BUILDING A COGNITIVE ENTERPRISE: HOW GENERATIVE AI HAS SUPERCHARGED THE AI REVOLUTION

by **Deepak Dastrala**

I believe the bulk of AI usage in corporations was by consumer facing companies such as Google and Amazon – whilst internal enterprise usage was low. For any product or service, to really make an impact, it has to have desirability, feasibility and viability. Only if these three things are taken care of, will enough value and impact be made. While these companies have successfully leveraged AI to generate significant revenue, enterprises have often struggled to achieve similar success due to challenges such as data quality and the lengthy, cost-heavy process of AI model development and subsequent maintenance.

Just one next best action recommendation from Amazon has probably created an addition of \$10- \$20bn extra in sales, but enterprises don't have such use cases and I think this is the reason so far enterprises haven't seen enough success in AI. However, this is changing with the latest progress in Generative AI.

Scaling AI Sustainably in Enterprises

Despite the ever-growing popularity of AI, the need for scaling the technology sustainably when integrating into everyday operations has not changed. A strategic approach is called for here. Despite the increasing work that is done by LLMs in terms of intelligence, the requirements to build, operate, and manage this technology haven't diminished.

If you want to build one AI use case, for example, you need at least 14-15 unique roles. Simply plugging into an LLM will not yield sustainable outcomes for enterprises to build, deploy and manage AI use cases at scale. For an enterprise to be sustainable and competitive in AI, they will need to have at least 300 use cases.

"This is why a platform-based approach is the best route to take. Leveraging solutions like Purple Fabric will help enterprises to standardise, optimise, and automate end-to-end AI journeys and help the firm focus on the problem

statement. The platform will abstract all the technical challenges required to bring in the right data and subsequently build, deploy and manage the AI use cases at scale.

"Without a platform-based approach, it will be challenging for businesses to focus on their core competency and deliver outcomes at scale"

Purple Fabric's robustness is further enhanced by IntellectAI's eMACH.ai framework, which features a sophisticated blend of events, Microservices-based, API-first, Cloud-native, and Headless architecture, all driven by Artificial Intelligence. This framework not only facilitates seamless integrations with customer enterprise systems but also ensures that the architecture remains future-proof, adaptable to new technologies and business needs as they arise. It enables the effective utilisation of the best LLM models to achieve significant business impact through Enterprise Connected Intelligence.

Scaling AI initiatives sustainably in the wake of the Generative AI boom requires a strategic and platform-based approach. By focusing on desirability, feasibility, and viability, and leveraging the benefits of pre-trained models and LLMs to build expert agents, enterprises can successfully integrate AI into their everyday operations and deliver impactful outcomes at scale.

Role of Governance and Change Management in Building a Cognitive Enterprise

Governance and change management play a crucial role in building a cognitive enterprise. Over the last year, many people have seen the growing value of AI, and at a high level, enterprises are recognizing the need to embrace AI.

The next level of efficiency will come from AI. As digital transformation addresses a certain level of inefficiency, the next level of inefficiency will be overcome through cognitive transformation. This will result in greatly improved cost structures for enterprises to serve customers and build new products and services, superior quality and hyper personalisation.

However, the journey for the development of AI is still largely unknown. As models evolve, many firms are considering how to leverage AI on top of their existing data. This leads to questions about how data is curated and secured to ensure that the core intelligence of an enterprise is not compromised.

The importance of responsible AI practices that protect data integrity and prevent bias. The need to involve the workforce in this journey, ensuring employees understand how to use AI technology safely.

This is where the governance helps in terms of putting up the right guardrails but also not stopping the innovation. Taking people along on the journey, having auditability and explainability factored into the journey in a responsible way.

Focusing on the Right AI Opportunities for Enterprises

The world of AI is changing rapidly, with the fast-evolving GenAI platform ChatGPT serving as a testament. Many enterprise firms often struggle with where to start when it comes to AI. Most enterprises are taking a safe journey and see AI as an extension of their automation journey. While an acceptable starting point, enterprises need a proper strategy with a holistic approach beyond this initial phase to stay relevant and competitive in the long run. I want to share a quote that I recently came across, "If financial institutions don't have an AI strategy, they don't have a strategy at all."

The opportunity for AI innovation is substantial. At a high level, one-member companies - augmented by agentic networks and functions - will have a billion-dollar market cap within 20 years. While enterprises are exploring how AI can be leveraged for typical scenarios like onboarding, customer service, risk, and compliance, they equally need to think about the opportunities that will help them build new products and services that don't exist yet.

Balancing Innovation and Compliance in AI Adoption

In an age where AI innovation is rapidly advancing, firms must balance innovation with the necessary stability of compliance. The key to achieving this balance is for people to proactively understand what they need to do to stay close to the regulations and firms to engage with regulators practically. If you're in a financial services unit, work alongside the regulators and understand the kind of work they're trying to do and participate in framing the policy so they're always ahead of it.

It is important to focus on helping the workforce to build a culture of ethical excellence, ensuring they are well informed about the opportunities and challenges in AI. The significance of teams understanding data privacy and security in the context of AI, questioning, "What are the models you are trying to leverage? How do you understand that there is statistical bias in the data and how do you prevent the hallucination? What techniques do you want to use to make sure that the models you leverage are controllable and don't bring any inherent bias?"

To balance compliance and innovation in AI, it is crucial to have sufficient traceability, explainability, and accountability to protect customer trust. These steps are possible through practices like upskilling and reskilling, building tools and guardrails, and engaging with regulators.

Future of Generative AI in Enterprises: Reasoning, Acting, and Increasing Efficiency

Looking to the future of GenAI within the enterprise sphere, I would like to note

that recently LLMs have started reasoning, breaking problems down into smaller steps, and acting. This is a fundamental shift from what most people thought these models could do even a year and a half ago. Where the cloud revolution took over the market for all software, the intelligence revolution has the potential to disrupt and take over the market for all services which were previously squarely in the domain of humans. I believe the future of Generative AI is actions done by expert agents. This means entire divisions within organisations can be run by agents collaborating together to increase enterprise efficiency exponentially. They are going to contribute substantially both to a company's bottom line and the top line, with the top line opportunity being the bigger one by far.