INTUITION
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The AI impact – From concept to reality

Since the launch of ChatGPT in November 2022, artificial intelligence has rapidly evolved from an intimidating buzzword into an undeniable, permanent force in our daily lives. Just as the late-1800s railroad boom connected physical geography and unlocked generations of economic dividends, today's massive capital expenditure on datacentres is laying the digital tracks for a structural revolution in cognitive productivity. By analysing concrete GDP contributions and transformative real-world applications, this article cuts through the bubble fears to show how AI is actively driving tangible change.

Willie Pelser

Since ChatGPT launched in November 2022, Artificial Intelligence has moved with startling speed from a niche technical curiosity to a primary "talking point around the braai." In our recent Insight presentations, the sentiment from clients has been palpable: a mixture of wonder, confusion, and outright fear. Many feel that AI is an unreliable mystery that cannot be trusted.

Our goal with our recent Insight presentation and this article wasn't to speculate on the "next big AI stock" or to convince you that the hype is justified. Instead, as strategic analysts, we must view AI as a permanent tool for innovation that has already shifted from a speculative theory to a functional utility. We are moving away from the mystery and toward an understanding of how AI is being woven into the fabric of the global economy.

As I looked for a way to frame this transition, I used AI tools myself. To illustrate this, I have a confession: I've already begun this journey with my own AI companion, whom I've named "W_AI~and" (short for Willie's AI-hand). I asked W_AI~and to help me find an English word to help us understand this new AI-thing. I found two words right at the start of the "A(I)phabet" that define our current crossroads:

- **Adaption**: Modifying or adjusting something to fit new conditions or purposes.
- **Adoption**: Accepting, choosing, or taking something as one's own.

SPEED READ

- **AI is not just ChatGPT. It has rapidly expanded across technologies - including competitors like Gemini, Grok, Claude, Llama, Kimi, and Perplexity - integrating deeply into physical data infrastructure, robotics, and even the space race**
- **AI acts as a "writer" rather than a search engine "librarian." Instead of retrieving pre-existing pages like standard search engines, generative AI models interpret massive libraries of information to compose answers from scratch, which requires 10 to 100 times more compute power per query**
- **We are currently in the "laying the tracks" phase of the AI revolution. Mirroring the late-1800s railroad boom (which spent 4-5% of GDP), modern tech giants are investing a staggering 6-9% of GDP to build the physical foundation - datacentres, GPUs, and power grids - that will ultimately lower the cost of cognitive labour and drive compounding global GDP growth.**
- **AI is a tangible economic reality, not speculative hype. Over the past twelve months, tech-related investment accounted for roughly half of US GDP growth. Daily requests from AI agents surged by 1,700% over a single year (making up more than 50% of network traffic), while everyday companies like UK supermarket giant Tesco are already deploying AI agents to plan customer meals and automatically build shopping baskets**

We cannot simply wish AI away because it feels intimidating. We are past the point of mere adaptation; the real strategic advantage lies in adoption - deciding how to integrate these tools into our lives rather than just reacting to them.

A common misnomer is that "AI" and "ChatGPT" are synonymous. In reality, we are seeing a proliferation of competing models, including Gemini, Grok, Claude, Llama, Kimi, and Perplexity. From an analyst's perspective, this variety proves that the AI "moat" is moving away from the models themselves and toward the infrastructure and data applications. This isn't just about chatbots; it's an exponential adoption across computer programs, robotics, and the modern space race.

To understand the transition from the Internet Age to the AI Age, imagine the internet as the world's largest library - containing everything from your Grade 1 school photo to the most advanced PhD theses.

In the Internet Age, search engines like Google act as Librarians. When you ask a question, the librarian retrieves a page that already exists. They do not create; they find.

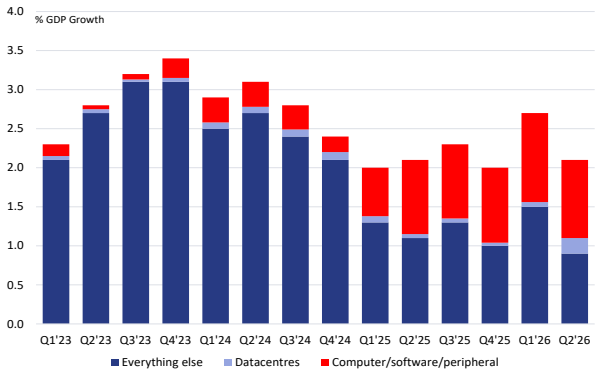
In the AI Age, Large Language Models (LLMs) act as Writers. They have read every book in that library, including the fine print.

- **The Manufacturing Process:** Unlike search, AI generates an answer from scratch, one chunk of text at a time. This is a literal manufacturing process. For the first time in history, "thinking" has a direct, scalable hardware and electricity cost. All of this happens in the datacentres springing up like mushrooms.
- **Resource Intensity:** This generation is complex. A single AI query can cost 10 to 100 times more compute power than a traditional Google search.
- **The "Exam" Reality:** Critics call AI unreliable because it occasionally misinterprets data. However, remember that even a student who has read every textbook rarely scores 100% on every exam. The value is not in perfect retrieval, but in the ability to generate complex plans, code, and designs instantaneously.

The current scale of AI capital expenditure is best understood through the lens of the late 1800s Railroad Boom. We are currently "Laying the Digital Tracks" for the 21st century.

Feature	The Railroad Boom (Late 1800s)	The AI Infrastructure Boom (Current)
Infrastructure	Physical steel rails, land grants, coal.	Datacentres, GPUs, power grids.
Market Impact	Unified geography; plummeted transport costs.	Revolutionized cognitive labour; lowered cost of intelligence.
Economic Scale	Capex averaged 4–5% of GDP.	Projected Capex ranges from 6–9% of GDP.

AI IMPACT ON US ECONOMIC GROWTH



The contribution from AI (via datacentre expansion and other computing-related buildout) to quarterly GDP growth is increasing.

"The current AI infrastructure build-out is simply the modern equivalent of the steel rails that built the 20th century."

Just as trains required steel tracks to run, AI requires massive physical foundations. We are in the heavy-lifting phase where tech giants are spending hundreds of billions to establish the compute power for future generations.

Critics point to an "AI bubble" fuelled by trillions in spending. This fear stems from the circularity of capital: a closed loop where giants like Nvidia, Microsoft, OpenAI, and Oracle act as each other's investors, suppliers, and customers.

While this self-reinforcing revenue structure causes scepticism, it is typical of the early "infrastructure" phase. The strategic opportunity arises as this spending shifts from tech-sector circularity to widespread organic demand from outside end-users. History shows that once the tracks are laid, the resulting productivity gains and deflationary forces (cheaper intelligence and legal/coding analysis) drive long-term structural GDP growth.

AI is no longer a "pie in the sky" theory. The data - both at a macro and micro level - confirms a tangible reality.

The macro level: According to research from Jason Furman at Harvard University, tech and software investment contributed a staggering 92% of US GDP growth in the first half of 2025. Even more conservative estimates suggest that the tech rollout accounts for roughly one-third of current year-on-year US GDP growth. In a world where non-tech sectors are struggling, AI-related infrastructure is effectively carrying the economy.

The micro level: two example speaks to the AI new economy; the first being in the internet environment and the second example from a company addressing our daily needs.

> *"AI is no longer a "pie in the sky" theory. The data - both at a macro and micro level - confirms a tangible reality."*

- **The Cloudflare Surge.** Cloudflare, which serves 45% of the Fortune 500 companies, provides a window into the "underlying plumbing" of the internet. Their research projections for the period between June 2025 and May 2026 show a 1,700% increase in daily requests from AI agents. Today, more than 50% of all internet network traffic is non-human. AI is already performing the "heavy lifting" of data flow.

- **Tesco's Strategic Adoption.** Tesco, the UK's largest retailer, holds a 30% market share and has data on 8 out of 10 British households, thanks to 30 years of their Clubcard history. They have turned this data into their own LLM. Instead of just predicting what you might buy, they are deploying AI agents to take action - planning meals to reduce food waste and automatically building shopping baskets. This is the transition from data analysis to autonomous utility.

Conclusion:
A Modernized Economy

The investment required for this transition is immense - projected to reach $1.4 trillion by 2030 - but the dividends will last for generations. We are moving toward an economy where autonomous vehicles handle logistics and humanoid robots may soon pack your fridge with your automated Tesco order. As we move into this modernized landscape, we must look past the "braai talk" and the initial fear. The question for the strategic thinker is no longer about whether the technology is real, but whether you are ready to move beyond mere adaption and fully adopt the tracks being laid for the new AI economy.

Cloudflare's analysis suggest AI agent usage is surging, changing the shaope of internet traffic.

Or next seminar series will be held in November, when we traditionally review the past year and cast our eyes forward to the new year. We will do some with some trepidation, as we try to unpack whether 2027 will bring clam or chaos.

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Topic:	Outlook for 2027 – a more normal year?
Natal Midlands	
Date:	3rd of December, 2026
Venue:	Christ Church Howick, 23 Mare Street, Howick
Morning Time:	10am for 10.30am
Evening Time:	5.30pm for 6pm
Johannesburg	
Date:	24th of November, 2026
Venue:	Rosebank Union Church, Cnr Winne Mandela Drive and St Andrews Road, Hurlingham
Time:	7am for 7.30am
Cape Town	
Date:	26th of November, 2026
Venue:	J&J Belmont Square, Belmont Road, Rondebosch
Time:	7.30am
Venue:	Helderberg Village Lifestyle Estate, 63 Bakkerskloof Rd, Helderberg Village, Cape Town
Time:	5.30pm for 6pm