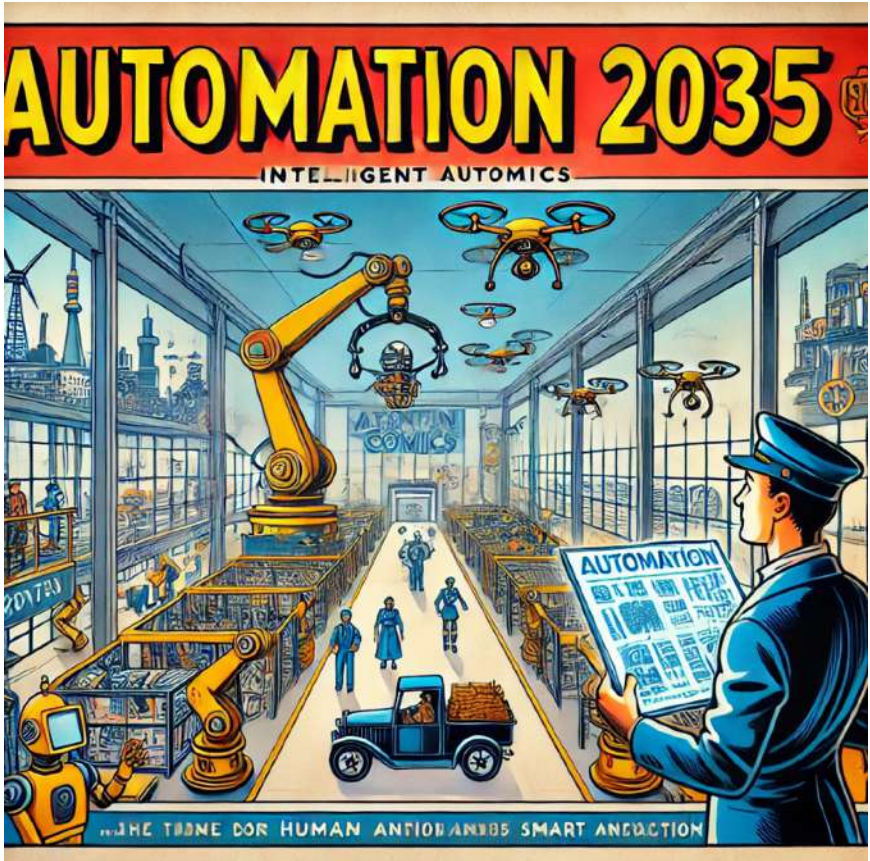


# AUTOMATION 2035



ARSHAD HISHAM

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Arshad Hisham

[www.arshadhisham.com](http://www.arshadhisham.com)



## **Dedication**

*To the epic tales and boundless universes that ignited my imagination, this series is dedicated to the visionary worlds of Battlestar Galactica, Isaac Asimov's Foundation series, and Star Trek.*

*Your narratives have not only entertained but have also inspired countless hours of daydreaming and late-night musings about AI, space exploration, and the future of humanity.*

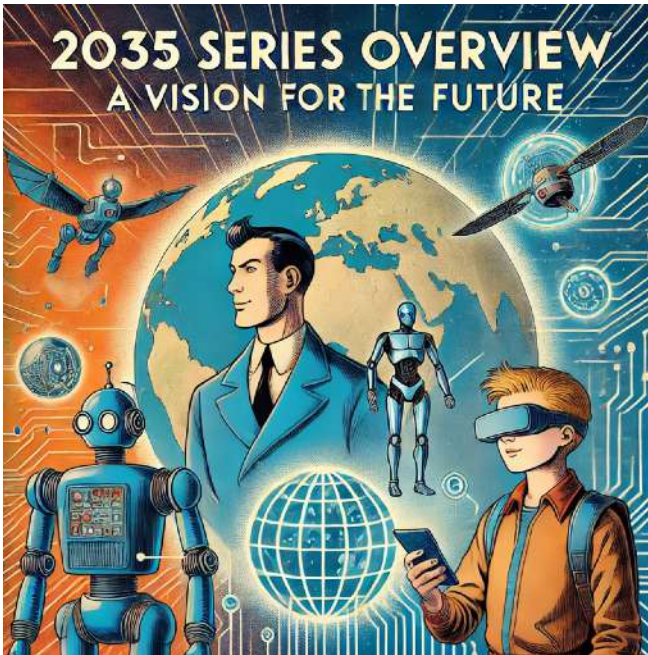
*Your intricate world-building has taught me that no detail is too small, no plot twist too grand. May this series honor your legacy and spark the same curiosity and wonder in others that you have kindled in me.*

*To my incredible family—my wife, whose patience and support know no bounds, even when I rambled about Cylons and warp drives; my children, whose questions about robots and space made bedtime stories an adventure of their own and sometimes more complicated than a quantum physics lecture; my parents, for encouraging my love of science fiction from a young age and not minding when I turned the living room into a command center; and my in-laws, for always cheering me on, even when I explained the plot of my latest book at family dinners. A special shout-out to my friends and the brilliant minds at InGen Dynamics—thank you for tolerating my endless geeky references, my tendency to speak Klingon during meetings, and for being my partners in turning sci-fi dreams into reality.*

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# THE 2035 SERIES: A VISION FOR THE FUTURE

## Introduction: Envisioning 2035



By 2035, the fabric of daily life was unrecognizable to anyone who had lived through the early years of the 21st century. The convergence of artificial intelligence, robotics, automation, and reimagined education systems had turned

the ordinary into the extraordinary. Yet, this future was not born from the seamless implementation of technology alone. It had emerged from years of debate, trial, and error—a battle between innovation and the preservation of humanity’s most vital qualities.

Picture this: in a remote Kenyan village, Amina places a lightweight augmented reality headset on her daughter, who is eager to begin her virtual lesson on the ancient civilizations of Mesopotamia. Thousands of miles away in Silicon Valley, a robotics engineer named Aaron remotely supervises an AI-driven manufacturing plant in Kuala Lumpur, watching in real-time as robotic arms assemble intricate components faster and more precisely than any human team ever could. Meanwhile, deep in Antarctica, a fleet of autonomous drones collects climate data, predicting patterns that could mitigate the devastating effects of global warming.

In many ways, the story of 2035 is one of connection—between humans, between nations, and between humanity and the intelligent systems we’ve built to assist us. But that connection wasn’t always smooth. To appreciate the world of 2035, one must first rewind to the inflection points that defined its trajectory. These moments were marked not by technological marvels alone, but by the choices humanity made in response to them.

## **Historical Turning Points: The Road to 2035**

The seeds of this new world were planted in the 20th century. In 1961, General Motors introduced Unimate, the first industrial robot, into its assembly line. It was an unwieldy, clunky machine by modern standards, yet it symbolized a fundamental shift: machines that didn’t just assist humans but began to replace them in repetitive, hazardous tasks.

By 2011, IBM's Watson made headlines for defeating two human champions on the quiz show Jeopardy! This wasn't merely an entertainment spectacle. It was a moment when artificial intelligence demonstrated its ability to process and understand vast amounts of unstructured information, laying the groundwork for the AI revolution of the following decades.

Then came 2023, a year that historians would later call the "Generative Leap." OpenAI's language models, Google's DeepMind advancements, and breakthroughs in generative design allowed machines to create in ways previously thought to be uniquely human. These developments didn't just enhance industries; they redefined what machines—and by extension, humans—were capable of.

But for all the promise these innovations brought, they also highlighted the tensions inherent in rapid technological change. By 2025, debates about AI governance, the role of automation in job displacement, and the ethical dilemmas surrounding autonomous systems had reached a fever pitch.

In the United States, for example, the introduction of self-driving freight vehicles sparked protests across the trucking industry, displacing hundreds of thousands of drivers. In India, an experimental AI-led irrigation system saved millions of gallons of water during one of the country's worst droughts, proving how automation could solve global challenges.

And in Japan, where an aging population strained social systems, humanoid robots filled roles as caregivers, offering companionship and support to the elderly. These events were not isolated—they were snapshots of a world adapting to forces that simultaneously empowered and challenged it.

## **The Four Pillars of the 2035 Series**



This book series delves into four interlocking areas where the most profound transformations unfolded: artificial intelligence, automation, robotics, and education. Each area brought unique challenges, yet their integration defined the story of humanity's future.

## **Artificial Intelligence: The Brain of the Future**

AI became the brain powering industries, homes, and even individual lives. It analyzed patterns in everything from healthcare to climate change, offering solutions that were as precise as they were scalable.

## **Automation: Efficiency Redefined**

Automation eliminated drudgery but also transformed the very concept of work. By 2030, over 50% of the world's agricultural output was managed by AI-driven systems. Yet, this efficiency came with trade-offs. In rural Kansas, farmers who once toiled in fields now monitored drone fleets from control hubs. Their pride in production was tempered by a longing for the tactile connection they once had with their land.

## **Robotics: Partners and Pioneers**

Robots didn't just fill gaps in labor; they explored frontiers humans couldn't. From the deep seas to the surface of Mars, robots acted as our hands and eyes in places we could not go. Yet, their presence also raised questions. When an autonomous rover made a critical error during a Europa mission in 2029, it sparked a global debate about accountability in robotic decision-making.

## **Education: Learning Reimagined**

Education became the linchpin of adaptation. By 2035, immersive AR and VR classrooms brought the world's knowledge to every corner of the globe. A child in Guatemala could explore the Pyramids of Giza alongside a classmate in Singapore, yet disparities remained. The digital divide persisted, and debates over data privacy in AI-driven education systems underscored the need for vigilance.

## **The Human Element: Why This Series Matters**

While these advancements may sound like the triumph of machines, they are, at their core, a testament to humanity's resilience and adaptability. This series isn't just about technology; it's about the people who shape and are shaped by it. It's about Priya, an AI ethicist in Mumbai, who fights to ensure that algorithms reflect diverse perspectives. It's about Miguel, a mechanic in Mexico City, who reinvents himself as a renewable energy technician at 52. And it's about Aisha, a teenager in Nairobi, who learns to navigate a globalized world through the lens of a virtual reality headset.

At its heart, the 2035 Series is a story of choice. As machines become more intelligent, humans must decide how to wield this power responsibly. Will we use AI to heal divisions or deepen them? Will robots amplify human creativity or replace it? And will automation free us from toil or alienate us from purpose?

By exploring these questions through narrative and analysis, the 2035 Series invites readers to imagine a future that is not preordained but shaped by the decisions we make today. It is a journey into the possibilities of tomorrow, grounded in the realities of our shared humanity.

## WHY THE AUTHOR HAS COME UP WITH THIS BOOK

### Why This Book, Why Now

In 2035, the world stands at the crossroads of extraordinary technological evolution and the enduring need for human-centered progress. Arshad Hisham, an innovator, entrepreneur, and thought leader, has spent decades navigating these crossroads, shaping a future where artificial intelligence, automation, robotics, and education converge.

The ideas in this book are not simply projections of what could be; they are the result of hard-earned experience, ethical reflection, and an unyielding drive to align innovation with humanity's greatest challenges.

Arshad's story begins not in the gleaming tech campuses of Silicon Valley but in the vibrant yet complex landscapes of the Middle East and India. Growing up in environments that straddled traditional cultures and emerging modernity, he understood early on how technology could be both a bridge and a barrier. This duality has driven his career: from the assembly lines of Toyota to the research labs of IBM, from government initiatives in Australia to founding InGen Dynamics, a company at the forefront of AI and robotics.

This book is an invitation to explore the transformative power of these technologies while grappling with their societal

implications. Drawing inspiration from milestones like the launch of the Unimate robot in 1961, which heralded the automation of industry, and IBM Watson's victory on Jeopardy! in 2011, which showcased the potential of machine intelligence, Arshad dives deep into the breakthroughs, setbacks, and ethical dilemmas that have defined this century of innovation.

But this is more than a retrospective. It's a roadmap for navigating the world ahead. As someone who has negotiated multi-million-dollar exits, built startups from scratch, and advised some of the most forward-thinking organizations globally, Arshad writes not as a theorist but as a practitioner. His unique lens blends visionary foresight with a deep understanding of the ground realities faced by educators, policymakers, business leaders, and everyday citizens.

Arshad believes that artificial intelligence is more than a tool; it is a mirror reflecting humanity's values, biases, and aspirations. This belief underpins the ethos of the book: technology must not only advance; it must advance responsibly. Through narratives of breakthroughs—such as the 2024 debut of Tabletop Aido, a robot designed to address labor shortages—and anecdotes of collaboration, such as his work with underserved communities to democratize technology, Arshad paints a future that is both inspiring and cautionary.

## **A Vision Rooted in Humanity**

Arshad's work reflects an unwavering commitment to the idea that technology should empower, not alienate. This principle extends to his work in education. When the pandemic of the early 2020s forced a rapid shift to online learning, Arshad saw both the potential and the pitfalls of virtual education. He developed Futureonauts, a curriculum that reimagines how engineering students learn AI and robotics. Taught at top universities worldwide, the program

emphasizes not just technical skills but the ethical considerations necessary for responsible innovation.

What drives Arshad's vision is a simple but profound belief: that technology should serve the many, not the few.

This philosophy has informed his work with communities in rural India, where he championed projects to bring affordable automation to small-scale farmers. By integrating AI with traditional farming practices, these projects didn't just boost yields—they preserved livelihoods and cultural heritage.

### **Bridging the Gap Between Vision and Action**

For all the optimism in this series, it is not blind to the challenges. The rise of AI and automation has been accompanied by significant disruptions.

One of the book's central themes is accessibility. Arshad critiques the stark inequalities in technological access, which became glaringly evident during the pandemic. While children in affluent cities learned through AR and VR classrooms, students in underserved regions struggled with basic internet connectivity. His advocacy for equitable education isn't theoretical—it's grounded in his projects to deploy learning hubs in parts of Sub-Saharan Africa and South Asia.

## PROLOGUE: THE RISE OF AUTOMATION'S ERA

The year was 2035, and the rhythm of human activity had shifted irrevocably. Cities pulsed with silent efficiency, their arteries fed by autonomous delivery systems that moved goods with algorithmic precision. Factories, once defined by the clamor of human labor, now operated under the hum of collaborative robots—machines capable of anticipating and adjusting to the needs of their human counterparts. Farms, once dependent on human intuition and effort, were managed by drones that mapped soil health, water distribution, and crop vitality, ensuring every resource was used to its fullest.

This was not the automation of science fiction, filled with fantastical machines and dystopian overlords. It was an automation that had quietly woven itself into the fabric of daily life. Yet, as the world adapted to its newfound efficiency, questions arose that cut to the core of human identity and purpose. What did it mean for farmers to no longer touch the soil they cultivated? For factory workers to manage processes from behind a screen rather than on the assembly line? And, most crucially, how could society ensure that this automation uplifted all, rather than deepening the divides that had long plagued humanity?

Automation had not emerged overnight. Its roots stretched back to the Industrial Revolution, a time when steam engines and mechanized looms began to reshape economies and societies. By the mid-20th century, the advent of computerization had accelerated these changes, introducing programmable logic controllers and numerical control machines that hinted at the potential of fully autonomous systems. The 21st century brought the tipping point. Advances in artificial intelligence and machine learning transformed automation from rigid, rule-bound systems into adaptable, intelligent collaborators.

One defining moment occurred in 2012, when deep learning—a branch of AI inspired by the structure of the human brain—achieved a breakthrough. Geoffrey Hinton and his team demonstrated that neural networks could outperform traditional algorithms in recognizing images, setting the stage for automation that could “see,” “hear,” and “understand.” By 2025, these systems had left the research labs and entered the mainstream, revolutionizing industries as diverse as logistics, healthcare, and entertainment.

The stories of individuals caught in this tidal wave of change reveal both the promise and peril of automation. Lucas, a logistics manager in Hamburg, monitored an automated warehouse from his small apartment, marveling at the system’s ability to predict demand and reallocate resources in real time. Yet, he couldn’t help but notice the growing unease among his human colleagues, many of whom felt their roles had been reduced to monitoring the very machines that had replaced their skills.

In Iowa, Jasmine, a fourth-generation farmer, worked alongside drones that analyzed her fields with more precision than any human ever could. She appreciated the technology’s ability to optimize her yields but missed the connection she had once felt to the land. “It’s strange,” she often said, “to be a farmer without farming.”

And in Mumbai, Naresh operated a fully automated recycling plant that could sort, categorize, and repurpose waste with astonishing accuracy. But even as he marveled at the plant's efficiency, he worried about the growing energy demands of such systems—an irony not lost on those who had embraced automation as a solution to environmental challenges.

This book is an exploration of this critical moment in history. Through the eyes of those living and working in the era of automation, it examines the societal, ethical, and philosophical questions that arise when machines take on roles traditionally held by humans. It is a story of adaptation, resistance, and innovation, and it asks one central question: How can we harness the power of automation to elevate humanity without eroding the very qualities that make us human?

The rise of automation's era is not merely a technological transformation; it is a profound reimagining of work, creativity, and purpose. The decisions made today will shape not only industries but also the very fabric of society. In these choices lies the essence of what it means to be human in a world increasingly shaped by machines.



## FOREWORD: WHY THIS BOOK, WHY NOW

As the calendar turned to 2035, the world found itself at a crossroads. Automation had become so seamlessly integrated into daily life that its presence often went unnoticed. Cars drove themselves, machines produced goods with minimal human intervention, and drones delivered packages faster than most people could imagine needing them. Yet, for all its ubiquity, automation remained a subject of intense debate—celebrated for its efficiency and criticized for its disruption.

This book seeks to demystify automation, peeling back the layers to explore how it is reshaping industries, communities, and individual lives. It is not a book about robots or algorithms; it is a book about people. The farmer whose livelihood depends on drones. The teacher adapting to classrooms enriched by artificial intelligence. The factory worker navigating a new role alongside collaborative robots.

Why now? Because the pace of change is accelerating, and the decisions we make today will determine the trajectory of automation for decades to come. The 2020s saw the proliferation of AI-driven systems that outperformed humans in specialized tasks, from diagnosing diseases to optimizing supply chains. These advancements brought remarkable

benefits, but they also exposed gaps in governance, ethics, and equity.

For instance, when Amazon first introduced fully automated warehouses, the efficiency gains were undeniable, but so were the human costs. Workers reported being treated as extensions of machines, expected to match the relentless pace of their automated counterparts. In 2023, a warehouse protest in Alabama highlighted these tensions, forcing companies to reckon with the human impact of their technological ambitions.

The foreword to this book is both a call to action and an invitation. It invites readers to explore the complexities of automation, to celebrate its potential while confronting its challenges. It calls on policymakers, technologists, and citizens to engage in thoughtful dialogue about how automation can serve humanity rather than divide it.

This is not just a book about technology; it is a book about our shared future. About how we choose to integrate, regulate, and live alongside machines that are not merely tools but collaborators. It is a story of hope, caution, and the enduring quest to balance progress with purpose.

The time to engage with these questions is now. The era of automation is not on the horizon—it is here. And its story is ours to write.

## CHAPTER 1: THE AUTOMATION LANDSCAPE IN 2025

### **Maria and Her Robotic Colleague**

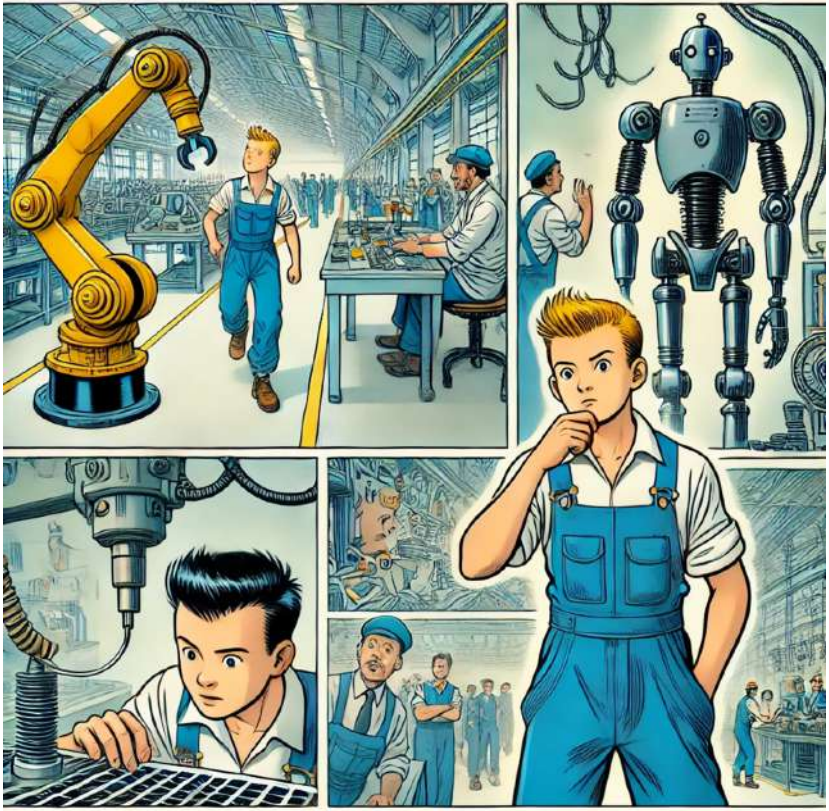
The factory floor had always been Maria's second home. Its sounds were a symphony she knew intimately: the rhythmic clatter of conveyor belts, the hum of machinery, and the occasional bark of a foreman giving directions. But today, that harmony felt disrupted, overlaid with something new—a sleek, mechanical precision embodied by Axel, the newest addition to the assembly line.

Maria paused to wipe her hands on her oil-stained overalls, her gaze fixed on the robotic arm a few feet away. Axel moved with unnerving grace, its metallic claws gripping components and placing them with pinpoint accuracy. The robot didn't tire, didn't hesitate, and didn't make mistakes. In

every way, Axel outperformed its human colleagues—except when something went wrong.

That afternoon, a circuit board jammed in the machinery. Axel's sensors blinked red, its arm frozen mid-motion. The assembly line ground to a halt. Maria sighed, her hands moving instinctively to the problem. Within seconds, she cleared the jam, adjusted the alignment, and hit the restart button. Axel resumed its flawless performance, but Maria couldn't shake the gnawing question: how long before it learned to fix its own mistakes?

Her supervisor's words echoed in her mind: *"This isn't about replacing anyone. Axel will handle the repetitive stuff so you can focus on the skilled tasks only humans can do."* It sounded reassuring, but Maria had heard similar promises before. As she watched Axel continue its work, she felt both pride in her expertise and a creeping sense of obsolescence.



## The Rise of Automation in 2025

By 2025, automation had become more than a technological buzzword—it was the engine driving global industry. Factories like Maria’s had transformed into “smart factories,” where human workers collaborated with advanced machines in ways that would have seemed like science fiction just a decade earlier. Yet, as these changes unfolded, they brought not only progress but profound challenges.

## Historical Echo: The First Industrial Revolution

The parallels to the Industrial Revolution were striking. In the early 19th century, textile workers known as Luddites

smashed mechanized looms, fearing the machines would render their skills irrelevant. While history often portrays them as anti-progress, their concerns about economic displacement were far from irrational. By the 2020s, a new kind of “automation anxiety” had emerged, not about looms but about algorithms and robots like Axel.

## **Transforming Industries: The Smart Factory Revolution**

Maria’s factory was emblematic of a broader trend. Across industries, automation was redefining how work got done, pushing the limits of efficiency and precision.

### **The Rise of Cobots**

Unlike the industrial robots of the past, which were confined to cages for safety, collaborative robots—or cobots—worked side by side with human workers. Axel, for instance, wasn’t designed to replace Maria entirely. Instead, it handled repetitive, physically taxing tasks, allowing her to focus on more complex problems. Cobots were equipped with advanced sensors and AI that enabled them to adapt to human movements, minimizing accidents and maximizing productivity.

### **Predictive Maintenance**

Maria’s factory also benefited from AI-driven predictive maintenance. Sensors embedded in machinery monitored vibrations, temperature, and wear, feeding data into algorithms that flagged potential failures before they occurred. This approach drastically reduced downtime, saving companies millions of dollars annually.

### **Mass Customization**

Perhaps the most transformative shift was the move toward mass customization. In the past, factories were optimized for large-scale production of identical goods. By 2025, AI had enabled factories to produce personalized products—custom-fit sneakers, tailored furniture, and even bespoke electronics—at the same speed and cost as mass production.

## **Logistics and Warehousing: A Seamless Symphony**

The ripple effects of automation extended beyond the factory floor. Warehouses and supply chains became ecosystems of precision and adaptability.

Autonomous drones zipped through warehouses, picking items and delivering them to packing stations in seconds. Self-driving trucks coordinated with AI logistics systems to optimize delivery routes, cutting fuel consumption and reducing delivery times. In regions like California's Central Valley, where agriculture was a cornerstone of the economy, these technologies revolutionized how produce moved from farm to table.

## **The Human Element: Maria's Dilemma**

Despite these advances, automation was far from a perfect solution. Maria's role on the factory floor had changed dramatically. Tasks that once required her full attention—aligning components, tightening screws—were now handled by Axel with tireless precision. Her job had shifted toward oversight, troubleshooting, and maintenance. While this required a higher level of skill, it also left her feeling disconnected from the tangible work she once loved.

Maria's situation wasn't unique. Across industries, workers faced similar dilemmas. Automation displaced millions of jobs, particularly in sectors like manufacturing, retail, and

transportation. While new roles emerged—programming, AI maintenance, and data analysis—these positions often required specialized training, leaving many workers behind.

## **Challenges and Ethical Questions**

Automation's rise wasn't without its costs. For every efficiency gained, there were complex ethical dilemmas to navigate.

## **Bias in Algorithms**

AI systems reflected the biases of their creators. Hiring algorithms, for example, sometimes excluded candidates based on patterns of historical discrimination, perpetuating inequality in the name of efficiency.

## **Surveillance and Control**

In some workplaces, AI systems were used to monitor employees, tracking productivity with near-omniscient precision. While this boosted output, it also raised concerns about privacy and worker autonomy.

## **Economic Inequality**

The rewards of automation were often concentrated among a few corporations, exacerbating wealth gaps. Smaller businesses, unable to afford the latest technologies, struggled to compete.

## **Historical Echo: The Luddites' Lesson**

In 1811, the Luddites weren't just smashing machines—they were demanding a voice in shaping the future. Their protests highlighted a key lesson: technological progress without social progress breeds conflict. By 2025, this lesson loomed



large. As automation advanced, societies had to grapple with questions about fairness, inclusion, and the distribution of wealth.

## **A Glimpse of the Future: Industry 5.0**

As Maria finished her shift and watched Axel return to its charging station, she thought about the future. Her supervisor had hinted at new training programs that would teach workers like her how to program and maintain robots. It wasn't just about keeping up—it was about staying relevant in a world where machines were becoming partners rather than tools.

This vision—sometimes called Industry 5.0—focused on collaboration between humans and machines. Unlike the automation-driven ethos of Industry 4.0, which prioritized efficiency above all else, Industry 5.0 emphasized synergy. The goal wasn't to replace workers but to amplify their creativity and problem-solving abilities.

For Maria, the future wasn't about choosing between humans and machines. It was about finding balance—recognizing that while robots like Axel could execute tasks with superhuman precision, they lacked the creativity, empathy, and adaptability that made human work meaningful.

As she walked out of the factory into the cool evening air, Maria allowed herself a moment of optimism. Automation wasn't just about machines taking over. It was about humans and machines working together to create something greater than either could achieve alone.



AUTOMATION  
AUTOMATION

THE MANUFACTURING  
ON AUTOMATION

WORKERS  
RESKILLED

THE RE RESKILLED  
ON AUTOMATORS?

THE DEPENDANT  
AUTOMATION

INFORMATION  
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DELIVERS PACKAGES  
ON AUTOMATION

2025

ETHICAL DILEMMAS  
JOB DESPLESSION

ETHICAL CHALLENGES  
JOB DISPLESSION

ETHICAL CHALLENGES  
AUTOMATION!

WORKERS RESKILLS

ETHICAL DILEMMAS  
WITH ALGORITHMS?

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**CHAPTER 4: AUTOMATION IN KEY SECTORS**

**CHAPTER 5: THE ROLE OF AI IN AUTOMATION**

**CHAPTER 6: SOCIOECONOMIC IMPACTS OF AUTOMATION**

**CHAPTER 7: SUSTAINABILITY THROUGH AUTOMATION**

**EPILOGUE**

## DISCLAIMER

This book combines forward-looking projections and fictional narratives to explore the potential trajectory of technology and its impact on society. While the scenarios and technologies described are grounded in current research and trends, they are speculative and should not be interpreted as predictions or guarantees of future developments.

Readers should be mindful that the narratives, characters, and events in this book are fictional and intended to illustrate broader themes and concepts. Any resemblance to actual persons, living or dead, or real events is purely coincidental.

The ideas and opinions expressed herein are those of the author and do not necessarily represent the views of any organizations or entities referenced in this work. This book is intended for educational and entertainment purposes and should be approached as a starting point for thoughtful discussion rather than a definitive guide.

May this journey inspire curiosity, dialogue, and a commitment to shaping a future that reflects humanity's highest aspirations.



## **ABOUT ARSHAD HISHAM**

Arshad Hisham is an Advisor, Educator, Managing Consultant, Investor, Engineer, and Inventor with degrees in Business, Engineering, and an MBA. He is a dynamic and driven innovator with a proven track record of exceptional achievements. Over the course of his career, Arshad has transformed simple ideas into multimillion-dollar enterprises, earned worldwide press coverage, and successfully negotiated complex exit sales to billion-dollar global conglomerates.

Arshad has served on advisory councils at leading institutions like Cal State East Bay and as a jury member for the prestigious Edison Awards in the United States. His groundbreaking work in AI, Automation, and Robotics has been featured in major publications, including Fortune, Forbes, Discovery Channel, IEEE, and Popular Science. A sought-after speaker, Arshad has delivered keynote

addresses at global events such as the IEEE Robotics Symposium at Columbia University, the Boston Consulting Group's AI Summit in Chicago, The Walt Disney Company, The City of Tomorrow Summit at 92Y in New York, and the Robo-Business Summit in San Jose.

As a top operations executive and digital transformation leader, Arshad has worked with Silicon Valley high-tech firms and Fortune 50 companies, driving growth and efficiency across industries such as healthcare, retail, hospitality, banking, and large consumer businesses. In addition to his corporate roles, Arshad is a dedicated board member, angel investor, and advisor to emerging technology companies in AI, Automation, Cybersecurity, Blockchain/FinTech, and Robotics. His global impact spans Silicon Valley, India, the UK, and the Middle East, where he has fostered innovation and empowered entrepreneurs.

Arshad's professional journey includes significant contributions during his tenure with IBM, the Government of Australia, and Toyota, where he played key roles in advancing automation and enterprise software development. Between 2008 and 2015, he founded four rapidly growing startups in Enterprise Software, Vehicle Automation, Point-of-Sale Systems, and Online Gaming. Since 2015, as the founder and CEO of InGen Dynamics, he has spearheaded groundbreaking advancements in AI, Education, Automation, and Robotics. The company's innovative products, including Aido, Sentinel, Kaiser.Haus, and Origami, address global challenges such as labor shortages and environmental sustainability. By 2025, the company achieved an \$80M revenue pipeline and successfully deployed Tabletop Aido robots across the United States, London, and the Asia Pacific, with over 750,000 hours of field operations.

Arshad's contributions extend into education, where he developed a comprehensive Engineering Degree curriculum in AI, Automation, and Robotics for the Futureonauts

educational initiative, now taught in top engineering colleges worldwide. His innovations have been referenced by prestigious academic institutions, including MIT, the University of Pennsylvania, and IEEE, and featured in high school textbooks. His profile and company have been highlighted by the American Society of Mechanical Engineers (ASME) and exhibited at world-renowned science museums like the Sheikh Abdullah Al Salem Culture Centre in Kuwait City.

Arshad also serves as an Executive-in-Residence at Cranfield School of Management. A recipient of the Edison Award Silver Medal, he regularly shares his expertise on global podcasts and media outlets, discussing AI, IP, Education, Automation, and Robotics. Arshad Hisham's work reflects a deep commitment to democratizing technology, fostering equity, and designing systems that empower communities worldwide. His journey is not just a story of technological success but one of human ingenuity, ethical responsibility, and an unyielding passion for building a brighter future through innovation.