Executive Guide to **Investing in AI**

Wondering why Generative AI is a game-changer? Let's break it down:

- **Varied use cases:**

Not all use cases are equal. Tailor your approach based on the business value. Some industries need to innovate, while others benefit from more standarized solutions. - **Evolving landscape:**

Generative AI is still in its early days, especially beyond text. Experiment and pilot within your context to understand benefits and challenges, especially in industries like healthcare and manufacturing.

- **Risk factors:**

Be aware of risks like data hallucinations, bias, cybersecurity and copyright challenges. Addressing these challenges is key for successful implementation.

Choosing your Generative AI path:

- **Speed to market:** Rapid response is crucial, particularly in industries facing disruption.
- **Customization requirements:** Tailor solutions for more complex use cases: fine-tune commercial or open models.
- **Volume and scale:** Consider workload volume, seasonality, and the impact on the model's deployment.
- **Data privacy:** Evaluate data residency and privacy controls, deciding between cloud solutions or on-premises models.
- **Latency and performance:** For real-time use cases, optimize the size and architecture of the foundation model.
- **Operating model implications:** Availability of talent is crucial. Consider the maturity of your operating model and data pipeline management.

AI deployment options

- **Public APIs:** For simple tasks without customization.

- **Models-as-a-service:** Utilize pre-built models from vendors.

- **Open models:** Use or customize models like Falcon or Sable Diffusion.

- **Custom models:** Use or customize models like Falcon or Sable Diffusion.

◎ Should I develop this capability now, or is it better to acquire it later?

When investing aggressively and building solutions is advisable:

- AI incrementally enhances the core offering or business model.
- AI creates a novel offering or opens new markets.
- If your industry is facing disruption.

Buying out-of-box solutions

- For more standardized use cases where solutions already exist.
- Horizontal use cases where platform solutions will likely emerge.

◎ Total Cost of Ownership (TCO)

Primary costs: Fixed set-up costs (hardware, data curation, costs of engineering, training and tuning) and variable costs (consumption costs for API's, and inference).

Secondary costs: Hidden and hard-to-estimate costs, ranging from maintenance costs, risk management, organizational change management, as well as legal costs.

The total costs can vary significantly between deployment options:

- Public API
- Models as a Service
- Building proprietary models

◎ Winning with Generative AI

- Focus on economic viability at scale when making core technologies choices.

- Invest early in closing the talent gaps.

- Look ahead to solve the data and day-two operational equation.

- Assess feasibility and impact before investing for scale, and be clear about when to buy versus build.