



CIONET
What's next.



cognizant

Google Cloud



A COGNIZANT AND GOOGLE-SPONSORED EVENT 18TH OCTOBER 2023

ADOPTING NEW TECHNOLOGIES

SHOULD NOT BE A
GAME OF CHANCE

Roger Camrass

CIONET UK

A Cognizant and Google-sponsored event 18th October 2023

Adopting new technologies should not be a game of chance

A discussion dinner was held on the 18 October 2023, which was sponsored by Cognizant and Google. The event was attended by senior executives from a range of sectors. Phil Matthews, a business leader at Cognizant, and John Abel, Technical Director in the Office of the CTO at Google Cloud, introduced the session, which was moderated by Roger Camrass, Research Director of CIONET International.

Providing the context

Digital leaders often misjudge technology adoption cycles due to early-stage hype and later-stage despondency. Take the example of social media, mobile, analytics and cloud (a combination of forces that MIT refers to as 'SMAC'). While these technologies were widely promoted through the 1990s and into the first decade of the new millennium, the real power of these tools took a decade or more to come to fruition. We must learn a lesson from this process of slow technological emergence as we seek to understand the pipeline of techniques, such as generative artificial intelligence (AI), immersive technologies and decentralised autonomous organisations, which are now bombarding our businesses.

This event was designed to explore significant change issues relating to the adoption of new technologies, including investment risk, timing, and delivering business benefits.



What were the main issues facing the delegates?

Delegates were concerned by the lack of readiness of their businesses to exploit new technologies. They suggested internal cultural resistance and the preponderance of legacy processes can derail innovation efforts. An executive from the construction sector said data governance is a prerequisite for applying new techniques, such as generative AI. Executives from the automotive and healthcare sectors echoed these sentiments.

All delegates agreed emerging technologies and innovations are essential for any business that wants to both solve today's problems and open long-term opportunities. Think about how self-driving vehicles can improve delivery and logistics processes, and how digitalization in health services can power breakthroughs in patient care, such as the virtual hospital. Delegates suggested the in-depth knowledge organisations gain about new techniques – and a realistic assessment of the value of these technologies set against business risk – is a key factor for success.



What can we learn from past experiences?

All delegates recognised the profound changes that technologies, such as e-commerce, mobile apps, social media, cloud and data analytics, have engendered during the past two decades. Most enterprises have transitioned to the cloud to foster scalability and agility at an organisational level. All delegates said their businesses have adopted mobile apps to help improve services for internal and external customers. But a delegate from the consumer product sector said legacy systems continue to impede progress and must be addressed before CIOs can experiment with new techniques. The delegate referred to this process of addressing legacy technologies as “cleaning house”.

All delegates recognised that a focus on business problems and customer requirements has been the key to successful innovation during the past two decades. They recognised digital’s impact on customer behaviours, such as the shift to e-channels in retail, government services and banking. Organisations have helped to remove cultural barriers to change by designing services around the “digital voice of the customer”.

Are we reaching a pivot point?

Many delegates said a fundamental shift is taking place in their business models and organisational operations. Delegates provided examples from banking, medical devices and food ingredients that illustrated how profound changes in models and operations could take place during the next decade. It was suggested all organisations must examine their core activities to respond to digital demands from their customers. This requirement is especially true for traditional manufacturers, who should focus on providing customer-tailored solutions rather than discrete products. Geographical variations are important, too. A delegate from a pharmaceuticals company referred to demographic challenges in Japan, where new solutions are required to support an ageing population.

The discussion also focused on the importance of risk mitigation processes during pivotal moments of change, such as manufacturers relabelling themselves as technology companies. One delegate said their board lacked the readiness to deal with these kinds of fundamental decisions. The delegate said their board tasked the CIO with developing a business strategy suited to a digital marketplace. There was general agreement during the discussion that CIOs and CTOs are becoming increasingly involved in shaping and executing business strategies because of the central role of digital technologies in modern enterprises.



Modernise the factory or create the new?

The delegates also discussed how ambitious an organisation must be to exploit digital innovation. Two scenarios were considered: modernising the existing factory by automating and innovating processes; or launching start-ups that incorporate digital business models and architectures. Most delegates recognised that most of the business investment – as much as 80% – should focus on modernisation, with a large proportion of cash centred on the reduction of legacy systems and the removal of organisational silos.

While modernisation is crucial, some delegates also described schemes to test new techniques in a fresh 'start-up' environment, which could help to bypass cultural and legacy concerns. Such environments require a new set of skills and investment criteria, where companies might need to act as venture capitalists as well as traditional managers. For example, the rapid growth of Tesla and electric vehicles during the past decade has led to seismic change in the automotive sector and a preference for green-field manufacturing approaches. The UK's large-scale HS2 transport project, meanwhile, has led the construction industry to abandon old practices and embrace new techniques.



What will happen in the longer term?

Delegates recognised that inward-looking discussions will not be enough to achieve genuine innovation. Take the example of the failed dot com experiments at the peak of e-commerce activity during the 1990s, when businesses failed to effectively consider the demands of their customers. The discussion proved external considerations are paramount to innovation success. The end customer, whether in the business or in the marketplace, is digitally literate. Successful innovations engage the customer from the outset rather than at the mid-point in any change journey. As device manufacturers have discovered, this engaged approach has profound implications for research and development processes.

The most effective way to innovate is to understand your customers (business or consumer). A discussion between Google and a media executive illustrated the central role of the 'persona' in modern marketing. Consumer data provides new perspectives on behaviours and needs. Google described its concept of 'micro-moments', which is a tool that can be used to track market behaviour.

What are the actions to be taken?

Phil Matthews of Cognizant concluded the evening's discussions with a three-point plan to accelerate innovation and reduce the risk of failure:

- 1 CIOs should understand where pain points exist within the business and take an active part in strategic and operational discussions.
- 2 CIOs should help develop solutions that address all aspects of change, not just the technical areas. Culture, people and risk mitigation should be covered.
- 3 CIOs should work with partners to explore case studies from outside the organisation and assess the most appropriate direction for new solutions.

Additional information can be found by visiting Cognizant and Google's websites or contacting the sponsors via LinkedIn:

Phil Matthews and **John Abel**



Roger Camrass
Researcher director

A pioneer of today's Internet as an ARPA research fellow at MIT in the seventies, Roger has spent over forty five years helping corporations harness the power of new technologies such as cloud, mobile communications, e-commerce, voice recognition and satellite. He was a partner at EY responsible for e-commerce during the dot.com boom. He is a graduate of Cambridge University and MIT, and a visiting professor at the University of Surrey.

See rogercamrass.com

