

Circuits of Change:

Dr. Rohit Nara and the Future of Indigenous Tech

The Inspirational Journey of Dr. Rohit Nara of bridging Indigenous Deep Tech with an Advancing India



Biography of Dr. Rohit Nara

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“ Legacy is not the sum of accolades collected, but the culture planted—one where simplicity, service, and sustainability are sacred vows. ”



Dedication

This isn't just my story; it's ours. And it begins with those who were my bedrock:

To my parents, **Mr. Ravinder Singh and Ms. Rekha Devi** – my first teachers, instilling in me the strength to stand tall and the values to guide my path. You showed me that giving up was never an option, and your unwavering belief fueled even the wildest of my dreams. You were the anchors in the storm, always there to correct when needed and cheer the loudest when I dared to chase the impossible. Your support during the darkest hours, when I was ready to throw in the towel, was the very lifeline that pulled me through.

To my wife, **Astha Singh** – my partner, my northstar. You showed me the profound strength found in family, the unwavering love and care that anchors us even when the world outside is chaotic.

To **Mr. Om Praval Singh** – my father-in-law, whose quiet wisdom has been a guiding light, steering me clear of treacherous business waters. Your counsel has been invaluable, a steady hand on the rudder.

To my sister, **Manu Nara** – my lifelong challenger, the one who always pushed me beyond my self-imposed limits. You dared me to leap even when the world screamed caution, and for that, I am eternally grateful.

To the incredible force that is the **entire NARA Technologies workforce and my mentors, especially Mr. Ramachandran**

Venkata Raman – you are the engine room, the ones who take the blueprints in my mind and forge them into tangible reality. Your dedication, your belief in the vision, and your relentless efforts are the very foundation of our success. Raman Ji, your guidance has been instrumental in turning those early aspirations into something real.

And to **Mr. Sorish Arora and Mr. Kanish Agarwal** – close friends with whom I've navigated the complexities of this journey. Our paths haven't always been easy, but their friendship and support have been significant in shaping where we are today.

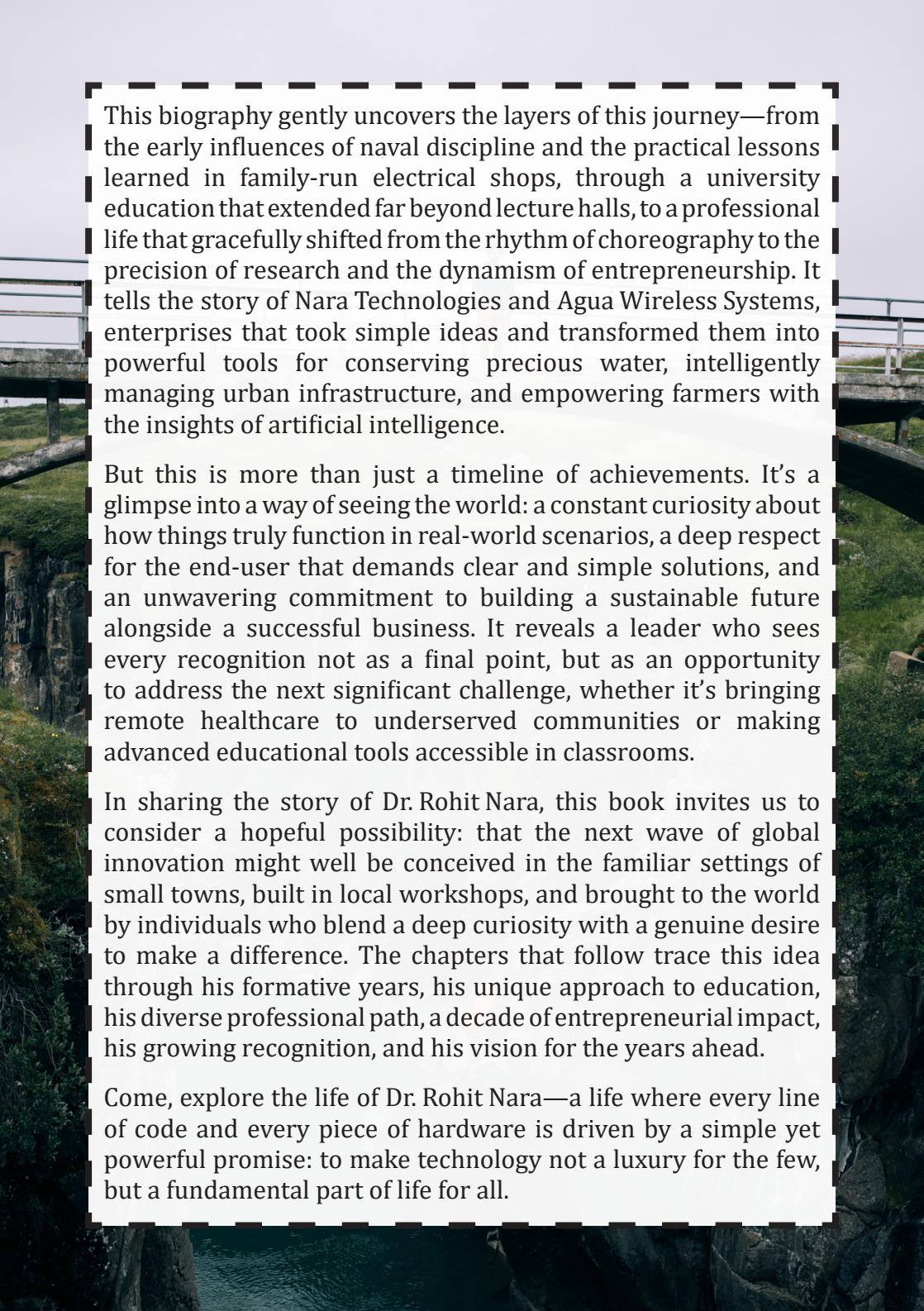
To each of you, every circuit board we've designed, every line of code we've written, every success we've achieved is a testament to your belief and contribution. This story, in its entirety, is dedicated to you.

Introduction

"The most profound technologies are those that disappear. They weave themselves into the fabric of everyday life until they are indistinguishable from it." — Mark Weiser

The story of Dr. Rohit Nara begins not in a gleaming laboratory or a bustling tech hub, but in the quiet afternoons of Rohtak. As the monsoon rains pattered outside, a young boy would often be found amidst the discarded husks of old tape recorders, his small hands carefully prying them open. For Rohit, these weren't just broken devices; they were puzzles waiting to be solved, each wire and coil whispering a secret about how the world worked. This early fascination blossomed into a lifelong pursuit, leading him to become Dr. Rohit Nara—an engineer with the heart of an entrepreneur and a guiding belief: that the power of technology should reach everyone, not just a privileged few.

His journey has been a fascinating blend of experiences, from the disciplined order of naval life to the vibrant chaos of a small workshop born in a store room of his home. From there, his ideas expanded into tangible solutions that now find their place in modern production lines and community-level projects. Along the way, Rohit has quietly challenged accepted norms: the idea that advanced technology must always come from overseas, that rural India isn't ready for sophisticated innovation, and that doing well in business must come at the expense of our planet or our communities. He was filing patents while still navigating university life, once brought a local dance group to enthusiastic applause, and has organically grown a technology group that now thrives financially while staying true to its foundational values.



This biography gently uncovers the layers of this journey—from the early influences of naval discipline and the practical lessons learned in family-run electrical shops, through a university education that extended far beyond lecture halls, to a professional life that gracefully shifted from the rhythm of choreography to the precision of research and the dynamism of entrepreneurship. It tells the story of Nara Technologies and Agua Wireless Systems, enterprises that took simple ideas and transformed them into powerful tools for conserving precious water, intelligently managing urban infrastructure, and empowering farmers with the insights of artificial intelligence.

But this is more than just a timeline of achievements. It's a glimpse into a way of seeing the world: a constant curiosity about how things truly function in real-world scenarios, a deep respect for the end-user that demands clear and simple solutions, and an unwavering commitment to building a sustainable future alongside a successful business. It reveals a leader who sees every recognition not as a final point, but as an opportunity to address the next significant challenge, whether it's bringing remote healthcare to underserved communities or making advanced educational tools accessible in classrooms.

In sharing the story of Dr. Rohit Nara, this book invites us to consider a hopeful possibility: that the next wave of global innovation might well be conceived in the familiar settings of small towns, built in local workshops, and brought to the world by individuals who blend a deep curiosity with a genuine desire to make a difference. The chapters that follow trace this idea through his formative years, his unique approach to education, his diverse professional path, a decade of entrepreneurial impact, his growing recognition, and his vision for the years ahead.

Come, explore the life of Dr. Rohit Nara—a life where every line of code and every piece of hardware is driven by a simple yet powerful promise: to make technology not a luxury for the few, but a fundamental part of life for all.

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Phase 1 The Roots of Life

"Curiosity can convert even the humblest room into a laboratory; the tools matter far less than the questions you dare to ask."

— Dr. Rohit Nara

The beginnings of Dr. Rohit Nara's story are rooted in the unassuming landscape of Rohtak, Haryana, a place where life moved to the rhythm of the seasons and self-reliance was a way of life. Born into a family that valued both responsibility and a spirit of enterprise, young Rohit absorbed the importance of serving others and the power of ingenuity almost without realizing it. These early influences would quietly shape the course of his life.

Just months after he was born, Rohit's world shifted south to Mumbai, Maharashtra, where his father served as a Chief Petty Officer in the Indian Navy. The five years the family spent in naval quarters, surrounded by a blend of cultures, provided young Rohit with an early understanding of order, the strength found in resilience, and the ability to adapt to new environments. His daily exposure to the precise workings of naval machinery and the constant hum of communication systems sparked a quiet but enduring fascination with how things were built and how they could be made better.

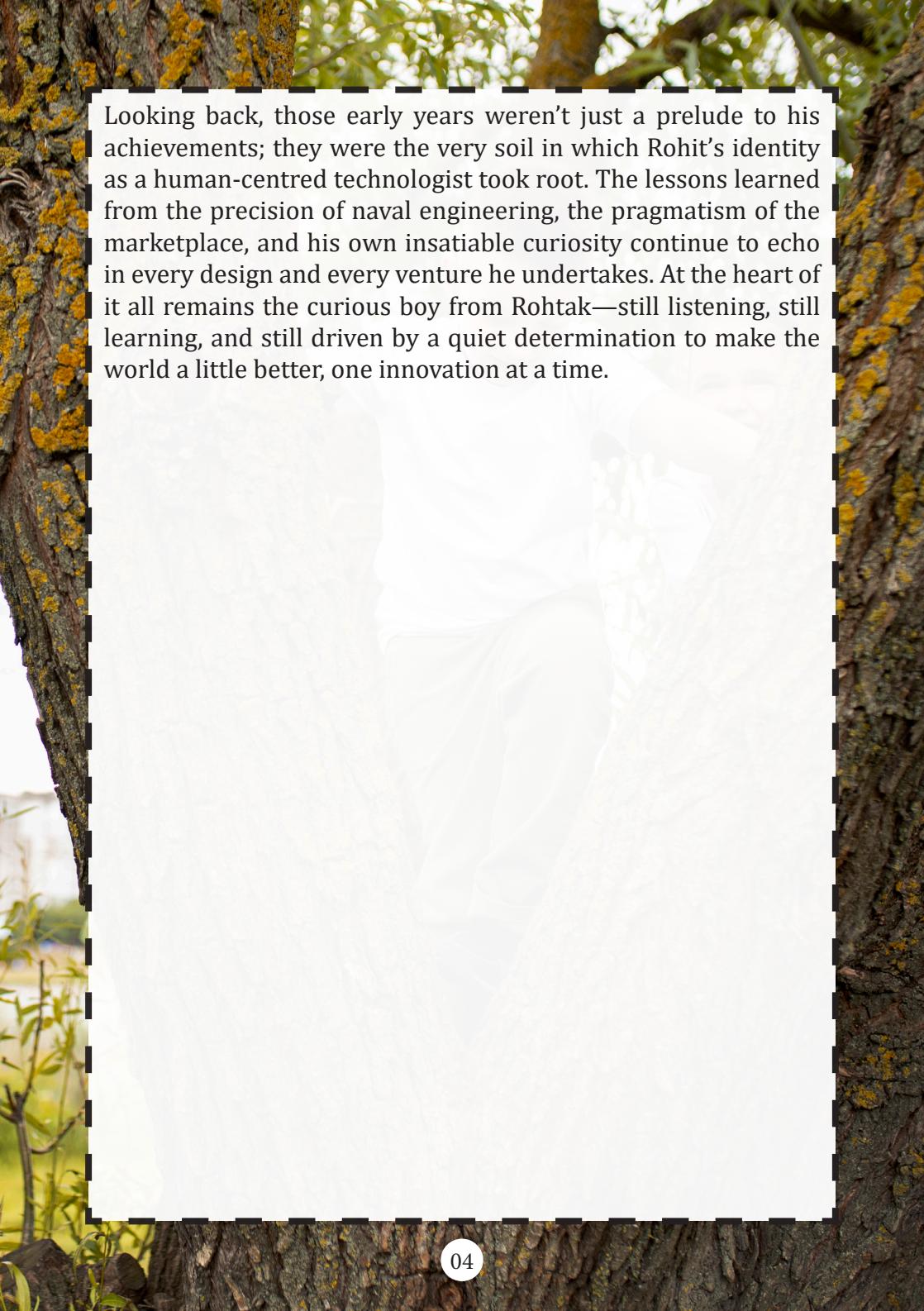
The next chapter unfolded in Kochi, Kerala, another naval port city with its own distinct charm. Here, amidst the mix of languages, cuisines, and vibrant festivals, Rohit's ability to observe subtle patterns within diverse settings grew. These early transitions—from the north to the south, from the familiar Hindi heartland to

the bustling port of Kochi—instilled in him a quiet confidence in navigating different worlds, both geographical and intellectual.

When his father retired after fifteen years of service, the family moved to a small town near their village, Rohtak. The shift from the structured life of a naval base to the open fields of Haryana was significant. Rohit's father started a small shop dealing in home appliances and electrical fittings, which soon became Rohit's own informal learning space. Surrounded by tools and the scent of solder, he discovered that every broken appliance held a story of cause and effect, and the potential for creative repair. He spent countless hours dismantling discarded devices, carefully examining each component, and even offering surprisingly insightful advice to customers on their inverters—experiences that gave him a practical understanding far beyond any textbook.

This hands-on exploration of electronics went hand-in-hand with a return to his linguistic and cultural roots. While remaining comfortable in English and Hindi, Rohit re-embraced Haryanvi, strengthening his connection to the local community even as his horizons broadened. He learned to move between different ways of speaking and different communities, a skill that would later prove invaluable in designing technology that could be easily adopted by a wide range of users.

Unlike many of his peers, Rohit's education wasn't confined to the school day. His childhood was a unique tapestry woven with the threads of military discipline, the spirit of entrepreneurship, and his own relentless curiosity. While other children were memorizing facts, Rohit was taking things apart to understand their inner workings. The simple question "Why?" naturally evolved into the more ambitious "What if?", laying the groundwork for a life dedicated to practical innovation.

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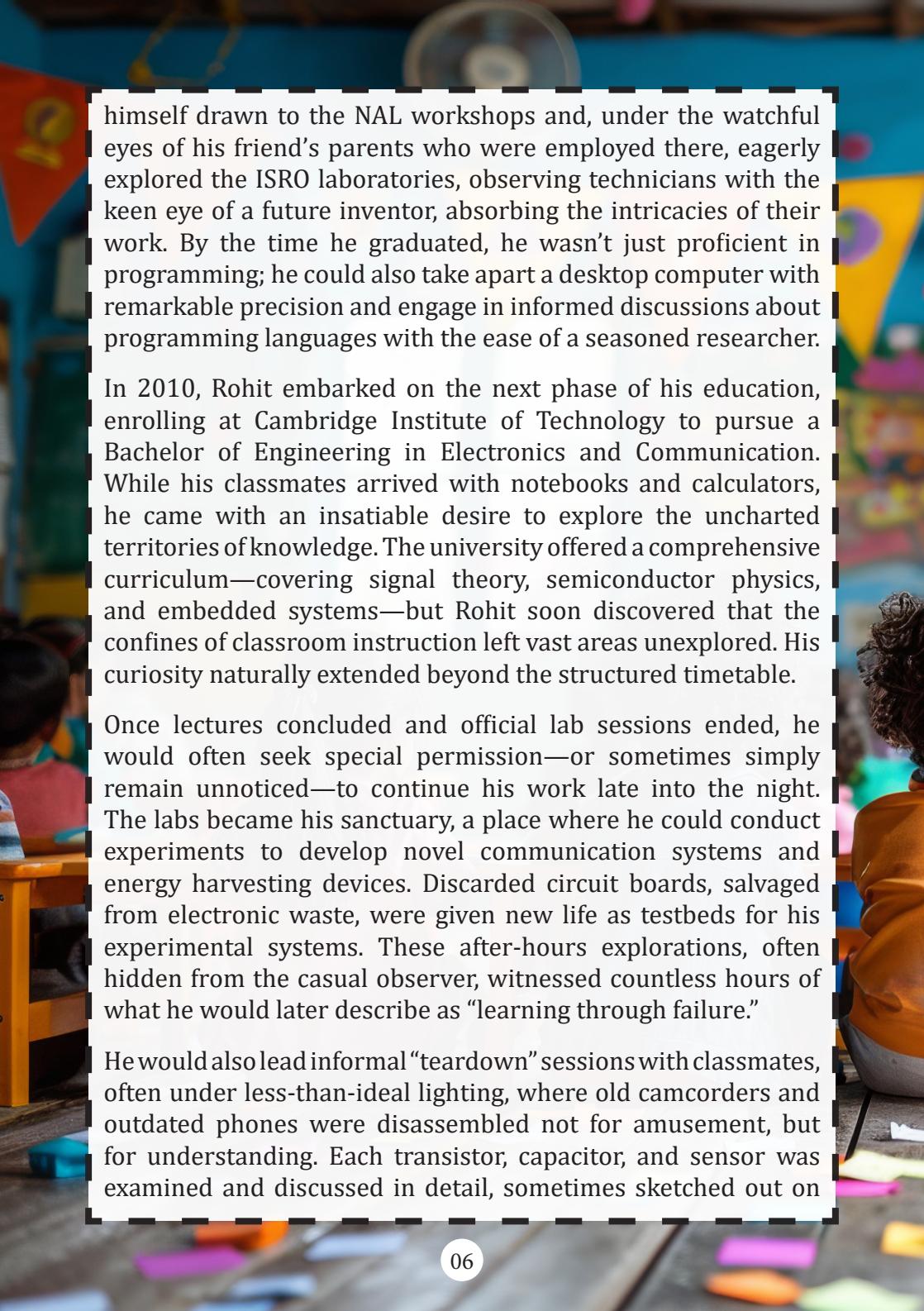
Looking back, those early years weren't just a prelude to his achievements; they were the very soil in which Rohit's identity as a human-centred technologist took root. The lessons learned from the precision of naval engineering, the pragmatism of the marketplace, and his own insatiable curiosity continue to echo in every design and every venture he undertakes. At the heart of it all remains the curious boy from Rohtak—still listening, still learning, and still driven by a quiet determination to make the world a little better, one innovation at a time.

Phase 2 Education Beyond Classrooms

“Real education starts where the syllabus ends—in the experiments you design for yourself and the failures that teach what textbooks cannot.” — Dr. Rohit Nara

By conventional measures, Rohit Nara's academic journey was undoubtedly impressive — an unusual invitation to join institutional research while still an undergraduate. Yet, to define his education solely by his transcripts would be to miss the richness and unconventionality of his learning path. For Rohit, learning came from experimentation and practical implementation rather than classroom education. His most profound lessons weren't absorbed from textbooks or blackboards, but under the warm glow of lab lights, where theories were tested, dismantled, and rebuilt into tangible and observable realities.

His formal schooling began at Kendriya Vidyalaya, nestled within the National Aerospace Laboratories (NAL) campus in Bengaluru, where he studied from 2004 to 2010. The very setting was unique—just beyond the school grounds, engineers tested powerful engines and fine-tuned satellites. On one side was the campus of National Aerospace Laboratories (NAL) and on the other lay the grounds of Indian Space Research Organization (ISRO), Bengaluru. Immersed in this environment, he found a natural affinity for Computer Science, often finishing assignments ahead of schedule only to rewrite them more efficiently, driven by an internal curiosity rather than mere deadlines. He often found



himself drawn to the NAL workshops and, under the watchful eyes of his friend's parents who were employed there, eagerly explored the ISRO laboratories, observing technicians with the keen eye of a future inventor, absorbing the intricacies of their work. By the time he graduated, he wasn't just proficient in programming; he could also take apart a desktop computer with remarkable precision and engage in informed discussions about programming languages with the ease of a seasoned researcher.

In 2010, Rohit embarked on the next phase of his education, enrolling at Cambridge Institute of Technology to pursue a Bachelor of Engineering in Electronics and Communication. While his classmates arrived with notebooks and calculators, he came with an insatiable desire to explore the uncharted territories of knowledge. The university offered a comprehensive curriculum—covering signal theory, semiconductor physics, and embedded systems—but Rohit soon discovered that the confines of classroom instruction left vast areas unexplored. His curiosity naturally extended beyond the structured timetable.

Once lectures concluded and official lab sessions ended, he would often seek special permission—or sometimes simply remain unnoticed—to continue his work late into the night. The labs became his sanctuary, a place where he could conduct experiments to develop novel communication systems and energy harvesting devices. Discarded circuit boards, salvaged from electronic waste, were given new life as testbeds for his experimental systems. These after-hours explorations, often hidden from the casual observer, witnessed countless hours of what he would later describe as “learning through failure.”

He would also lead informal “teardown” sessions with classmates, often under less-than-ideal lighting, where old camcorders and outdated phones were disassembled not for amusement, but for understanding. Each transistor, capacitor, and sensor was examined and discussed in detail, sometimes sketched out on

whiteboards like intricate anatomical diagrams. It became clear to his professors that Rohit was no ordinary student. His assignments often arrived as fully functional devices—tools and systems that not only proved theoretical concepts but also offered solutions to problems that hadn't even been formally posed.

During his undergraduate years, Rohit translated his growing theoretical knowledge into a series of practical inventions. One such innovation was a low-cost infrared-based home automation system that ingeniously used an Android phone's audio jack as a remote controller for household appliances. In another project, he developed an embedded control interface that utilized audio ports as dual-channel digital inputs, eliminating the need for specialized external hardware. Always driven by a sense of utility, he also conceived a unique energy-harvesting system that could extract power from seemingly unrelated forces applied across a common medium, converting it into usable electricity—aimed at regions plagued by unreliable and polluting power sources.

His social awareness also found expression in his engineering endeavours. Observing the daily challenges faced by visually impaired individuals navigating busy urban environments, he conceptualized a wearable echo-location device. Using ultrasonic pulses and tactile feedback, this aid offered blind users real-time spatial awareness, reducing their reliance on sight or cameras. He even ventured into the realm of non-lethal defence design with a super-capacitor-based electro-weapon prototype, carefully balancing high-voltage systems with principles of public safety and controlled incapacitation. A biomedical Android application, capable of tracking vital signs and securely storing encrypted data, further showcased the breadth of his personal innovations, which stretched far beyond the typical scope of an engineering education.

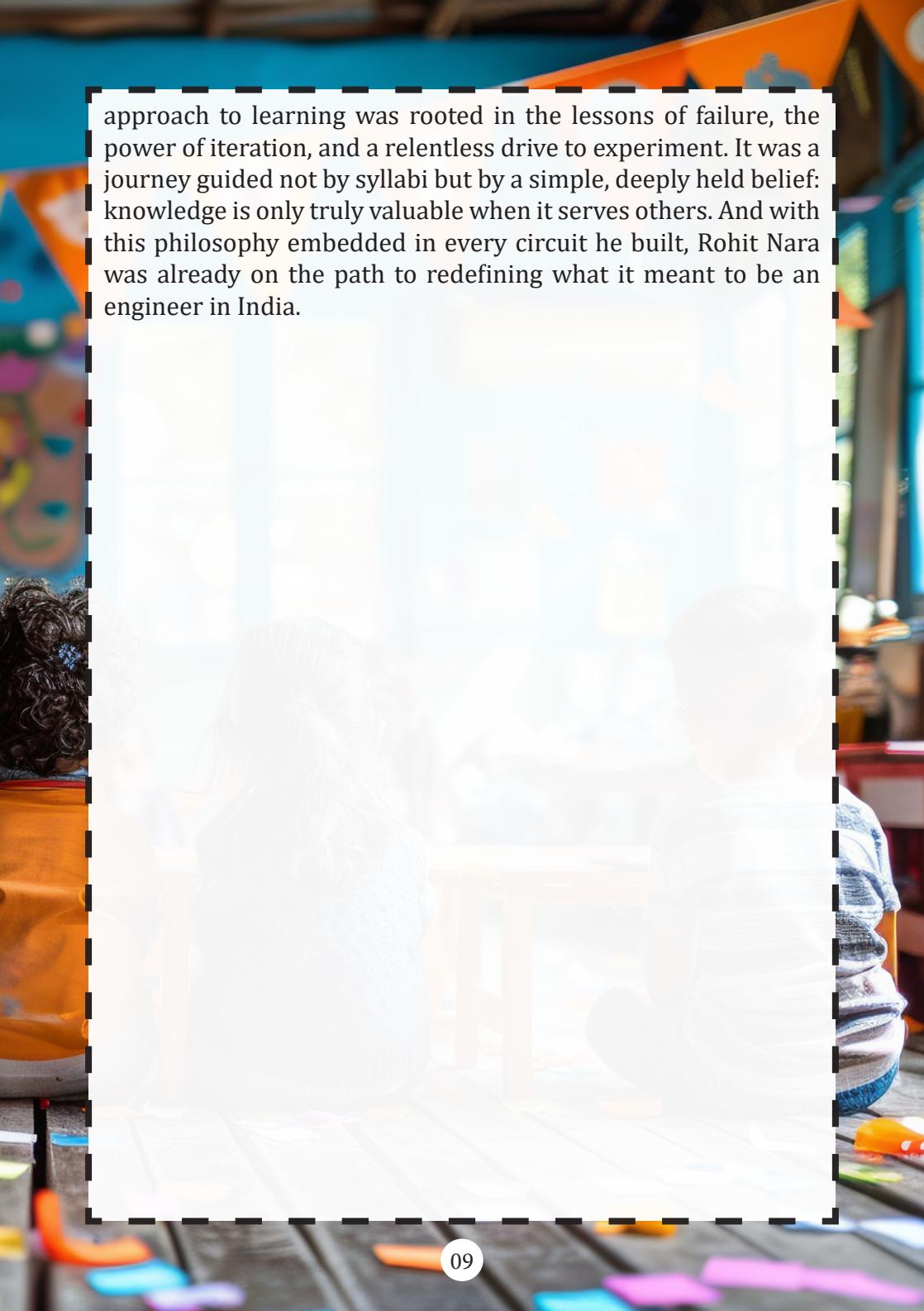
By the time he was nearing the end of his program, Rohit had already filed two patents and co-authored several internal research publications—achievements that set him apart from his peers. These accomplishments caught the attention of the academic leadership at Cambridge Institute of Technology, and in February 2013, while still an undergraduate, he was offered an unofficial appointment as a Research Scientist—a remarkable distinction.

Over the next two years, a period that included his unconventional decision to leave his undergraduate program, Rohit spearheaded the development of eleven groundbreaking technologies. Among these were 3D volumetric displays built with phased infrared arrays, bio-electronic interfaces aimed at advancing neural prosthetics, and adaptable hydraulic generators designed to provide stable electricity to rural micro-grids. He also contributed to Matlab-driven image processing software that enabled advanced automation in industrial control systems. His R&D portfolio during this time wasn't just a collection of experiments; it was a glimpse into the integrated, user-focused, and resource-conscious innovation that would later define his entrepreneurial ventures.

For those who guided him, Rohit was never the student solely concerned with memorizing equations for an exam. He was the one who constantly asked, "Is there another way this could work?" and "Can this code be made more efficient?" While his academic grades were respectable, they were meaningful to him primarily as a means to access labs, mentors, and new intellectual challenges. His true credentials, even then, were the ever-growing collection of devices he had conceived and built—each one designed, tested, and made to function in the real world.

Long before he would establish companies or gain recognition in the startup world, Rohit Nara had already completed what could only be described as an intense apprenticeship in invention. His

approach to learning was rooted in the lessons of failure, the power of iteration, and a relentless drive to experiment. It was a journey guided not by syllabi but by a simple, deeply held belief: knowledge is only truly valuable when it serves others. And with this philosophy embedded in every circuit he built, Rohit Nara was already on the path to redefining what it meant to be an engineer in India.



Phase 3

A Journey Across Innovative Frontiers

“Technology without empathy is noise; fuse it with understanding and it becomes progress.” — Dr. Rohit Nara

The professional path Rohit Nara embarked upon was anything but a straight line. Instead, it unfolded as a diverse exploration, beginning in the unexpected realm of artistic leadership, then delving into the rigor of academic research, and ultimately blossoming into a series of dynamic, hands-on roles spanning social technology, industrial automation, cloud architecture, and the burgeoning Internet of Things. Each experience, regardless of its scale or duration, played a crucial role in shaping him into the versatile and purpose-driven technologist he would become.

The initial chapter of his professional life took a surprising turn, far removed from the familiar world of circuits and code. In the autumn of 2010, while still immersed in his formal education, Rohit stepped into the vibrant world of performing arts as the Crew Manager for Lethal Hustlers, a dynamic dance ensemble of fourteen individuals specializing in a captivating mix of hip-hop, salsa, breakdance, bhangra, and robotic movement. For a significant period, he was deeply involved in choreographing performances, coordinating the team's efforts, managing their schedules, and refining their routines. This role, seemingly unconventional for an aspiring engineer, proved to be a valuable masterclass in leadership, creative collaboration, and team dynamics. It honed his ability to perform under pressure,

navigate diverse personalities, and channel collective energy towards a shared artistic vision. Looking back, the time spent with Lethal Hustlers wasn't a detour from his technological journey, but rather a foundational experience that instilled in him the principles of rhythm, discipline, and impactful performance—principles that would later find new expression in his engineering endeavors.

In the autumn of 2014, after filing his second patent, he took the first step into the entrepreneurial world by founding Nara Technologies Private Limited (OPC). Concurrent with these early entrepreneurial efforts, Rohit continued his research at the Cambridge Institute of Technology, a period we've already explored. It's worth reiterating that during his two-year tenure there (2013–2015), he operated at the cutting edge of eleven advanced technology projects, filed patents that showcased his ingenuity, and transformed abstract ideas into functional prototypes with a clear social purpose. His time in the lab wasn't purely academic; it marked the true beginning of his professional engineering ethos: that research must ultimately lead to real-world application, and invention must be rooted in genuine utility.

Eager to venture beyond the academic sphere, Rohit joined Idea Coe, a company focused on social and mobility technologies, in March 2015, as their Director of Social and Mobility. During an intense four months in Bengaluru, he spearheaded multiple interdisciplinary projects, focusing on how users interact with social networking and mobile platforms. His work ranged from designing user experiences that were adaptable across different devices to creating secure cloud-based systems with role-based access. He played a key role in shaping advertising strategies, collaborating with both internal teams and external partners to position the company's solutions within the broader technological landscape. More than just a job title, this

role marked Rohit's entry into the world of product strategy, user experience philosophy, and human-centered design. He contributed not only as a technologist but also as a storyteller, shaping client presentations, analyzing user data, and helping to forge strategic alliances that emphasized both growth and long-term sustainability.

Following his time at Idea Coe, Rohit made a pivotal decision: he left college to dedicate himself fully to his burgeoning company, Nara Technologies.

By July 2016, his expertise led him to take on a part time role of Chief Technology Officer (CTO) at Outstrip, a forward-thinking data intelligence company. Here, his focus shifted towards mobile data collection, feedback mechanisms, and the automation of surveys. He designed robust server infrastructure and user-friendly Android applications capable of real-time data acquisition, instant result generation, and processing across multiple databases. A notable achievement during this period was the development of an innovative calendar-filtering system that significantly reduced server load by optimizing data queries—a testament to his constant drive to blend efficiency with elegant design. He also implemented a multi-user hierarchy management system, helping clients streamline how information was gathered, processed, and visualized. In his relatively short but highly productive six-month tenure, he effectively bridged the gap between raw data and actionable intelligence.

Almost concurrently, in September 2016, Rohit was invited to consult with Vishesh Innovative Technologies, where he spent four months as a Process Consultant. The challenge was significant: to design a cloud-based ERP (Enterprise Resource Planning) system specifically tailored for electronics manufacturing processes. He delivered a comprehensive suite of operational tools, ranging from inventory management and invoicing systems to job order creation and quality control

modules. His ERP framework not only automated back-end operations but also incorporated a role-based hierarchy to ensure clear traceability, accountability, and transparency. His solutions empowered small and medium-sized enterprises (SMEs) to move away from cumbersome spreadsheets and manual entries towards digitized, auditable systems—another step in his ongoing mission to bring affordable sophistication to Indian industries.

In December 2016, Rohit began a year-long consultancy with Bristo Beverages, where he served as an IoT Consultant. Tasked with modernizing the company's cold drink manufacturing systems, he introduced an intelligent IoT PLC (Programmable Logic Controller) system that dramatically improved the production line's efficiency. By integrating Bluetooth and GSM protocols into the machinery, he enabled real-time monitoring and remote access, significantly reducing downtime and reliance on manual intervention. He also designed an intuitive Android interface for managing system settings and implemented helical flow sensors to enhance the accuracy of beverage composition ratios. With each layer of refinement, the plant moved closer to becoming a smart manufacturing facility—agile, responsive, and transparent.

Soon after, in February 2017, he accepted a parallel consultancy with Phoenix Industries in Belgaum, where he contributed his expertise for eleven months. His work there focused on the critical area of pressure-release systems for gasifier-based energy generators, a highly specialized field where safety and thermal stability were paramount. Rohit led research into pressure-sensing technologies for high-temperature environments, implemented siphoning mechanisms for temperature regulation, and designed durable electronics enclosures using epoxy resin for enhanced thermal endurance. He also engineered a GSM-supported Android application to monitor system performance

and issue timely alerts in case of tar deposition or efficiency loss. His innovations not only stabilized the system's output but also significantly extended the lifespan of the equipment—transforming a potentially fragile infrastructure into a more reliable and intelligent energy solution.

Across all these diverse roles, Rohit Nara was never content to be just a contributor; he was a catalyst for change. Whether working with a burgeoning beverage startup or an established energy generator, he brought the same meticulous standards, the same unwavering commitment to making technology serve human needs, and the same fundamental belief that systems should simplify lives, not complicate them. Each professional milestone broadened his perspective, expanded his technical toolkit, and further solidified the ethos that continues to guide his entrepreneurial ventures to this day: build solutions that truly matter, and build them with excellence.

Phase 4 Entrepreneurial Journey

“Every prototype carries a moral equation: if it cannot serve the last mile, it is unfinished.” — Dr. Rohit Nara



The monsoon season of 2014 was just beginning to fade when Rohit Nara turned the key to his small rooftop room in a Bengaluru suburb and, to the quiet hum of the city, declared Nara Technologies open for business. This “office” was modest, little less than a studio apartment, its only luxuries a well-used laptop, a second-hand oscilloscope, and a whiteboard already filled with a tangle of circuit diagrams. What it lacked in grandeur, it more than made up for in conviction: a firm belief that world-

class hardware could be conceived and built in India, priced for the Indian market, and—most importantly—capable of tackling the nation's most persistent infrastructure challenges.



In its early days, Nara Technologies sustained itself through rapid-prototyping projects: a GSM telemetry module here, a resilient solar controller there. Each successful delivery brought in enough to acquire the next essential tool—a signal generator one month, an industrial soldering station the next—slowly transforming the small room into a resourceful design studio. By August 2019, the sheer variety of projects had outgrown the capacity of external subcontractors, prompting Rohit to establish a complementary entity. Agua Wireless Systems was born, taking on the responsibility for water management systems, PCB assembly, and complete product builds, all with a focus on clear user interfaces and empathetic user experiences.

The result was a remarkably efficient design-build-deploy cycle: a sensor sketched on a Monday could be CNC-milled, programmed with firmware, rigorously tested for durability, and installed at a customer's pilot site by Friday. This agility quickly caught the attention of state utilities and smart-city administrators, positioning the fledgling company as a valuable partner rather than just a component supplier.



Building on countless late-night experiments in that small Bengaluru room, Agua Wireless Systems ingeniously integrated ultrasonic level sensors, chlorine and turbidity probes, flow meters, and motor controllers into a compact gateway that communicated via Wi-Fi, 4G, LoRa, and Bluetooth, securing every piece of data with robust AES-256 and SSL/TLS encryption. Designed to draw power flexibly from the grid, batteries, or solar panels, the system seamlessly integrated into India's diverse and often patchwork infrastructure.

The impact was immediate and tangible. At a technology park in Bengaluru, Agua's solutions led to a 30 percent reduction in water consumption and detected leaks accounting for another 25 percent loss, allowing the initial investment to be recovered in just two and a half years. In the remote hill villages of Uttarakhand, a solar-powered installation efficiently balanced water supply across fifty homes while meeting all the stringent National Jal Jeevan Mission (NJJM) compliance standards. A pilot project for sewer line monitoring in Rajasthan replaced traditional PLC-based systems with 170 solar-powered sensors, saving the municipality ₹93 lakh in capital expenditure. And in a 500-kiloliter-per-day effluent treatment plant, Agua's automation solutions slashed manpower costs by 65 percent, paying for themselves in just over three years.

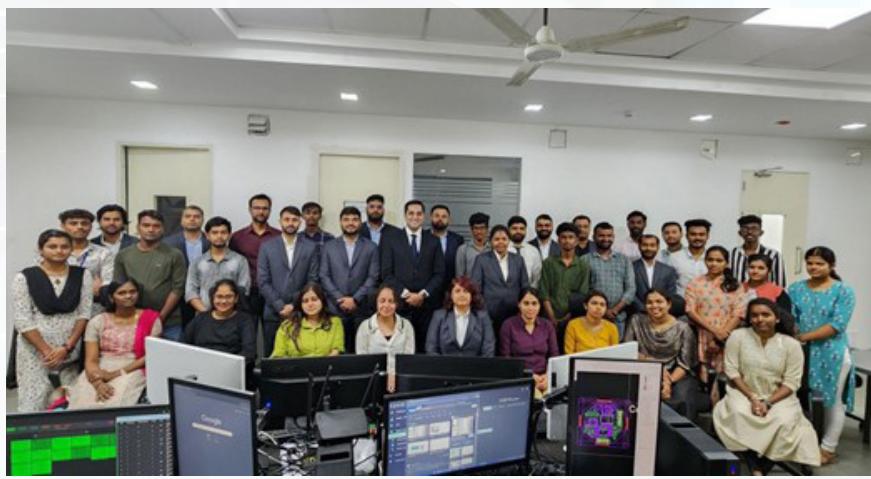
Recognition soon followed. Silicon India, a pulse-taker of India's technology scene, named Nara Technologies one of the "10 Best Electronics Start-ups" in 2016, celebrating the boldness with which a small, underfunded team had developed firmware and hardware that could compete with established international players. This initial acknowledgment quickly translated into tangible opportunities: inquiries from venture capitalists, offers of collaboration from component suppliers eager to align with a rising star, and invitations to co-develop solutions for state-level smart-city initiatives.

Refusing to be confined to the label of a "water-tech" founder, Rohit cleverly redeployed the core Agua architecture across new and diverse applications. A Smart Manhole Monitoring System, for instance, combined ultrasonic probes with 4G gateways and solar power packs, providing city engineers with early warnings of potential overflow hazards days before they reached critical levels. For the industrial sector, Smart Silo Monitoring offered rugged IP-65 aluminum enclosures, RS-485 / 4-20 mA connectivity, and cloud-based dashboards that could identify

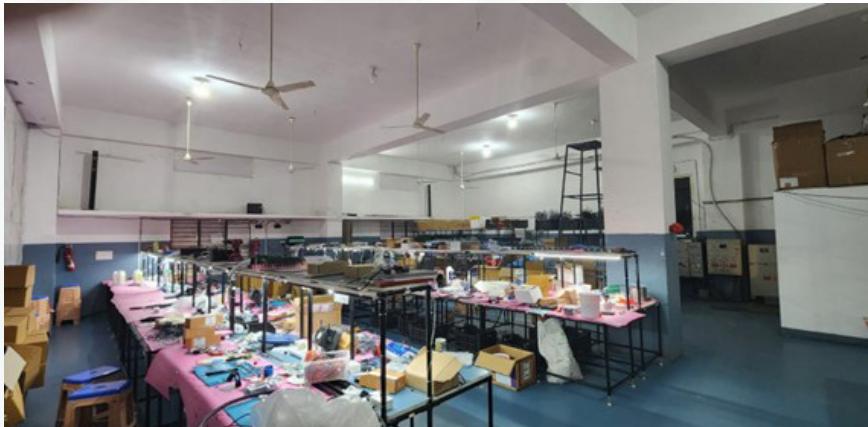
networking bottlenecks and predict cleaning schedules long before a blockage could disrupt production.

On the electrical grid, under the Nara Technologies banner, the company's Wi-Fi/4G Power Switches and Controllers created intelligent mesh networks that integrated light-intensity sensors, real-time power analytics, and LoRa backhaul, transforming ordinary streetlights into data-rich energy assets. Each new product adhered to the same fundamental principles: robust, interoperable, secure—and, crucially, affordable for both municipalities and mid-market industries.

Today, the NARA Group—an umbrella encompassing Nara Technologies and partner companies Resona Manufacturing, Pyxo Design, and Agua Wireless Systems—boasts a significant presence in the field with over 25,000 deployed devices, an order book exceeding ₹15 crore, and cumulative revenues surpassing ₹12 crore, all achieved by a dedicated team of over 70 specialists. The company's growing patent portfolio, including provisional filings for smart bore-wells, dynamic billing systems, leakage detection technologies, and barometric level sensing, serves both as a competitive advantage and a clear statement of their innovative intent.



Certifications—ISO 9001 for manufacturing quality, ISO 27001 for software security, along with RoHS, CE, and FCC compliance for export—underscore the group's commitment to global standards, even while addressing highly localized problems.



The Smart Manhole Monitoring System, a prime example of Rohit's innovative thinking, reimagines the city sewer as an intelligent, self-reporting asset. A durable ultrasonic level sensor sits just beneath the manhole cover, constantly measuring sludge levels and transmitting readings through a 4G IoT gateway powered by either a field-replaceable battery lasting up to 1.5 years or a compact solar panel with a lifespan of over seven years. When effluent rises towards a pre-defined danger threshold, the gateway instantly sends alerts to a cloud-based human-machine interface (HMI), SMS services, and a mobile application, empowering maintenance teams to address blockages proactively, long before streets flood or public health is compromised. By transforming reactive clean-ups into proactive maintenance, the system dramatically reduces emergency response costs, safeguards public health, prevents traffic disruptions, protects groundwater from contamination, and contributes to the municipality's sustainability goals.



However, financial milestones only tell part of the story. From that first prototype built in a small Bengaluru room to the latest edge-AI motor controller, Rohit has consistently applied a dual litmus test to every product roadmap: commercial viability and measurable ecological benefit. Does this product reduce the overuse of chlorine? Does it extend the lifespan of solar-powered streetlights? Can a local technician with just a smartphone calibrate it without wading through complex manuals? Only when a technology answers “yes” to the triple bottom line of profit, planet, and people does it earn its place on the factory floor.

The decade ahead promises even greater ambition. Data from Agua systems is now feeding pilot projects for a city-scale digital water twin, integrating rainfall forecasts, aquifer levels, and consumer demand into a single adaptive grid. Simultaneously, Resona Manufacturing is scaling up the production of RoHS-compliant energy meters for export, while Nara Technologies is prototyping edge-AI drives aimed at achieving double-digit reductions in energy consumption for water pumping in precision agriculture.

Yet, the founder can still be found walking the factory aisles, his hands bearing the marks of those early soldering days in that small room from 2014. For Rohit Nara, growth has never meant losing touch with the fundamental hardware; instead, it has meant expanding the circle of impact—proving that when relentless curiosity is guided by a strong sense of sustainability, a local tinkerer can indeed build platforms that resonate globally.

Phase 5 A Chronicle of Recognition



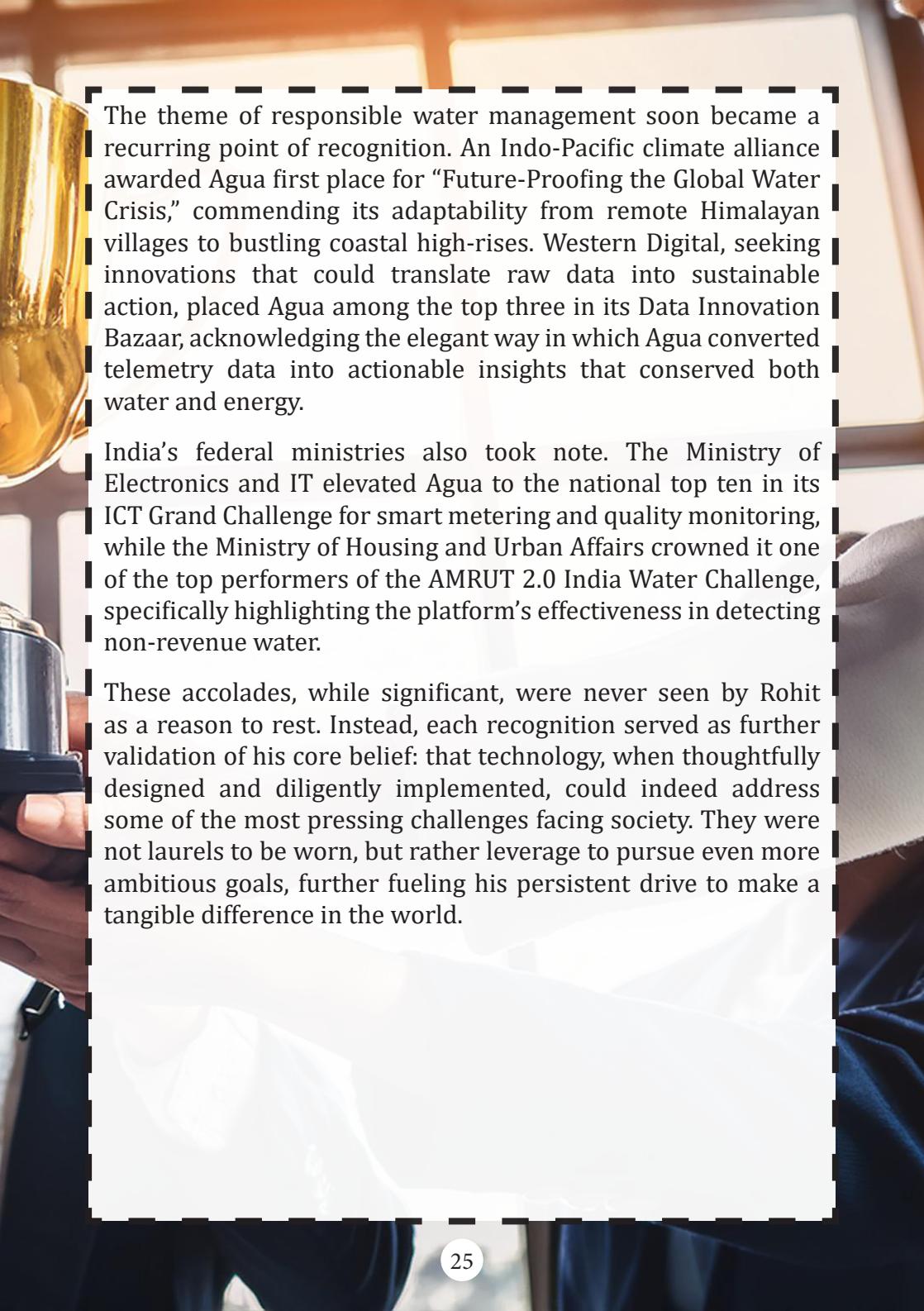
In the final weeks of 2016, barely two years into their commercial operations, the industry's attention unexpectedly turned towards Rohit Nara's unassuming workshop in Bengaluru. Silicon India, a respected voice in India's technology landscape, declared Nara Technologies one of the "Ten Best Electronics Start-ups in India." This recognition celebrated the sheer audacity with which a lean, resource-constrained team had developed firmware and hardware capable of standing shoulder-to-shoulder with established international players. What began as a complimentary editorial soon became a catalyst for growth: inbound calls from venture capitalists, approaches from component suppliers eager to partner with a rising star, and invitations to collaborate on solutions for state-level smart-city initiatives.



The following September, the spotlight shifted north. At a bustling investor summit in Gurugram, the Government of Haryana proudly recognized Rohit Nara as a “Rising Star from Haryana,” highlighting how a son of the soil had not only developed export-quality technology but had also committed to localizing manufacturing and creating high-skilled employment opportunities in his home state. Earlier, in 2015, the Karnataka SME Council conferred its Excellence in Research & Development citation, acknowledging a rate of patent filings that would be impressive for a large Fortune 500 company, let alone a start-up still in its infancy. The combined weight of these honors bestowed upon Rohit a unique dual legitimacy: he became both a favored figure for policymakers and a compelling example of frugal, indigenous research and development.

By 2019, the accolades had crossed national borders. Columbia University's Urban Works Innovation Challenge convened an international panel to identify technologies with the potential to safeguard densely populated Asian megacities. After rigorous real-world validation, Agua's integrated sensor-to-cloud architecture—the brainchild of Rohit Nara—emerged as one of the top three winning solutions for Urban Safety and Sustainability. It was lauded for its ability to transform raw data from leaks into equitable, on-demand water supply solutions. In 2022, The Nudge Prize recognized the platform as one of India's ten most transformative responses to humanity's pressing challenges, effectively placing Rohit on a regional stage where the impact of his work was valued above pure revenue figures.





The theme of responsible water management soon became a recurring point of recognition. An Indo-Pacific climate alliance awarded Agua first place for "Future-Proofing the Global Water Crisis," commending its adaptability from remote Himalayan villages to bustling coastal high-rises. Western Digital, seeking innovations that could translate raw data into sustainable action, placed Agua among the top three in its Data Innovation Bazaar, acknowledging the elegant way in which Agua converted telemetry data into actionable insights that conserved both water and energy.

India's federal ministries also took note. The Ministry of Electronics and IT elevated Agua to the national top ten in its ICT Grand Challenge for smart metering and quality monitoring, while the Ministry of Housing and Urban Affairs crowned it one of the top performers of the AMRUT 2.0 India Water Challenge, specifically highlighting the platform's effectiveness in detecting non-revenue water.

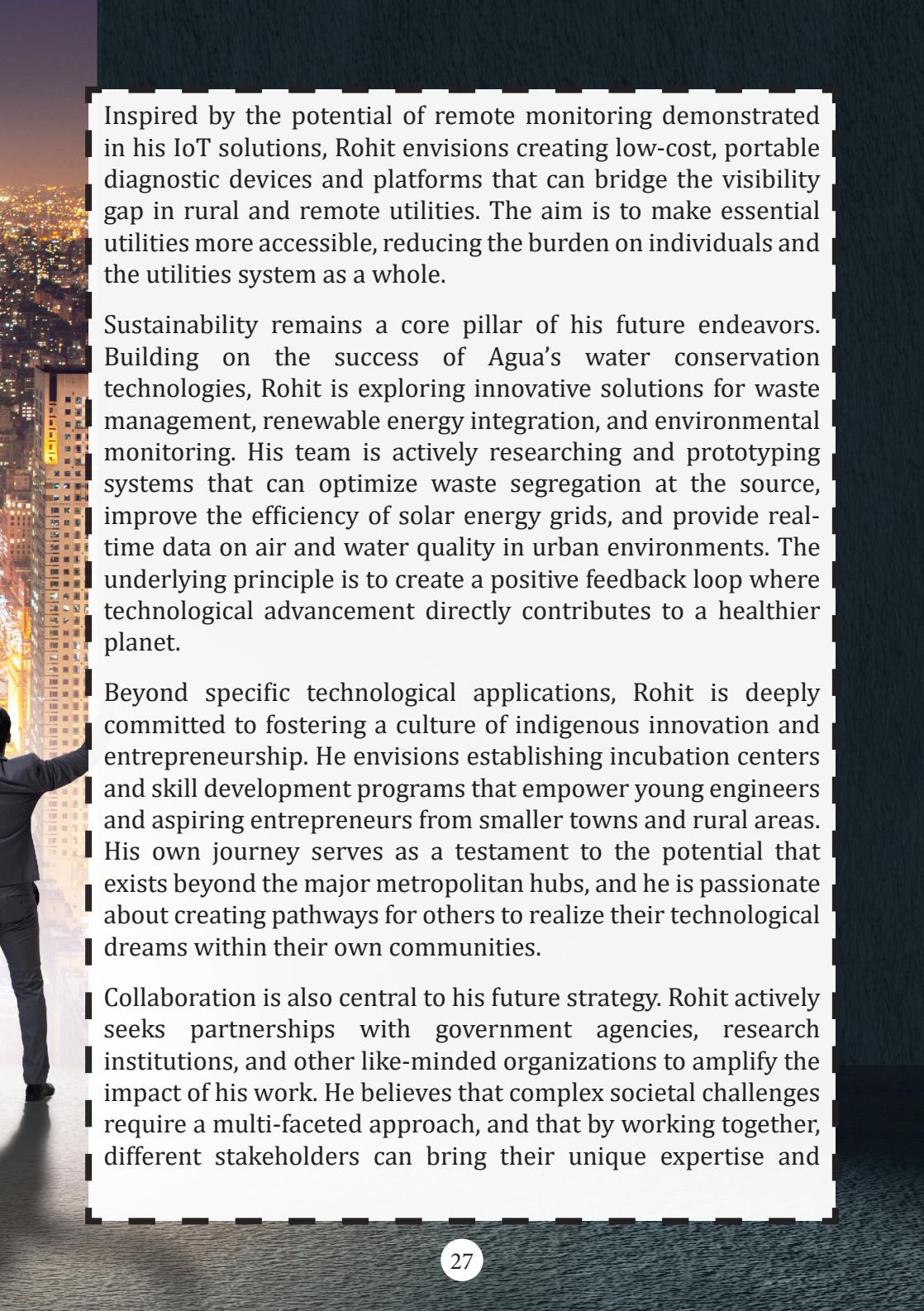
These accolades, while significant, were never seen by Rohit as a reason to rest. Instead, each recognition served as further validation of his core belief: that technology, when thoughtfully designed and diligently implemented, could indeed address some of the most pressing challenges facing society. They were not laurels to be worn, but rather leverage to pursue even more ambitious goals, further fueling his persistent drive to make a tangible difference in the world.

Phase 6 A Vision for the Future

“Awards lend a fleeting gleam to the trophy shelf; enduring impact illuminates the streets, fields, and classrooms of the communities we serve.” — Dr. Rohit Nara

The growing collection of accolades, rather than signaling a point of culmination, has instead served to amplify Rohit Nara's vision for the future. For him, each recognition is not a destination but a signpost, indicating the path towards even greater impact. His gaze is now firmly set on leveraging the foundations laid by Nara Technologies and Agua Wireless Systems to address broader societal challenges and to push the boundaries of indigenous deep tech innovation.

One of the central tenets of his future vision is the deepening integration of artificial intelligence and machine learning into his existing platforms. Having witnessed the transformative power of data-driven insights in water management, he envisions extending this intelligence to other critical infrastructure domains. Pilot projects are already underway to incorporate edge-AI capabilities into smart agriculture solutions, aiming to optimize water usage in irrigation, predict soil health, and provide farmers with real-time, actionable advice directly on their mobile devices. The goal is to empower those at the grassroots level with the same sophisticated tools that were once the exclusive domain of large corporations.

A vertical photograph on the left side of the page shows a person from behind, standing on a high-rise building's edge. They are looking out over a dense urban landscape at night, with numerous lit windows and streetlights. The sky is dark, suggesting it's nighttime.

Inspired by the potential of remote monitoring demonstrated in his IoT solutions, Rohit envisions creating low-cost, portable diagnostic devices and platforms that can bridge the visibility gap in rural and remote utilities. The aim is to make essential utilities more accessible, reducing the burden on individuals and the utilities system as a whole.

Sustainability remains a core pillar of his future endeavors. Building on the success of Agua's water conservation technologies, Rohit is exploring innovative solutions for waste management, renewable energy integration, and environmental monitoring. His team is actively researching and prototyping systems that can optimize waste segregation at the source, improve the efficiency of solar energy grids, and provide real-time data on air and water quality in urban environments. The underlying principle is to create a positive feedback loop where technological advancement directly contributes to a healthier planet.

Beyond specific technological applications, Rohit is deeply committed to fostering a culture of indigenous innovation and entrepreneurship. He envisions establishing incubation centers and skill development programs that empower young engineers and aspiring entrepreneurs from smaller towns and rural areas. His own journey serves as a testament to the potential that exists beyond the major metropolitan hubs, and he is passionate about creating pathways for others to realize their technological dreams within their own communities.

Collaboration is also central to his future strategy. Rohit actively seeks partnerships with government agencies, research institutions, and other like-minded organizations to amplify the impact of his work. He believes that complex societal challenges require a multi-faceted approach, and that by working together, different stakeholders can bring their unique expertise and

resources to the table to create more comprehensive and sustainable solutions.

Ultimately, Rohit Nara's vision for the future is one where technology serves as a true equalizer, empowering individuals, strengthening communities, and safeguarding the environment. It's a vision rooted in the belief that innovation should be driven by a deep understanding of human needs and a strong sense of social responsibility. As Nara Technologies and Agua Wireless Systems continue to evolve, they will undoubtedly be guided by this enduring commitment to building a better future for all, one thoughtful innovation at a time.



Phase 7

Glimpses of personal life

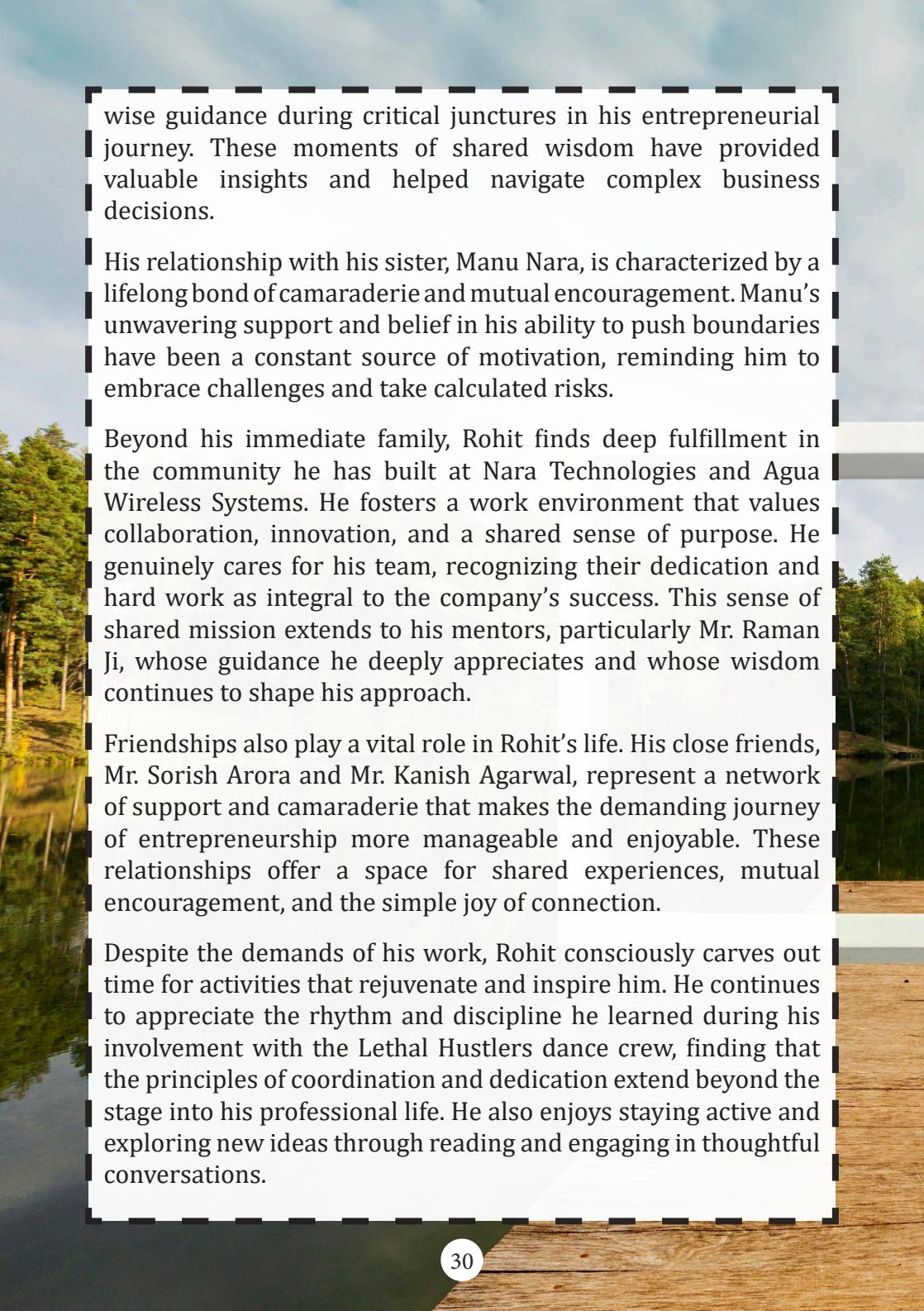
“Coming from a lower middle class family, I pursued big ideas on shoestring means, placing real financial strain on those I love; yet they gave everything to support me—sacrifices I can never fully repay.”— Dr. Rohit Nara

Beyond the circuits and algorithms, the patents and the accolades, lies the personal world that shapes and sustains Dr. Rohit Nara. While his professional life is marked by relentless innovation and a drive to solve complex challenges, his personal life offers a glimpse into the values and relationships that ground him.

Family remains a cornerstone of Rohit’s life. His deep bond with his parents, Mr. Ravinder Singh and Mrs. Rekha Devi, continues to be a source of strength and inspiration. Their early encouragement and unwavering belief in his potential laid the foundation for his ambitious pursuits. The values they instilled—persistence, integrity, and a strong work ethic—are threads that run through both his personal and professional endeavors.

His marriage to Astha Singh is a partnership built on mutual respect and understanding. Astha’s supportive presence provides a vital anchor amidst the often-turbulent waters of entrepreneurship. Their shared life reflects a balance between the demands of his work and the importance of family connection, a harmony that Rohit deeply values.

The quiet counsel of his father-in-law, Mr. Om Praval Singh, has also played a significant role, offering a steady perspective and



wise guidance during critical junctures in his entrepreneurial journey. These moments of shared wisdom have provided valuable insights and helped navigate complex business decisions.

His relationship with his sister, Manu Nara, is characterized by a lifelong bond of camaraderie and mutual encouragement. Manu's unwavering support and belief in his ability to push boundaries have been a constant source of motivation, reminding him to embrace challenges and take calculated risks.

Beyond his immediate family, Rohit finds deep fulfillment in the community he has built at Nara Technologies and Agua Wireless Systems. He fosters a work environment that values collaboration, innovation, and a shared sense of purpose. He genuinely cares for his team, recognizing their dedication and hard work as integral to the company's success. This sense of shared mission extends to his mentors, particularly Mr. Raman Ji, whose guidance he deeply appreciates and whose wisdom continues to shape his approach.

Friendships also play a vital role in Rohit's life. His close friends, Mr. Sorish Arora and Mr. Kanish Agarwal, represent a network of support and camaraderie that makes the demanding journey of entrepreneurship more manageable and enjoyable. These relationships offer a space for shared experiences, mutual encouragement, and the simple joy of connection.

Despite the demands of his work, Rohit consciously carves out time for activities that rejuvenate and inspire him. He continues to appreciate the rhythm and discipline he learned during his involvement with the Lethal Hustlers dance crew, finding that the principles of coordination and dedication extend beyond the stage into his professional life. He also enjoys staying active and exploring new ideas through reading and engaging in thoughtful conversations.

While his professional achievements often place him in the public eye, Rohit remains grounded and approachable. He values authenticity and strives to maintain a genuine connection with the people around him. His personal life reflects the same values that drive his professional success: a deep sense of responsibility, a genuine care for others, and a persistent pursuit of making a meaningful contribution to the world.

Legacy of Life

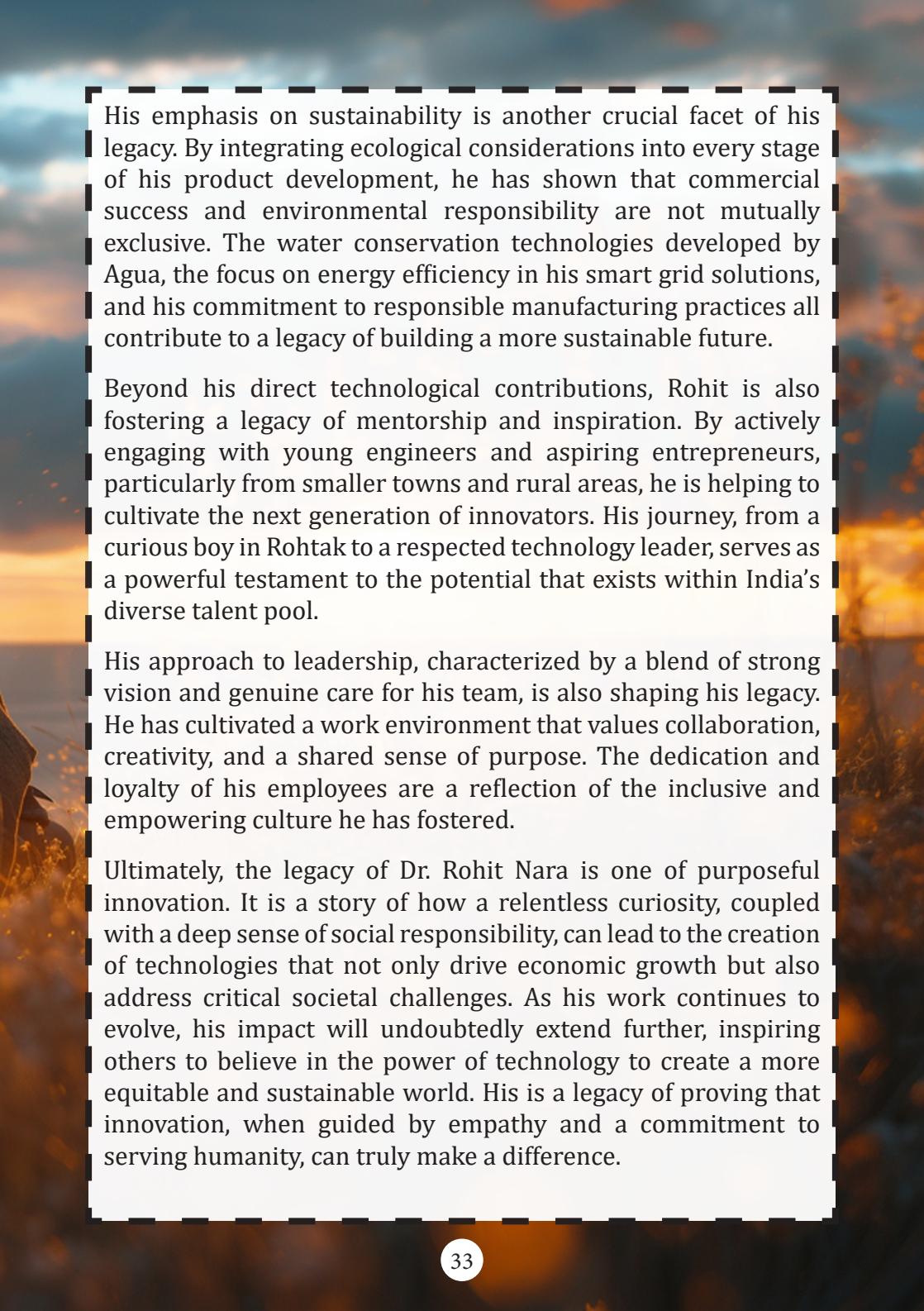
“True leadership is proven by how many others can build after you, not merely by how much you build yourself.”

— Dr. Rohit Nara

The story of Dr. Rohit Nara is still very much in the making, yet the threads of his legacy are already beginning to weave a distinctive pattern. It is a legacy not solely defined by the companies he founded or the technological innovations he pioneered, but by the enduring impact of his work on communities, industries, and the very way technology is conceived and deployed in India.

One of the most significant aspects of his emerging legacy is his unwavering commitment to bridging the digital divide. Through Nara Technologies and Agua Wireless Systems, he has consistently demonstrated that cutting-edge technology can be made accessible and affordable for those who need it most. From empowering farmers with precision agriculture tools to providing remote water management solutions for underserved communities, his work has directly improved the lives and livelihoods of countless individuals. This focus on creating technology for the “last mile” is a defining characteristic of his approach and a key element of his lasting impact.

Furthermore, Rohit is creating legacy of indigenous innovation. He has consistently championed the idea that world-class technology can be developed within India, tailored to the specific needs and contexts of the nation. His success in building a vertically integrated technology group, from design to manufacturing, serves as an inspiring example for other aspiring entrepreneurs and reinforces the potential for India to be a hub of technological innovation.

The background of the page features a photograph of a person sitting on a grassy hillside, looking out over a vast landscape under a dramatic sunset sky. The colors are warm and golden.

His emphasis on sustainability is another crucial facet of his legacy. By integrating ecological considerations into every stage of his product development, he has shown that commercial success and environmental responsibility are not mutually exclusive. The water conservation technologies developed by Agua, the focus on energy efficiency in his smart grid solutions, and his commitment to responsible manufacturing practices all contribute to a legacy of building a more sustainable future.

Beyond his direct technological contributions, Rohit is also fostering a legacy of mentorship and inspiration. By actively engaging with young engineers and aspiring entrepreneurs, particularly from smaller towns and rural areas, he is helping to cultivate the next generation of innovators. His journey, from a curious boy in Rohtak to a respected technology leader, serves as a powerful testament to the potential that exists within India's diverse talent pool.

His approach to leadership, characterized by a blend of strong vision and genuine care for his team, is also shaping his legacy. He has cultivated a work environment that values collaboration, creativity, and a shared sense of purpose. The dedication and loyalty of his employees are a reflection of the inclusive and empowering culture he has fostered.

Ultimately, the legacy of Dr. Rohit Nara is one of purposeful innovation. It is a story of how a relentless curiosity, coupled with a deep sense of social responsibility, can lead to the creation of technologies that not only drive economic growth but also address critical societal challenges. As his work continues to evolve, his impact will undoubtedly extend further, inspiring others to believe in the power of technology to create a more equitable and sustainable world. His is a legacy of proving that innovation, when guided by empathy and a commitment to serving humanity, can truly make a difference.

Final Verdict

The journey of Dr. Rohit Nara, as chronicled in these pages, is far more than a timeline of inventions and entrepreneurial milestones. It is a compelling narrative of relentless curiosity channeled into purposeful innovation, a testament to the power of a determined spirit grounded in a deep sense of social responsibility. From his early fascination with the inner workings of discarded electronics in Rohtak to his current leadership of a thriving technology group, Rohit's story underscores the profound impact that a blend of ingenuity and empathy can have on the world.

He has consistently defied conventional boundaries, moving seamlessly between the worlds of engineering, entrepreneurship, and even the performing arts, drawing valuable lessons from each. His unconventional educational path, marked by a thirst for practical knowledge that often transcended the traditional classroom, laid the foundation for his hands-on approach to problem-solving.

The rise of Nara Technologies and Agua Wireless Systems is a direct reflection of Rohit's unwavering belief in indigenous innovation and his commitment to creating solutions that are both technologically advanced and accessible to the Indian context. His ability to translate frugal prototypes into scalable platforms that address critical needs in water management, urban infrastructure, and agriculture has garnered national and international recognition.

Yet, beyond the technological achievements and business success, what truly defines Dr. Rohit Nara's journey is his unwavering focus on the human element. His insistence that technology must serve the needs of all, particularly those at the margins of society, is a guiding principle that permeates every aspect of his

work. He views each innovation not just as a technical feat, but as an opportunity to create tangible improvements in people's lives and to contribute to a more sustainable future.

His leadership style, characterized by a blend of strong vision and genuine care for his team, has fostered a culture of collaboration and shared purpose within his organizations. He serves as an inspiring example for aspiring entrepreneurs, particularly those from smaller towns, demonstrating that groundbreaking innovation can emerge from anywhere.

In conclusion, the life of Dr. Rohit Nara is a powerful reminder that the most impactful technological advancements are often born from a deep understanding of real-world challenges and a genuine desire to make a difference. His journey is a compelling argument for a future where innovation is driven not just by profit, but by a profound sense of purpose and a commitment to creating a more equitable and sustainable world for all. His story is not yet complete, but the legacy he is building—one circuit, one line of code, one thoughtful innovation at a time—is already leaving an indelible mark on the landscape of Indian technology and beyond.



Dr. Rohit Nara

“A blueprint without empathy is just a sketch. But when conscience guides creation, every prototype becomes a promise.”