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OPERATIONAL AI IS CHANGING HOW WE LOOK AT DATA

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Anne-Laure Thibaud has over two decades of experience in large-scale big data analytics and AI, and has observed the pivotal role that data and insights have come to play in shaping competitive organizations. Since joining the group in 2000, Anne-Laure has risen to a position of global leadership heading Capgemini's worldwide portfolio in data, analytics, intelligent automation, AI and GenAI. Her role is crucial in guiding Capgemini's clients to future-proof their businesses and stand out in today's data economy.

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Steve Jones is the EVP of Data Driven Business and Generative AI, a published author in technical and business journals and a member of several standard bodies, Steve's focus is on the ability of business to adopt technology successfully and be able to manage it in operations, leading Capgemini's early efforts in Cloud, SaaS, and Big Data. Today he focuses on the redesigning of businesses for the 50% AI world.

'Data is the new oil' **was an expression coined by British mathematician Clive Humby. The implication was twofold. Not only was it valuable, but it required refinement before that value could be extracted. This statement was reasonable in a world where market analysts could afford to wait for data scientists to refine the data they were working with. Today, however, organizations task AI with accelerating the decision-making process, from the boardroom to the factory floor. This shift reflects a fundamental change in the value and purpose of data, driven by the opportunities and challenges presented by operational AI.**

Gen AI will enable operational digital employees

The question is: By the end of the current decade, what proportion of business decisions will AI make directly, and in what proportion will it assist? Because most decisions occur operationally, that is the context in which AI will work. Large language models (LLMs) are enabling new interactional dynamics with employees and consumers, bringing within reach not only new levels of automation but entire new buying and support cycles. The generative and simulation capabilities of Gen AI have the potential to alter how organizations run, from strategic planning to day-to-day decision-making.

However, organizations would be unwise to think of Gen AI as potentially an overseer of their whole business. Rather, they should think of it as a world of hundreds, thousands, or even millions of digital employees, each allotted a specific task – and they should only be trusted to operate within the scope of each task. Therefore, the question becomes: If we allow digital employees to take a large number of business decisions, why can't we rely on them without human oversight and intervention? The answer is that, while Gen AI offers the potential to revolutionize human-machine interaction, it can only do so when it has the trust of its users. We do not currently live in that world.

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Data must represent reality

It is widely accepted that applications do not create great data. There is an army of people, processes, and technologies with the job of enhancing poor-quality data. Nevertheless, every day, people make business decisions based on poor-quality operational data, mixed with personal experience, contextual framing, and refined historical data. This process, amalgamating professional experience and a measure of intuition, requires a trained human mind.

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For AI to make this kind of operational decision, the data it is using must be accurate at the point of decision, reflecting not only transactional information but a full assessment of the business context. All of those elements that employees have acquired naturally through their normal activity must now be encoded so that AI can be trusted to make similarly informed decisions under time pressure and in the heat of operations.

Having an *operationally accurate digital reality* is the foundation of this operational status for AI, making it a potentially viable unsupervised decision-taker in areas from cost optimization to the implementation of new competitive advantages.

But operational AI requires more than data reality

Control of operational reality is vital in Gen AI, but that is not enough to make it a trusted digital employee. Today, organizations educate their employees on corporate culture, and managers and HR make them aware of their responsibilities in a way that leaves their roles clearly defined. Once those guardrails are in place, managers tend to trust employees to work within their boundaries toward their agreed goals.

With Gen AI, the assumption is that it cannot be trusted in the same way as a human employee and, given the opportunity, will act outside its boundaries. Organizations are compelled to build all the information about their culture, mission, and guardrails into the AI they use in order to retain control of it.

Developing a digital business model

When asked to document how a business works today, most executives tend to refer to business processes. That is, a series of steps that are meant to represent the lifecycle of a given task. However, a company does not work based on 'lead to cash' or 'source to pay' processes. Rather, it works on the basis of the internal collaborations that drive the outcomes of the business. This is the world in which AI must learn to operate, with a deep understanding of all the nuances of the business environment. For instance, Gen AI has the power to act as a procurement negotiator on either the supplier or buyer side, but to do so, it needs to be 'educated,' in the appropriate format, on context and how success will be measured.

Because, by default, we do not trust Gen AI, we need a mechanism with which to enforce this digital business model, and particularly its restrictions, onto the Gen AI solutions, to ensure the business continues to manage the tech in operational terms. Operational AI needs the digital equivalent of an HR department, but one that combines the professional paranoia of cybersecurity with the corporate risk management mindset of finance.

This applies from preventing a digital call center agent from citing 17th-century French history in its responses, through to preparing operational AI to assess the full Scope 3 implications of a procurement decision and how to weight those considerations between suppliers.

The operational management of a hybrid team

This digital business model and its enforcement enables team leaders, managers, and executives to incorporate digital employees into their teams and manage them not as a technology solution under the CIO but as a core component of the function. The manager is accountable for the digital employee, including the decisions it makes and the digital reality it creates. The manager is also responsible for setting the boundaries within which the AI should operate. Once these elements are in place, the leader can consider operational AI an organizational asset rather than just a technological one.

Operational AI requires the business to raise its data game

Creating an AI that works on refined data, whether in a proof of concept (PoC) or as part of a traditional AI solution, is relatively easy. It has clear boundaries and relatively limited challenges. The more serious challenges come when we look to put AI in operational control of decision-making and outcomes.

We need operational control of our digital reality to ensure that Gen AI solutions are making decisions based on our business reality. As GenAI models become more powerful and as the opportunities to fundamentally alter business become ever greater, a new organizational approach is required, where the management and governance of AI is considered as important as the management and governance of the team. Operational AI isn't a step change in the value of data. Rather, it's an inversion from a world where data, once refined, follows a given lead to a world where data reflects reality and drives outcomes.

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