



# Generative AI: Getting ready and getting it right

## Be a next-gen leader with Quantiphi and AWS

As a renaissance in business technology, generative AI has ushered in a new era of innovation and possibilities. A recent survey by McKinsey revealed that 40 percent of organizations plan to increase their AI investments, driven by the advancements in generative AI. Particularly, business functions such as marketing, sales, product development, and service operations stand at the forefront, contributing to 75 percent of all generative AI use cases.<sup>1</sup>

However, while the versatility and capabilities afforded by generative AI are unmatched, there is a caveat: its results can sometimes lack accuracy, demanding meticulous attention to AI risk management. Moreover, the implementation of generative AI raises critical questions about organizational readiness in areas, including technical team expertise, data readiness, operating models, and responsible AI principles. Companies vacillate between the urge to innovate and the need for prudent caution, pondering the right approach for integration. This juxtaposition of excitement and prudence presents a unique dilemma for C-suite executives.

This whitepaper explores this dichotomy, delving into the right way of embracing generative AI. We explore unmet challenges that businesses will encounter when implementing generative AI, such as factual inconsistencies, limited domain understanding, and misaligned responsible AI principles. Through this exploration, Quantiphi and Amazon Web Services (AWS) together help guide your organization to embrace this technology thoughtfully and intentionally. With the right combination of Quantiphi's enterprise-ready generative AI platform *baioniq* and advisory services complementing one another, leaders can adopt this cutting-edge technology with certainty over business outcomes and in alignment with responsible AI practices.

<sup>1</sup> McKinsey, "The state of AI in 2023: Generative AI's breakout year," August 2023

## Navigating generative AI: Crafting a strategic approach

Generative AI provides a diverse palette of innovative possibilities, from enhancing workforce productivity to automating critical business workflows, and even revamping core business processes. However, to approach implementation with a strategic mindset, you must first assess your organizational readiness and determine your specific goals and needs.

The following are common cross-business challenges faced by organizations when implementing a generative AI strategy.

### Technology choice and skill needs:

- Ensuring accuracy and reliability in generative AI applications.
- Addressing technical expertise and data gaps within organizations.
- Managing data architecture necessary for generative AI projects.

### Cost challenges:

- Balancing the costs associated with implementing generative AI against potential benefits.
- Accessing the investment required for kickstarting technology projects.

### Cultural challenges:

- Overcoming resistance to change and fostering a culture of AI-infused responsible innovation.
- Integrating generative AI with existing workflows and organization culture.

There are also technology-specific considerations, such as ensuring large language models (LLMs) are trained on an organization's proprietary data, to ensure LLMs can understand and cater to the nuances of a specific business. As well, integrating LLMs and generative AI into legacy systems can be complex and challenging, requiring expertise and resources.

When it comes to data, which underlies generative AI and LLMs, it's imperative to prepare for data privacy and security—especially when dealing with sensitive business information—as well as factual inconsistencies and limited domain understanding.

Finally, LLMs may not inherently come with responsible AI guardrails and ethics, which are essential to prevent potential misuse, toxic outputs, and biases, and manage risk caused by hallucinations in AI-generated content. Organizations must ensure selected applications meet legal and ethical standards, adding complexity to decision-making. In short, there are so many considerations that seeing the end result as a clear picture can be challenging.

## When choosing the right use case, make sure you consider

- Real-world problems
- Complexity
- Resource and expertise constraints
- Ethics and regulation

## Getting ready: Leveraging advisory services and a platform

### Generative AI Advisory Workshop Series:

Embarking on the generative AI journey is akin to navigating the dynamic terrain of technology. In this expedition, Quantiphi's Generative AI Advisory Workshop Series serves as your reliable GPS, guiding you with assurance toward your destination. Led by a skilled team of AI and data science experts, this workshop series aids in aligning your team's technical proficiency, surmounting data challenges, and assessing your organization's preparedness.

With more than a decade of expertise in constructing, implementing, and overseeing AI models across various business sectors, including healthcare, education, public sector, communication, media, insurance, retail, oil and gas, and manufacturing, Quantiphi is well-equipped to initiate generative AI programs promptly.

Whether you're just starting or aiming to navigate the advanced terrains of generative AI, Quantiphi's Advisory ensures you're not only ready but also starting on the right track.

## Generative AI Advisory Series includes:

1. In-depth educational generative AI sessions and two-way information exchange
2. Identification and prioritization of use cases
3. Hands-on creation of minimum viable prototypes (MVPs)



## baioniq: Quantiphi's enterprise-ready generative AI platform

In the generative AI journey, organizations must select use cases like plotting waypoints on a GPS. Achieving a balance between accuracy and reliability demands a versatile platform that guides and fine-tunes strategies to match the unique requirements of the business landscape.

baioniq is an enterprise-ready generative AI platform that empowers organizations to supercharge the productivity of their knowledge workers and apply generative AI to specific tasks within their industry.

baioniq makes generative AI adoption easier and accelerates solution development with enterprise-ready layers for accessing, domain adapting, and instruction fine-tuning a variety of foundational models while adhering to responsible AI principles.

Designed for swift onboarding of generative AI capabilities, baioniq is containerized and deployed on AWS and is Amazon Bedrock native. Organizations can fine-tune LLMs in Amazon Bedrock and Amazon SageMaker JumpStart to incorporate domain-specific data and execute enterprise-specific tasks.

Furthermore, baioniq provides connectors through its blinq APIs, enabling interactions with end-users via dialogue, speech, search, and robotic process automation. With baioniq, enterprises gain the capability to construct versatile generative AI applications, customize sector-specific solutions, and expedite solution development.



# Generating innovation with AWS

The most performant and cost-effective tools and infrastructure for generative AI.

AWS has been training for this moment. Generative AI isn't new, but deep expertise refined over years of experimentation at AWS is newly available to your business in a range of easy to adopt, low-code tools to help you:

- **Innovate:** Create generative AI applications that unlock the value of your data quickly, captivate your customers with new experiences, and potentially generate new revenue streams.
- **Scale:** Customize models with enterprise data, avoid third-party lock-in, and confidently scale generative AI, knowing your data will not be used to inform models.
- **Perform, responsibly:** Get support filtering model outputs for unacceptable content.

You can even save on energy costs and work toward sustainability goals because AWS silicon chips in Amazon EC2 instances for machine learning are designed to be energy efficient.

With AWS, you don't need to invent nor reinvent generative AI capabilities—they are ready to deploy now. You just have to decide what business capabilities to reimagine first.

## Start here:

Any generative AI project can benefit from these powerhouse tools.



### Amazon Bedrock

The easiest way to build and scale generative AI applications with foundation models.



### Amazon CodeWhisperer

Save developers time and get applications to market faster.



### Amazon SageMaker JumpStart

Deploy prebuilt machine learning solutions in just a few clicks.

[Learn more](#)

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Reduce costs by 50% when you train models on Amazon EC2 instances powered by AWS chips purpose-built for ML.

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## Getting generative AI right: Responsible innovation and change management

In simple terms, for organizations to support their teams effectively, they should encourage a culture of AI-infused responsible innovation. Overcoming resistance to change involves having customized discussions and guiding teams through sessions focused on what is achievable.

## Making generative AI seamlessly fit into existing workflows and the organization's culture is easier with the guidance of advisory services and baioniq capabilities.

baioniq, along with the Generative AI Advisory Workshop Series, provides a comprehensive and adaptable solution to address the challenges associated with adopting generative AI—covering technology, cost, and cultural aspects—to enable a successful and sustainable journey into the world of AI. The following parameters serve as critical benchmarks to ascertain that an organization has indeed arrived at the peak of its generative AI journey:

### Cost-effective customization:

- Achieved significant cost-efficiency.
- Customized LLM solutions align seamlessly with strategic goals.

### Scalable infrastructure mastery:

- Efficiently supports LLMs and diverse workloads at scale.
- Demonstrates optimized infrastructure management.

### Data management excellence:

- Ensures data quality, availability, and integration.
- Meets diverse data needs effectively.

### Performance optimization:

- Robust metrics achieved consistently.
- Expertise in fine-tuning for superior LLM outcomes.

### Responsible AI leadership:

- Eliminates hallucinations and prioritizes fairness.
- Ensures transparency and ethical AI practices.

## Learn more about baioniq—Quantiphi's comprehensive generative AI platform.

[Learn more](#)

### ABOUT THE AWS PARTNER



Quantiphi is an **award-winning** AI-first digital engineering company driven by the desire to reimagine and realize transformational opportunities at the heart of the business.

Quantiphi's journey into generative AI began in 2019 with the introduction of the BERT model, and now its generative AI services and platform empower businesses across industries, boosting productivity and reducing costs by tailoring AI solutions to their unique needs, creating a futuristic edge.

### TOP GENERATIVE AI APPLICATIONS



Knowledge management



Dynamic content generation



Advanced conversational AI solutions