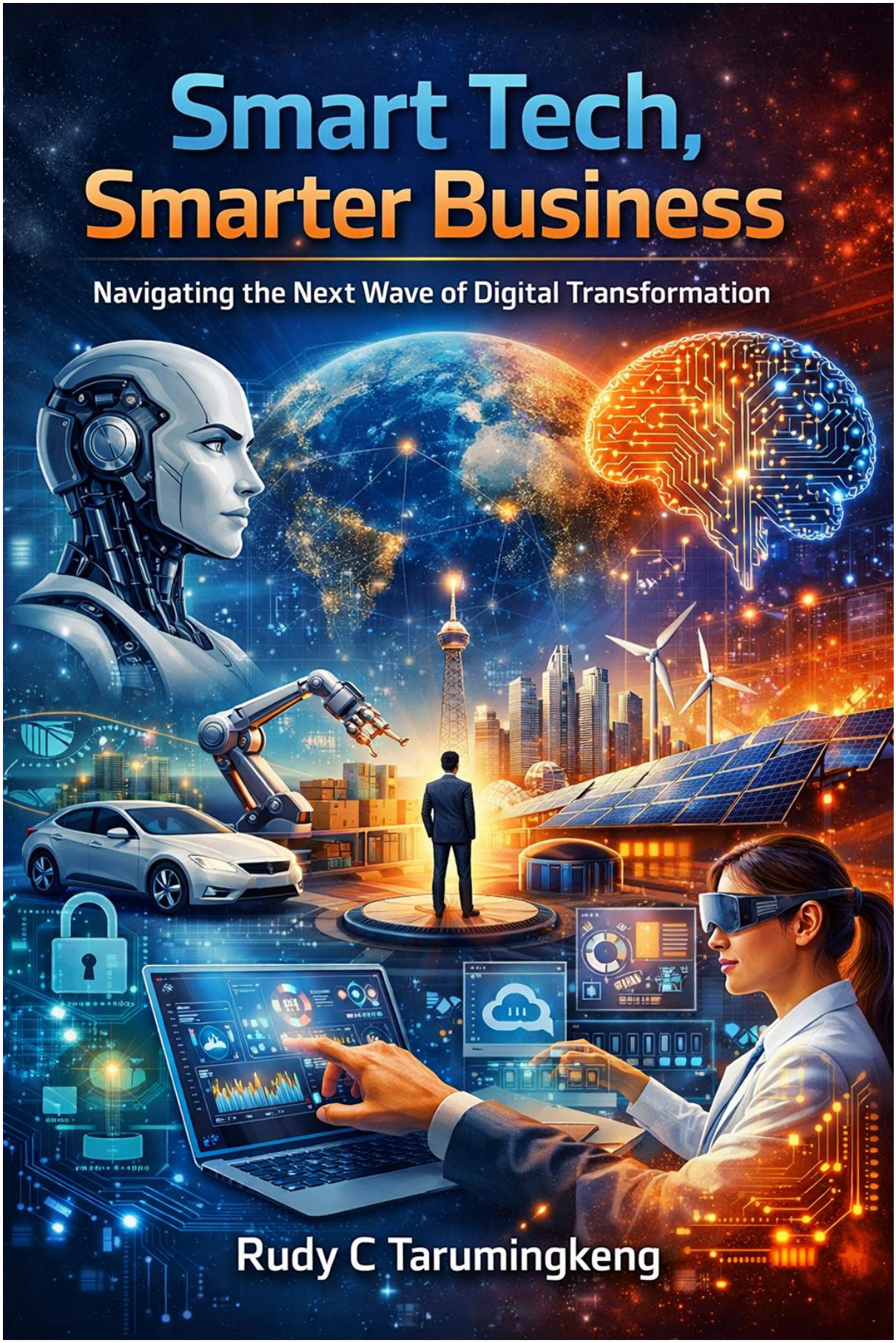
Smart Tech,
Smarter Business
Navigating the Next Wave of Digital Transformation
Rudy C Tarumingkeng

By:
Prof Ir Rudy C Tarumingkeng, PhD
Professor of Management NUP: 9903252922
Rector, Cenderawasih State University, Papua (1978-1988, dan
Head, AGRO Manokwari Campus, (now Universitas Papua Manokwari)
Coordinator, CIDA/DIKTI SFU Burnaby BC Canada 1988-1991
Rector, Krida Wacana Christian University, Jakarta (1991-2000)
Chairman, Board of Professors, IPB-University, Bogor (2005-2006)
AI - Data Analyst, dan Chairman Academic Senate, IBM-ASMI, Jakarta 2024-

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rudyct75@gmail.com
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SMART TECH, SMARTER BUSINESS: NAVIGATING THE NEXT WAVE OF DIGITAL TRANSFORMATION

Abstract

This essay examines the next wave of digital transformation and argues that smart technology is reshaping business not only through automation, but through deeper changes in organizational intelligence, strategic decision-making, customer value creation, resilience, and governance. It shows that contemporary digital transformation is moving beyond basic digitization toward more connected, data-intensive, and AI-enabled business models in which firms use cloud systems, analytics, automation, traceability tools, and cybersecurity frameworks to improve adaptability and competitiveness. The discussion emphasizes that smarter business is not defined by technology ownership alone, but by the ability to integrate technology with data governance, workforce capability, business-model innovation, and responsible leadership. The essay also highlights major tensions in this transition, including uneven AI adoption across firms, widening skills gaps, cybersecurity exposure, dependence on digital infrastructure, and the growing electricity demand associated with data centres and AI systems. Drawing on recent evidence from the OECD, World Bank, NIST, IFRS Foundation, IEA, UNCTAD, and the World Economic Forum, the essay concludes that the most successful firms in the coming decade will be those that treat digital transformation as an enterprise-wide capability-building process rather than a narrow IT initiative. In that sense, smart technology becomes most valuable when it enables firms to become more agile, more trustworthy, more sustainable, and more strategically intelligent. (OECD)

Keywords

Smart technology; digital transformation; artificial intelligence; data governance; automation; business resilience; cybersecurity; business-model innovation; digital strategy; intelligent enterprise.

Smart Tech, Smarter Business: Navigating the Next Wave of Digital Transformation

Introduction

Digital transformation is no longer a fashionable managerial slogan. It has become the operating condition of contemporary business. For many years, companies treated digitalization as an efficiency project: moving records online, automating paperwork, building websites, digitizing workflows, and connecting business units through enterprise software. That first wave was important, but it was still largely about doing old things in faster ways. The next wave is more ambitious. It is about redesigning how firms sense opportunities, make decisions, create value, manage risk, and compete. In that sense, "smart tech" does not simply mean more software. It refers to the growing use of artificial intelligence, cloud computing, data platforms, sensors, automation, cybersecurity tools, and digitally connected ecosystems that allow firms to operate with far greater intelligence, adaptability, and precision than before. This new phase is unfolding in a context where technological change is rapid, AI use is accelerating, and digital policy is increasingly concerned not only with innovation, but also with trust, skills, inclusion, and environmental impact. The OECD describes the current period as a new phase of digital transformation marked by rapid technological change, while also noting that the ICT sector has grown about three times faster than the total economy across OECD countries over the past decade. (OECD)

The significance of this next wave lies in the fact that digital transformation is no longer merely about internal process modernization. It is now tied to business strategy itself. Firms are being pushed to respond to new customer expectations, geopolitical uncertainty, cybersecurity threats, workforce disruption, climate pressure, and more demanding investors. At the same time, digital technologies are becoming powerful enough to change the structure of markets. AI can improve performance in specific work tasks by substantial margins; data-driven firms can coordinate complex operations across value chains; and digital platforms can reshape how products are designed, delivered, serviced, and monetized. But the gains are not automatic. The OECD cautions that the full benefits of AI depend on complementary investments in ICT infrastructure, management capabilities, and human capital, and that adoption remains concentrated among larger and more productive firms. The World Bank likewise argues that AI's benefits are uneven because countries and organizations differ sharply in connectivity, compute, context, and competency. In other words, the next wave of digital transformation is not just a technology race. It is a capability race. (OECD)

This essay argues that smarter business in the next decade will depend less on owning technology and more on integrating technology with strategy, governance, people, and purpose. The firms that succeed will be those that understand digital transformation as a systemic change in how the enterprise learns and adapts. They will treat data as an economic resource, AI as a decision-support architecture, automation as a redesign tool, cybersecurity as a strategic discipline, and sustainability as part of business model innovation rather than a separate reporting function. At the same time, they will recognize the new contradictions of the digital age: growing energy demand from data centres, concentration of digital power, widening skills gaps, new cyber vulnerabilities, and the risk that technology accelerates complexity faster than organizations can govern it. The next wave, therefore, is not just

about becoming more digital. It is about becoming more intelligent, more resilient, and more responsible. (IEA)

From Digitization to Intelligent Transformation

The first wave of digital transformation was mainly transactional. It focused on converting analogue processes into digital ones. Paper became PDF, cashier queues became e-commerce checkouts, and manual reconciliations became ERP workflows. This shift improved speed and reduced friction, but it often left the underlying logic of the business unchanged. The next wave is different because it changes how firms think, not just how they process. It is increasingly built around intelligence. Companies no longer want merely to store data; they want to predict demand, personalize offerings, detect anomalies, optimize systems, and model future scenarios. That is why AI, advanced analytics, and connected devices have moved from the periphery of business experimentation to the centre of strategic planning. OECD data indicate that firm-level AI adoption has more than doubled across reporting OECD countries in just two years, reaching 20.2% in 2025 from 14.2% in 2024 and 8.7% in 2023, with especially strong adoption in ICT and professional services, but also fast growth in previously lagging sectors such as construction and accommodation. (OECD)

This shift from digitization to intelligent transformation alters the very meaning of competitive advantage. In the industrial era, scale, capital intensity, and supply control were often decisive. In the digital era, the decisive variable increasingly becomes how quickly a firm can convert signals into action. A retailer that can detect demand changes in real time, a manufacturer that can predict equipment failure before downtime occurs, a bank that can personalize risk decisions without losing control, or a logistics firm that can continuously reroute for efficiency has an advantage that is not easily copied by competitors still operating through fragmented data and slow decision cycles. What matters, then, is not simply access to digital tools, but the organizational

ability to combine them into a coherent operating model. The OECD stresses that AI's productivity gains require complementary assets, particularly management quality and workforce problem-solving capability. This is crucial because many companies mistakenly believe that acquiring advanced tools is equivalent to transforming the firm. In reality, the next wave rewards orchestration, not acquisition. (OECD)

Another difference is that intelligent transformation increasingly extends beyond the boundaries of the firm. Digital systems are now embedded in ecosystems. Data moves across suppliers, customers, logistics providers, regulators, and financial institutions. The business is no longer an isolated machine; it is a node in a network. This means that the next wave of digital transformation is also about interoperability, standards, and coordination. The OECD's integrated policy approach emphasizes that data, technologies, and new business models are driving forces underlying digital transformation and that coherent governance is needed across multiple domains. The implication for companies is clear: digital strategy cannot remain confined to IT departments. It must connect operations, finance, sustainability, cybersecurity, HR, procurement, and customer strategy, because intelligence only creates value when it travels across the organization and its value chain. (OECD)

Data as the New Operating Logic of the Firm

If the next wave of digital transformation has a hidden engine, it is data. For years, managers described data as the "new oil," but that metaphor is imperfect. Oil is extracted and burned. Data is generated, shared, refined, recombined, and reused. Its value depends not only on possession, but on context, quality, timeliness, and governance. Smart businesses increasingly operate by transforming data into an organizing logic. Inventory decisions, marketing campaigns, maintenance schedules, fraud checks, credit models, talent planning, product design, and sustainability reporting are all becoming more data-intensive. OECD work on digital policy explicitly states that data are the fuel that powers the engine of

digital transformation. That statement is more than rhetorical. It suggests that the modern firm cannot compete intelligently unless it can structure, access, govern, and interpret relevant data across its operations and partnerships. (OECD)

Yet many businesses remain "data-rich but insight-poor." They collect transactional traces at scale but lack usable architecture. Different departments keep separate systems, supplier information is incomplete, sustainability metrics are manually assembled, and real-time analytics are available to only a handful of executives. In such organizations, data accumulates without becoming intelligence. The next wave requires a different mindset. Companies must treat data not simply as an IT asset, but as a strategic resource requiring stewardship. This includes data quality management, interoperability, privacy protections, lifecycle controls, and clear responsibility for how data informs decisions. NIST's AI Risk Management Framework is especially relevant here because it frames AI risk not only as a technical issue, but as something that organizations must govern through design, development, deployment, and evaluation practices that improve trustworthiness. Since AI performance depends on data quality and contextual relevance, bad data governance becomes bad strategy. (NIST)

This is also why the next wave of transformation is increasingly linked to disclosure and accountability. Investors, regulators, and customers now expect businesses to demonstrate—not merely assert—their performance on climate, supply-chain integrity, and sustainability-related risks. IFRS S1 requires firms to disclose sustainability-related risks and opportunities that could reasonably be expected to affect cash flows, access to finance, or cost of capital, and it requires disclosure of governance, strategy, risk management, and performance in those areas. Digital maturity becomes critical here because credible sustainability disclosure depends on reliable internal information systems. A company cannot report well on value-chain risks, emissions exposure, or supplier

practices if its data architecture is fragmented or weak. In this sense, data infrastructure is no longer just an enabler of efficiency. It is part of corporate accountability itself. (IFRS Foundation)

AI, Automation, and the Rewiring of Value Creation

Artificial intelligence is often presented as a dramatic rupture, but in business practice its power is more specific and operational. AI changes value creation by improving pattern recognition, prediction, classification, optimization, and increasingly content generation. In call centres, it summarizes interactions and supports agents. In finance, it detects anomalies. In manufacturing, it anticipates faults. In marketing, it personalizes communication. In procurement, it flags risk. In product development, it accelerates design iteration. OECD evidence suggests that recent generative AI tools can improve performance in specific tasks by roughly 20% to 40%, depending on context, although broader economy-wide outcomes remain uncertain. That finding is important because it tempers both hype and skepticism. AI is not magic, but it is not trivial either. It creates tangible gains when fitted to appropriate tasks within suitable organizational systems. (OECD)

Automation in this next wave is also more cognitive than before. Earlier automation replaced repetitive physical or clerical labor. Current automation increasingly augments knowledge work. This creates strategic opportunities for firms because it allows human attention to be redirected toward judgment, creativity, relationship management, and exception handling. However, this shift also demands process redesign. Simply layering AI onto inefficient workflows rarely yields transformative gains. Smart businesses therefore use automation to rethink the sequence of work itself. They ask which decisions can be delegated, which require human oversight, what information needs to be surfaced earlier, and how responsibilities should be redistributed. The best uses of AI do not merely reduce labor time; they shorten feedback loops and improve the quality of organizational response. This is why the OECD

links AI productivity gains to complementary investments in management capability and leadership skills. Technology changes the frontier, but organizational design determines whether firms reach it. (OECD)

At the same time, AI raises fundamental governance questions. The more businesses rely on algorithmic outputs, the more they must confront issues of accuracy, bias, explainability, safety, privacy, and overdependence. NIST's framework exists precisely because AI can create risks for individuals, organizations, and society if deployed carelessly. Smart businesses therefore need a more mature philosophy of AI adoption. They must ask not only, "Can the model do this?" but also, "Should this decision be automated, under what constraints, with what monitoring, and with what human recourse?" The next wave of transformation will likely expose a gap between firms that merely use AI and firms that govern AI. The latter will be better positioned to scale with trust. (NIST)

Rethinking the Customer and the Business Model

Digital transformation is often discussed as an internal operational matter, but its most visible effects are often customer-facing. Smart technology changes not only how firms produce, but how they relate to markets. Customers increasingly expect immediacy, customization, transparency, and continuous service. In response, firms are moving away from one-size-fits-all offerings toward more adaptive and data-informed models. Recommendation systems, dynamic pricing, conversational interfaces, and predictive service support all reflect this shift. Yet the deeper change is business-model level. Digital transformation is enabling firms to move from selling products to selling outcomes, from episodic transactions to ongoing service relationships, and from static offerings to learning systems that improve as they are used.

This matters because a smarter business is typically one that learns from use, not just from sales. Connected products create feedback. Usage data reveals what customers value, where friction occurs, and how services can be improved. That in turn supports new revenue models: subscription, performance-based contracts, remote diagnostics, predictive service plans, and platform-mediated ecosystems. Such models can be more resilient because they reduce dependence on one-off purchases and deepen the firm's relationship with customers. They also create opportunities for sustainability. A company that profits from uptime or performance rather than sheer sales volume has an incentive to build more durable, serviceable, and efficient products. Smart technology thus becomes a bridge between customer value and resource discipline.

There is, however, a tension here. The same technologies that make customer experiences more convenient can also make markets more manipulative, addictive, or opaque. Hyper-personalization can drift into exploitation. Digital platforms can create lock-in. Data collection can exceed reasonable expectations. This is why trust becomes a competitive variable. OECD work on trust in digital environments warns that without trust, a major source of economic and social progress will remain underused. For business, that implies a strategic lesson: the next wave of digital transformation will reward firms that treat transparency and consent not as regulatory burdens, but as market assets. Businesses that misuse data may gain short-term advantages, but they undermine the legitimacy on which long-term digital relationships depend. (OECD Going Digital Toolkit)

Supply Chains, Traceability, and the New Resilience Imperative

If one lesson of the past several years is unmistakable, it is that efficiency without resilience is fragile. Global supply chains have been tested by pandemics, geopolitical tension, cyber incidents, logistics disruptions, and climate-related shocks. The next wave of digital transformation is

therefore moving beyond cost optimization toward visibility, traceability, and adaptive coordination. Smart technology enables firms to monitor inventory in motion, map supplier dependencies, track quality conditions, model disruption scenarios, and identify weak points before they become crises. What was once a back-office procurement function is becoming a strategic intelligence challenge.

This change is reinforced by the rise of regulatory and investor scrutiny. Businesses are increasingly expected to know not only who their direct suppliers are, but what is happening deeper in the value chain. In this setting, traceability is becoming central to both compliance and competitiveness. The World Bank's work on public agrifood digital traceability platforms emphasizes the importance of digital traceability for market access, coordination, and information integrity, while the European Commission's work on the Digital Product Passport points toward a future in which product sustainability, durability, and lifecycle information can be stored and shared in structured digital form. This marks an important transformation: value chains are being asked to become readable. Firms that can demonstrate origin, material content, environmental attributes, and movement across the chain will be stronger in markets where trust and verification matter. (IFRS Foundation)

Smarter supply chains are not just more transparent; they are more adaptable. With predictive analytics, companies can anticipate demand spikes, supplier delays, or transport bottlenecks. With sensors and connected logistics, they can monitor temperature-sensitive goods or equipment performance. With better network intelligence, they can redesign sourcing strategies, rebalance inventories, or diversify suppliers before disruptions become costly. Yet here too, technology alone is insufficient. Supply-chain intelligence depends on partner cooperation, shared standards, and governance agreements. Many firms discover that their digital sophistication ends at the edge of their own enterprise

systems. The next wave of transformation requires extending intelligence outward across the business ecosystem.

There is also a sustainability dimension. Traceability can support circular economy strategies, lower waste, improve recovery of materials, and strengthen product stewardship. OECD work on digital tools for the circular economy shows how digital business models and technologies can support more reliable environmental information and stronger consumer engagement. In practical terms, this means that smarter supply chains are not only more resilient against shocks; they can also be more accountable and materially efficient. That makes traceability one of the most strategically important intersections between digital transformation and sustainable business. (OECD)

Work, Skills, and the Human Side of Transformation

No serious account of the next wave can avoid the question of work. Every major technological transition changes skill requirements, organizational roles, and the social contract of employment. What makes the current moment distinctive is that AI and automation are beginning to affect both routine and non-routine work, including parts of professional and cognitive labor once considered relatively insulated. This does not mean that jobs disappear in a simple one-for-one fashion. More often, tasks are reconfigured, new roles emerge, and older roles are redefined. But the pressure on skills is real. The World Economic Forum's Future of Jobs Report 2025 identifies technological change, geoeconomic fragmentation, economic uncertainty, demographic shifts, and the green transition as major drivers reshaping labor markets through 2030, and reports that skills gaps remain the biggest barrier to business transformation, with about 40% of skills required on the job expected to change. (World Economic Forum)

This has major implications for business strategy. A firm can invest in advanced tools and still fail if its people cannot work effectively with them. The next wave therefore elevates the importance of workforce

redesign. Businesses need not only AI specialists and data scientists, but also managers who can frame problems correctly, frontline staff who can use digital support systems well, and leaders who understand how automation changes risk, accountability, and customer value. The World Economic Forum also notes that AI and big data, networks and cybersecurity, and technology literacy are among the fastest-growing skill areas, but it emphasizes that human capabilities such as creative thinking, resilience, flexibility, and lifelong learning remain essential. This is a crucial point. Smart tech does not eliminate the need for human judgment; it changes where that judgment matters most. (World Economic Forum)

The OECD makes a similar argument in its AI materials, stressing that AI is likely to significantly affect jobs and that countries and firms must prioritize training, support workers through transition, and ensure inclusive labor markets. That guidance applies directly to business. The firms most likely to benefit from digital transformation are not necessarily those with the most advanced software, but those that build learning capacity across the organization. In practical terms, this means redesigning roles, rethinking incentives, investing in AI literacy, and giving workers room to experiment responsibly. When transformation is handled badly, it creates fear, resistance, and talent loss. When handled well, it creates augmentation rather than alienation. (OECD)

Another issue is inequality between firms. Large enterprises often have greater access to talent, compute, proprietary data, and digital infrastructure. Smaller firms may face higher adoption costs, skills shortages, and cyber vulnerabilities. OECD work on AI adoption among SMEs shows that usage is rising rapidly but remains comparatively low, and that AI adoption is still much less prevalent than use of many other digital technologies. This suggests that the next wave may widen competitive gaps unless ecosystem support improves. Smarter business cannot become the privilege of only the biggest businesses. If the next

wave is to produce broad-based productivity gains, SMEs must be included through affordable tools, trusted standards, targeted training, and practical support. (OECD)

Cybersecurity, Trust, and Digital Risk

Every new layer of digital intelligence also creates a new layer of vulnerability. As businesses become more connected, automated, and AI-enabled, they become more exposed to cyber risk, model risk, data misuse, and operational disruption. The next wave of digital transformation is therefore inseparable from cybersecurity and trust. Firms that treat cyber as a technical afterthought will find that their transformation efforts generate hidden fragility. Modern cyber risk is not confined to stolen passwords or isolated attacks. It includes supply-chain compromise, ransomware, cloud misconfiguration, compromised AI tools, deepfake-enabled fraud, and systemic dependence on a small number of critical providers.

Recent evidence shows how serious this has become. The World Economic Forum's Global Cybersecurity Outlook 2025 reports that 66% of organizations expect AI to have the most significant impact on cybersecurity in the coming year, yet only 37% say they have a process in place to assess the security of AI tools before deployment. The report also highlights the rising complexity of cyberspace, the growth of cyber risks, and the vulnerabilities created by dependence on concentrated digital infrastructure. These findings suggest that many organizations are accelerating AI adoption faster than they are strengthening AI-related security controls. That is a dangerous mismatch.

NIST's Cybersecurity Framework 2.0 is relevant precisely because it treats cyber risk as an organizational governance issue, not just an IT issue. It provides guidance for organizations of different sizes to manage and reduce cybersecurity risk, and NIST has also released small-business guidance to help organizations with modest capabilities use the framework in practical ways. This matters because the next wave of

digital transformation is not sustainable unless it is secure by design. A company that digitizes procurement, customer service, product intelligence, and internal knowledge flows without embedding risk controls is effectively scaling vulnerability. Smart businesses must therefore integrate cybersecurity into transformation planning from the beginning, especially when deploying cloud services, third-party AI tools, and connected devices. (NIST Publications)

Trust also extends beyond security into privacy, fairness, and information integrity. Businesses increasingly operate in environments where customers, regulators, and workers expect more explainability about how digital systems affect them. The OECD notes that AI can fuel bias and discrimination and present risks to privacy, safety, security, and human autonomy. Firms that want durable legitimacy will need governance models that go beyond compliance checklists. They must show that they can manage digital power responsibly. In the next wave, trust will not be a public-relations theme. It will be part of operational excellence. (OECD)

Sustainability, Energy, and the Digital Paradox

One of the most important features of the current transformation is that it unfolds under sustainability pressure. Businesses are being asked to grow while reducing emissions, improving resource efficiency, and making value chains more transparent. Smart technologies can help achieve those goals by optimizing energy use, predicting maintenance, reducing waste, improving logistics, and supporting circular business models. Yet digital transformation also has an environmental cost. The expansion of AI, cloud computing, and data-centre infrastructure is increasing electricity demand and material use. This creates a paradox: digital technology can support sustainability, but it can also deepen environmental strain if deployed without discipline.

The International Energy Agency provides one of the clearest warnings. It estimates that data centres accounted for about 1.5% of global electricity consumption in 2024, or around 415 TWh, and that electricity demand

from data centres is set to more than double by 2030 to roughly 945 TWh, driven primarily by AI alongside other digital services. UNCTAD likewise emphasizes that digital technologies depend heavily on raw materials and that devices, data centres, and networks together account for a significant share of global electricity use, while also generating growing water demand and e-waste pressures. The lesson is not that digital transformation should slow down, but that it must be managed with much greater awareness of its physical footprint. (IEA)

For business strategy, this means that the next wave cannot be judged solely by software capability. It must also be evaluated by compute efficiency, power sourcing, hardware lifecycle, and environmental trade-offs. A company that uses AI to optimize logistics but ignores the energy intensity of its compute stack is seeing only half the picture. A company that promotes digital sustainability tools while replacing devices at unsustainable rates is trapped in contradiction. OECD and UNCTAD work both suggest that the digital transition and the green transition are intertwined. Businesses therefore need a "twin transition" mindset: using digital tools to advance sustainability, while also reducing the environmental footprint of digital infrastructure itself. (OECD)

This is also where reporting and management systems become important. As sustainability-related risks and opportunities become financially material, firms need integrated measurement. IFRS S1 is important because it requires entities to disclose how governance, strategy, risk management, and performance relate to sustainability-related risks and opportunities that could affect business prospects. In practice, that means firms must connect digital operations to sustainability performance rather than treating them as separate reporting domains. The smarter business of the future will know not only whether a digital investment increases productivity, but also what it means for energy use, supply risk, capital allocation, and long-term resilience. (IFRS Foundation)

SMEs, Emerging Economies, and Uneven Transformation

The next wave of digital transformation will not arrive evenly. That may become one of its defining features. Leading firms in high-income economies often have access to better connectivity, larger data pools, cloud infrastructure, venture capital, and specialized skills. Many SMEs and firms in developing markets operate under very different conditions. This asymmetry matters because technology waves tend to reward early movers and amplify structural advantages. The World Bank's 2025 Digital Progress and Trends Report explicitly frames AI readiness around four foundations—connectivity, compute, context, and competency—and stresses that these foundations are distributed very unevenly across countries. OECD work similarly notes that AI adoption remains concentrated among larger firms and leading sectors, raising the risk that digital transformation will widen productivity gaps rather than close them. (Open Knowledge Bank)

This unevenness is not merely a policy problem; it is a business reality. Many firms in emerging markets do not lack ambition; they lack reliable digital foundations. Connectivity may be unstable, skilled personnel scarce, and capital constrained. Yet this does not mean that they are excluded from smarter business altogether. It means that the form of transformation may differ. Cloud-based services, smaller AI tools, mobile-first systems, and sector-specific platforms can often create value without requiring frontier-scale infrastructure. The World Bank's emphasis on "small AI" and practical adoption pathways is useful here because it suggests that intelligence can be distributed through more modest tools when the ecosystem supports them. The next wave will therefore not be defined only by the most advanced models in the largest firms, but also by the spread of usable intelligence into ordinary business operations across smaller enterprises and developing markets. (Open Knowledge Bank)

UNCTAD adds an important developmental perspective by arguing that digitalization must be both environmentally sustainable and inclusive. That warning is relevant for business leaders as well. If digital transformation produces stronger concentration, higher barriers to entry, and larger capability gaps, its economic benefits may be politically and socially unstable. Smarter business, in a deeper sense, should include ecosystem thinking. Large firms need digitally capable suppliers. Markets need interoperable systems. Workforces need pathways into new skills. Trustworthy growth depends on diffusion, not just concentration. (UN Trade and Development (UNCTAD))

The Strategic Leadership Agenda

The next wave of digital transformation will ultimately test leadership more than technology. Tools matter, but choices about deployment, governance, investment, and purpose matter more. Many digital transformation efforts fail not because the software is weak, but because the organization cannot align around a coherent model of change. Leaders therefore need a different mental framework. First, they must stop treating digital transformation as a portfolio of disconnected IT projects. It is an enterprise redesign agenda. Second, they must identify where intelligence creates the most strategic value: reducing cycle times, strengthening customer trust, improving resilience, lowering waste, enhancing workforce capability, or enabling new business models. Third, they must build governance structures that keep experimentation disciplined without suffocating it.

A crucial leadership lesson is that not everything valuable is immediately automatable, and not everything automatable is strategically wise. Mature leaders know that transformation is partly a sequencing problem. Some firms need better data architecture before advanced AI. Others need cyber strengthening before platform expansion. Others need workforce redesign before aggressive automation. Smart transformation is path-dependent. It builds on foundations. OECD, NIST, and the World

Bank all point in this direction, albeit in different language: productivity gains depend on complementary assets; trustworthy AI requires structured risk management; and AI benefits depend on foundational conditions. The implication is that strategic patience is sometimes more intelligent than technological haste. (OECD)

Leadership also involves moral clarity. Digital transformation changes power relationships inside and outside the firm. It changes who knows what, who decides what, who is monitored, who is excluded, and who bears the cost when systems fail. A smarter business is therefore not just a more efficient one. It is one that uses intelligence in ways that strengthen legitimacy and long-term value. In this sense, the best digital leaders are not those who adopt the most tools, but those who build organizations capable of learning without losing trust, scaling without losing control, and innovating without losing sight of human and environmental consequences. That is the deeper meaning of navigating the next wave. It is not only about speed. It is about direction. (NIST)

Conclusion

"Smart tech, smarter business" is not a slogan about gadgets. It is a statement about organizational intelligence. The next wave of digital transformation is moving business beyond simple digitization toward systems that can learn, predict, coordinate, and adapt. AI is becoming a productivity tool, data a strategic resource, automation a redesign mechanism, traceability a resilience asset, and cybersecurity a leadership obligation. At the same time, the next wave is revealing hard truths: adoption is uneven, energy demand is rising, governance is lagging, and skills gaps remain one of the most serious barriers to transformation. The evidence from OECD, World Bank, IEA, UNCTAD, NIST, IFRS, and the World Economic Forum converges on a shared conclusion: digital transformation is no longer just about efficiency. It is about whether firms can build the capabilities required to compete intelligently in a

world defined by rapid technological change, systemic risk, and rising expectations of accountability. (OECD)

The businesses that will thrive are unlikely to be those that chase every trend. They will be those that know how to align technology with strategy, people, governance, and sustainability. They will invest in the foundations—data, skills, cyber resilience, operating discipline, and trustworthy governance—that allow tools to become durable capabilities. They will understand that transformation is not a moment but a managerial practice of continuous adaptation. And they will recognize that in an era where many firms are becoming more digital, the real differentiator is not digitization itself, but wisdom in how digital power is used. That is what will make smart tech translate into smarter business. (OECD)

Glossary

1. Smart technology
Smart technology refers to digital tools and systems that can collect data, process information, support decisions, and often interact dynamically with physical or organizational environments. In business, this usually includes AI, cloud systems, analytics, connected devices, and automation tools. (OECD)

2. Digital transformation
Digital transformation is the broader organizational process through which digital technologies change business operations, innovation, governance, and value creation. The OECD frames the current phase as a new and rapidly evolving stage of transformation shaped by emerging technologies, policy shifts, and new governance challenges. (OECD)

3. Artificial intelligence (AI)
AI refers to systems that can perform functions associated with learning, reasoning, prediction, classification, or generation, often using data-driven models. NIST describes AI risk management as a way to improve how organizations incorporate trustworthiness considerations into the design, development, use, and evaluation of AI systems. (NIST)

4. Data governance
Data governance refers to the policies, processes, responsibilities, and controls that ensure data quality, consistency, accessibility, security, and proper use across an organization. It is essential because AI and advanced analytics only create reliable business value when the underlying data is credible and well managed. This is an inference based on the role of data and trustworthy AI emphasized by OECD and NIST. (OECD)

5. Automation
Automation is the use of technology to perform tasks with reduced human intervention. In the current wave of transformation, automation increasingly includes not only routine process execution but also support for knowledge work through AI and intelligent systems. (OECD)

6. Business-model innovation
Business-model innovation refers to changes in how a firm creates, delivers, and captures value. In digital contexts, this often includes platform models, service-based offerings, subscription structures, and data-enabled customer relationships. This definition is a synthesis of the OECD's treatment of digital technologies, data, and new business models as central to digital transformation. (OECD)

7. Traceability
Traceability is the ability to track and verify the origin, movement, status, or composition of products and materials across a value chain. It is increasingly important for resilience, compliance, sustainability, and product transparency. (Internal Market & Industry)

8. Digital Product Passport (DPP)
The Digital Product Passport is an emerging EU mechanism intended to make product-related information more accessible and manageable, especially information relevant to sustainability, product characteristics, and lifecycle management. The European Commission's 2025 consultation focused on how DPP-related data should be stored and managed and whether service providers should be certified. (Internal Market & Industry)

9. Cybersecurity risk
Cybersecurity risk refers to the possibility of loss, disruption, or harm arising from failures or attacks affecting digital systems, data, networks, or connected operations. NIST's Cybersecurity Framework 2.0 provides guidance for organizations to manage and reduce such risks. (NIST Publications)

10. Sustainability-related risks and opportunities
Under IFRS S1, these are sustainability-related matters that could reasonably be expected to affect an entity's cash flows, access to finance, or cost of capital over the short, medium, or long term. This definition matters because digital transformation increasingly intersects with climate, supply-chain, energy, and governance issues that are financially material. (IFRS Foundation)

11. Skills gap
A skills gap is the mismatch between the capabilities workers currently possess and the capabilities businesses need. The World Economic Forum identifies skills gaps as the biggest barrier to business transformation and reports that around 39% of workers' existing skill sets are expected to be transformed or become outdated during 2025–2030. (World Economic Forum)

12. AI adoption
AI adoption refers to the degree to which firms are actually using AI in practice. OECD data show that among reporting OECD countries, 20.2%

of firms used AI in 2025, up from 14.2% in 2024 and 8.7% in 2023, indicating fast but still uneven diffusion. (OECD)

13. AI foundations

The World Bank uses the idea of AI foundations to describe the basic conditions needed for effective and inclusive AI deployment, especially connectivity, compute, context, and competency. These foundations help explain why the benefits of AI are distributed unevenly across countries and firms. (World Bank)

14. Trustworthy AI

Trustworthy AI refers to AI that is designed and governed in ways that support values such as validity, reliability, safety, security, accountability, transparency, explainability, privacy enhancement, and fairness. NIST uses this language to guide organizations in operationalizing responsible AI. (NIST)

15. Digital sustainability paradox

The digital sustainability paradox describes the tension that digital technologies can both support sustainability and intensify environmental pressures. UNCTAD highlights the material, water, energy, and waste burdens of digitalization, while the IEA projects that data-centre electricity demand will more than double by 2030, driven largely by AI and other digital services. (UN Trade and Development (UNCTAD))

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