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MAGAZINE

WORLD TECHNOLOGY NEWS

GLOBAL BREAKTHROUGHS.
INNOVATIONS. MARKETS. PEOPLE. IDEAS
SHAPING TOMORROW.

PAKISTAN
THE DIGITAL SCALE-UP

Inside Pakistan's record IT exports, 5G spectrum unlock and AI infrastructure push



IT EXPORTS BREAK RECORD
FY2026 ICT exports reach \$4.6B, up 20.6% year on year.



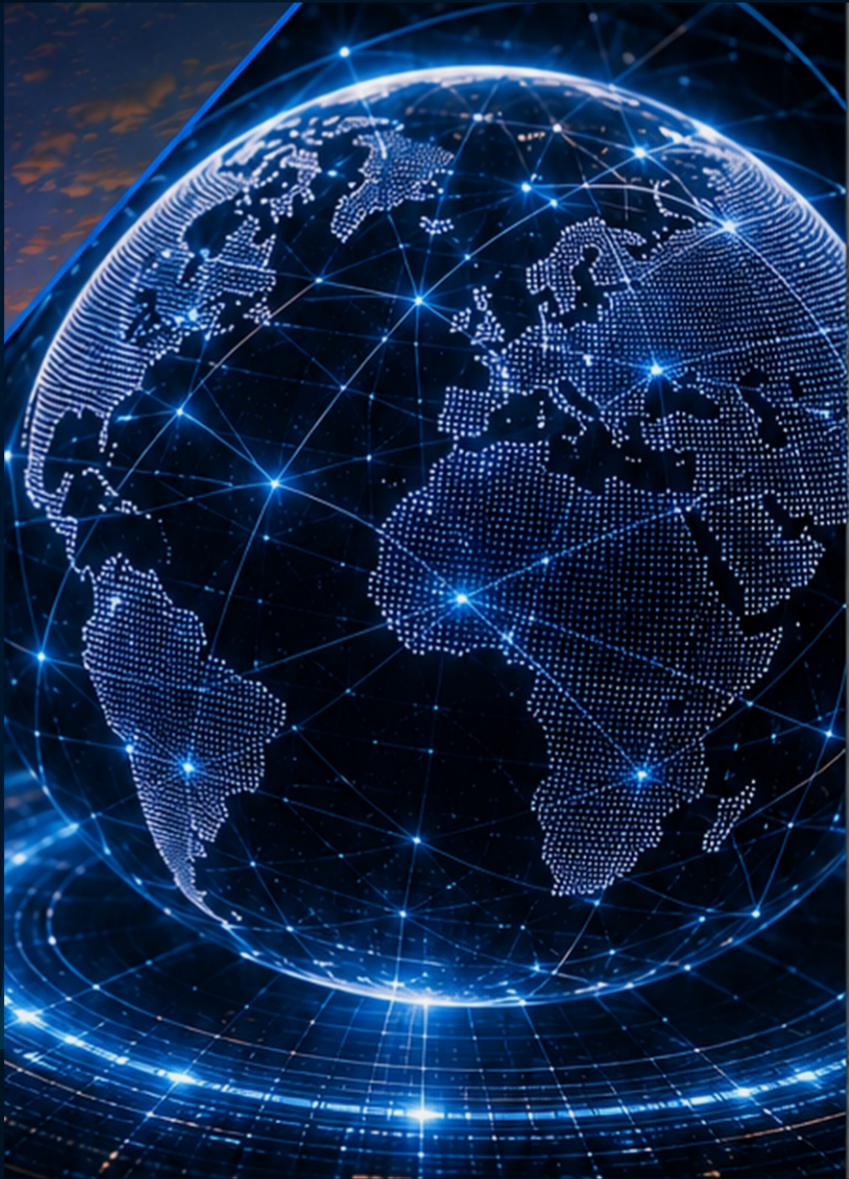
5G SPECTRUM UNLOCKED
480 MHz sold in a landmark auction as operators prepare rollout.



AI MOVES TO DELIVERY
\$1B national ambition, AI hubs and mass upskilling move into execution.



SEMICONDUCTOR TALENT
Three regional research clusters build a workforce pipeline for chips.



WORLD NEWS

Your daily update on global tech breakthroughs and trends

AI & AGENTS

The next wave of intelligent work

ROBOTICS

Automation moves into the physical world

DATA CENTERS

Compute, cloud and cooling scale

CYBERSECURITY

Protecting connected systems

ENERGY TECH

Power becomes the new bottleneck

WORLD NEWS

Global tech moves and markets

CONTENTS

PAKISTAN FOCUS + WORLD TECHNOLOGY

Two pages on Pakistan. Five pages on the technologies shaping the world.

03

PAKISTAN — THE DIGITAL SCALE-UP

Record IT exports, software, freelancers and AI capability.

04

PAKISTAN — 5G, AI & SEMICONDUCTORS

Spectrum, Google, national AI hubs and the new chip-talent pipeline.

05

WORLD TECHNOLOGY NEWS

The global developments moving markets, investment and innovation.

06

AI & ROBOTICS

Agents, automation, humanoids and the next enterprise wave.

07

SEMICONDUCTORS & DATA CENTERS

Chips, compute capacity, cloud infrastructure, cooling and power demand.

08

CYBERSECURITY

AI-driven threats, digital resilience, identity and critical infrastructure.

09

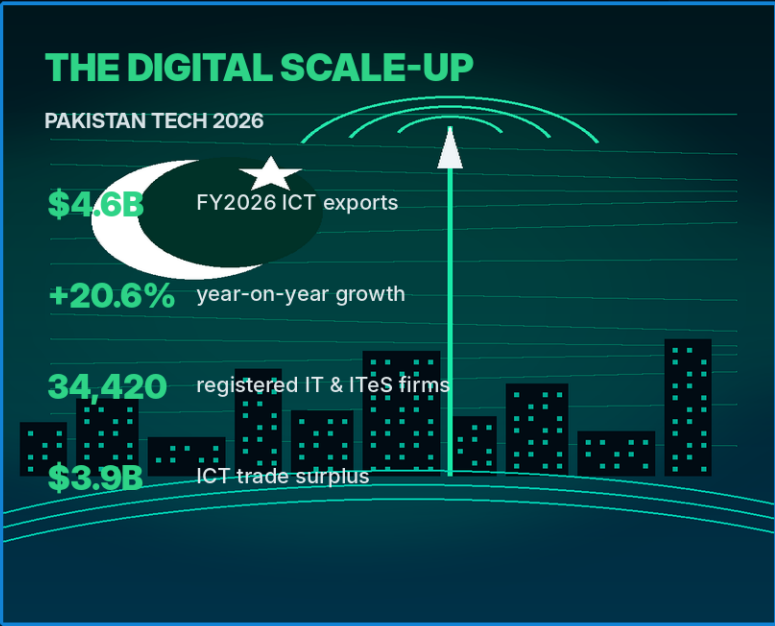
ENERGY TECH

Grid intelligence, storage, electrification and clean technology investment.



PAKISTAN: THE DIGITAL SCALE-UP

Record IT exports are turning software, freelancing and AI skills into a strategic export engine.



WHY PAKISTAN MATTERS

Pakistan's technology sector is becoming a meaningful export engine rather than a niche services story. ICT export earnings reached a record \$4.6 billion in FY2025-26, up 20.6% from \$3.814 billion a year earlier. The sector also produced a \$3.9 billion trade surplus, the strongest among Pakistan's services industries. July 2026 added another \$417 million of IT exports, showing that momentum carried into the new fiscal year. Scale is emerging through thousands of software and IT-enabled-services firms, a large freelance workforce, and growing demand from the Middle East, Europe and other overseas markets. The model remains service-heavy, but that is not a weakness by itself: software engineering, cloud operations, cybersecurity, fintech and remote business services can expand without the capital intensity of heavy manufacturing. The strategic question is whether Pakistan can convert labour-cost advantage into a reputation for quality, security, product ownership and repeatable delivery. If it can, the country's next phase will be less about outsourcing volume and more about higher-value digital exports.

FROM OUTSOURCING TO CAPABILITY STACK

The policy layer is now catching up with export growth. Pakistan's National AI Policy sets out an adoption framework for a knowledge-based economy, while the government says AI is a national priority and has committed to a \$1 billion investment ambition by 2030. National AI hubs, training programmes and scholarship plans aim to widen the skills base beyond the existing software workforce. In August 2026 Google opened its first office in Pakistan, tying its presence to youth upskilling and the wider Digital Nation agenda. At the same time, the semiconductor human-resource programme completed three regional education and research clusters led by NUST in the North, UET Lahore/ESUPAK in the Central region and NED University in the South. Pakistan is not suddenly becoming a leading-edge chip fabrication centre. The more credible near-term opportunity is in engineering talent, design services, verification, embedded systems, packaging knowledge, AI software and supplier capability. That matters because the global tech value chain increasingly rewards countries that can connect software talent to physical infrastructure.

EXPORT ENGINE

Software + services + freelancing + regional sales

CAPABILITY BUILD

AI skills + semiconductor education + cloud + cybersecurity

Sources: Pakistan Economic Survey 2025-26; APP ICT exports (17 Jul 2026); MoITT AI policy and 2026 programmes; Business Recorder.



THE INFRASTRUCTURE CATCH-UP

5G spectrum, AI hubs and semiconductor skills are turning digital ambition into capacity.



PAKISTAN BUILDS THE NEXT LAYER

Connectivity + AI capacity + semiconductor talent = a broader digital platform.

5G SPECTRUM: 480 MHz SOLD

Pakistan completed its NGMS/5G spectrum auction in March 2026. Jazz secured 190 MHz, Ufone 180 MHz and Zong 110 MHz. The auction raised about \$507 million at the bidding stage, with rollout plans focused first on major cities. The business case now shifts from spectrum ownership to coverage, fiber backhaul, enterprise 5G and monetisation.

GOOGLE OPENS ITS FIRST PAKISTAN OFFICE

On 18 August 2026, the government announced the inauguration of Google's first office in Pakistan. The move was tied to youth upskilling, AI training and the Digital Nation Pakistan agenda. Commercially, the signal is bigger than one office: global platforms see a market large enough to justify a deeper local presence.

SEMICONDUCTOR CLUSTER FRAMEWORK COMPLETED

On 29 August 2026, NED University joined the Semiconductor Education & Research Cluster as lead institution for the South region, completing a three-region framework with NUST in the North and UET Lahore/ESUPAK in the Central region. The near-term asset is talent formation, not fabs.

AI POLICY MOVES INTO EXECUTION

Pakistan's AI roadmap targets large-scale skills development, national AI hubs and a \$1 billion investment ambition by 2030. The government has highlighted 1,000 funded AI scholarships and upskilling for one million non-IT professionals, aiming to spread AI capability beyond software companies.

GSR ANALYTIX VIEW

Pakistan's advantage is broadening: export talent + 5G + AI skills + semiconductor workforce + digital infrastructure.

Sources: MoITT 5G spectrum auction (10 Mar 2026); MoITT Google office (18 Aug 2026); MoITT semiconductor cluster (29 Aug 2026); National AI Policy.



WORLD TECHNOLOGY NEWS

AI spending, infrastructure constraints and cyber risk are reshaping t



01 NVIDIA SAYS THE AI BOOM HAS YEARS LEFT

Nvidia forecast roughly 70% sales growth for its next fiscal year as data-center revenue more than doubled, reinforcing confidence in continued AI infrastructure spending.

WHY IT MATTERS: capital, compute, security and power are becoming one market.

02 ANTHROPIC SIGNS \$35B CLOUD DEAL

Anthropic agreed to a \$35 billion cloud-computing deal with Nvidia-backed Lambda, adding another giant commitment to the race for AI compute.

WHY IT MATTERS: capital, compute, security and power are becoming one market.

03 TEXAS PAUSES NEW DATA-CENTER GRID LINKS

Texas halted new grid connections for data centers while utilities audit speculative "ghost" demand and strengthen rules for large-load projects.

WHY IT MATTERS: capital, compute, security and power are becoming one market.

04 ASIA FACTORIES RIDE AI HARDWARE BOOM

August factory activity improved across major Asian manufacturing hubs as semiconductors and AI-related hardware supported new orders and exports.

WHY IT MATTERS: capital, compute, security and power are becoming one market.

05 CHINA HUMANIDS FACE FACTORY REALITY

China leads humanoid hardware and production ambition, but real factory deployment remains constrained by dexterity, reliability and economics.

WHY IT MATTERS: capital, compute, security and power are becoming one market.

06 G20 SPLITS OVER HOW HARD TO REGULATE AI

The United States used a G20 technology meeting to argue for a lighter regulatory approach, highlighting the widening policy gap around AI governance.

WHY IT MATTERS: capital, compute, security and power are becoming one market.

07 CYBER RISK MOVES TO FINANCIAL-STABILITY CORE

The Financial Stability Board said AI-driven cyber risk is the most immediate technology concern for the global financial system.

WHY IT MATTERS: capital, compute, security and power are becoming one market.

08 ENERGY FIRMS BRACE FOR AI-ENHANCED ATTACKS

Utilities are confronting AI-assisted cyber threats against increasingly connected operational systems, raising demand for OT security and monitoring.

WHY IT MATTERS: capital, compute, security and power are becoming one market.



FROM AGENTS TO AUTOMATION

The AI market is shifting from model capability to workflow ownership and physical execution.



THE NUMBERS BEHIND THE SHIFT

- 70%** Nvidia projected sales growth for its next fiscal year
- \$35B** Anthropic-Lambda cloud-compute agreement
- \$1.5B** Salesforce Agentforce annualised recurring revenue cited by Reuters
- 350MW** Capacity of the Texas facility tied to the Anthropic-Lambda deal

FROM MODEL RACE TO WORKFLOW ECONOMICS

Artificial intelligence is entering a more demanding commercial phase. The question is no longer whether models can generate text, code or images. The question is whether companies can turn those capabilities into reliable workflows that save time, generate revenue and integrate with existing systems. That shift is changing software economics. AI agents increasingly sit above CRM, cloud, security and productivity tools rather than replacing every application underneath them. This is why software companies with strong data, distribution and security positions can still benefit from the AI cycle. Salesforce said Agentforce reached roughly \$1.5 billion in annualised recurring revenue, while cybersecurity companies are seeing demand expand as AI increases both attack capability and defensive automation. Compute remains the enabling layer. Anthropic's huge infrastructure commitments and Nvidia's aggressive growth forecast show that model developers still need enormous amounts of GPU capacity, networking and power. The constraint is moving from model access to operating economics: latency, inference cost, energy, data governance and integration.

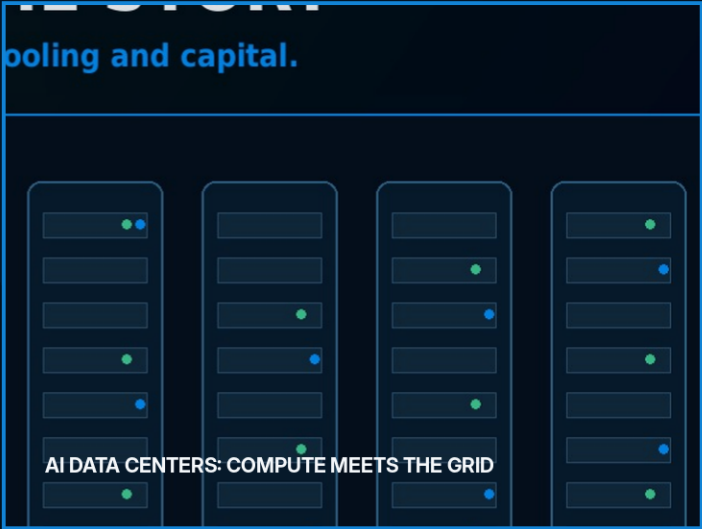
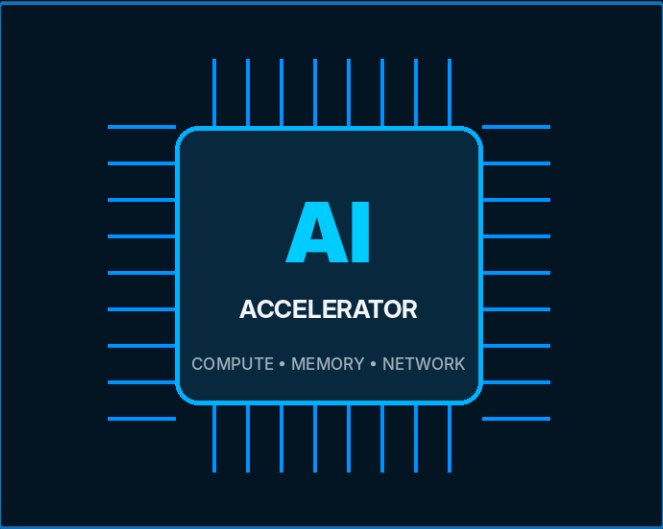
Robotics is the physical version of the same transition. Hardware has improved rapidly, especially in China, but general-purpose humanoids still struggle with dexterity, reliability and cost. Conventional industrial robots remain superior for many repetitive tasks. The commercial winners are therefore likely to appear first in structured environments: warehouses, factories, inspection, healthcare support, logistics and dangerous industrial operations. In these settings, controlled workflows reduce the complexity of perception and decision-making. For suppliers, the opportunity is broader than robot bodies. It includes actuators, sensors, vision systems, edge computing, batteries, motion control, simulation software, safety systems, secure connectivity and synthetic training data. The next phase of AI and robotics will reward companies that can combine software intelligence with dependable physical systems.

Sources: Reuters - Nvidia outlook (26 Aug 2026); Anthropic-Lambda cloud deal (31 Aug); software/AI trade (1 Sep); humanoid robotics investigation (27 Aug).



THE AI STACK IS BECOMING PHYSICAL

Chips still matter, but power, land, cooling and financing are deciding where compute can grow.



NVIDIA RESETS THE CAPACITY BAR

Nvidia said quarterly data-center revenue more than doubled to about \$89 billion and forecast roughly 70% sales growth for the following fiscal year. The signal is clear: accelerator demand remains powerful, but memory supply and margins are becoming constraints.

CLOUD CAPACITY BECOMES A BALANCE-SHEET DECISION

Anthropic signed a \$35 billion cloud agreement with Nvidia-backed Lambda. The Texas facility supporting the deal is planned around 350 MW, showing how AI contracts now resemble major infrastructure projects rather than ordinary software subscriptions.

GRID REALITY HITS PROJECT PIPELINES

Texas has halted new data-center grid connections while it audits speculative "ghost demand." Across several US regions, large-load requests exceed 700 GW, forcing utilities to demand stronger financial commitments and more transparent project schedules.

EUROPE MOVES COMPUTE TOWARD POWER

Reuters reported that European AI data centers planned for 2026-2028 are located an average of about 175 km from major cities, versus 46 km for projects built in 2022-2025. Power availability is becoming more important than postcode prestige.

THE NEW AI STACK: CHIP → ACCELERATOR → NETWORK → DATA CENTER → POWER → COOLING → GRID → FINANCE

Sources: Reuters - Nvidia earnings (26 Aug 2026); Anthropic/Lambda (31 Aug); Texas data-center grid connections (1 Sep); Europe data centers (19 Aug).



AI MAKES THE ATTACK SURFACE FASTER

Cyber risk is moving from IT departments into financial stability, energy systems and national infrastructure.



CYBER WATCH

Financial system

The Financial Stability Board says AI-driven cyber risk is the most immediate technology concern for the global financial system because AI can change the speed, scale and economics of attacks.

Industrial & energy systems

Utilities and connected industrial networks face AI-assisted reconnaissance, social engineering and protocol exploitation. Legacy operational technology remains a weak point.

FROM CYBERSECURITY TO OPERATIONAL RESILIENCE

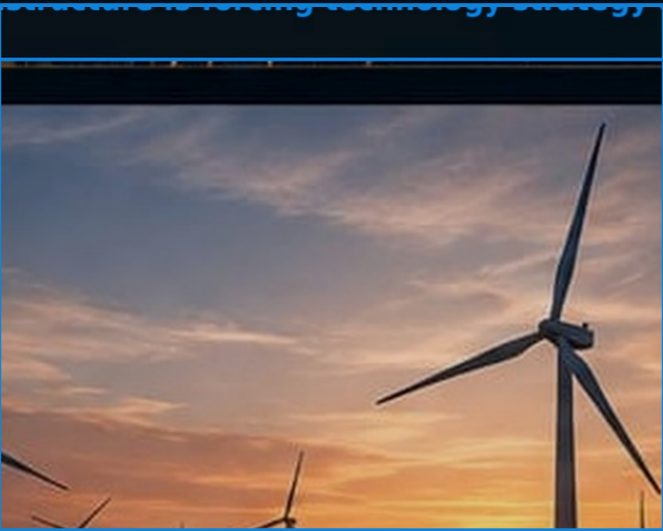
AI is changing the economics of cybercrime. Attackers can automate reconnaissance, social engineering, vulnerability discovery and parts of malware development. That does not make every attack autonomous, but it reduces the time and skill required to scale campaigns. The Financial Stability Board has elevated AI-driven cyber risk to a core financial-stability concern. That is significant because it moves the issue beyond individual companies. A successful attack on a payments network, exchange, cloud provider or major bank can create systemic consequences. Government networks remain targets as well. In late August, US authorities said they disrupted a long-running China-linked campaign that had targeted agencies including the Justice Department, NASA, the Federal Reserve and the Senate. The campaign illustrates how persistent access operations can remain active for years.

Operational technology is becoming the next major battleground. Energy firms are connecting generation, substations, industrial controls and field equipment to digital platforms, expanding the attack surface. Reuters reported that AI is increasingly helping attackers identify weak points and automate parts of exploitation. For suppliers, cybersecurity is moving into procurement specifications. Buyers increasingly expect secure-by-design equipment, identity controls, patch management, remote-access security, software supply-chain controls, incident response and recovery planning. The opportunity is therefore not limited to security software. It includes secure industrial networking, managed SOC services, OT monitoring, hardware roots of trust, backup systems, employee training and cyber-insurance readiness. Resilience is becoming a commercial requirement for connected infrastructure.

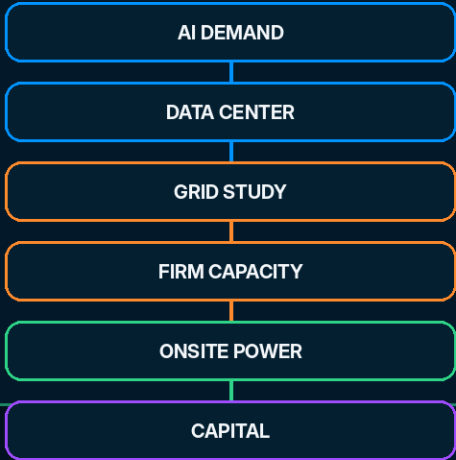


POWER BECOMES THE PERMISSION TO SCALE

AI demand is forcing data-center strategy and electricity strategy to become one plan.



THE COMPUTE-POWER LOOP



THE INFRASTRUCTURE CONSEQUENCES OF AI

The AI investment cycle is exposing a basic constraint: software can scale faster than electricity infrastructure. Data-center developers can order servers in months, while substations, transmission lines and generation projects often require years. Texas has moved to stop new data-center grid connections while it examines speculative or duplicate connection requests. Reuters found that large-load requests across several US regions exceed 700 GW, far above plausible near-term consumption. Utilities are responding with deposits, disclosure rules and stricter proof-of-financing requirements. The problem is not only total megawatts. AI clusters also create highly concentrated loads, power-quality demands and cooling requirements. This is pushing developers to secure generation, storage and transmission earlier in the site-selection process.

Europe is seeing the same dynamic. New AI data centers are moving farther from major cities toward cheaper land and faster power connections. The result is a new geography of digital infrastructure: compute follows substations, fiber routes, cooling resources and generation capacity. For industrial suppliers, the opportunity is broad. Transformers, switchgear, high-voltage equipment, gas turbines, batteries, microgrids, nuclear partnerships, renewable-energy contracts, grid software, cooling systems and demand-response platforms all become part of the AI stack. The strategic shift is simple: data centers are no longer merely real-estate or IT projects. They are energy projects with computing equipment inside them. Companies able to integrate electrical engineering, digital control and financing will capture a growing share of the infrastructure cycle.

WATCHLIST: TRANSFORMERS • SWITCHGEAR • COOLING • BATTERIES • MICROGRIDS • GAS • NUCLEAR • RENEWABLES • GRID SOFTWARE

Sources: Reuters - Texas data-center grid review (1 Sep 2026), Europe AI data centers (19 Aug), AI-enhanced energy cyber threats (1 Sep), Nvidia infrastructure investment coverage.