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AI KPIs 2022: Best Practices Snapshot

Insights from Omdia's AI
Enterprise Insights
Intelligence Service

AUTHOR

Mark Beccue, *Principal Analyst, AI & NLP*



Introduction: AI KPIs as Best Practices

As artificial intelligence (AI) initiatives continue to move to commercialized, enterprise-grade elements of business operations, those overseeing AI are building foundational structures and operational frameworks to ensure success. A critical element of these foundational structures is identifying and deploying the best performance metrics. With so much investment at stake and the early-stage nature of AI market adoption, key performance indicators (KPIs) for AI are the most important guardrail for senior management to use to guide their AI strategies.

Choosing KPIs for AI is a challenge, as the industry is still in the early stages of AI market adoption. AI readiness, knowledge, experience, and expertise across enterprises are low.

Leveraging new data collected in a comprehensive enterprise survey on the state of AI adoption and a smaller survey specific to AI KPIs, Omdia has discovered further statistical and anecdotal evidence on the strategies and structures enterprises are using to address AI KPIs. It is important reading for enterprises that are operationalizing AI and building AI KPIs to benchmark AI KPI methodologies.

There are four key takeaways to be learned from our analysis



AI KPIs remain an immature concept



AI KPIs will rapidly grow as foundational elements of enterprise AI

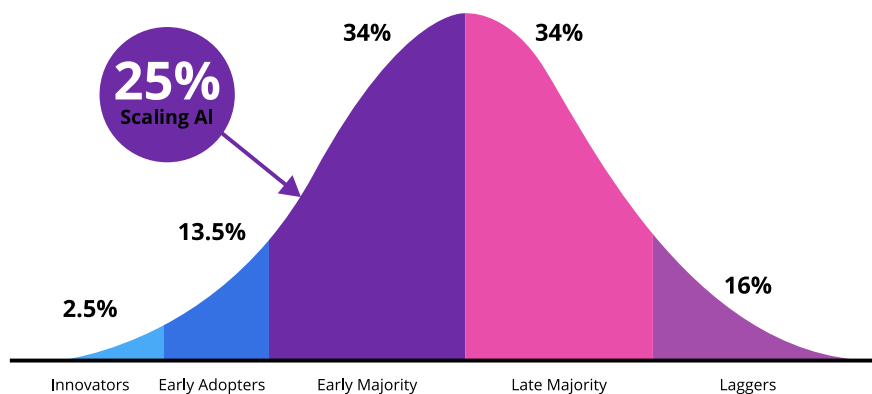


AI KPIs should line up with your organization's larger business metrics/KPIs



Enterprises that do not develop AI KPIs for their AI initiatives will fail at AI

Figure 1: AI maturity in the context of diffusion of innovation



Source: Omdia, adapted from Everett M. Rogers' Diffusion Theory (1962). © 2022 Omdia

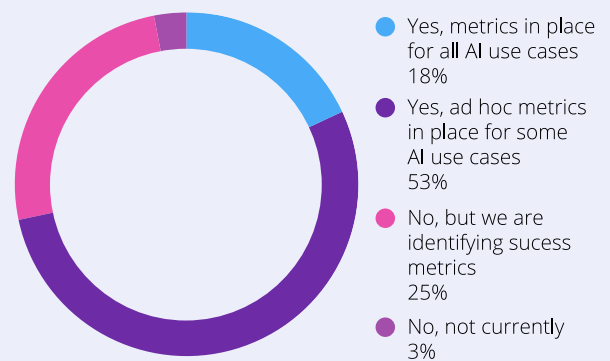
The following pages outline what these takeaways mean for the industry and how they will impact AI adoption in the enterprise

AI KPIs remain an immature concept

With nearly every new technology, there is a lag between what is possible and where the true business value resides. Many organizations continue to struggle with measuring the success of their data and analytics investments, and these programs have been around for more than 20 years. AI is certainly no different. In Omdia's recent comprehensive enterprise AI survey, only 18% of respondent companies indicated they have metrics in place for all their AI use cases. There is little consensus as to the approaches to building AI KPIs, including what kinds of business metrics AI should be tied to and who should define and own AI KPIs. This immaturity is unsurprising, given that most enterprise AI initiatives are undeveloped.

The lack of maturity is a potentially dangerous position for enterprises operationalizing AI because many are leaning on ad hoc KPIs for some of their AI initiatives, which could result in KPIs maximized for AI. The good news is this dependence may be a short-lived challenge, as an increasing number of enterprises are actively identifying AI KPIs and formalizing ad hoc AI KPIs.

Figure 2: Do you have metrics/KPIs in place to measure the success of AI initiatives?



Source: Omdia; © 2022 Omdia Notes: n=414

Here are some of the signals of AI KPI immaturity:

Approaches to building AI KPIs vary

What this means:

The percentage of enterprises that will be able to model on existing programs will grow significantly over the next two years.

It makes sense that enterprises that have been early adopters of enterprise AI have largely been on their own to create AI KPIs. More than half of the respondents to Omdia's AI KPIs survey of 24 enterprises created their AI KPIs from scratch.

No consensus on who should lead the development and management of AI KPIs

What this means:

Omdia expects line of business leaders (e.g., product management, etc.) to take on more AI KPI leadership roles and for data science organizations to take on less over the next two to three years.

There are signs that enterprises are divided on where leadership should reside. The fact that there is no definitive choice for which organization should lead is not necessarily a negative.

Standardized AI KPIs? No consensus on approaches

What this means:

Omdia expects some AI KPIs will standardize in a de facto sense as a result of best practices developed by maturing early adopters of enterprise AI.

If AI KPIs were to evolve into relatively standardized forms, it would logically benefit new entrants to enterprise AI to measure results and therefore justify the investment. There are no indications that enterprises are favoring a defined standardization approach.



AI KPIs will rapidly grow as foundational elements of enterprise AI

The number of organizations with AI KPIs will grow rapidly over the next two to three years because the barriers to building AI KPIs today are largely temporary. These types of issues affect enterprises in the early stages of most projects and are not long-term, systemic challenges.

AI KPIs should line up with your organization's larger business metrics/KPIs

57% of KPI interviewees said the best place to start building AI KPIs is with business goals, while another 22% said operational goals. It is important to note that only 22% said to start building AI KPIs with specific AI performance metrics. And yet, while there are strong signals that AI KPIs should start with business goals, enterprises are also indicating that multiple business metrics, such as time reduction, revenue improvement, productivity, and cost reduction, are of roughly equal importance. Omdia expects this trend to remain even in a maturing market since AI is being applied across a very broad range of use cases.

Enterprises that do not develop AI KPIs for their AI initiatives will fail at AI

The lack of AI KPIs is a signal the organization is not fully invested in success. It may face limited funding, resources, and goals.

Best practices



Work backward to determine your KPI path

To build AI KPIs, start with the broad-based organizational outcomes and associated KPIs and map AI outcomes to them. AI outcomes will determine which AI model metrics to use that will align AI outcomes/ KPIs to organizational KPIs.



Ensure AI KPIs make sense within your specific circumstances as a business or organization

AI KPIs vary significantly by horizontal application or industry vertical.



Cost reduction, engagement, and time reduction are good starting points for AI KPIs

While AI KPIs vary widely, Omdia found these three measurements are commonly used across different use cases and industries.



Understand the difference between AI model metrics and AI KPIs

AI model metrics, such as classification metrics, regression metrics, General Language Understanding Evaluation (GLUE), and so on, measure specific AI outcomes, but they are not by themselves good AI KPIs. AI model metrics are best used to inform/ contribute to broad-based organizational AI KPIs (cost reduction, engagement, etc.).



Realize that mature use cases and applications will feature more developed, proven AI model metrics and KPIs—and the reverse is also true

Expect AI model metrics and KPIs to evolve over time. KPIs for less mature AI use cases will evolve more rapidly than KPIs for more mature use cases. The less mature the AI use case is, the more risk there is of getting associated KPIs wrong.



Summary

With so many things to consider in the ever-evolving AI landscape, now is the time to start the planning process behind your organizations KPIs and way you will measure the success of AI within business. Despite perceived barriers to putting AI KPI's in place, the number of companies with KPIs in place expected to grow exponentially in the next few years, indicating that any barriers are temporary and that it is imperative to have some best practice processes in place in order to ensure AI success is measured in line with business goals.

Our [AI KPIs 2022: Best Practice Report](#) takes a full deep dive into the KPIs that will have an impact on the way AI is monitored and implemented within business. This report is part of the AI Enterprise Insights Intelligence Service, which provides in-depth examination of the current state of enterprise AI adoption. Through a rich collection of reports, surveys and trackers, it offers unique insight into the behaviors, best practices and challenges of these organizations.

Interested in learning more about how enterprises are operationalizing their approach?

Fill out the form to contact our team for more information about our market leading AI research services.

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Connecting the dots

Omdia is a global technology research powerhouse, established following the merger of the research division of Informa Tech (Ovum, Heavy Reading and Tractica) and the acquired IHS Markit technology research portfolio. *We combine the expertise of over 400 analysts across the entire technology spectrum, analyzing 150 markets publishing 3,000 research solutions, reaching over 14,000 subscribers, and covering thousands of technology, media and telecommunications companies. Our exhaustive intelligence and deep technology expertise allow us to uncover actionable insights that help our customers connect the dots in today's constantly evolving technology environment and empower them to improve their businesses—today and tomorrow.



Mark Beccue

Principal Analyst, AI & NLP

Mark holds a Bachelor of Science degree in journalism from the University of Florida and has spent more than 25 years interpreting technology business.

Prior to joining Omdia, Mark was an independent consultant who provided custom qualitative market analysis in mobile technology. He also previously worked for Syniverse, where he was a senior market intelligence analyst with responsibility for identifying trends and opportunities. As well as this, Mark has served as a senior analyst at ABI Research, where he concentrated on mobile consumer technology.