. No shared vision across business units and with the AI CoE.
- 2. A lack of executive sponsorship, causing low adoption of the AI CoE.
- 3. The AI CoE itself playing a support role instead of driving the mainstream Al agenda.
- 4. Incoherent metrics for the AI CoE and business units on analytics.

Nothing fundamentally changed, the vision remained unrealized, the outcomes were mixed—all because the AI CoE wasn't embedded into the business units.

ReadyAl[™]—Deloitte's approach to the Al CoE

Different organizations, and even different divisions in the same organization, are at different stages of their AI journey. We bring in scaled AI from proof of concept to industrialization, with a focus on:

- Data to dollars. Insights are actionable and monitored across
- time for value realization.
- **Business intelligence (BI) to AI.** Retrospective and introspective business intelligence (showing what happened, when, and how) pair with predictive and preventive AI algorithms.
- **Operation to innovation.** Businesses move to the edge of how they should evolve.

With this approach, we help enterprises scale AI, ML, data sciences, and analytics capabilities to quickly unlock tremendous business value. Our flexible, innovative engagement models are designed to suit varying client needs.



Al CoEs will continue to evolve

With AI becoming more mainstream, the focus will continue shifting to high-value use cases that go to the heart of the company's enterprise value.⁷ Think smart spaces for retail, smart kiosks for restaurants, fraud detection and waste reduction for financial services, new drug discovery for life sciences, green energy for energy and utilities, autonomous vehicles for automotives, and so on.

As AI implementations expand, AI initiatives will become increasingly multidisciplinary. We may see core enterprise AI capabilities augmented with Vision AI, Edge AI, and Generative AI.⁸

It will all require significant computing power in order to mine, analyze, and operationalize large volumes of data—structured as well as unstructured—for sophisticated, real-time, accurate insights. Therefore, AI infrastructure is key. AI-optimized, modernized hardware and software infrastructure should be high performing, ultra-scalable, and automated—not to mention intelligent, easily managed, and cost efficient.

Enabled this way, an AI CoE can:

- Inform business strategy.
- Optimize AI hardware, software, and services in a cohesive, seamless construct that holistically drives business value.
- Cater to core operations along the continuum of InfraOps, Data Ops, Cloud Ops, MLOps, and AlOps.

Here's a final thought to take with you: Treat AI as an investment. As you would with any other investment, create a portfolio of opportunities in this scenario, a use case backlog—and methodically deploy AI against it. Then manage and nurture this use case backlog with a CoE where the "E" stands for excellence, not experimentation.

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