

the future of us_

Innovation Forum



Forum Members Insight Report

by Ant Morse – Chair | Innovation Forum

Q3 | Dec

adventa_

“We are likely to see greater transformation in the next 10 years than we’ve seen in the last 100”



Executive Summary

We are undoubtedly living through a time of incredible change, which I often describe as “*We are living through a history lesson of the future.*” This will one day refer to a time when teachers tell children how remarkable advancements in technology not only transformed how people lived and worked but also sparked an evolution of the entire global economy.

While names such as Gates, Jobs, and Musk (among others) will feature in the pages of history books (or rather XR spatial walls), closer to home, we too will be leading our own transformations as the ones responsible for both navigating, implementing and managing organisational change for our people and our customers alike.

Yet, there is no guidebook, no map, and certainly no brochures that holds the answers. This is why **we** formed the *Future of Us Innovation Forum*.

Who are the ‘We’

We are a group of like-minded curious and inquisitive leaders from across enterprises, public sectors and charities. We’ve come together in a variety of ways: you may be an Adventa customer, part of a supplier network, or a participant in industry forums I support. Together, we collectively form a larger forum with one thing in common: this incredible change is all happening on our watch.

Our purpose is to explore the future of technology; to demystify the complex and ensure we take everyone on the journey with us. As a Forum we cover the headline, but also far beyond, as we also discuss societal, cultural, and economic change. We are not afraid to push the conversation into challenging territories—areas that must be addressed if we are to drive real transformation.

Ultimately, we are the navigators and leaders of change—the owners of the problems and the ones tasked with finding the solutions. We hold the pen, and with it the responsibility to get it right. To support, we come together in person as a group at various events throughout the year, and this report aims to keep us all up to speed in between.

Our aim is to share insights, best practices, and to hear from experts across industries while contributing our own research, experiences and findings. To quote Ken Blanchard, “*None of us is as smart as all of us,*” which perfectly describes our forum.

I’m privileged to lead the forum and appreciate your participation and ongoing contributions. See page 16 with news of two exciting 2025 in person events, with more details to follow soon, and I look forward to see you all again in the near future.

Very Best

Ant

Ant Morse – Chair | Innovation Forum



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Our Opinion and a reality check point on AI Today



5th Revolution, or is it all just a Bubble ?

AI continues to dominate the headline and our news feeds, as the tech giants and innovative start ups share their latest and greatest advances, ground-breaking innovations and huge investment on the technologies set to completely transform not only every industry, but also our lives, society and the economy overall...

Leaving many asking the question, 'are we at the cusp of the 5th Industrial Revolution, or is it a bubble about to burst?' As in reality many organisations today are either suffer with FOMO, questioning their own knowledge or skills and general AI awareness, as we as leaders then managed growing expectations from our newly intrigued boards, investors, and customers alike.

So, is this amazing technology ready to change the world today, or is the bubble about to burst as the inevitable monetisation from the providers gathers pace? Or, as this is not our first Rodeo, we will naturally challenge if we can really see the all the worthwhile practical examples and uses case, and most importantly viable ROI? See **Page 14** (Opinion) and **Page 15** (AI Today) as a check point on the true potential and progress of this clearly game changing transformation and reality of where we are today.

**80% of
AI projects
will fail**

So, how is industry preparing and adopting? Are we confident or concerned?

According to the Harvard Business Review, 80% of AI Projects will fail. While this sounds high, is it reflective of your own explorations? Are we finding the right use cases, and when we do can we clearly measure that all important ROI? Or are we looking for AI to solve problems for the sake of it? And how will recent progress to Agentic AI move us from basic automation into proactive actionable tasks? See **Page 5** for more info.

ROI & Practical Examples

AI bubble or not, it's happening on our watch and falls to us to assess and measure the actual value of AI solutions. See **Page 9** (Practical Applications) Where we will share use cases and practical example each quarter from our wider members or partners of actual practical examples with clear value and use.

Job Disruption or Evolution ?

While we grapple with use cases and business plans, our people face a growing number of challenges of their own, raising questions we may not yet have answers to, such as : Will AI take my job? What are the AI plans of my organisation? And how do I upskill to stay relevant? And with 54% concerned about their role,

this feels like another example of the rapid pace of change out pacing our normal steps and process to manage change. And if our L&D teams are not swamped right now, are we doing enough? Problem or amazing opportunity? See **Page 12** for further insight.

Excuse me, do I know you ?

Two Harvard students created a facial recognition tool using Meta's smart glasses, Ray-Bans 2. This tool can reveal personal information about unknown individuals, such as their name, home address, telephone number, or their family members' names. The students demonstrated the technology called I-XRAY on X and the code now widely available. Novelty aside this presents a range of risks not just at a privacy level but also around how glass technology could record a range of situations, outside of our knowledge and consent.

We will continue to explore this and build this question and more into our upcoming 2025 Spatial Computing focused Event, where we will meet with experts to discuss how glass will inevitably bring opportunity and risk alike. See more info on **Page 13 & 16**.

Finding the Space on XR

Will AI breath new life into the Augmented and Virtual reality space? Will it bring useable solutions to this already mature marketplace struggling to find an audience outside of its limited range of niche industry applications, or gaming. Well, the industry seems to think so and massive investments and recent product developments makes this a technology to watch (excuse the pun). But in terms of the workplace solutions is the real answer simply just a whisper away? See more on **Page 7** (Spatial Computing)



AI Market News

What are the latest developments and new stories from the AI Market likely to impact our organisations and customers alike?

Will the battle for AI supremacy deliver true transformation and what are the wider aspects for our consideration in our own pursuit for true AI differentiation?



Agentic AI : Beyond Basic Automation

While many businesses have embraced AI for tasks such as chatbots and process automation, AI Agents represent a significant leap forward in capability and autonomy. Unlike traditional AI systems that follow predetermined rules or generative AI that responds to specific prompts, AI Agents are designed to make independent decisions and take actions to achieve defined goals. Think of them as digital employees who can understand objectives, plan their approach, and adapt their strategies based on results.

What sets AI Agents apart is their ability to chain together multiple steps and tools without constant human oversight. For example, while standard automation might trigger an email when inventory drops below a certain level, an AI Agent could analyse sales patterns, check supplier availability, compare prices, place orders within approved parameters, and even negotiate delivery times—all while adapting to changing circumstances.

Real-world applications are already emerging. Microsoft's *Copilot for Service Management* can independently investigate and resolve IT issues, sometimes handling entire support tickets without human intervention. Similarly, sales teams are deploying Agents that autonomously research prospects, craft personalised outreach, and maintain relationship-building communication streams—only escalating to human handlers when specific criteria are met.

However, it's crucial to recognise that these Agents aren't completely unsupervised. They operate within carefully defined boundaries and ethical frameworks, with human oversight remaining essential for strategic decisions. Moving forward, the goal isn't to replace human workers but to augment their capabilities, allowing them to focus on higher-value activities while Agents manage routine but complex tasks that require continuous attention and rapid decision-making. We compared our own experiences in current projects and the admin and pre-work is always the biggest barrier to having time to actually interact with customers. So, are Agents the answer?we think they probably are and will help us take neat automation to solid ROI's.

AI Goes Nuclear

The extraordinary capabilities of artificial intelligence demand enormous amounts of power, driving Big Tech's ongoing search for affordable energy sources. Companies like Microsoft are strategically positioning AI data centres in regions such as Johor, Malaysia, where reliable and cost-effective energy is abundant.

This insatiable appetite for power has sparked an intriguing convergence between AI technology companies and nuclear energy. Major AI developers are increasingly investing in Small Modular Reactors (SMRs), serving a dual purpose: meeting their growing energy demands while addressing pressing environmental concerns. This shift towards nuclear power is particularly timely, as the energy requirements for AI systems continue to surge due to both natural technological progression and widespread adoption across industries.

The move towards SMRs represents a strategic response to the computational demands of training and running large language models and other AI systems. These smaller, more flexible nuclear facilities offer a promising solution for delivering the consistent, high-capacity power needed for AI operations, while also supporting the tech industry's decarbonisation goals.

As a business leader, when was the last time you scrutinised the energy footprint of your technology suppliers? In an era where a single AI model training run can consume as much electricity as hundreds of homes do annually, should we not be incorporating energy consumption metrics into our vendor evaluation processes? Perhaps it's time to expand our environmental, social, and governance (ESG) considerations beyond our immediate operations to account for the hidden energy costs of the AI-driven services we increasingly rely upon. One to watch as the use case increases so too will the task/challenge... We'll keep working on this and share more in next quarters report.



Yet another incredible year for the Magnificent 7, but is 2025 going to be the year of changing directions, performance and the start of an overhaul of the stalwarts of tech? AI's impacts on the future of work from automation, the huge investments made and still needed, couple with a delay in monetisation and a now very crowded competition for consumer and corporate spends, will result in a new landscape for big tech and we are already seeing the signals of transformation and pivots, as they battle not only for AI supremacy, but also to protect revenues, say relevant and find their focus area ahead. At Adventa we focus our attention and analysis to explore what their latest developments and solutions might tell us about their wider overall strategic direction.

Alphabet ↑ 35.5%

2024 presented Google with unprecedented challenges, as while the DOJ and FTC pushed for its breakup over monopoly concerns, the tech giant faces intense pressure from the invisible hand of competition impacting their previous untouchable revenues, possibly removing the need for regulatory intervention long term. And after a pretty low key H1 in AI raising questions about their relevance and ability to keep up, did we worry too soon? as Google then not only responded but stunned the market with its Gemini multimodal capabilities, integrations of Gemini into search, advanced video generation, a very user-friendly voice assistant and a suggested partnership with Samsung for AR glasses. However, the threat and risk to search revenues will remain the biggest threat to Google in 2025 and its need to capture the end user beyond 'googling' in order to stay relevant and protect the revenues.

NVIDIA ↑ 171.2%

- The hero of many share portfolio's With a strangle hold on the AI chip space today, but competition is now hot on the heels, which could challenge dominance, see amazon update as just one example ➡
- 2024 closed with fall in value but likely due to investors cashing out,
- Expected focus on Consumers at CES with their new Grace Blackwell AI powered PC set for transition of desktops into Agents and spatial computing.
- Expected focus on consumers in 2025 for faster monetisation.

TESLA ↑ 62.5%

- EV market comes under pressure from falling residuals and rapid growth from competition from China
- Starlink gathers pace and rumour of a Tesla phone could see major disruption in the telco space globally but in reality cellular is still needed for a useable solutions. So, expect a possible news of telco partnership or acquisitions in 25/26
- SpaceX 'lifts off' by its \$ 350bn valuation suggesting increase in activity and collision play book of sat, cell, battery, & EV, enabled by Elon's friends and new role.

amazon ↑ 44.4%

- Bezo returns to lead on all Amazons AI projects.
- Launch of the biggest dedicated AI hardware cluster ever. Providing enormous compute power to its partners such as Anthropic & Databricks
- With the big news that its cluster is powered by its own AI chips to reduce its reliance on Nvidia
- Launch of Nova Multimodal AI, which out-performed GPT 4o and Sonnet 3.5
- Continued focus on retail AI recommendation solutions, but I see risk to this and assume Mr B does too.

Apple ↑ 30.1%

- Lack of progressive products coupled with issues over Apple Intelligence, mothballing of the Vision Pro and lack of an LLM, bring focus on Apples long term plans, but don't discount the subtle updates that are coming through, all of which are making the collective ecosystem of phone, table, mac and watch incredibly sticky. Suggesting their play is to be the best 'access to AI' hardware firm
- Could be risky but if they make Siri AI intelligent, they could nail it.
- Rumours of doorbell, wall tablet, home pods with screens, and consumer priced Vision solutions (£3.5k was never going to go mass market)

Microsoft ↑ 12.1%

- Big investments into Open AI inevitably hit trading in 24, and slow start in the monetisation of CoPilot in enterprise not ideal. But Wave 2 sees continued and under played progress
- Possibly a marketing push needed to help stress the value and help the business cases, couple with a workforce upskilling focus, to see demand from the floor as well.
- A massive prize in the upsell of AI solutions to its 365 base is available, but work to do in 25 to complete benefit and use cases.
- Open AI with Bing gives them another shot at search, but Alphabet are defending and fighting back.

Meta ↑ 65.4%

- Is the Metaverse finally coming into view 'excuse the pun' for Zuckerberg, as he throws huge investments into Meta Llama AI model and Orion spatial glass projects (more on **page 7**) but opinions aside, the natural marriage of Spatial Computing, AI and all that free data from his Facebookers, could bring instant payback. But Orion could be late 25 if not 26, but Meta certainly have some strong components in place here. And AI trained from actual data over Synthetic could be a big win.
- Meta Rayban is also a great test bed and expect to see an glass display arrive very soon. Question is who will get there first?

Spatial Computing

Mark Zuckerberg suggests the smartphone will be dead by 2030

Is he right? Is the start of the end of our trusty devices? Or will these current almost novel solutions remain on the shelves of our offices and kid's bedrooms gathering dust?

Well, wherever your 'view' today, this area is absolutely one to watch as technical progress coupled with big investments may inevitably lead to a complete transformation of all our IT, desktops, devices, security and remote work solutions of tomorrow.



What leads us to this conclusion is two-fold, Firstly, the recent advances in XR tech and the increased investments, but Secondly, from our 'collision sequence' methodology, which calls out the natural and obvious combination of Glass and the handsfree interaction provided by voice AI assistants. Our finding supporting Zuckerberg's quote that glass, with AI, could become the new digital remote control of our lives. However, we disagree with his end game. Asking the question do we actually need Glass? Will everyone start wearing glasses? Is it that challenging to whip out our phones? Or is the answer just a [Whisper Away](#) in the form of voice controlled and voice delivered AI Agents. In his Book [The Future Of Us](#) our Founder Ant Morse talked about the [Story of Scout](#) who is his personal AI Assistant, and while Ant uses both a vision pro and Orion type solutions to interact with Scout, more often than not he interacts with Scout simply via voice the majority of the time. Incredible predictions on AI so far, but will he be correct on his point of us naturally favouring Voice Instead of Glass and utilising our trusty headphones in our daily lives? Time will tell, but in the meantime, we will continue to 'Focus' on the increasingly interesting area of tech.

Vision Pro – Apple halt production

Production halted after eight months due to low sales of their remarkable device - So what led to this outcome? The £3,500 price point proved prohibitive, with reports suggesting 90% of sales went to companies and influencers. Social acceptance also proved challenging, as images of users wearing the device in public drew criticism online. Finally, the low sales numbers likely discouraged app developers, leading to limited software options. Our view is that we should look forward on all glass solutions and see them not as failures but as valuable real-world testing, similar to the case with Google Glass. For the next iteration we predict Apple will streamline features and develop a more affordable headset version, or pivoting to Meta Orion/Google Glass-style glasses. They may also develop a high-powered Vision Pro 2.0 for industrial/enterprise use but low volume markets are not usually Apples target market, but if they are to aim for 'best access to AI devices' as referenced on Page 6, they will need to be present in this space. Also, rumours in market around a partnership with Sony for VR gaming, and we predict a wider AI partnership focus in 2025, so don't rule increased collaborations.

Google Glass

A buzz of rumours for the return to Glass for Google. Suggestion of a Samsung collaboration, with a prototype flashed into news feeds, and progressions of Project Astra via DeepMind focusing on AI Assistants which would 'collide' wonderfully with a new Glass solution.

The prototype looks similar to Meta's Orion, so a glasses form factor rather than Visor format of Apple Vision Pro.

Meta Orion

A big focus for Zuckerberg, with strong promise and a very credible contender if not a leader in the XR future. We doubt it will replace the smartphone for many years to come, but it could certainly change its purpose and become our natural 3rd field of notification, coupled with AI from Llama and community data from Facebook/Insta this could lead to many practical applications.

Meta Rayban

The 2024 addition of AI, could make this not only a great test platform for Orion, but if they can add 'display' to a future version update, this could in theory give us the 'out and about' AR solution we need. Coupled with partnerships with 'Be My Eyes' this could also bring incredible accessibility solutions and use cases to market. Happy 'by product' or not we'll take it as a positive step towards a more inclusive digital future.

Space Top G1

Image in the top right shows a user using the SpaceTop solution from Sighful.com, providing an Augmented Reality solutions/accessory to be used with your existing laptop where it project windows into your field of vision. Launched without much fuss in May we don't have many use cases, but it appears they have now ditched the additional keyboard and is to be used with your laptop and XREAL's Air 2 AR glasses, and also the price drops from \$1900 to \$950, opening this up to a wider market, however, while a neat solutions its rife for disintermediation.

Keeping it REAL (XREEL)

XREAL mentioned are a key play in the current AR market and we expect them to be a strong contender in the XR market moving forward. It will be interesting to 'see' how this plays out. More in next months report, where we will get eye on with their Air 2 AR Glasses.

RiVR

Getting
Hands on
with XR

We continue our focus on XR with great support from Industry leaders RIVR, who provide a number of solutions to some of our members and to a wide range of organisations and emergency services around the world. RIVR have kindly offered to support a 2025 Forum event bringing practical examples, uses case and some kit so you can get hands on and experience what all the fuss is about. See [Page 16](#)

Robotics

If AI is the automation of the mind, Robotics is the automation of labour. Rapid progress in Robotics' and AI combined over recent years, is now paving the way for robots to move from the reels of Sci-Fi movies into the very real reality of aiding and supporting our daily lives.

With history as our guide, we know that with any technology, over time things progress, new innovations and breakthroughs appear, competition increases, and costs reduce, making it a natural part of our lives. The difference begin that in our present-day things are evolving at such pace, its proving difficult to keep up.

So, what's driving the pace of progress here?

In the case of Robotics - we believe three drivers now accelerating impactful progress.

- **Tech**, will always be a lead in the Robotics and aside from the obvious link with a humanoid robot and Gen AI in theory 'bringing the bot to life' the industry has also made considerable progress around agility, complexity of motion, precise manipulation and fluidity of movement, making them appear more human. (we gulped here as well)
- **Competition** - A huge prize at stake, both in industry but also consumer markets and almost endless list of use cases will see innovator and entrepreneurial organisations look to capture a piece of the prize.
- **Necessity** - A changing workforce, changing attitudes towards work will lead to rapid development of bots to address employment challenges across the globe. And if we look to China as possibly a unique case but considerable driver. Their child restriction policy of 1979 has now resulted in a shortage of a workforce to fulfil certain roles, especially in sectors such as Care, as there are now not enough young who are able (or willing) to look after the ageing population. So, we will likely see rapid progress in China to address a potential national crisis and the benefits of progress will be globally adopted as a result.

The Minds Behind the Machines

DeepMind (UK) & NVIDIA (USA) are two of the main AI firms developing the 'brains' for future robotics – Focusing on teaching robots to learn through trial and error, similar to humans and providing the integration interfaces allowing robots to understand and respond to natural language commands. Progress is rapid and a little scary if we're honest, but we're sure regulation will keep things sensible and safe.

Humanoid Robotic Manufactures (a small selection)

Tesla (USA) - Optimus humanoid robot prototype revealed in 2023 - Designed for general-purpose tasks in homes and businesses - Leverages AI expertise in autonomous vehicle technology - Target price point under £20,000 for wider accessibility - Focus on reducing labour costs & automating repetitive tasks

Boston Dynamics (USA) - Known for Atlas humanoid robot and Spot robot dog - Atlas can run, jump, and perform complex physical tasks - Spot is used on construction sites for safety inspections - Continues to develop robotics for industrial, security & Research

FANUC (Japan) - World's largest manufacturer of industrial robots - Operates in UK manufacturing facilities, specialising in precision assembly and handling - Recently launched collaborative robots (cobots) designed to work safely alongside humans.

Figure AI (USA) - Developing Figure 02 (pic below) a general-purpose humanoid robot - Aims to automate labour-intensive tasks in industries like manufacturing, logistics, and retail - Focuses on human-like mobility, dexterity, and safe collaboration with humans - Recently secured major funding to accelerate development and commercialisation.

Unitree (China) - Specialises in affordable quadruped robots for commercial and consumer use - Known for the Unitree Go1 robot dog, used in research, security, and entertainment - Developing humanoid robots for logistics and service sectors - Focus on combining agility with AI-driven navigation for real-world applications

Practical Applications Today

- Amazon's warehouses use over 750,000 robots globally
- Ocado's automated warehouses in the UK swarms with robots to fulfil orders
- BMW's UK Mini plant utilises Figure.02 collaborative robots working alongside humans
- The NHS is piloting robotic surgical assistants for precision procedures
- Mercedes-Benz using another provider Apptrobik's Apollo in production assembly

And it doesn't always have to be groundbreaking innovations advances in small custom robots is already a healthy industry and we are thrilled to share that our friends at the National Robatarium in Edinburgh have kindly offered to host a future Forum event where we can see and interact with some of the worlds most innovative machines but also see wider practical use case for robotic in industry – **See Page 16**



Practical Applications

While we see incredible progress in both AI & Robotics, the reality is that both are still in their infancy in terms of practical applications deployed across industries.

Here we look to those early test cases and live practical applications developed by our customer and you our forum members

We believe we are at the crossroads of transformation and while we can't afford to consider things for too long, we are in a great position to learn, evaluate and understand our current readiness. So here we aim to bring you examples of how we are making consumer apps work, what's new in the enterprise solutions space and how others are creating custom built app to bring new USP's or innovative efficiencies

Consumer Apps

The benefits of the AI battle for supremacy coupled with the insatiable need for more data, has resulted in many enterprise focused applications been made available at a consumer level free of charge. Sure, they all have an upsell option for premium or high-volume use, but the majority provide full access and will inevitably be used by savvy employee to support their daily duties, and to make their lives easier. One of these to note is Google's **NotebookLM**: an AI-powered tool that transforms your notes & documents into engaging audio conversations. It extracts key insights, summarises content, and even creates podcast-style discussions between AI-generated voices, making it easier to understand & interact with your information. We work a look.

Enterprise Apps

Main vendors continue to compete for market share, with notable advancements in all enterprise AI solutions:

- **Microsoft:** Copilot Wave 2 includes Analytics at no extra cost, extended functionality across M365, launch of Copilot Pages for AI-powered collaboration, and Introduction of Copilot Agents for process automation
- **Salesforce:** Enhanced Einstein GPT capabilities for data-driven insights, released Agentforce for sales, marketing, and customer support automation
- **Google:** Expanded Workspace AI features including Gemini integration, Launched Google Vids and AI note-taking in Meet, continues to build on early success with email composition tools

This quarter shows clear momentum in enterprise AI adoption, with vendors focusing on process automation to demonstrate ROI. Are these the safe option deployments? will the Business Case ROI stand up, and will it be enough for our wider stakeholder & boards, or will they expect to see custom build AI solutions with neat USP's?

Custom Apps – Creating our own USP

While deploying enterprise Apps clearly takes us a step forward in our AI adoption, we also need to consider how custom-built applications can bring efficiencies & USP's. See an interesting case study from our friends at SerenityGPT

AI-Powered Smart Search:
Lessons from Perforce's
Implementation

S E R E N I T Y G P T
P E R F O R C E

Perforce, a leading software development tools provider, recently tackled a common challenge many organisations face - helping users find accurate information across vast documentation libraries. Their implementation of SerenityGPT's smart search solution offers valuable insights for businesses struggling with similar challenges.

The key problem Perforce faced was managing searches across 23 brands, some with over 10,000 pages of documentation. Traditional keyword searches were failing to provide relevant results, and information was scattered across multiple locations including documentation, knowledge bases, and PDFs.

The solution implemented delivers natural language search capabilities with verified answers, eliminating the need for users to piece together information from multiple sources. Notably, it's version-aware (automatically using the latest documentation unless specified otherwise) and provides responses in the user's preferred language.

Key Learning / Takeaways :

- Consider implementing AI-powered search to unify fragmented information sources
- Focus on providing verified answers rather than just search results
- Track unanswered queries to identify documentation gaps
- Use search analytics to understand common user challenges

The results were significant: reduced support tickets, improved customer satisfaction, and valuable insights into documentation gaps. While organisation needs may differ slightly these principles can be applied to improve any knowledge management system. Our thanks to the Team at Perforce for agreeing to share their project.

The Next Computing Revolution Explained

Imagine trying to find your way out of an enormous maze. While a traditional computer would check each path one at a time, a quantum computer could explore all possible paths simultaneously. That's the game-changing power of quantum computing in its simplest form.

It can do this because unlike traditional computer which carry out calculations in 'bits' of either 1 (on) or 0 (off) Quantum computers use something called 'qubits' which in theory allow each 1 or 0 to have multiple states simultaneously (thanks to quantum physics principles like superposition). Making them potentially millions of times more powerful than today's fastest supercomputers and allowing them to process vast amounts of possibilities simultaneously. And a nice example we heard recently was that a quantum computer could not only read a book in the British library in seconds, but it could read every book in the library all at the same time.

Quantum may hold profound impacts on society, as it will pose both a threat and risk in terms of global cyber security, but it may also hold incredible advancements in Science, Medicine, Cancer Research and Climate change modelling.

Where are we today ?

While its promise is incredible, it's still very much in its early days in terms of reliable solutions, for a number of reasons. Firstly, those quantum states of superpositions are incredibly fragile and prone to errors making it unreliable at present. Secondly, it's far from a desktop tower, quantum requires dedicated facilities and absolute zero temperatures (-273C) to work, which is why it has all that pipework below it, used for cooling. Thirdly, it costs tens of billions to build and maintain, but while this is classed as a limit, the reality here is more around our ability to understand and develop the technology, and Quantum experts are few and far between regardless of funds.

So how far away is it ?

Opinions vary greatly on this, but based on huge investments, rapid upskilling, technical breakthroughs and the prize available coupled with potential national security risks. We think it might be closer than many think. As a rough guide we may start to see some initial niche use cases in the next 3-5 years, more error free stable solutions in 5-10 years, but over 10 years before we see any mainstream quantum computing. Also it's not a single solution, it will have various forms, focus solutions and use cases, which we will explore more in future editions of this report and at our future forum events.

Who's Who in Quantum Computing ?

A small number of players due to the cost of entry, with key progress made by Google, IBM, Microsoft, PsiQuantum, IonQ, Alibaba and Quantinuum to name a few, with a wider ecosystem of suppliers and collaborators such as Amazon and Nvidia. With a number claiming to have reached 'Quantum Supremacy' which is where it can carry out a calculation in 5 mins that would take the world's most powerful computer 10 Septillion years to solve (and yes, we had to Google Septillion as well)

What will it do for businesses

We predict that while its initial intended purpose is to solve complex global and societal challenges, its byproduct will be a vast array of business applications from Security solutions, Supply chain optimization, Risk Analysis, Energy utilisation and demand management, R&D in many fields likely offered as a service. And last and most impactfully, it will be the computing power behind future AI solutions and likely be embedded throughout networks or satellite services to provide Edge AI power of the future.

Summary

Quantum computing isn't science fiction - it's happening now. While we're still years away from widespread adoption, the potential impact is so significant that business leaders can't afford to ignore it. Think of it like the early days of the internet: those who prepared early gained significant advantages.

Societal & Economic Drivers



As technology futurists, we are don't profess to be economist, or social scientists, but these two areas are a significant area of our research and the sole reason why we founded Adventa. Not because we want to pivot from technology to become economists or social scientists, but because while the technology is our expertise and passion, the two biggest driving factor deciding whether a technology will succeed or not, falls to two simple questions **"how people will use it?"** and **"how ,or who will pay for it?"** Take Apples Vision Pro as referenced on **page 7**, a truly incredible piece of technology, that we should all have, (and we'll get you into one at a future Forum event to show you what we mean) but the reality is that we look a bit silly wearing them, its limited in use cases today and who has £3500 lying around to buy one...it was always going to struggle.

And with history as our guide, we can also look back to Blackberry devices in the early 2000's which moved work from the office to our pockets, and while efficiency gains and status symbol desire were incredible drivers, this started a transformation of working around the clock for many, with new expectations from organisations, intended or otherwise.

However, on the flip, we could argue that these same innovation then paved the way for future technologies which allowed us to work from home during the pandemic and have empowered much desired work life balance, and an unintended by product made work 'accessible' for many previously locked out of the workforce. These are just two example of why we focus on these two questions in our work and here we will glance each quarter to share some of our thoughts and research on the wider drivers of change.

Economy

A challenging current landscape as we know and regardless of policies, plans and political views, the data, modelling and forecasts suggest we are likely to enter a challenging economic landscape throughout 2025/26. Raising the question of 'will recent policy decisions set a course for long term growth, and do we baton down the hatches and wait for the storm to pass, or will unseen consequential knock-on drivers of change subtly set a very different and unintended outcome? Our research is raising a Red Flag, and while we don't aim our forecasts to be wrong, we 'kinda' hope we are on this one. More in our Q4 report, as April change take effect.

Inflation	GDP	Interest Rates	Unemployment
3.5% 0.3%	0.0% 0.4%	4.75% 0.0%	4.3% 0.3%

Society

While the figures show an increase in unemployment are the experts right to suggest the job market is pretty buoyant ? and do the PM's plans to get Britan Working support this further, as he makes efforts to support more people back into gainful and better protected employment. However, while the polices are clearly much needed in areas, the impacts from our early evidence is that organisations are now very cautious of new hires and adjusting plans to address. This will be further impacted as technologies evolves leaving many leaders to ask 'what could a robot do, at less financial risk instead?' As the government also talks of plans to support AI adoption in industry, will this have a further driving factor and risk jobs rather than create them? Too early to say but businesses are used to innovating & working around challenges, and our phone is ringing on this one.

Forecast - a law of unintended consequences ?

We're seeing a concerning convergence of economic pressures: rising living costs, reduced consumer spending (across retail and services) and organisations trying to, or being forced to mitigate National Insurance cost increases by limiting pay rises. Add to this the increasing costs of new hires, and we're inadvertently creating a situation where staff become the focus of cost-cutting solutions - whether through reduced wages, downsizing, postponing new hires for innovation projects, or turning to AI as an alternative to human workers.

So what might unfold ? Could we see a sharp rise in unemployment from April onwards? Will the government's plans to help long-term absentees return to work soften this impact, a crucial question remains: who will employ them? Short-term employment seems highly unlikely which will stifle innovation projects, but if AI takes on some duties from existing staff do they free up time to innovate? This leaves organisations grappling with how to balance people budgets while potentially using AI to fill the gaps.

Is this an example we will share as part of our 'history lesson of the future' where well intended plans to support people, simply accelerated short term disruption and rapid the raise of the machines.... and as above, we 'kinda' hope we've got this one wrong, but indicators are very concerning.

People Focus

Challenging and changing times in place and while we navigate the situation for our employee, they (and we include ourselves in this) also face a pivotal time in history as technology, societal evolution and economic drivers bring change to our day job unlike anytime in history.



A Historical Perspective on Technological Change

We find ourselves at a pivotal moment in history where technology, societal evolution, and economic drivers are converging to create unprecedented change. While this transformation may feel uniquely threatening, it's important to recognise that workforce evolution has been a constant throughout history. From the mechanisation of mills in the 1800s to the automation of production lines from the 1950s onwards, each era has faced its own technological and in turn societal revolution.

However, what sets our current situation apart is not the nature of change, but its extraordinary pace. Unlike previous industrial revolutions that unfolded over generations, allowing society time to adapt gradually, today's AI revolution is compressed into years, if not months. This acceleration demands immediate action in helping our workforce upskill and adapt. So how do we manage our duty to take everyone on the journey with us ?

So, is AI going to take my job?

The Scale of Employee Concern

Recent surveys reveal that **54%** of UK workers express significant anxiety about AI potentially replacing their roles, while **82%** feel underprepared for an AI-integrated workplace. These statistics from PwC and Microsoft/LinkedIn research highlight a critical gap between technological advancement and workforce readiness.

Current Workforce Challenges

As enterprises rapidly advance their AI capabilities, two significant issues emerge. First, organisations are failing to provide comprehensive education about AI's current capabilities but also limitations, with only **23%** of UK employees reporting any formal AI training. Second, the lack of transparency around our AI strategies is fuelling unnecessary anxiety & resistance among employees. While we are all at this crossroad, employees see it as their organisations responsibility to upskill them, even if the AI strategy is not yet fully understood or defined.

The Regulatory Impact

Recent changes to UK employment law, including enhanced flexible worker rights and increased National Insurance contributions for employers, are creating a complex landscape as we explored in last section. This regulatory environment, combined with rising employment costs, is prompting organisations to accelerate their exploration of AI solutions as a potential alternative to traditional employment patterns. So we can agree the concerns are warranted in our current climate, and we need to tackle head on and soon.

The Path Forward

To best manage this, we believe that as leaders we must prioritise four key actions:

1. Implement comprehensive AI education programmes that demystify the technology and its actual capabilities.
2. Maintain transparent communication about AI initiatives and their intended impacts on the workforce.
3. Develop clear frameworks showing how AI and human workers will collaborate, not compete.
4. Bring your people into the plans. Run innovation workshop to learn how employees want, and don't want to work with AI, collectively shaping the future of roles within your organisation.

In summary, the critical question isn't whether AI will take jobs – it's how we manage this transformation while maintaining both business efficiency and workforce engagement. Success will be measured by how well we bring our people along on this journey of technological change, rather than simply by the speed of AI implementation.

Just as the industrial revolution ultimately created more jobs than it displaced, AI has the potential to generate new opportunities and roles we haven't yet imagined. However, the compressed timeline means we cannot afford to be passive observers. Our insights show that organisations that openly share their AI roadmaps and actively involve employees in AI initiatives experience significantly less resistance and higher adoption rates. As business leaders, we must balance the opportunities presented by AI advancement with our responsibility to prepare and support our workforce through this accelerated transition.

Risk, Threats, Regulation & Governance

As technology leaders, the projects we're exploring and leading today will reshape not only our organisations but potentially society and the economy overall. While the future promises to be incredible, we face two critical challenges: the absence of established guardrails for AI technology, and a workforce largely unprepared for its implications couple with its usage and security risks.

AI Usage & Brand Risk - Recent studies highlight scale of our challenge:



While some organisations have begun implementing AI usage policies and training programmes, we must look to continuously review any policies as security and brand damage risks evolve, and prepared to detail actions taken, by when and documented competition rates and reminder processes

Data Governance

Drawing parallels with GDPR implementation, most organisations understand the fundamental requirements for data protection. However, the role of Data Officers is rapidly evolving as AI projects multiply, bringing new dimensions of risk and responsibility. Their expertise becomes increasingly crucial in navigating this complex landscape.

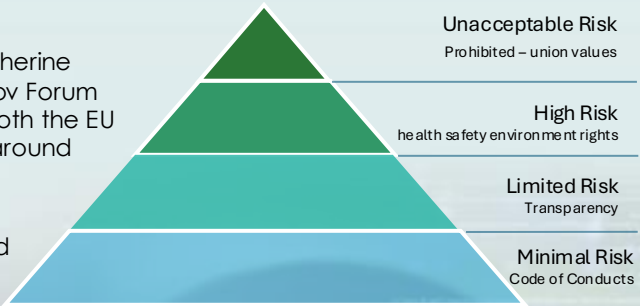
Regulatory Landscape

While technological advancement traditionally outpaces regulation, we've seeing encouraging progress in UK governance, likely informed by lessons from previous technological revolutions. A dedicated UK regulatory framework is expected in late 2025, though increased government focus could accelerate this timeline. In the interim, the Pro-innovation approach to AI white paper and the EU AI Act serves as valuable reference points. It's also worth considering whether a unified international approach to AI regulation might be more effective than individual national frameworks, albeit possible unrealistic in reality, but possible a joined up UK and EU framework would make sense. But until UK policies emerge, we must carefully deploy AI solutions with the understanding that retrospective reviews may be necessary once regulatory frameworks are established.

EU AI Act Insights

To support our challenge, we were kindly joined by Katherine Douse lawyer and director of Osborne Clarke at our Nov Forum Event in London, where she kindly guided us through both the EU Act and some considerations and factors to consider around potential UK regulation. Key Point in summary :

- **Prohibition of High-Risk AI Systems:** The EU AI Act takes a cautious approach by prohibiting AI systems deemed to pose unacceptable risks to fundamental European values, such as those used for social scoring or manipulative advertising. This proactive approach aims to prevent potential harm and ensure ethical AI development.
- **Focus on AI Systems:** Not Just Models: The Act's scope extends beyond AI models to encompass entire AI systems.
- **Risk agnostic regulation:** Transparency and other obligations will apply to AI providers and deployers where AI systems interact with humans or generate content. It remains to be seen how these obligations will be applied in practice.
- **Significant Penalties for Non-Compliance:** Katherine stressed that non-compliance with the Act can lead to substantial fines, reaching up to €35,000,000 or 7% of a company's global annual turnover.
- **Early Implementation of Prohibitions:** The prohibitions within the EU AI Act are set to be the first provisions to come into effect, starting in Feb 2025. This demonstrates a proactive stance in regulating AI and setting a global precedent.
- **Comparison with UK Regulation:** Katherine highlighted that the UK's regulatory framework for AI is currently less developed than the EU's, suggesting the potential for divergence in approach to AI governance and opportunity for innovation in the UK



Our Call to Action - To navigate this evolving landscape, we recommend the following priorities:

1. Treat the EU AI Act as a minimum compliance benchmark
2. Implement robust governance frameworks now
3. Document all AI development and deployment decisions
4. Ensure a people training plan is in place
5. Write an AI use policy, or review your current policies
6. Educate our people on the wider AI Scam methods

What a time to be holding the pen

by Ant Morse



As a Futurist and researcher with three decades of experience, I've witnessed countless technological advances, yet nothing compares to the transformation unfolding before us today. I make this statement with unwavering conviction: *"we are entering a period of change that will eclipse both the industrial and digital revolutions combine"*. It's a bold claim, certainly, but one I've staked my professional reputation on in my 2021 book *the Future of Us* – and thus far, my predictions are proving accurate.

The Dawn of Unprecedented Change

While the long-term outlook is overwhelmingly positive, promising smarter work patterns and improved work-life balance overall, history teaches us that many will still miss the crucial signs of change. The internet revolution offers a sobering lesson: established giants who dismissed online retail as a passing trend found themselves overtaken by more agile, innovative competitors. Traditional media organisations who clung to print while digital content evolved faced existential struggles.

Yet the transformation ahead with AI promises to be even more profound. While the internet revolutionised how we connect and conduct business, AI is set to transform the very essence of how we think, create, and operate. The consequences for the unprepared will likely dwarf those of the digital revolution – we're not simply digitising processes, we're fundamentally reinventing decision-making, creativity, and problem-solving across every sector of our economy...and potentially our role as a workforce.

The Innovation Imperative

We stand at the starting line of what feels like a marathon of transformation. Some organisations have run their practice races through pilot projects and small-scale AI applications, but now begins the real journey of change. The finish line isn't merely adoption – it's relevance and survival in a radically transformed landscape.

The challenges before us are formidable. We must master complex solutions with few established precedents to guide us, while identifying and evaluating use cases that ensure clear ROI. We face the task of anticipating both competitors' and suppliers' moves in a rapidly evolving market, all while upskilling our workforce and managing the delicate politics of workplace transformation and inevitable disintermediation. Perhaps most critically, we must navigate this journey without regulatory guardrails, charting our course through uncharted waters.

The Path Forward

Innovation isn't just about adopting new technologies – it's about fundamentally rethinking how we approach challenges. Consider this: the internet took roughly a decade to reshape retail and media landscapes. AI is already transforming multiple industries simultaneously, from healthcare and financial services to manufacturing and professional services, and it's doing so at an unprecedented pace. Those who view AI as 'just another tech trend' risk becoming as relevant as a high-street video rental store in the streaming era.

Success in this new landscape demands a delicate balance. It requires strategic innovation timing that neither races ahead recklessly nor falls behind overcautiously. We must understand not just the technology, but its practical applications within our specific context. And most importantly this means recognising how the collision of emerging technologies creates entirely new opportunities, while consistently building bridges between AI's potential and real-world value creation.

Looking Ahead

As someone who has dedicated their career to understanding technological evolution, I believe our success lies in balancing innovative thinking with pragmatic execution. But crucially thinking wider about the collisions of technology and society. The future belongs to those who can navigate these waters with both the innovative vision to see new possibilities and the wisdom to execute thoughtfully. Indeed, what a time to be holding the pen. 🖋️

AI Today | A reality checkpoint.

As we bring our research together, we've learned that the Sci-Fi of yesterday is now rapidly becoming the Now-Fi of today. However, this very insight compels me to draw important distinctions between genuine technological progress and overenthusiastic speculation, particularly regarding Artificial General Intelligence (AGI) and Artificial Super Intelligence (ASI). We need a line of reality.

Let's start with some perspective. In the 1990s, the idea of carrying a supercomputer in your pocket that could instantly translate languages, recognise faces, and answer complex queries seemed purely fictional. Today, we call that a smartphone. Similarly, when Netflix first suggested streaming would replace DVDs, industry veterans scoffed. The cloud computing revolution faced similar skepticism - the idea of running critical business infrastructure on someone else's computers seemed preposterous to many tech leaders.

Yet here we are in 2024/25, witnessing remarkable achievements in Generative AI. GPT apps can write code, craft marketing copy, and engage in surprisingly nuanced conversations. Computer vision systems can detect diseases in medical images with remarkable accuracy. AI-powered robots are revolutionising manufacturing and warehouse operations. These are tangible, practical applications delivering real business value today.

However, we must maintain perspective about what current AI actually is: an incredibly sophisticated pattern recognition and probability calculation system. While modern AI can process and analyse data at unprecedented scales, it lacks true understanding, consciousness, or the ability to transfer learning across domains - key characteristics of AGI. And again while progress is incredible, as of today 'The singularity' - the hypothetical future point when artificial intelligence surpasses human intelligence and rapidly begins to self-improve - remains a fascinating but currently distant prospect.

What's crucial for business leaders to understand is the current "line of reality" in AI capabilities:

What AI Can Do Today:

- Process and analyse vast amounts of structured and unstructured data
- Automate routine cognitive and analytical tasks
- Enhance decision-making with data-driven insights
- Generate creative content within learned parameters
- Optimise complex systems and processes

What AI Cannot Yet Do:

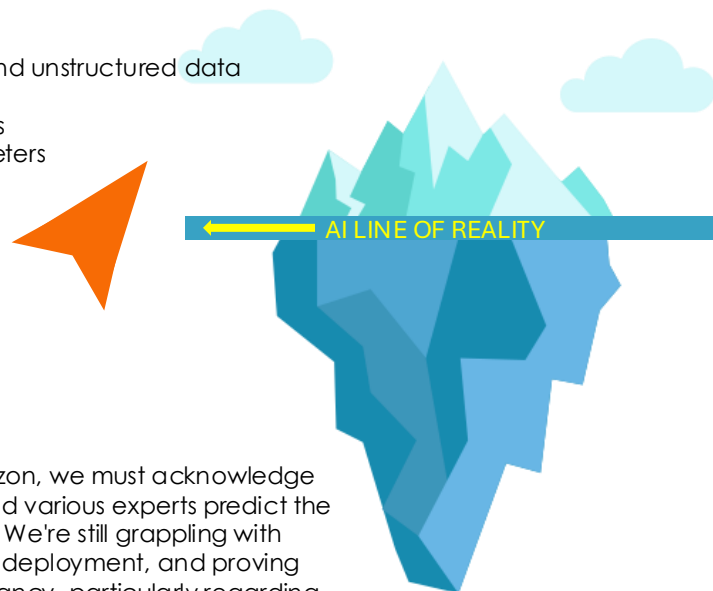
- Truly understand context and meaning
- Exercise genuine judgment or common sense
- Transfer learning across unrelated domains
- Demonstrate true creativity or originality
- Make ethical decisions independently

As practical futurists focused on the 2 to 5 year horizon, we must acknowledge that while the headlines scream "AGI is coming!" and various experts predict the imminent arrival of ASI, the reality is more nuanced. We're still grappling with fundamental challenges in data privacy, ethical AI deployment, and proving ROI for AI investments. The technology is still in its infancy, particularly regarding its business impacts.

This doesn't mean we should dismiss the possibility of AGI or ASI. History has taught us that technological progress often exceeds our expectations, and we predict some incredible if not scary progress on AGI in 2025. However, our immediate focus should be on maximising the tremendous potential of current AI technologies while building robust frameworks for responsible AI development. With I'd propose we have more present task in helping our people understand AI and building a roadmap for AI integrations in terms of who will do what as AI progresses.

For business leaders, the imperative is clear: embrace AI as a powerful tool in your arsenal, but maintain realistic expectations. Focus on practical applications that can deliver value today while keeping an eye on future developments. Invest in understanding both the capabilities and limitations of current AI technologies, and build your AI strategy around solving real business problems rather than chasing theoretical possibilities.

And yes, while we should remain open to the possibility that AGI and ASI might emerge sooner than expected (and perhaps start preparing our Sarah Connor-style survival kits, LOL), our primary focus should be on the tremendous untapped potential of current AI technologies. After all, we're still discovering new ways to leverage what we already have - and that's exciting enough.



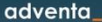
Our Innovation Forum

"None of us is as smart as all of us"

Ken Blanchard



As we close out 2024, I reflect on another exciting year for our Customer Innovation Forum. With your valued participation, and the kind support and growing collaborations with Active Digital, Virgin Media O2, Microsoft, Samsung, Google, Netcall, Zoom and Serenity GPT, through to our exciting new partnership with Cavell, allowing us to be fully independent and benefiting from their broader tech industry experience and expertise. Together we've tackled some of the most pressing challenges in play. We've shared research, insights, recommendations and hopefully added value to your plans and projects. And we've been lucky to bring in some amazing guest speakers and experts who've offered guidance and their professional advice.



Nov 24

Cavell Enterprise Forum:
Navigating the
Technological Frontier

Forum Members Insight Report
Ant Morse | Chair

And while we hope this report acts as a useful and regular update, appreciating its not always easy to align our diaries to meet in person, but aware it's no substitute for time together and I'm thrilled to announce two hopefully extraordinary session we are planning for 2025, focusing in on Spatial Computing & Robotics.



Spatial Computing

As per the update on **Page 7** We are planning a Spatial computing review session kindly support by RIVR who are leaders in XR solutions and will both guide us on the latest development in this space but also bring some kit along so we can 'see what all the fuss is about' on the latest XR solutions actually used in industry



Robotics

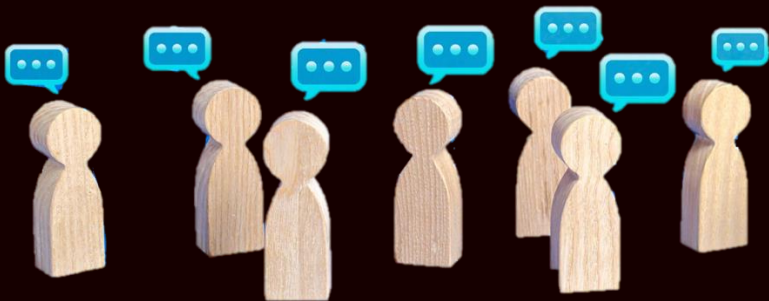
Our friends up at the National Robotarium have kindly offered to host us for a 2025 event at their state-of-the-art facility at Heriot-Watt University campus, offering us unprecedented access to advanced robotics and innovations. Where we will look not only at the latest state of art robots, but also the custom fabricated robots they are building, including some for our forum members.

Ai Regulation Guidance

We'd also like to callout our thanks to Katherine Douse from Osborne Clarke who kindly joins our Cavell Enterprise Forum event in London, providing her invaluable advice and guidance on AI regulation referenced on **Page 13** and who now joins our forum as a member herself. Thanks again Katherine, and amazing to have you onboard



And finally, I'm delighted to end our Q3 report with the fantastic news that our very own forum member **Janet Trowse** received an **MBE** in the King's New Year's Honours list, for her incredible work in leading the Network Rail Menopause Awareness Project, in recognising a gap in support and raising awareness in a project that ultimately reached 150k employees across the rail industry. Massive congratulations Janet, and we look forward to catching up at our next Forum session.



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