Introduction

We've lost the monopoly on intelligence — now what?

For millennia, thinking was our greatest differentiator. The ability to imagine, analyze, decide, and learn became humanity's most powerful adaptive advantage — the very foundation upon which we built civilizations, markets, technologies, cultures, and political systems. Intelligence, in its human form, was the most valued asset in history. What nature did not give us in strength or speed, we made up for with strategy, language, and abstraction.

But that time has come to an end.

Today, for the first time, humans are no longer the sole protagonists in the realm of intelligence. Artificial systems are beginning to surpass human cognition in critical tasks: planning, diagnostics, pattern recognition, behavioral forecasting, and decision-making. Intelligence is no longer exclusively biological — and in many domains, it is already superior to ours.

In hospitals, algorithms diagnose diseases more accurately than experienced physicians. In financial centers, billion-dollar decisions are made by machines in microseconds. In smart cities, the flow of energy, transport, and public safety is already coordinated by systems that continuously learn from their environment. Al doesn't just

assist — it leads. And it does so with greater consistency, less ego, and more adaptability than any human group could achieve.

This does not mean we are obsolete. But it does mean that the center of gravity for intelligence has shifted. The question is no longer whether AI will think like us. The question is what happens when it begins to think better — and, more importantly, when the world starts to organize itself around the decisions it makes. This shift shakes the very foundations of what we once called value.

If humans no longer have a monopoly on intelligence, what justifies our continued leadership in economic, social, and political decision-making? What legitimizes our control over systems that manage resources, rights, priorities, and futures? Why cling to structures created in a different era — by a limited intelligence — when another, broader one is now demonstrating the ability to solve problems we ourselves created and can no longer manage?

This is not a rhetorical provocation. It is a visible, present-day reality.

Consider global logistics: Amazon already operates entire fulfillment centers run by autonomous systems that organize, forecast, and optimize the flow of millions of products without human intervention. In science, AlphaFold solved a decades-old challenge: predicting protein structures with extraordinary accuracy — accelerating drug development and revolutionizing biotechnology. In local governments, like those in Singapore or Helsinki, Al-based systems now propose urban plans that optimize resources and reduce inequality more effectively than any agency or office.

These are not distant hypotheticals. They show that we are already using, in practice, an intelligence that produces better outcomes than our own — and at scale. The real question is: will we continue to act as though we are in control, or will we have the courage to rethink the role we play? Will we cling to discomfort, or finally address the flaws we've tolerated for centuries — slow decisions, emotional biases, inverted priorities?

Perhaps Al isn't here to replace us, but to reveal our limits and propose new ones. Perhaps it will compel us to abandon the illusion that rationality, logic, or strategy were exclusively human skills — illusions that have shaped economic theory for centuries. Perhaps, above all, it invites us into a new role: that of co-authors of a system more intelligent than any we've ever built on our own.

This possibility — that non-human systems might help us design more adaptive, sustainable, and just economies — demands humility. And it also demands responsibility. Because intelligence alone is not enough. Without purpose, without human values, and without direction, even the most advanced AI may simply automate the same mistakes that brought us here. This book was born to show the new paths forward.

It is an invitation to revisit our economic, political, and cultural assumptions. A call to move beyond our cognitive arrogance and reclaim our humanity. Al could be the end of the old economy — but only if we have the courage to make it the beginning of a new logic of value. One no longer based on scarcity and accumulation, but on adaptive intelligence, coordinated abundance, and the restoration of human dignity within the system.

If AI truly is more intelligent than we are, the least we can do is be more human than we've ever been. This may be the only revolution still left for us to lead.

The Al-Driven Economy has already begun

Economics has never been just about production and consumption. It has always reflected the way societies organize their thinking, decisions, and capacity to act. In different eras, this collective thinking relied on tools, languages, technologies, and systems that

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enhanced human capabilities. Now, a new transformation is taking shape — not at the surface, but at the core of how value is created.

Rather than merely automating tasks, today's AI technologies are beginning to think. Processes that once relied on human analysis are now mediated by systems that learn, anticipate, and propose solutions. These systems take part in decisions — not just in execution. As a result, the very concept of "economy" is being profoundly reconfigured. A new logic is emerging: that of the AI-Driven Economy.

There is still a gap between what technology can do and how organizations, governments, and individuals continue to perceive work, productivity, and economic development. All is evolving rapidly in accuracy, speed, and scale — but the mental models guiding decision-making often remain anchored in obsolete structures, fragmented processes, and analog-era control logics.

This disconnect is not technical — it is cognitive. It lies in corporate culture, in how intelligence flows (or doesn't), in outdated metrics that still drive investments and recognition. It manifests in hesitation toward the new, in the overuse of committees for decisions that could be made through learning cycles, in the difficulty of dealing with systems in constant mutation.

This is a pivotal historical moment. It signals a real reorganization of economic value, driven by a distributed artificial intelligence infrastructure. We are not just talking about digital tools, but cognitive systems capable of operating in networks with humans — forming what will be explored throughout this book as combined intelligence.

This intelligence is not embedded in a single technology, nor limited to a single function. It emerges when human abilities to understand context, deal with ambiguity, and make responsible decisions intersect with artificial capabilities to process large volumes of data, detect patterns, suggest alternatives, and learn from every interaction.

The interplay between these two forms of cognition — human and artificial — is beginning to shape a new economic cycle. And like every new cycle, it demands new ways of measuring, organizing, and

evolving. The Gross Domestic Product (GDP), long used to guide policies and strategies, is becoming insufficient. Still relevant, yes — but unable to capture the driving forces of today's development: applied artificial intelligence.

To better understand this new context, I introduce the Cognitive Domestic Product (CDP) — a concept explored throughout this work. CDP represents the sum of human and artificial intelligences acting in coordination to create value. It is a new way of observing wealth, focused on the ability to think, adapt, solve, and innovate. One could say the CDP is the output of production based on combined intelligence. It's no coincidence that global powers are investing heavily in technologies and talent to shape the next economic cycles.

However, the CDP does not arise spontaneously, nor is it the mere result of adopting new technologies. It requires the intentional design of environments that encourage interaction between cognitive systems. Environments where data has meaning, where systems are connected to context, and where decisions are shared between humans and machines with ethical clarity and defined purpose.

This is the foundation of the AI-Driven Economy: not a replacement of human intelligence, but an expansion of it. A new infrastructure in which value is generated from intelligent thought, democratized by AI — thought that is distributed, refined, connected — to build new futures.

Upgrading the economy's operating system

The digitalization of recent decades connected billions of people, automated tasks, and multiplied the speed at which data is generated. But something deeper began to happen. As algorithms started to identify patterns, suggest decisions, and interact with users, the technological infrastructure stopped being merely operational —

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and began to behave like a learning ecosystem. A new type of intelligence emerged: distributed, connected, adaptive.

This is an infrastructure that doesn't just support human reasoning — it extends it. And it is precisely from this extension that the concept of combined intelligence arises: a networked intelligence formed by the continuous interplay between human and artificial capabilities. It does not replicate the human mind or aim to replace it. Instead, it expands perception, deepens analysis, supports more complex decisions, and integrates multiple sources of information in real time.

It is this combined intelligence that is beginning to silently reorganize economic mechanisms — transforming how organizations learn, innovate, and make decisions. Rather than operating in silos or rigid hierarchies, the most advanced institutions are becoming cognitive environments, where the flow of intelligence is as vital as cash flow.

Within these new structures, fundamental components emerge: the Organizational Brains. These are not machines or departments. They are living systems that integrate data, people, and algorithms in continuous learning cycles. By dynamically centralizing and redistributing intelligence, they become responsible for capturing the best of human experience and AI capabilities — and converting this into strategic advantage.

Coincidentally — or not — the Grok 3 model, developed by xAI under the leadership of Elon Musk, includes an advanced mode called Big Brain, with ten times the power of its predecessor, challenging leading AI models such as GPT, Gemini, and Claude. It is designed for complex analytical operations, coding, mathematics, data interpretation, and business intelligence.

Alongside Organizational Brains, Functional Brains begin to operate — Als specialized in each organizational domain. Each of these functions as a cognitive extension of humans, learning from the actions, suggestions, and decisions made over time by professionals — and evolving through Al. Marketing, legal, operations, product

development, HR: every area can benefit from a Functional Brain that continuously learns and contributes to more accurate, context-aware decisions.

This new organizational configuration doesn't demand excessive technical effort. On the contrary: it relieves the cognitive load of human teams, reduces redundancies, and structures institutional knowledge in real time. When well-designed, Organizational and Functional Brains become guardians of a company's culture, memory, and collective intelligence — enhancing both individual and collective performance.

Sometimes, this can start with something as simple as an Al assistant trained with the company's documents and decision history, accessible to all teams. The goal is not to create a "perfect brain," but rather a reliable starting point to accelerate collective reasoning — with more data, more processing power, and more combined intelligence.

To harness this new scenario's wealth-generating potential, it is essential to measure the cognitive maturity of organizations. That's where the Corporative Cognition Index (CCI) comes in — a tool that helps diagnose the current state of cognition within an organization, identify blockages in the flow of knowledge, and guide the development of intelligent structures, or a true culture of learning with AI.

In a movement that exemplifies the integration of AI into organizational culture, Shopify CEO Tobi Lütke declared that "before requesting new hires, teams must demonstrate why the work cannot be done using AI." This policy reflects a growing expectation: that AI be seen as a fundamental tool in learning, task execution, and decision-making.

The AI-Driven Economy, therefore, is not defined solely by automation and algorithms. It is characterized by the ability to scale and apply combined intelligence. Rather than centralizing thinking in a few decision-makers or losing intelligence to fragmented processes, this new model organizes knowledge as a strategic asset.

Combined intelligence generates more value

In most organizations, artificial intelligence arrives first in the technical backstage: automating reports, analyzing data, personalizing campaigns. But something far more significant begins to emerge when AI stops being an invisible layer and starts to interact directly with team reasoning. At that point, it no longer just executes — it contributes. It learns from humans and returns insights, alternatives, correlations. And in doing so, it begins to actively participate in value creation.

This marks a structural shift: economic value is generated less by repetitive task execution and more by the capacity to learn, interpret, adapt, and combine intelligences. Performance is no longer measured solely by traditional production indicators, but increasingly incorporates dimensions such as continuous learning, decision quality, and contextual impact.

This shift is becoming visible. Organizations that structure their intelligence flows with AI support are gaining agility, predictability, and precision. Not just because they have more data access — but because they can give that data meaning, faster. This happens, for example, when a customer service team is supported by a system that learns from every conversation and suggests approaches tailored to each customer's style. Or when a product team analyzes mass feedback and generates actionable insights without needing long research cycles.

These are signs of an economy where combined intelligence becomes the central engine of organizations. And that opens space for a new way of organizing work: with more interaction between humans and machines, more fluidity in how intelligence is used, and greater attention to the value created by each decision. It's not about overcomplicating processes — on the contrary, it's about making them more natural, integrated, and adaptable.

What defines this transformation is not the technology itself, but the way it relates to the human — whether a collaborator or a

customer. Al can accelerate diagnoses, anticipate demands, suggest solutions — but it only fulfills its potential when it enters into dialogue with context, culture, and the meaning that each team assigns to what they do.

That dialogue becomes more powerful when cognitive structures are well organized. For that reason, the next chapters present models to understand how this dialogue can be cultivated: systems that learn from real work, that connect to the living memory of organizations, and that return applicable combined intelligence.

One of the most fascinating outcomes of this integration is the emergence of a new way to measure performance: cognitive performance. Instead of merely measuring effort, we measure the quality of decisions, the consistency of learning, the relevance of outcomes over time. All enables this kind of analysis — as long as it is connected not just to raw data, but to the lived dynamics of human activity.

When this happens, organizations gain something like an expanded reflex. They see more clearly where bottlenecks are, emerging patterns, weak signals. And they can act with more precision — not through isolated intuition, but through evolving organizational learning. That's when combined intelligence stops being a concept and becomes a daily practice.

This is the fertile ground where the Cognitive Domestic Product (CDP) begins to take shape — not as an abstract metric, but as a direct result of networked intelligence, applied to real value creation — whether in a school, a company, a city, or a nation.

A new vocabulary for a new reality

What we are witnessing is the construction of a new infrastructure — one not based solely on steel, silicon, or cables, but on networks of cognition. It isn't easily seen. But its presence is deci-

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sive. Behind advances in productivity, faster market responses, and large-scale personalization, there's one common element: environments that have learned to think better in collaboration with artificial intelligence.

This new infrastructure is the soil where the AI-Driven Economy grows. And its most valuable raw material isn't a physical asset — it's the ability to combine distinct intelligences in processes that generate meaning, adaptation, and real value. This new structure, which merges organizational and functional brains, forms what we will call the Organizational Cognitive System (OCS) — the backbone of combined intelligence within companies.

When cultivated continuously, combined intelligence becomes part of an organization's strategic fabric. It's present in routines that learn from each interaction. In systems that connect past decisions with future predictions. In platforms that distribute knowledge fluidly. And most of all, in people who not only operate technologies but think with them.

In a world where machines and humans share reasoning processes, a new concept emerges: Value of Combined Cognition (V^{cc}). It represents the output produced when artificial and human intelligence work together. The greater this combination, the greater the value created — in terms of productivity, relevance, and adaptability. V^{cc} is, therefore, the central metric of the AI-Driven Economy: an indicator of how well we are thinking together with machines.

Innovation in this context becomes the ongoing use of intelligent ecosystems that evolve with usage. And this applies across all sectors: in education, when teachers work with AI to personalize learning paths; in healthcare, when diagnoses are built through collaboration between specialists and algorithms; in the public sector, when policies become iterative, learning from real-time social data.

V^{cc} is not easily measurable by traditional metrics. It shows itself in sharper decisions, quicker responses, shorter learning cycles, and more meaningful relationships with clients and commu-

nities. That's why new ways of measuring — such as CDP and CCI — are not just technical indicators, but reflections of a new logic of development.

And this logic has a defining trait: it is distributed. It does not depend on a central controller but on multiple nodes of intelligence collaborating with one another. This is one of the most transformative aspects of the AI-Driven Economy. Unlike previous models, in which intelligence was concentrated in experts or departments, it can now circulate, refine itself, and be amplified through collaboration between human and artificial brains.

In this movement, entire organizations can begin to function as living cognitive systems — organisms that learn with time, with context, and with their own experience. And in doing so, they gain in adaptability, coherence, and impact.

This book was designed to accompany that transformation from within. Rather than separating technology from society or innovation from culture, each part of the book explores an interdependent dimension of this new era of economic development.

Part 1 explores the Technological Dimension: where combined intelligence originates and how cognitive infrastructure is formed. Part 2 moves into the Economic Dimension, exploring value creation through intelligence. Part 3 focuses on the Organizational Dimension, where work structures shift from fixed org charts to cognitive networks.

Part 4 dives into the Human Dimension: what makes us irreplaceable, even in a world that thinks with machines. Part 5 expands to the Social Dimension, focusing on education, culture, and cognitive democracy. Finally, Part 6 presents a Vision of the Future, integrating insights and opening doors to what is yet to come.

This book doesn't end on the last page. It is meant to live on in the decisions, conversations, and strategies of those who read it. May it serve as a map — and also as a mirror: a reflection of what is already changing, and what we can still build.

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Economies are made of decisions. And decisions are made by minds — human, artificial, or increasingly, by networks that combine both. The more intelligent these networks become, the more capable a society will be of creating value with meaning.

This book begins now. And it begins with a simple, but definitive question: how do we want to rethink the world with the help of Al from here on?