CIONET

DISCUSSION SUMMARY

FROM HYPE TO REALITY: NAVIGATING THE CHALLENGES OF GENAI

Hitachi Digital Services

From Hype to Reality: Navigating the Challenges of GenAI

Generative AI (GenAI) is a revolutionary technology with the potential to transform industries. Organisations that harness its potential effectively will gain a significant competitive advantage.

However, while many companies are exploring GenAI use cases, far fewer are successfully implementing them.

To understand the obstacles and to chart a path forward CIONET, in association with Hitachi Digital Services, convened an executive roundtable in late January. It brought together senior IT decision makers from across a range of industries. And as the discussion unfolded on a night of "rich and robust" conversation (to quote one person in attendance), two themes emerged – cost and complexity.

In other words, the growing price of full scale AI rollout compared to a discrete proof of concept, and the complexity of bringing all relevant data together and ensuring it is "clean" enough to feed into language models large and small. We'll return to both themes in due course.

Ahead of the event Hitachi Digital Services spoke to 50 industry leaders. Based on those discussions, they identified six key challenges hindering GenAI adoption:

- Large language model (LLM) limitations: Current LLMs are primarily designed for unstructured text data, limiting their applicability to certain tasks. Business AI problems require specialised machine learning (ML) models to handle numerical data and complex reasoning.

- ROI uncertainty: Quantifying the return on investment (ROI) of GenAI projects can be difficult, making it challenging to secure funding and support.

- Safety and trust : Addressing concerns about bias, fairness, and the potential for misuse of GenAI is essential for building trust.

- Capability and cost considerations: Balancing the cost of deploying and maintaining GenAI systems with their capabilities is a critical consideration.

- Data management challenges : Ensuring data quality, consistency, and security for data from disparate data source is essential for effective GenAI implementation.

- Machine learning problem-framing approach: A robust ML problem-framing approach and effective MLOps practices are crucial for successful GenAI projects.

Picking up points two and four above, attendees discussed the expense of moving from concept to implementation. As one attendee pointed out, even for off-the-shelf co-pilot type adoption, the per license or per query costs can soon become unsustainable. This is especially the case for organisations with a global presence and tens of thousands of users. Although vendors will negotiate on price, those operating at scale need to think hard about how and where to deploy GenAI.

Some speculated that the cost of LLMs will come down as vendors instead look to make money through consultancy and other added value services. There is some evidence that new market entrance are already competing on price but there is no guarantee that prices will fall sufficiently for some organisations.

All of which makes it essential that project definition is precise and that users are expertly trained so they – and the organisations they work for – get the most out of the use cases created. Learning what to ask, and how to ask it, will drive greater productivity and, most likely, keep costs manageable. That's why prompt expertise will become a valued skill.

Getting the most out of GenAI is predicated on access to high quality data, too. On this point every attendee was agreed. Siloed data, legacy data, and unstructured data all presented their own challenges for the organisations around the table. One such organisation – 150 years old – is not only wrestling with badly tagged data, it is struggling to trace a product's journey via the available data. As such it is unable to assess product demand and optimum pricing.

Unstructured data presents its own problems – and opportunities. For a fast moving consumer goods firm, the ability to use video and static images to determine optimal product positioning and replenishment is clearly desirable. Incorporating that data into LLMs is a challenge, however. It involves processing large files and, potentially, accepting a lot of wastage.

Despite this, some were bullish about the meeting of LLMs and unstructured data. “That’s the LLMs superpower,” one said, although he acknowledged that “you do have to authenticate the results”.

Finally, the discussion returned to the potential impact of GenAI. Two attendees offer their own paradigm through which they looked at the power of the technology. The first split potential deployment between those projects that “make people’s jobs more productive” (with a notional 20-30% efficiency saving on offer), and those that “change the way you do what you do”. In other words, GenAI can be applied to making what you do better and faster, or to transform what you do.

A second attendee added a third dimension. Reflecting the previous speaker, she said there is a big opportunity for GenAI to bring greater efficiency. Beyond that, GenAI was both a “transforming” technology (changing the way you approach existing processes), and a “reimagining” technology (reinventing entire business models).

All things are possible, it seems. But only once you overcome the twin challenges of cost and complexity.

‘From Hype to Reality: Navigating the Challenges of GenAI’ – a CIONET executive roundtable event in association with Hitachi Digital Services – took place on Thursday 23 January 2025 at the Great Scotland Yard Hotel, London.

About CIONET

CIONET is the leading community of more than 10,000 digital leaders in 20+ countries across Europe, Asia, and the Americas. Through this global presence CIONET orchestrates peer-to-peer interactions focused on the most important business and technology issues of the day. CIONET members join over a thousand international and regional live and virtual events annually, ranging from roundtables, programs for peer-to-peer exchange of expertise, community networking events, to large international gatherings. Its members testify that CIONET is an impartial and value adding platform that helps them use the wisdom of the (IT) crowd, to acquire expertise, advance their professional development, analyse and solve IT issues, and accelerate beneficial outcomes within their organisation.

About Hitachi Digital Services

Hitachi Digital Services is an independent services business that focuses on delivering a unified operating model for cloud, data, IoT and managed services.

Playing a pivotal role in Hitachi's digital transformation strategy, Hitachi Digital Services places a strong emphasis on Generative AI to deliver an integrated end-to-end digital transformation for enterprises. The company is strategically positioned within the Hitachi Digital portfolio of companies to leverage the synergies between operational technology (OT), information technology (IT), and product and service offerings.

Such positioning allows Hitachi Digital Services to work closely with Hitachi Digital, the new Hitachi Vantara and Hitachi group businesses, including GlobalLogic, to create an integrated end-to-end digital transformation solution for enterprises.