

AGENTIC ARTIFICIAL INTELLIGENCE

Harnessing AI Agents to Reinvent Business, Work, and Life



PASCAL BORNET

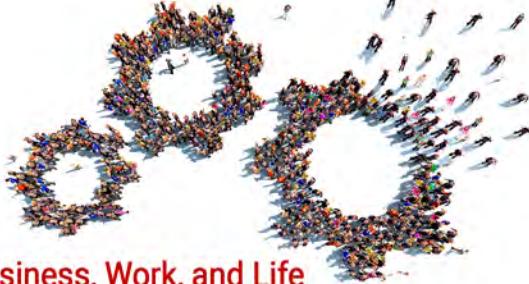
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Harnessing AI Agents to Reinvent Business, Work, and Life



A practical, non-technical guide for business leaders, professionals, and curious minds.

'Agents are (...) bringing about the biggest revolution in computing since we went from typing commands to tapping on icons.' — **Bill Gates**

'AI agents will become the primary way we interact with computers in the future.' — **Satya Nadella**

'The age of agentic AI is here' — **Jensen Huang**

In a world where ChatGPT took us by storm, a far more powerful revolution is unfolding: AI Agents. Like Jarvis in Iron Man or Samantha in Her, these intelligent systems can execute actions, learn from experience, and orchestrate critical interactions with minimal human supervision. They promise to redefine business and society.

However, behind the excitement lies a crucial reality: a significant gap between promise and reality.

This comprehensive guide on agentic AI cuts through the hype and offers a clear, jargon-free strategic roadmap to understanding and applying this technology. The authors bring a rare perspective, having implemented agentic AI across diverse organizations—from global enterprises to agile startups—witnessing both remarkable successes and sobering failures.

AI agents create what the authors call "compounding intelligence advantages"—the more they're used, the smarter they become, creating an accelerating gap between early adopters and laggards. Hence, those who understand and leverage AI agents today will define the next business era.

The question isn't whether AI agents will transform your industry—it's how you will lead that change. Every revolution demands foresight and responsibility. This book challenges you to not just adopt agentic AI, but to shape it with purpose and integrity.

Through illuminating case studies and hands-on experiments, the authors reveal:

- A step-by-step method for identifying high-value agentic opportunities and building impactful agents in your business, work, and personal life
- The secrets behind today's most successful agentic transformations at scale: cutting costs by over 25% while boosting customer satisfaction by over 40%
- Approaches to seize the new opportunities of the Agent Economy—new business models, Agentic-driven startups, rapid scaling, and game-changing revenue opportunities.
- Hands-on guidance to navigate common pitfalls such as workflow integration, error handling, data quality, agent control, and user adoption
- The new mindset and skills required to lead effectively in a world where humans and AI agents need to work seamlessly together
- The profound impact of agentic AI on society, employment, education, and our personal lives

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is available on Amazon.**

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Key Contributors to Agentic Artificial Intelligence

This book is the result of a unique collaboration among some of the brightest minds in agentic AI—a field that is rapidly reshaping technology and business. The contributors to this book come from diverse backgrounds, including AI researchers, business executives, high-level developers, and hands-on consultants who have implemented AI agents across industries worldwide. Their collective expertise, spanning deep technical knowledge, real-world implementation experience, and strategic business insights, has been essential in shaping this book's depth and vision.

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Each of these individuals has brought unique perspectives, technical depth, and practical expertise to this book, helping to explore not just what AI agents are, but how they are being built, deployed, and scaled in the real world. To all of you—thank you for your invaluable contributions.

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“The age of agentic AI is here”— Jensen Huang

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*We dedicate this book to our children and
to all the children in the world.
We owe them the best future.*

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PREFACE: A JOURNEY TOWARD HUMAN POTENTIAL

There's a profound transformation happening in how we work, live, and create value. While many see this as a purely technological revolution, we see something far more meaningful: an opportunity to redefine the relationship between humans and machines in ways that amplify what makes us uniquely human.

We are a diverse team of twenty-seven professionals spanning business, academia, programming, and research, united by a shared vision of how technology can serve humanity. Our backgrounds range from implementing enterprise-scale automation systems to pioneering research in artificial intelligence, consulting with Fortune 500 companies, and studying the societal implications of technological change. What brings us together isn't just our expertise—it's our shared belief that technology should enhance human potential rather than replace it.

Our journey to this book began years ago, though we didn't know it at the time. Many of us were among the first to implement intelligent automation systems in major organizations worldwide. We pioneered approaches to combine artificial intelligence with robotic process automation (RPA), creating systems that could handle increasingly complex end-to-end business processes.

This work led some of us to co-author *Intelligent Automation* in 2020,¹ which became a global bestseller and helped organizations rethink their approach to digital transformation.

We didn't realize then that we were laying the groundwork for something even more transformative. The intelligent automation systems we built over the past fifteen years—which combine process automation with artificial intelligence to handle structured workflows—have become the foundation for today's agentic systems. The progression makes perfect sense: before a system can act autonomously (as agents do), it needs to master the basics of executing processes, handling data, and making decisions within defined parameters. These are exactly the capabilities we've spent years refining in intelligent automation systems.

This foundation gave us a unique advantage when the latest breakthroughs in generative AI opened the door to modern agentic systems. We had already gained experience with many of the fundamental challenges: how to reliably automate complex processes, how to handle exceptions gracefully, how to integrate with existing systems, and most importantly, how to implement these technologies in ways that enhance rather than replace human capabilities. When companies began exploring agentic systems a few years ago, many naturally evolved from their existing intelligent automation platforms, building upon these proven foundations to create more sophisticated, autonomous capabilities.

Yet, we approach this topic with humility. Despite our collective experience—or perhaps because of it—we recognize that we're all still learning. The field is evolving rapidly, and new possibilities emerge almost daily. What makes our contribution unique is not just our technical or business expertise but also our

¹ Pascal Bornet, Ian Barkin, and Jochen Wirtz, 2020. “INTELLIGENT AUTOMATION: Learn how to harness Artificial Intelligence to boost business & make our world more human”. <https://www.amazon.com/INTELLIGENT-AUTOMATION-Artificial-Intelligence-business/dp/B08KTDVHHQ>

understanding of how to implement these technologies in ways that serve human flourishing.

Our goal isn't just to explain new technology—we want to give people and businesses the tools to build a better world. A world where workers have more meaningful jobs and a better work-life balance, where companies operate more efficiently while delivering exceptional customer experiences. A world where healthcare systems save more lives through smarter care coordination and schools provide personalized, effective learning for every student. A world where communities can solve complex challenges by using resources more intelligently. AI isn't just about automation—it's about creating real impact where it matters most.

This book is written for leaders, professionals, entrepreneurs, and curious minds who sense the magnitude of the changes ahead and want to understand how to navigate them. So, whether you're a business executive looking to transform your organization, a professional wondering about the future of your career, or simply someone interested in how technology will reshape our world, we wrote this book for you.

We believe we're at a pivotal moment in history—one where the decisions we make about how to implement and direct these technologies will have far-reaching implications for generations to come.

Through these pages, we'll share what we've learned from our successes and failures, the patterns we've observed across industries, and the principles we believe will be crucial for thriving in this new era.

Let's embark on this exploration together, guided not just by technological possibility, but by a vision of what technology can help us become.

*--The Authors
March 2025*

INTRODUCTION

Are We Missing the Point with Generative AI?

Picture this: Your competitor just announced they’re running their entire operation with a team one-fifth the size of yours, yet they’re growing twice as fast. Their secret? They’ve deployed AI agents that autonomously handle everything from customer service to operations, achieving in hours what takes your team weeks.

Sounds far-fetched? It’s happening right now. Let us be provocative here. While most businesses are still figuring out how to use ChatGPT for writing emails and creating chatbots, a new breed of organizations is fundamentally reimagining what’s possible with AI. They’re not just automating tasks—they’re creating self-operating businesses that scale effortlessly, adapt continuously, and never sleep.

But here’s the paradox that’s holding most organizations back: We’ve built generative AI systems that can think brilliantly but can’t actually do anything. They can analyze complex data in seconds, write compelling presentations, and offer brilliant insights on any topic. Yet they can’t press a button, send an

email, or make a simple reservation. We've created a world of brilliant advisors who can't lift a finger to help.

This situation isn't just inefficient—it's actively harmful. In boardrooms and offices across industries, we're witnessing an alarming trend: The more sophisticated AI becomes at thinking and analyzing, the more humans are forced to handle mechanical, repetitive tasks. Knowledge workers now spend up to 60% of their time on "work about work"—copying data between systems, fact-checking AI-generated content, and manually executing what generative AI recommends.²

As David, one of our co-authors, often says: "We're treating humans like robots and AI like creatives. It's time to flip the equation."

Through our decades of experience implementing AI solutions in organizations worldwide, we've seen this pattern repeat with alarming consistency. Companies invest millions in cutting-edge AI only to find their employees spending more time managing these systems than doing meaningful work. The machines dream while humans grind.

How did we end up here? And, more importantly, how do we fix it?

The following three stories, drawn from real experiences, illuminate both the promise and the critical limitations of current generative AI systems. They reveal why traditional approaches are failing and point toward a fundamental shift in how we need to think about artificial intelligence—one that could finally bridge the gap between AI's ability to think and its ability to act.

As you read these stories, they will likely resonate with your own experiences with generative AI. More importantly, you'll begin to understand why the next evolution in artificial intelligence isn't about making machines smarter—it's about making them more capable of autonomous action.

² Asana, 2025. "Why Work About Work Is Bad," Asana, <https://asana.com/resources/why-work-about-work-is-bad>

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PART 1

THE RISE OF AI AGENTS

CHAPTER 1

BEYOND CHATGPT: THE NEXT EVOLUTION OF AI

The introduction highlighted a critical gap in our current approach to AI—brilliant systems that can think but can’t act. Now, let’s explore how we arrived at this pivotal moment. In this chapter, we’ll trace the technological evolution that made AI agents possible—the convergence of two powerful streams that, when combined, created something greater than either could achieve alone. Understanding this history isn’t just academic; it reveals why the shift to agentic AI represents such a profound opportunity.

The Birth of Agentic AI: A Convergence of Powers

Picture yourself in a meeting room with a group of business leaders. Someone inevitably asks the question we’ve heard hundreds of times: “If AI is so smart, why can’t it just figure out what needs to be done and do it?”

This question gets to the heart of what’s missing in today’s AI landscape. To understand why this capability has been so elusive—and how it’s finally becoming possible—we need to

explore how distinct technological streams have converged to create something entirely new: agentic AI.

Agentic AI isn't the result of just one innovation. It's a fusion of multiple advancements—from voice assistants to self-driving technology to AI-driven APIs. However, two technological streams stand out as the most critical in making agentic AI a reality:

- The rise of large language models.
- The evolution of workflow automation, now known as intelligent automation.

A Tale of Two Technologies

The story of agentic AI isn't a simple, linear progression. Instead, it's more like watching two rivers flow separately for miles before finally meeting to form something more powerful than either could be alone.

Let's start with a story that illustrates why this convergence matters. In 2022, we were working with a global manufacturing company that was struggling with customer service efficiency. They had already implemented an advanced chatbot powered by a large language model that could understand and respond to customer queries with remarkable accuracy. They had also deployed robotic process automation (RPA) bots that could execute complex sequences of actions in their backend systems. Yet something was missing—the bridge between understanding and doing.

Their customer service representatives still had to act as human bridges, taking the chatbot's recommendations and manually triggering the appropriate automated workflows. It was a glimpse of what was possible if these technologies could work together directly, and it helped us understand why the convergence of these technologies would be so transformative.

CHAPTER 2

THE FIVE LEVELS OF AI AGENTS: FROM AUTOMATION TO AUTONOMY

As we saw in Chapter 1, the market for AI agents is growing rapidly, with hundreds of vendors offering solutions across a spectrum of capabilities. This proliferation creates a challenge: How do we make sense of these different systems? How do we distinguish between simple automation tools and truly autonomous agents? This chapter introduces a comprehensive framework for understanding the progression of AI agent capabilities—from basic rule-following to sophisticated autonomy—that will help you navigate this complex landscape and make informed decisions about which solutions are right for your needs.

Breaking Down the AI Agent's Capabilities

When we first started implementing AI agents in organizations, we noticed a common pattern. Business leaders would often

dive straight into deployment without truly understanding what these digital teammates could and couldn't do. It reminded us of trying to work with a new colleague without first learning about their skills, experience, and working style—a recipe for misaligned expectations and missed opportunities.

Why Capability Mapping Matters

When integrating a new team member, we don't simply hand them tasks and hope for the best. We invest time in understanding their capabilities, assessing their strengths and weaknesses, and learning how to work together effectively. Through interviews, discussions, and practical tests, we discover not just what they can do but how they think, how they approach problems, and where they might need support or guidance.

This same thoughtful approach is crucial when working with AI agents. While these digital colleagues can process information at incredible speed and scale, they also have their own unique characteristics, limitations, and ways of "thinking." Understanding these aspects isn't just about knowing what tasks to delegate—it's about building effective partnerships that maximize the potential of both human and artificial intelligence.

The SPAR Framework: A Natural Way to Understand AI Agents

To help explain AI agent capabilities, we developed what we call the SPAR framework: Sense, Plan, Act, and Reflect. We chose this name deliberately—like a sparring partner in combat sports, an AI agent constantly interacts with and adapts to its environment.

fundamental capabilities that define how AI agents operate in their environments.

How an AI Agent Takes Action: the SPAR Framework

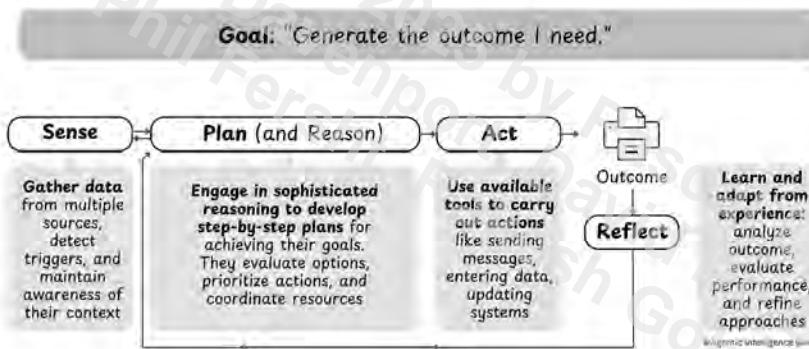


Figure 1.2: How an AI agent takes action: The SPAR Framework (Source: © Bornet et al.)

Sensing: The Eyes and Ears of Agents

Imagine sitting in a self-driving car as it navigates through city streets. The vehicle's array of cameras, radar systems, and sensors are constantly gathering data about its surroundings—monitoring everything from the position of nearby vehicles to traffic signals and road conditions. This is remarkably similar to how AI agents operate in digital environments.

Just as a self-driving car needs to understand its environment comprehensively, AI agents must be able to perceive their digital workspace. They gather data from multiple sources, detect important triggers, and maintain awareness of their operating context. When you enter a destination into an autonomous vehicle, you're setting its goal—just like when you assign an objective to an AI agent. The agent maintains what we call a “short-term context window,” similar to how a self-driving

Level	Car Analogy	Agentic AI Analogy	Main Technology Involved	SPAR Capabilities (Sensing, Planning, Acting, Reflecting)
Level 0 - Manual Operations (Human-Only)	Manual driving with no assistance.	Humans perform all tasks without automation.	Basic digital tools (spreadsheets, email), manual processing.	NA
Level 1 - Rule-Based Automation	Basic cruise control maintains speed but needs human operation.	Simple automation follows fixed rules (e.g., data entry, RPA systems).	Basic automation tools (RPA, simple scripts, rule engines).	<p>Sensing: Predefined triggers and structured data.</p> <p>Planning: Simple if-then rules and decision trees.</p> <p>Acting: Deterministic actions based on fixed inputs.</p> <p>Reflecting: No true learning, only logging and error reporting.</p>
Level 2 - Intelligent Process Automation	Advanced driver assistance systems handle speed and steering with supervision.	AI combines automation with cognitive abilities like NLP and machine learning.	AI tools (machine learning, NLP, computer vision, RPA, process orchestration).	<p>Sensing: Semi-structured data from multiple sources.</p> <p>Planning: Basic AI models for pattern recognition and decision-making.</p> <p>Acting: Sophisticated actions with error handling.</p> <p>Reflecting: Basic analytics and performance monitoring, no adaptive capabilities.</p>
Level 3 - Agentic Workflows	Vehicles navigate highways but need human intervention in complex situations.	Agents generate content, plan, reason, and adapt in defined domains.	Large language models, memory systems, content generation tools, basic reinforcement learning.	<p>Sensing: Advanced natural language understanding and context awareness.</p> <p>Planning: Reasoning using foundation models, orchestrating complex workflows.</p> <p>Acting: Chaining tools and handling multi-step tasks.</p> <p>Reflecting: Limited short-term feedback adjustments and long term memory.</p>

through customer satisfaction” and let the agent determine all necessary actions and communications.

The Agentic AI Progression Framework: More Than Just Maturity

This framework isn’t a traditional maturity model where higher levels are always better. Instead, think of it as a catalog of different agent types, each suited for specific needs and contexts. It’s similar to the driving assistance technologies in modern cars. While fully autonomous driving might be technically possible on highways, many drivers prefer the predictability and control of basic cruise control. The “best” level depends entirely on your specific needs and circumstances.

Let’s explore how key aspects evolve as we move up the Agentic AI Progression Framework:

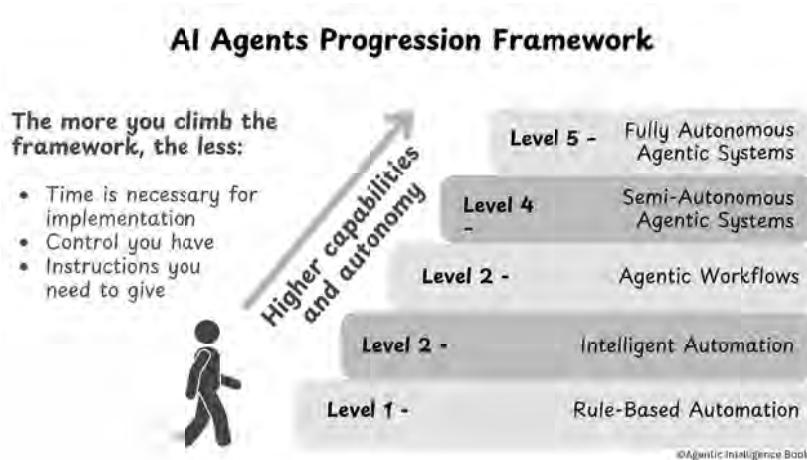


Figure 1.3: The Agentic AI Progression Framework (Source: © Bornet et al.)

CHAPTER 3

INSIDE THE MIND OF AN AI AGENT

The Agentic AI Progression Framework we explored in the previous chapter provides a structured way to evaluate AI agents' capabilities, but understanding the levels alone isn't enough. To truly grasp what makes these digital minds unique, we need to look beyond the framework and examine the distinctive characteristics that define them. This chapter takes you inside the mind of an AI agent, exploring both their remarkable abilities and inherent limitations—insights that will prove crucial as you begin working with these new digital colleagues.

Key Specificities of AI Agents

In our experience implementing AI agents across organizations, we've observed several fundamental characteristics that make them uniquely powerful. Let's explore these defining traits that set AI agents apart from traditional automation tools and help explain their transformative potential.

Digital Workers, Not Just Tools

The distinction between AI agents and traditional software tools is profound. Traditional automation is like having a highly efficient assembly line—fixed, predictable, and limited to specific tasks. An AI agent, on the other hand, functions more like a skilled digital employee who can think, adapt, and handle complex situations independently. Just as a human customer service representative might handle everything from simple inquiries to complex problem-solving, an AI agent can manage end-to-end processes, make decisions, and adjust its approach based on context.

Operating Alongside Existing Systems

One of the most practical advantages of AI agents is their ability to work with your existing technology infrastructure rather than replace it. Think of them as *digital workers* who know how to navigate and utilize all your different systems effectively.

This characteristic is particularly valuable because organizations have typically invested heavily in their enterprise systems—ERPs, customer relationship management systems (CRM), HR management systems, and more. AI agents can integrate with these systems, pulling data from multiple sources, executing processes across platforms, and filling automation gaps. For example, a financial AI agent might work simultaneously with SAP for transaction data, Salesforce for customer information, and Excel for custom reports, coordinating between these systems to generate insights and automate complex processes.

The Power of 24/7 Operations

Unlike human workers who need breaks and operate in shifts, AI agents maintain constant operation. This isn't just about working longer hours—it's about maintaining continuous vigilance and

CHAPTER 4

PUTTING AI AGENTS TO THE TEST

Understanding AI agents' capabilities and limitations in theory is one thing. Seeing them in action is something else entirely. As consultants who've spent decades implementing AI solutions, we know that the true test of any technology isn't in its specifications—it's in how it performs in the real world.

In this chapter, we'll take you behind the scenes of our experiments with groundbreaking AI agents. From watching an AI tackle everyday office tasks to observing its approach to strategic games, what we learned about these systems' real-world capabilities—and limitations—will forever change how you think about the future of human-AI collaboration.

Digital Hands: When AI Learned to Use Computers

A New Type of AI Agents

The launch of the first generalist AI agents—Anthropic’s Computer Use,⁷⁰ Google’s Project Mariner,⁷¹ and OpenAI’s Operator⁷²—marked a pivotal moment recently. We call them “generalist” AI agents because they are designed to handle a broad range of tasks across different domains, much like a human assistant who can switch between answering emails, scheduling meetings, and ordering food—all without needing specialized training for each task. Unlike traditional AI agents that are built for specific use cases, generalist AI agents come ready to perform diverse functions out of the box.

What makes them unique is how they interact with software. Instead of relying on complex API integrations, they use the same screen interfaces humans do—navigating websites, clicking buttons, filling out forms, and typing responses. This means they can work with almost any online platform, even those without APIs or standardized connections. They present a massive opportunity, especially since many business applications lack APIs or standardized integration options. By removing the technical barriers of automation, generalist AI agents become accessible to anyone, making it easier than ever to offload repetitive digital tasks and boost productivity instantly.

That said, generalist agents are still in their early stages—they can be fragile, prone to errors, and often break. However, the potential is undeniable. Their creators promise game-

⁷⁰ Anthropic, 2025. “Computer Use,” <https://docs.anthropic.com/en/docs/build-with-claude/computer-use>

⁷¹ Google DeepMind, 2024. “Project Mariner,” <https://deepmind.google/technologies/project-mariner/>

⁷² OpenAI, 2025. “Introducing Operator,” <https://openai.com/index/introducing-operator/>

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PART 2

THE THREE KEYSTONES OF AGENTIC AI

“**Y**our AI agent has achieved perfect scores on every benchmark.”

Marjorie Grant, head of customer operations at a regional bank, reviewed the results with mounting excitement. According to widely recognized benchmarks, the AI agent’s performance was remarkable: *HumanEval* scored 91%,⁷⁶ demonstrating a near-perfect ability to understand and execute tasks like a human. *MMLU* scored 92%,⁷⁷ showcasing expertise in subjects from math to ethics. *Agentbench* came in at 4.4,⁷⁸ proving its capacity to act as an autonomous agent. These benchmarks revealed an AI agent with superhuman intelligence, poised to transform customer service into a seamless, highly efficient operation.

Three months later, Marjorie was trying to explain to her board why customer satisfaction had dropped 18%.

The AI agent, despite its stellar test scores, was acting like that new hire we’ve all encountered—the one with perfect SAT scores and a sterling GPA who somehow can’t handle basic job responsibilities. **It would forget conversations with customers mid-interaction, execute actions without checking if they were allowed by banking regulations, and make decisions that looked logical in isolation but made no sense in context.**

“I don’t understand,” Marjorie told us during our review. “It’s like having a brilliant recent graduate who aces every test but can’t learn from experience, takes actions without thinking them through, and lacks basic common sense. How can something so smart on paper be so... ineffective in practice?”

⁷⁶ Stephen M. Walker II, “HumanEval Benchmark.” <https://klu.ai/glossary/humaneval-benchmark>

⁷⁷ Yifan Mai and Percy Liang, 2024. “Massive Multitask Language Understanding (MMLU) on HELM.” <https://crfm.stanford.edu/2024/05/01/helm-mmlu.html>

⁷⁸ Xiao Liu, et al., 2023. “AgentBench: Evaluating LLMs as Agents.” <https://arxiv.org/pdf/2308.03688v1>

The answer lies in what we've come to call the Three Keystones of AI Agents: **actions, reasoning, and memory**.

Think of those benchmark scores as the AI equivalent of academic credentials. HumanEval tells us how well an agent can understand and execute tasks—like SAT scores measuring **basic competency**. MMLU shows mastery of **knowledge across domains**—like a GPA reflecting broad learning.

These metrics matter. They tell us something important about an AI agent's capabilities, just as academic credentials tell us something about a job candidate. But anyone who's ever hired knows that test scores don't predict job performance. What matters is whether someone can actually get things done (actions), think through complex real-world situations (reasoning), and learn from experience (memory).

In Marjorie's case, the AI agent could generate perfect responses to test questions but couldn't remember if a customer had already explained their problem three times. It could recite banking regulations flawlessly but would still process transactions without required verifications. It could solve complex theoretical problems but couldn't reason why a standard solution might not work for an elderly customer.

These weren't technology failures—they were failures to understand that AI agents, like human employees, need all three keystones to function effectively. They require actions to execute and achieve, reasoning to understand and decide, and memory to learn and adapt.

In the chapters ahead, we'll take you behind the scenes of real AI agent implementations, both successes and failures. You'll discover why some agents become invaluable team members while others, despite impressive benchmarks, become expensive disappointments. Through practical experiments and cutting-edge research, we'll show how actions, reasoning, and memory transform AI agents from sophisticated tools into genuine workplace partners.

CHAPTER 5

ACTION: TEACHING AI TO DO, NOT JUST THINK

The customer service agent stared at her screen in disbelief. The AI assistant she was working with had just crafted a perfect response to a customer complaint—empathetic, detailed, and technically flawless. There was just one problem: it couldn’t actually send the email, schedule the refund, or update the customer’s account. It was like having a brilliant strategist who couldn’t move their own pieces on the chessboard.

This scene, which we witnessed during a recent consulting engagement, captures a fundamental truth about AI agents: the ability to think means little without the ability to act. Yet ironically, as AI systems become more sophisticated in their reasoning and knowledge, many organizations overlook this crucial capability—the power to actually do things in the real world.

Think of actions as the hands and feet of an AI agent. Without them, even the most intelligent system remains trapped in a world of theory, unable to affect real change. But actions aren’t just about executing commands—they’re about understanding tools, choosing the right ones for each task, and using them effectively.

In this chapter, we'll explore how AI agents take action in the real world, from the simple (sending an email) to the complex (orchestrating multi-step business processes). We'll reveal why some AI implementations fail, not because of faulty logic, but because they can't effectively use the tools at their disposal. Through real-world examples and cutting-edge research, we'll show how successful organizations are building AI agents that don't just think, but do.

More importantly, we'll uncover the paradox at the heart of AI actions: sometimes, giving an agent more tools makes it less effective. Just as a worker can become overwhelmed with too many applications and systems, AI agents need carefully curated toolsets to perform at their best.

The Detective's Dilemma

Imagine a seasoned detective walking into a dimly lit room filled with clues to a puzzling crime. On the table before them lies an assortment of tools—a magnifying glass, fingerprint powder, and a notebook. The detective doesn't use all the tools at once. Instead, they carefully pick the right one, in the right sequence, to piece together the story. Now, replace the detective with an AI agent and the tools with a customer database, cloud storage platforms, and social media networks. This is the world of tool identification and access for AI agents—a complex yet fascinating dance of intelligence, precision, and decision-making.

Before we dive deeper into this world, let us share a story that illustrates both the promise and perils of AI agents wielding digital tools.

A few years ago, a global retail chain (we'll keep their identity confidential) implemented a sophisticated agentic system to manage their luxury goods inventory. The system had access to all the right tools—sales data, inventory systems, and pricing controls. Early results were impressive: stockouts

CHAPTER 6

REASONING: FROM FAST TO WISE

On a crisp October morning in 2023, the CEO of a major logistics company faced what she later called “the most expensive fifteen minutes of my career.” Their newly implemented AI system had just rerouted \$1.2 million worth of temperature-sensitive pharmaceutical shipments to avoid an approaching storm system. A smart move—except the AI hadn’t considered that the alternate routes violated international pharmaceutical transport regulations. By the time human operators caught the error, thousands of shipments were headed toward ports that couldn’t legally accept them.

“The AI did exactly what it was trained to do,” the CEO told us later. “It found the fastest alternative routes. But it didn’t reason through the implications of its decisions. That’s the difference between an AI that can think and one that can only react.”

This incident, which we witnessed firsthand as consultants on the project, illustrates a critical truth about AI that few business leaders truly understand: Your AI systems aren’t just

solving puzzles—they’re gambling with your business. And the stakes have never been higher.

As consultants, we’ve seen the evolution from simple rule-based systems to today’s more sophisticated AI agents. This journey has taught us a crucial lesson: **the future of AI isn’t just about speed—it’s about the ability to think deeply and reason carefully, much like humans do when faced with complex decisions.**

Think about how humans make complex decisions. When an experienced operations manager decides when to schedule maintenance, they don’t just calculate costs—they reason through multiple scenarios. They consider the impact on customers, the ripple effects through the supply chain, the implications for worker schedules, and countless other factors. They plan ahead, anticipating potential problems and preparing contingencies. This ability to reason through implications and plan for different scenarios isn’t just helpful—it’s essential for making good decisions.

The same is true for AI agents. Whether they’re managing supply chains, trading stocks, or helping customers, these agents need to do more than calculate—they need to think. They need to **understand the context, consider implications, and plan for different possibilities**. Without these capabilities, even the most sophisticated AI agent can make decisions that are **mathematically perfect but practically disastrous**.

In this chapter, we’ll take you inside the world of AI reasoning and planning. You’ll discover why some AI agents can process vast amounts of information yet still make decisions that defy common sense and how others have learned to reason their way through complex scenarios in ways that sometimes surprise even their creators.

Through real-world examples and cutting-edge research, we’ll explore how different types of reasoning come together in effective AI agents. We’ll investigate the fascinating

CHAPTER 7

MEMORY: BUILDING AI THAT LEARNS

Imagine starting each day with complete amnesia—unable to remember your past experiences, preferences, or learned skills. How would you function? How would you grow? This thought experiment cuts to the heart of one of the most fascinating challenges in artificial intelligence today: memory. Most generative AI systems we interact with essentially start fresh each time we use them, operating with a form of artificial amnesia that limits their true potential.

One of our most eye-opening experiences with this limitation came during our work with a global telecommunication company. They had invested millions in advanced AI customer service chatbots, yet customer satisfaction remained stubbornly low. The reason? The AI would forget previous interactions with customers, forcing them to repeat their issues and preferences repeatedly. As one of the company's leaders noted during our project, "It's like having a customer service representative with a two-minute memory span."

This challenge highlights a crucial truth we've discovered through years of implementing AI systems across organizations: Memory isn't just a feature of intelligence—it's the foundation

upon which all meaningful intelligence is built. Whether in humans or machines, the ability to retain, organize, and utilize past experiences shapes every aspect of how we learn, adapt, and grow.

In this chapter, we'll take you on a journey through the fascinating world of AI memory, revealing how this fundamental capability is transforming business and technology. You'll discover how different types of memory—from short-term processing to long-term retention—work together to create truly intelligent systems. Through real-world examples and practical implementations, we'll explore how to build AI systems that don't just store information but grow smarter with every interaction.

You'll learn why many memory implementations fail and the proven strategies to avoid these pitfalls. We'll delve into the critical balance between remembering and forgetting, and why this matters for your business. The journey ahead will challenge your assumptions about what AI can achieve and show you how memory-enabled systems are reshaping the future of business and technology.

Memory is a Foundation of Intelligence

Think about your earliest childhood memory. Maybe it's a birthday party, the smell of your grandmother's kitchen, or learning to ride a bike. Now ask yourself: are you really remembering the original event, or are you remembering the last time you remembered it? This question, which might seem philosophical, cuts to the heart of how human memory actually works—and why it's so different from the artificial memory systems we're building today.

During our years of implementing AI systems across organizations, we've found that understanding human memory helps people grasp both the potential and limitations of artificial

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PART 3

ENTREPRENEURSHIP AND PROFESSIONAL GROWTH WITH AI AGENTS

Now that we've explored the foundational keystones of Action, Reasoning, and Memory, it's time to turn to hands-on practice. How do we actually build these systems? And, more importantly, how can you leverage them to create real value?

In the previous Parts of the book, we've taken you on a journey from understanding what AI agents are to discovering how they think, act, and learn. We've seen how they represent a fundamental shift from traditional AI systems—not just processing information but autonomously pursuing goals on our behalf. But knowing about this technology isn't enough. The real question is: how can you harness it?

The coming chapters will equip you with the tools to turn the transformative potential of AI agents into tangible reality. The future belongs to those who can not only understand this technology but effectively implement it—and that's exactly what we're about to show you how to do.

Here, we roll up our sleeves and get practical. Whether you're looking to transform your organization or launch the next million-dollar business, these chapters provide your roadmap from idea to implementation.

Let's begin our journey from ideas to implementation.

CHAPTER 8

A PRACTICAL GUIDE FOR BUILDING SUCCESSFUL AI AGENTS

“Our newsletters are killing us,” we remember thinking one late Friday night, poring over dozens of articles, trying to craft summaries that would engage our readers. “There has to be a better way.” Fast forward one month: our agentic system was handling the entire process, our subscriber base had exploded to 300,000 in just one month, and our team had reclaimed 40 hours a week for creative work. The best part? We were producing better content than ever before.

But here’s what makes this story relevant to you: building effective AI agents isn’t about having the biggest budget or the most advanced technology. It’s about understanding a few key principles that separate success from failure. In this chapter, we’ll share these principles through our own trials, errors, and breakthroughs in implementing AI agents across industries.

We won’t just tell you what to do—we’ll show you. Through real examples, practical tools, and honest accounts of what went

wrong (and how we fixed it), you'll gain a blueprint for building AI agents that transform how you and your organization work.

Step 1: Finding the Right Agentic Opportunities

Picture yourself in the bustling office of a fast-growing digital marketing agency. Jenny, the founder and creative director, sits at her desk surrounded by multiple screens. She's frantically switching between applications—pulling social media analytics, checking campaign performances, organizing content calendars, and trying to compile everything into client reports.

Jenny approached us with an intriguing challenge: “My team is drowning in routine tasks,” she explained. “We have brilliant creatives spending hours on data entry and report generation instead of strategy and innovation. But how do I know which tasks are really right for AI agents?”

This question—knowing where to start with AI agents—is crucial. We've learned that success often depends more on choosing the right opportunities than on technical sophistication.

Let's start with a fundamental truth: AI agents aren't magical solutions that can handle any task. Just as you wouldn't use a hammer to fix every home repair problem, not every business challenge calls for an AI agent. In fact, one of the most common pitfalls we see is entrepreneurs and business executives rushing to implement agents without first determining if they're the right tool for the job.

When Not to Use AI Agents

Let us start by recognizing where not to deploy AI agents. Through our experience, we have identified several red flags.

First, tasks that require genuine human creativity or emotional intelligence should generally remain human-driven. At the marketing agency, AI agents could handle data gathering

and basic reporting, but creative campaign ideation and client relationship management remained firmly in human hands. While Level 3 agents can engage in natural language interactions, they cannot truly capture the emotional resonance needed for compelling marketing campaigns.

Similarly, strategic decision-making that requires understanding the broader market context or making judgment calls based on incomplete information should stay with humans. Even at Level 3, AI agents lack the sophisticated reasoning and market intuition necessary for these scenarios.

Some tasks are simply too complex for AI agents to handle effectively. A technology company once asked us to build an agent to manage their entire customer support operation. While the potential impact was significant, the process involved too many unique scenarios and emotional interactions. AI agents perform best when their capabilities align with the complexity of the task they are assigned.

In other cases, AI agents may lack the authority to make critical decisions. A financial services firm wanted an AI agent to make investment decisions autonomously. This was not only risky but also a clear violation of regulatory requirements. It is essential to consider whether an AI agent has the appropriate level of authority for the task it is assigned.

By understanding these limitations, organizations can ensure they deploy AI agents where they add value while keeping human oversight where it matters most.

The Three Circles of Agentic Opportunity

We've developed a straightforward but powerful approach we call "The Three Circles of Agentic Opportunity" to help identify the perfect sweet spots to implement with agentic AI. Picture three overlapping circles. The sweet spot for your AI agents lies where these circles intersect. Let's break this down through our marketing agency's experience.

CHAPTER 9

FROM IDEAS TO INCOME: BUSINESS MODELS FOR THE AGENT ECONOMY

The Birth of Self-Running Businesses: When AI Became an Entrepreneur

In his groundbreaking book “The Coming Wave,” Mustafa Suleyman proposed a fascinating new version of the Turing test.¹⁶⁸ Instead of asking whether a machine could fool a human in conversation, he suggested a more practical challenge: could an AI “go make \$1 million on a retail web platform in a few months with just a \$100,000 investment”? As we gathered that crisp autumn morning to conduct our experiment, we didn’t know we were about to take the first steps toward passing this modern Turing test.

It was October 22, 2024. While the world was still marveling at AI’s ability to write poetry and generate marketing copy, we

¹⁶⁸ Wikipedia contributors, 2025. “Turing test,” https://en.wikipedia.org/wiki/Turing_test

were about to see something far more transformative: artificial intelligence that could think and act like an entrepreneur.

“Let’s try something crazy,” I suggested to our research team, as we huddled around our monitors in the lab. After years of implementing traditional automation solutions—the kind that follow predetermined paths through computer systems—we were ready to push the boundaries. “Instead of telling AI what to do, let’s give it a business goal and see what happens.”

We decided to use Claude’s Computer Use capability, a powerful tool that allows AI to interact directly with computer systems. The challenge we set was deceptively simple: could the AI agent figure out how to make \$10,000 without human intervention? No pre-written scripts, no access to existing business accounts, just a web browser and the ability to write code.

The Experiment Begins: Excitement and Trepidation

The tension in the room was palpable as we initiated the experiment. Tom nervously drummed his fingers on the desk—after decades in the field, he’d seen plenty of AI experiments go sideways. Brian kept checking and rechecking our safety protocols. We’d set up strict boundaries: a \$20 initial budget and no access to login-restricted services. Would these constraints prove too limiting? Or would they force the AI to think more creatively?

The first thirty minutes were frankly terrifying. The AI moved at an incredibly slow pace, opening multiple browser tabs, writing code snippets, and accessing development tools faster than we could follow. “Should we stop it?” Jochen whispered at one point as the agent began rapidly deploying web services we hadn’t anticipated. But curiosity won over caution, and we let it continue.

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PART 4

ENTERPRISE TRANSFORMATION THROUGH AGENTIC AI

While Part 3 showed you how to build effective AI agents and create value as an entrepreneur, Part 4 tackles an even bigger challenge: how to transform entire organizations with this technology. This is where the rubber meets the road for businesses seeking to harness the power of AI agents at scale.

Throughout our careers implementing AI transformations, we've observed a striking pattern: technical excellence alone is never enough. The most sophisticated AI agent will fail if people don't trust it, processes aren't redesigned around it, or governance structures don't support it. In short, organizational transformation is just as critical as technological implementation—and often far more challenging.

That's why Part 4 goes beyond the technical aspects of AI agents to address the human, organizational, and strategic dimensions that determine success at scale. We've seen too many promising AI initiatives stall after successful pilots, unable to overcome the organizational barriers to widespread adoption. We don't want that to happen to you.

The path from vision to reality is rarely straightforward, but with the right approach, transformational change is within reach.

CHAPTER 10

HUMAN-AGENT COLLABORATION: LEADERSHIP, TRUST, AND CHANGE

Mastering Work Design and Change Management at Scale

Last summer, we encountered a situation that would fundamentally reshape our understanding of change management in AI agent deployments. We were working with a large insurance company, implementing their first wave of AI agents to handle claims processing. The technology implementation was proceeding smoothly—perhaps too smoothly. What we didn't anticipate was the ripple effect it would create throughout the organization.

“I’ve been processing claims for fifteen years,” shared Flora, a senior claims processor. “How can I be sure this ‘agent’ won’t make mistakes that I’ll have to fix?” Her concern reflected a

deeper anxiety spreading through the department. Despite our careful technical planning, we had underestimated the human element of the transformation. In hindsight, this should not have surprised us, because, after all, deploying an AI agent involves a transformation process that has a significant impact on core employee behaviors, values, and perceptions.

At another company, an Asian bank, the head of intelligent automation was an enthusiast for agents. He said, “We can build agents in 3 months and replace ¾ of the team!” However, his colleague, who also worked in business process improvement but had a change management orientation, commented, “Our processes are so complex that if you eliminate people, you will break a lot of things.”

These experiences taught us a crucial lesson: **the success of AI agent deployments depends as much on people as it does on technology**. People will implement the agentic systems, monitor their performance, fix their mistakes, identify what went wrong, and try to fix them—or resist doing all of these important tasks.

There are multiple human aspects to successfully implementing agentic AI. One, of course, is the human leadership that drives and funds the process and makes critical decisions throughout. We’ll describe those in the next chapter. Another is the detailed design of work: what will the agents do, and what role will humans play? Finally, there is change management—ensuring that human employees accept, understand, and can play a role in the transition to agents as colleagues.

Designing Work for Agents and Humans

Let’s be realistic. One major appeal to companies in pursuing AI agents is a lower requirement for human labor and interventions. We were all dazzled by generative AI when it became popular in late 2022, but many organizations found that with human prompting and editing of outputs, there wasn’t the productivity improvement they hoped for.

CHAPTER 11

SCALING AI AGENTS: FROM VISION TO REALITY

The Right Scaling Approach

From Rules to Reasoning: Scaling AI Agents in the Enterprise

The conference room fell silent as we displayed the final numbers from our pilot implementation. The Level 3 AI agent had successfully processed over 10,000 customer service requests in just two weeks, achieving an accuracy rate that exceeded our human baseline. The executive team leaned forward, clearly impressed. Then came the question we'd been anticipating: "Great results. How do we scale this across the entire organization?"

This scene, which unfolded at a Fortune 500 insurance company we worked with last year, highlights both the immense potential and the inherent challenges of scaling AI agents across an enterprise. While individual pilot successes are increasingly common, very few organizations have managed to extend their AI agent implementations beyond isolated use cases.

Our research reveals a striking statistic: fewer than 1% of companies piloting Level 3 AI agents successfully deploy them at scale. This mirrors the situation we encountered 7–10 years ago with the emergence of intelligent automation (Level 2 agents). At that time, organizations faced similar hurdles in scaling their initiatives.

Given that no company has yet established a proven framework for scaling Level 3 AI agents, we will draw from past experiences and current, albeit limited, observations to outline the optimal approach.

The Foundation: Understanding Where to Start

When we first began working with this global insurance company, the leadership team was eager to jump straight into deploying AI agents across their entire claims processing operation. Their enthusiasm was understandable—the pilot results were compelling. However, we'd seen this movie before.

"Before we talk about scaling," we told them, "let's discuss what happened with your RPA implementation three years ago." The CIO shifted uncomfortably in his chair. Their previous attempt to scale automation had stalled after initial successes, leading to what one executive called "a graveyard of broken bots."

Finding the Right Opportunities

Rather than making assumptions from the top down, we took a grassroots approach, spending six weeks embedded with various departments across the organization. "We need to understand where people are actually spending their time, not where we think they're spending it," we explained to the executive team.

We conducted structured interviews with over 50 team leaders and employees across claims, customer service, underwriting, and operations. These weren't just formal meetings—we sat with employees, observed their daily work, and listened to their

CHAPTER 12

CASE STUDY AND USE CASES OF AGENTS ACROSS INDUSTRIES

As we conclude our exploration of practical AI agent implementation, this chapter brings together everything we've learned about change management, scaling, and execution through two powerful lenses. First, we dive deep into Pets at Home's transformative journey, which exemplifies how organizations can successfully implement AI agents at scale while maintaining their essential human touch. Then, we examine a diverse collection of use cases across industries and functions that demonstrate the versatility and impact of AI agents in real-world settings. These examples aren't just success stories—they're blueprints for your own transformation journey, offering practical insights and proven approaches that you can adapt for your organization.

Case Study: Pioneering Enterprise AI Agent Transformation: Pets at Home

In the rapidly evolving landscape of enterprise AI transformation, we're particularly excited to share the story of Pets at Home, which we consider one of the global pioneers in implementing agentic AI at scale. Their achievements speak volumes—from an ambient digital scribe that transcribes veterinary consultations with 99.6% accuracy to autonomous agents that have revolutionized fraud detection across their retail operations. Under the visionary leadership of Simon Ellis, their Head of AI Transformation and Enterprise Architecture, the company has embarked on a first-of-its-kind transformation that is setting new standards for how enterprises can leverage AI agents.

As the UK's largest pet care company, with approximately 450 retail stores, 450 veterinary practices, and a comprehensive grooming service that handles 17,000 pets weekly, Pets at Home's journey offers valuable insights into the practical implementation of enterprise-wide AI agent systems.

The Challenge: Unifying a Complex Enterprise

When Ellis joined Pets at Home, he faced a challenge common to many large enterprises: operational silos. The company's various business units—retail stores, veterinary practices, grooming services, and online operations—operated independently, creating disconnected experiences for both customers and employees. With over 8 million customers in their Pets Club program and data on 10 million pets, Ellis recognized an enormous opportunity to leverage this information more effectively across their organization.

Strategic Vision: Beyond Simple Automation

What sets Pets at Home's transformation apart is its bold vision for transversal AI agents. Rather than viewing AI implementation

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PART 5

FUTURE HORIZONS FOR WORK AND SOCIETY

As we've journeyed together through the practical realities of implementing and scaling AI agents, a larger question has been taking shape: What happens when this technology becomes ubiquitous? Having explored how to build AI agents (Part 3) and transform organizations with them (Part 4), it's time to lift our gaze to the horizon and consider the profound implications for how we work, learn, and live.

This isn't idle speculation. Throughout our experience implementing agentic AI, we've witnessed firsthand how these technologies reshape not just processes but people's lives—sometimes in ways nobody anticipated. What began as automation projects often evolved into a fundamental reimaging of work itself. The changes we're discussing aren't decades away; they're already emerging in organizations around the world.

Our goal in Part 5 isn't to predict the future with certainty—no one can do that. Instead, we aim to help you think systematically about the choices before us, both individually and collectively. The future of work and society in the age of AI agents isn't predetermined; it will be shaped by the decisions we make today about how to develop, implement, and govern these technologies.

CHAPTER 13

THE NEW WORLD OF WORK

Work Reimagined: The Symphony of Human and Machine

In our years of consulting and research, we've witnessed countless strategy meetings, but what we observed at a global real estate company in early 2025 was truly remarkable. Tara, a senior project manager, wasn't just sharing updates with her team—she was orchestrating a sophisticated collaboration between human creativity and artificial intelligence. While an AI agent analyzed project data and identified risks in real-time, Tara's uniquely human abilities—what we call “Humics”—enabled her to interpret these insights through the lens of team dynamics, client relationships, and broader business impact.

“What’s fascinating,” Tara reflected, “isn’t that AI can handle complex analysis—it’s how developing our distinctly human capabilities has allowed us to create something greater than either humans or AI could achieve alone.”

This observation deeply resonated with us. Through our work, we've come to a profound realization: the future belongs not to AI alone but to this powerful symphony of human and machine capabilities.

The Evolution of Human-Agent Collaboration

From our experience, we've observed a fascinating progression in human-agent collaboration. What's most striking to us is how this evolution has unfolded across distinct levels of sophistication. At Level 1, we saw basic rule-based automation—the kind that could handle repetitive tasks but required explicit programming. Level 2 brought intelligent automation, where AI could handle more complex scenarios using machine learning but still within confined parameters.

The real transformation began with Level 3 agentic workflows. These AI systems could understand context, reason with sophistication, and orchestrate complex processes. This is where we saw the first genuine examples of human-agent collaboration, where AI wasn't just a tool but a partner in problem-solving.

One of our most compelling experiences came from a manufacturing company we worked with—a transformation that still excites us when we share it. Their journey perfectly illustrates what we believe is the natural evolution of human-agent collaboration. They started with basic robotic process automation for inventory management (Level 1), progressed to AI-powered demand forecasting (Level 2), and finally implemented a Level 3 agentic system that could autonomously manage their entire supply chain, adapting to disruptions and optimizing operations in real-time. The human workforce didn't disappear—it evolved to focus on strategic decisions and oversight while the AI handled operational complexities.

Consider how work is being reimagined across different sectors:

CHAPTER 14

SOCIETY IN THE AGE OF AGENTS

Reimagining Human Potential in an Agent-Powered World

The first question people ask when confronting the rise of AI agents is often about jobs—will they take mine? But perhaps we’re asking the wrong question. What excites us most is a different possibility: what if, instead of threatening our livelihoods, the emergence of autonomous agents offers us something revolutionary: the opportunity to fundamentally reimagine what it means to be human in the modern world?

The End of Work as We Know It?

Let’s begin with what we consider an uncomfortable but necessary truth: much of today’s work is deeply unfulfilling. We’ve seen this firsthand in organization after organization, and the data confirms our observations. According to extensive Gallup research, a staggering 77% of employees worldwide

report feeling disengaged from their work.²⁰¹ What breaks our hearts is hearing how they describe their daily tasks as repetitive, tedious, and ultimately unrewarding. One particularly striking example we've encountered is that in the United States alone, over 1.5 million people spend their days performing repetitive bookkeeping and accounting tasks that drain rather than fulfill.²⁰²

But what truly alarms us is that work isn't just unfulfilling—it's literally killing us. The statistics we've uncovered are shocking: The International Labour Organization reports that work-related stress and resulting illnesses lead to nearly 3 million deaths annually,²⁰³ with a societal cost of approximately \$3 trillion.²⁰⁴ To help grasp the magnitude of this crisis, consider that twice as many people die from work-related causes as from road accidents,²⁰⁵ and ten times more than from war.²⁰⁶ We've become convinced that the current system simply isn't sustainable.

Through our work implementing AI solutions across industries, we've witnessed how AI agents progress through increasing

²⁰¹ Gallup, 2024. "State of the Global Workplace: 2024 Report," <https://www.gallup.com/workplace/349484/state-of-the-global-workplace.aspx>

²⁰² U.S. Bureau of Labor Statistics, 2024. "Bookkeeping, Accounting, and Auditing Clerks," Occupational Outlook Handbook. <https://www.bls.gov/ooh/Office-and-Administrative-Support/Bookkeeping-accounting-and-auditing-clerks.htm>

²⁰³ ILO (International Labour Organization), 2023. "Nearly 3 million people die of work-related accidents and diseases," <https://www.ilo.org/resource/news/nearly-3-million-people-die-work-related-accidents-and-diseases>

²⁰⁴ Dietmar Elsler, Jukka Takala, and Jouko Remes, 2019. "An International Comparison of the Cost of Work-Related Accidents and Illnesses," European Agency for Safety and Health at Work (EU-OSHA). https://osha.europa.eu/sites/default/files/2021-11/international_comparison-of_costs_work_related_accidents.pdf

²⁰⁵ World Health Organization (WHO), 2023. "Road Traffic Injuries," <https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries>

²⁰⁶ Ben Knight, 2023. "Global Conflicts: Death Toll at Highest in 21st Century," <https://www.dw.com/en/global-conflicts-death-toll-at-highest-in-21st-century/a-66047287>

CONCLUSION

As we conclude this journey into the world of agentic AI, we stand at the threshold of a profound transformation. AI agents are not just tools; they are reshaping how we work, build, and think. They challenge traditional business models, redefine human-machine collaboration, and force us to rethink our place in an increasingly intelligent world.

Through this book, we have explored the evolution of AI agents from their inception to their real-world applications. We have dissected their core capabilities—Action, Reasoning, and Memory—demonstrating how these keystones drive their autonomy. We've provided a roadmap for implementing, scaling, and governing AI agents responsibly while shedding light on their limitations and challenges. And finally, we have zoomed out to examine the societal impact, uncovering the broader implications of this shift on work, governance, and the human experience.

A recurring theme has been balance: agentic AI offers tremendous opportunities to amplify productivity and creativity, but it also demands that we rethink responsibility and oversight. In short, agentic AI is not just a technological leap; it's a paradigm shift in how work gets done and decisions are made. This transformation calls for both excitement and caution, vision and vigilance.

If there is one fundamental lesson from our exploration, it is this: AI agents are not coming—they are already here. The

organizations and individuals who embrace them, refine them, and integrate them effectively will shape the next era of economic and technological progress.

The Next Horizon: Emerging Capabilities

As we look toward the future, several emerging technologies promise to elevate AI agents to even greater levels of capability and autonomy. Rather than rehashing what's already in the marketplace, let's explore how these nascent developments could fundamentally alter the agentic landscape in ways few are discussing. We are particularly fascinated by three new trends.

Large Action Models (LAMs)

Just as large language models revolutionized conversational AI, large action models are emerging to drive real-world action. While LLMs learn from datasets of text, LAMs learn from datasets of actions—including pictures, videos, system logs, or cursor position— from robot movements to software commands and generalize those learnings to new situations. Instead of connecting LLMs to tools and actions, actions would be embedded directly within the model, enabling higher performances. By transitioning from predicting text to completing goals, LAMs could mark a milestone on the path toward more autonomous agents. Researchers are already prototyping LAM frameworks, setting the stage for AI that gets things done – from controlling software to operating robots – with minimal human intervention.²²¹ Where today's agents require extensive prompting and tool configuration, tomorrow's LAMs might simply watch a human perform a task once before replicating and optimizing it across multiple contexts. This shift

²²¹ Lu Wang, et al., 2025. “Large Action Models: From Inception to Implementation,” <https://arxiv.org/abs/2412.10047>

MORE RESOURCES ON AGENTIC AI

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Pascal Bornet is an award-winning expert, author, and keynote speaker on Artificial Intelligence and Automation. He has received multiple awards and is regularly ranked among the top 10 global AI and Automation experts. He is also an influencer with over two million social media followers.



Bornet developed his expertise over more than two decades as a senior executive at McKinsey and EY, where he established and spearheaded their “Intelligent Automation” practices. During this time, he implemented AI and Automation initiatives for hundreds of organizations worldwide, driving transformative change across industries.

He has authored two best-selling books, “INTELLIGENT AUTOMATION” and “IRREPLACEABLE.” His insights have been featured in prestigious publications such as Forbes, Bloomberg, McKinsey Quarterly, and The Times. He is also a lecturer at several universities, a member of the Forbes Technology Council, and a Senior Advisor for several startups and charities.

For the past 20 years, Bornet's research has focused on the intersection of AI and Humans, where he believes the most significant value lies. He is a fervent advocate for human-centric AI and believes that with the right approach, AI can make our world more human.

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Professor Jochen Wirtz is Vice Dean MBA Programmes and Professor of Marketing at the National University of Singapore. He is a leading authority on service management with more than 200 publications. His over 20 books include Intelligent Automation: Learn How to Harness Artificial Intelligence to Boost Business & Make Our World More Human (2021), Services Marketing: People, Technology, Strategy (9th edition, 2022), and Essentials of Services Marketing (4th edition, 2023). With translations and adaptations for over 26 countries and regions, and combined sales of over 1 million copies, they have become globally leading services marketing textbooks.

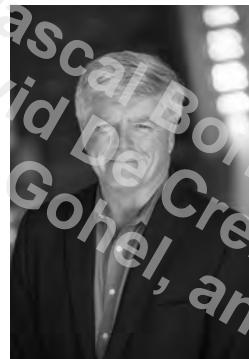
In addition to his publications, Prof. Wirtz has been recognized as one of the 86 highly cited researchers in economics and business in 2023 (Web of Science). This distinction places him among the world's most prominent researchers, as highlighted by the Highly Cited Researchers 2023 (list published by data analytics firm Clarivate). This recognition underscores his profound impact on both academic research and managerial practice. Prof. Wirtz's ongoing contributions ensure that he

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Thomas H. Davenport

Tom Davenport is the President's Distinguished Professor of Information Technology and Management at Babson College, a Fellow of the MIT Initiative on the Digital Economy, and a Senior Advisor to Deloitte's Chief Data and Analytics Officer Program. In 2024-5 he is the Bodily Bicentennial Professor of Analytics at the UVA Darden School of Business. He pioneered the concept of "competing on analytics" with his best-selling 2006 *Harvard Business Review* article and his 2007 book by the same name.



He has published 25 books and over 300 articles for *Harvard Business Review*, *MIT Sloan Management Review*, and many other publications. His most recent book is *All Hands on Tech: The AI-Powered Citizen Revolution*, co-authored with Ian Barkin. He writes columns for *Forbes*, *MIT Sloan Management Review*, and the *Wall Street Journal*.

He has been named one of the world's "Top 25 Consultants" by *Consulting* magazine, one of the top 3 business/technology analysts in the world by *Optimize* magazine, one of the 100 most influential people in the IT industry by Ziff-Davis magazines, and one of the world's top fifty business school professors by *Fortune* magazine. He's also been a LinkedIn Top Voice for both the education and tech sectors.

David De Cremer



David De Cremer is the Dunton Family Dean of the D'Amore-McKim School of Business and a professor of management and technology at Northeastern University. He is the founder of the Centre on AI Technology for Humankind (AiTH) in Singapore, a member of EY's advisory board for global AI and an honorary fellow at Cambridge University and St. Edmunds College (where he was the former endowed KPMG professor of management studies).

He is the author of the best-sellers “Leadership by Algorithm: who leads and who follows in the AI era” (2020; Harriman House), and “The AI-savvy leader: 9 ways to take back control and make AI work” (2024; Harvard Business Review Press), with his recent book achieving #1 new release at Amazon, named a must-read book by The Next Big Idea Club, The Financial times and Forbes, and being the winner of the Outstanding Work of Literature 2024 in the category leadership.

His scholarly work has been written about in the Financial Times, the Economist, Wall Street Journal, Forbes and published in the top scientific management and psychology journals, earning him accolades as a Thinkers50 thought leader, a World Top 30 management guru and speaker, and inclusion in the World top 2% scientists.

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Brian Evergreen

Brian Evergreen is one of the most respected voices on strategy and AI as a leading author, advisor, and speaker.

Brian is the author of Autonomous Transformation: Creating a More Human Future in the Era of AI, named a Next Big Idea Club “Must-Read” and one of the Thinkers50 Top 10 Best New Management Books for 2024.

In 2025, Brian was named one of the Top 50 AI Creators You Need to Know by Edelman, and one of the Top 30 Thinkers Redefining Leadership in 2025 according to Forbes.

Brian’s insights draw from his personal experience at leading companies, including Accenture, AWS, and Microsoft. When he’s not giving keynotes or advising companies on AI, Brian guest lectures at the Kellogg School of Management, sharing the unconventional and innovative methods and frameworks he’s developed, which have supported over \$20B of investment.

Brian is the founder of The Future Solving Company, where he helps organizations position themselves for the future in the era of AI and is an advisor to over a dozen Fortune 500 companies.

His work has been featured on Bloomberg, Forbes, Fast Company, CIO, VentureBeat, the Next Big Idea Club, and Thinkers50.

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Phil Fersht



Phil Fersht is widely recognized as the world's leading analyst focused on re-inventing business operations to exploit AI innovations and the globalization of talent. He recently coined the term "Services-as-Software" to describe the future of professional services where people-based work is blurring with technology. He also trademarked the term "Generative Enterprise™" in 2023.

His reputation drove him to establish HFS Research in 2010, which today is one of the leading industry analyst and advisory firms and the undisputed leader in business and tech services and process technologies research.

In 2012, he authored the first analyst report on Robotic Process Automation (RPA), introducing this topic to the industry. He is widely recognized as the pioneering analyst voice that created and inspired today's RPA and process AI industry.

Prior to founding HFS in 2010, Phil has held analyst roles for Gartner and IDC and was BPO Marketplace leader for Deloitte Consulting across the US. Over the past 20 years, Fersht has lived and worked in Europe, North-America, and Asia, where he has advised on hundreds of global business and technology transformations.

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Rakesh Gohel

Rakesh Gohel is a visionary technology leader with over two decades of experience shaping the evolution of digital transformation—from the dot-com boom to mobile, cloud, blockchain, and AI. Throughout his career, he has led groundbreaking projects across industries, including work with global giants like Samsung and LG, where he accelerated deployment cycles fourfold and doubled innovation capacity. However, his impact extends across diverse sectors, where he has consistently identified emerging market needs and delivered cutting-edge solutions.



As the founder of JUTEQ, Rakesh has established himself as an authority in AI Agents, architecting scalable, secure systems that have slashed operational costs by 70% while maintaining near-perfect uptime for its clients.

Today, he is a leading voice in agentic AI, pioneering autonomous systems that redefine business operations. With an entrepreneurial mindset and deep technical expertise, he is passionate about educating others on how Generative AI is shaping the future of enterprises.

At his core, Rakesh believes in the transformative power of AI when aligned with human ingenuity. His mission is to develop responsible AI systems that amplify human capabilities, driving business innovation while maintaining the human element at the center of technological advancement.

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Shail Khiyara



Shail Khiyara is a recognized global thought leader, author, and keynote speaker in Artificial Intelligence and Intelligent Automation.

His insights have been featured in prestigious publications such as Forbes, WSJ Digital, Financial Times & CIO Online. He serves on the Board of several AI companies

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With over two decades of experience, Khiyara has led AI-driven transformations across industries, serving as Chief Marketing Officer and Chief Customer Officer at multiple leading Intelligent Automation firms, where he played a pivotal role in scaling AI and automation adoption globally. Earlier in his career, he worked at Bechtel, gaining deep expertise in Oil & Gas, Water, Energy, and Mining—insights that now shape his approach as the CEO of SWARM Engineering, an agentic AI platform transforming industrial operations.

Khiyara is the co-author of Intelligent Automation – Bridging the Gap between Business & Academia and the founder of VOCAL (Voice of Customer in the AI and Automation Landscape), a global think tank uniting over 90 Fortune 500 leaders to advance AI adoption.

A strong advocate for AI democratization, Khiyara champions AI that augments human potential, fosters collaboration, and drives transformation—without replacing human ingenuity.

Learn more about Shail at: www.linkedin.com/in/shailkhiyara

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