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NAVIGATING THE AI WAVE
FOR NEW BUSINESS VALUE

Developing a clear strategy for leveraging Artificial Intelligence (AI) in your business can be a daunting proposition. Due to the broad capabilities and technology options, as well as the security and compliance considerations, it can be difficult to answer the inevitable question: "What is our AI strategy?" Here is some practical guidance to help accelerate the path to achieving your business outcomes leveraging the value of AI.

Nearly every product and service we bring to our customers is now claiming to be powered by Artificial Intelligence (AI). Successfully navigating the hype cycle involves striking the right balance between rapid adoption and responsible governance. As with most technology buzzwords, AI has many aspects to it, so it's important to establish a basic understanding of the complete AI landscape. Generative AI is the shiny object, but many business use cases can be solved with something more appropriate (and less expensive) such as a traditional machine learning algorithm or analytics tool.

Armed with a foundational understanding of the AI landscape, your adoption journey should begin by considering use cases. Performing a diligent assessment of the potential use cases for AI in your organization, including the expected benefits, costs and risks is an incredibly useful endeavor. A thorough analysis should include both identification of possible use cases and a preliminary ranking and prioritization for each. Be sure to include a balanced blend of current pain points across the organization and "art of the possible" scenarios that could differentiate your business. It can also be helpful to include someone with AI expertise in this analysis to further assess the effort and potential costs to achieving each scenario. This will factor into your phasing strategy.

When it comes to executing on your AI use cases, there are a few key elements to consider. These include your data platform, core infrastructure, development approach and overall security and governance.

DATA PLATFORM

Data is the raw material that powers AI. As with any raw material, there is a lot of processing that must occur in order to transform the raw material into a specific product. This is the function of your foundational data platform. It's important to assess your current data platform to ensure readiness for the AI wave. This includes data ingestion, classification, storage, transformation, enrichment and (of course) data protection and governance. If your underlying data platform is immature or based on legacy architecture and technology, you may need to modernize this foundation as part of your AI journey.

CORE INFRASTRUCTURE

The AI wave is powering a new era of infrastructure that is moving beyond generalized compute (CPUs) for every workload. Demand for specialized compute in the form of GPUs, TPUs and other specialty processors is exploding in order to support AI's complex inferencing engines and mathematical algorithms. NVIDIA is a leader in this space with solutions such as the DGX platform, which combines high-end GPUs with purpose-built interconnectivity and custom software across the infrastructure. The major cloud platforms are another great source of AI infrastructure and platform services, especially if you are looking to get started quickly with a proof-of-concept or just some exploration. Be sure to understand and build a projection model for cloud costs if this is your long term approach.

DEVELOPMENT APPROACHES

Designing and developing AI-enabled solutions requires integrating existing best practices for Agile delivery with the adjustments required for implementing applications that leverage generative AI, such as Large Language Models (LLMs). It starts with picking the right foundational model, version, size, and tuning to meet the capabilities your specific use case(s) require while maintaining the appropriate level of cost efficiency overall. From there, you must determine the correct approach(es) to generate the desired output – from simple prompt design to retrieval-augmented generation (RAG) and fine-tuned training on your proprietary data set. Then wrap this AI service into an application tailor built to streamline and enhance your business workflow.

It is also key to understand the impact of these AI solutions on typical Agile delivery processes for release planning and QA testing. For many AI-enabled applications, especially those that require fine-tuning with your specific data, it is key to continue to evolve that training as the system is used and new data is created. This typically requires adjustments to the release cycle approach for such applications as well as considerations regarding the testing and operational management of the overall solution. Observability is critical, both in terms of availability and the quality of generated outputs.

SECURITY AND GOVERNANCE

AI is a double-edged sword for cybersecurity. On the one hand, AI can be leveraged for increased functionality and capability across the spectrum of cybersecurity. Most security products are injecting AI into their product offerings for augmented capabilities. On the other hand, AI introduces new threat vectors and security concerns, along with new requirements for data governance and policy. AI models themselves can produce biased or incorrect results, which requires risk mitigation. AI model transparency is a key consideration here, along with iterative and continuous accuracy-based testing.

The free-form, open style of generative AI, has led to a desire, and often a need, to install 'guard rails' around its usage. It is often necessary to draft policies around generative AI regarding consumption and interaction to assure proper governance and compliance.

WHAT THE FUTURE HOLDS

The release of OpenAI's ChatGPT in November 2022 was a watershed moment. It placed a spotlight on the potential for AI to disrupt so many facets of business and technology. The time is now to start considering how AI can be adopted across your organization. Leveraging the services of a trusted advisor and IT solution provider with the expertise to look across the AI landscape and objectively guide your journey is a smart approach.

At Verinext, we are actively enabling and managing AI transformation for clients and helping them make the best decisions in AI solutions. Our capabilities span infrastructure through applications with security and compliance embedded throughout. As an independent advisor with deep expertise in technology architecture and implementation, we bring an unbiased and pragmatic approach to serving our clients.

Verinext is your sherpa guide to building an AI-powered organization, always with better business outcomes in in mind.

Contact us today to learn how Verinext can help you design and execute a high value AI integration using the best of AI tools and techniques available.