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Mechanical horses vs automobiles: who will win?

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There is a question I hear more and more often, phrased in different ways but always with the same underlying anxiety: "Is artificial intelligence going to take my job?"

It is a legitimate question. And the honest answer is yes, it will. At least the job as it is today. The real question is what the job will turn into, and that, for me, is the most interesting part of the question.

Let's start with what we already know, which points in opposite directions. The World Economic Forum projects that by 2030, 92 million jobs will be displaced by automation and artificial intelligence, but that 170 million new ones will be created. In the shorter term, however, the 2026 Stanford AI Index sees a different reality: employment of software developers aged 22 to 25 has fallen by almost 20% since 2024. The disruption is not theoretical. It is real and it is here. And those with less experience and less accumulated professional context are the most exposed.

That said, those who announce the end of work are as wrong as those who deny it. The truth is more subtle, and far more demanding.

Mechanical horses

The first visible impact of generative AI is not the replacement of people. It is a brutal acceleration of productivity in tasks that already exist. The data is clear: the Stanford AI Index documents gains of 26% in software development (in my own teams I see gains above 40%) and of 50% in producing marketing content. Goldman Sachs reports that workers with access to generative AI tools save between 40 and 60 minutes a day.

These numbers create a predictable temptation. If a team of ten now produces what fifteen used to, many organisations' reflex will be to cut the team to seven. It is the obvious move, and it is exactly what happens when we treat a transformative technology as if it were just an efficiency tool.

There is a famous line attributed to Henry Ford: "If I had asked people what they wanted, they would have said faster horses." That is exactly what is happening with artificial intelligence. Most organisations are using it to build mechanical horses, slightly faster and cheaper versions of what they already did. But the combustion engine did not exist to make better horses. It existed to invent the automobile, an entirely new category that transformed cities, economies and ways of living. Generative AI has the same potential. But only for those who can stop thinking only about faster horses.

At this stage of adoption lies a danger few are discussing: companies cutting people today to capture immediate efficiency gains may be destroying exactly the human capital they will need tomorrow to innovate for real. Anyone who leads technology where digital meets the physical world at scale knows that no database replaces the knowledge of people who work with real customers every day. Cutting teams while you are in the mechanical horse phase is optimising for a paradigm that is about to change. When the moment comes to invent the automobile, who will be there to imagine it?

Literacy: it is not about tools, it is about imagination

The answer depends on literacy, and this is where most conversations about AI miss the mark. Companies are spending fortunes on AI tools and close to nothing on literacy. It is like buying pianos for the whole organisation without teaching anyone to play.

AI literacy is not knowing how to use ChatGPT. It is not mastering the art of the prompt. It is something deeper: the ability to combine these tools with critical thinking and real knowledge of the domain you work in. PwC estimates that workers with AI skills earn a 56% wage premium over colleagues in the same roles. But that premium does not go to those who "use AI". It goes to those who know enough about their work to see where AI adds value, where it produces nonsense, and where human judgement cannot be replaced.

It is often said that "you will not be replaced by AI; you will be replaced by someone who uses AI". It is true, but it is an incomplete truth that can encourage a superficial literacy. The more honest version would be: you will be replaced by someone who combines AI with deep mastery of their field and the creativity to see applications others do not see. The difference between using a tool and transforming a domain with it is the difference between owning a calculator and being a mathematician.

But the literacy that worries me most is not individual. It is organisational. It is the literacy of leaders and boards.

What I see far too often is managers and directors treating AI as one more technology you buy. They set up pilots, hire consultants, deploy tools, and then ask "where is the return?". The mistake is structural: this is not a technology question, it is a question of deep transformation of people, organisations and processes. Consultants sell efficiency arguments because that is what boards ask for. And so the loop closes: AI is bought to optimise what exists, impact is measured in costs cut, and nobody ever gets to the question that really matters: what does this technology allow us to create that was impossible before?

The real return on artificial intelligence is not in doing the same with less. It is in imagining what has never been done.

And imagining requires a kind of literacy that no vendor sells and no six-week pilot develops. It is built through use, through error, and through the will to reinvent what you do. But when that literacy exists, what happens next is extraordinary.

The V-shaped curve

I believe this disruption will follow a V-shaped curve. In the short term, contraction: automation of the obvious tasks, pressure on repetitive roles, companies cutting teams because it is the only answer they can articulate in the mechanical horse phase. That is the downward side of the V, and we are already on it, with the knot in the stomach that comes with any steep descent.

But what comes next is, for me, more interesting, and the data is starting to show it. Venture capital investment in AI reached 211 billion dollars in 2025, more than double the previous year, representing more than half of all global venture capital (Crunchbase/OECD). And perhaps the most revealing figure: more than one in three new startups in the United States is now launched by a solo founder, against fewer than one in four in 2019 (Carta), because AI tools let one person do what used to require a whole team.

This is the central idea of the upward side of the V: companies with fewer people, because the productivity amplification is real, but many more companies solving many more problems. Nobody in 2005 predicted that smartphones would create the data scientist profession or a mobile app economy worth more than 300 billion dollars today. The most important roles and companies of the next decade probably do not have a name yet.

The timing of this rise is, I admit, uncertain. But I believe it will be fast: generative AI reached 53% adoption among the population in just three years, faster than the personal computer or the internet. This is not a niche technology. It is a paradigm shift at the speed of human attention.

But believing in the V does not mean ignoring its risks. For many people and regions, without the right conditions, the V can turn into an L: a descent with no recovery. The United States concentrates around 79% of global investment in AI. Europe, and Portugal in particular, is on the wrong side of this gap, and without a deliberate bet on literacy and creation, it risks becoming a passive consumer of a revolution that others lead. What determines the shape of the V is not the technology. It is the choices we make: real investment in reskilling, democratised access to AI education, regulation that protects without paralysing, and leaders with the courage and the literacy to think about creating the new, and not only about optimising the current.

What the machine does not imagine

Artificial intelligence is, at its core, a pattern machine. Extraordinary at finding regularities and executing structured tasks with superhuman speed and consistency. But patterns are not ideas. Correlation is not understanding. And linguistic fluency is not thought.

Throughout my career, from engineer to product leader and then leading technology organisations at scale, I have learned that what really moves organisations is never what can be automated. It is the ability to imagine something that does not yet exist and to communicate it in a way that moves people. It is storytelling. It is the creative spark that turns data into direction, obstacles into narrative, and vague possibilities into a shared vision.

It is the genuine human connection that makes a team commit to an idea before there is mathematical proof that it will work.

These are not accessory skills that AI will eventually replicate. They are the core of what makes us human, and more valuable every day, because everything else has become programmable. The more AI does for us, the more what only we can do matters.

The artificial intelligence revolution is not, in the end, about artificial intelligence. It is about our ability to look at an extraordinary tool and ask: what can I now create that I could not before? To have the audacity to dream, to create what nobody asked for, and to convince others to come with us on the journey. That remains our most distinctive trait, and the one we most need to preserve.

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