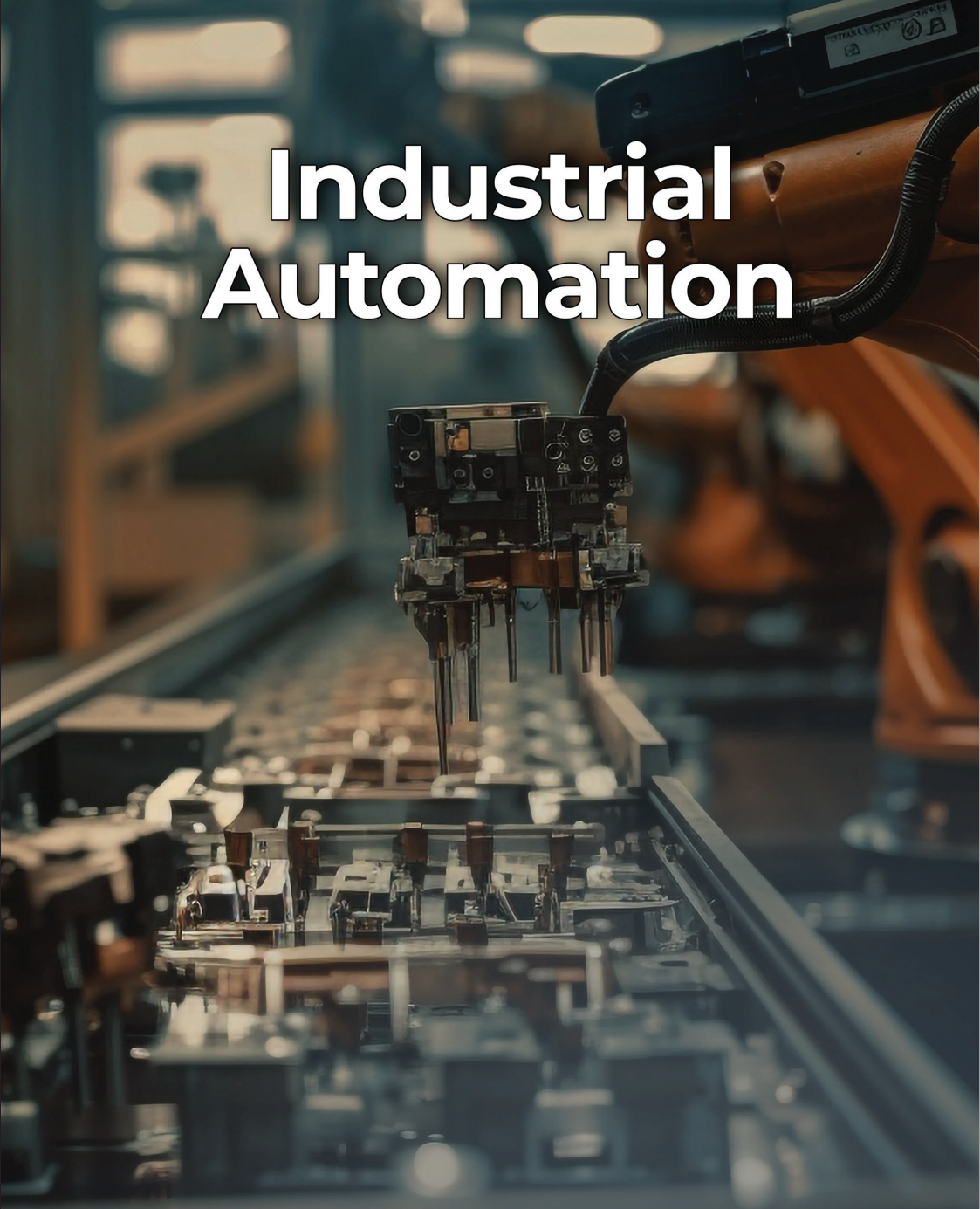
Industrial Automation



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Industrial Automation

Industrial automation refers to the use of advanced technologies, including robotics, computer systems, and control mechanisms, to perform manufacturing and production processes with minimal human intervention. At its core, it involves the integration of machinery, software, and sensors to monitor, control, and optimize operations in industries like manufacturing, oil and gas, automotive, and food processing. The goal is to enhance efficiency, precision, and safety while reducing labor costs and human error. By automating repetitive tasks or complex sequences, industrial automation allows for consistent output and scalability, adapting to the demands of modern production environments.



The Global Picture

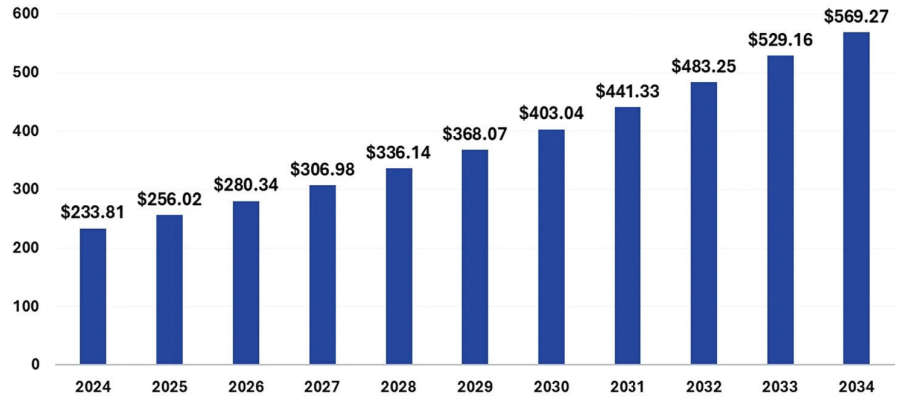
As of 2025, the global industrial automation industry continues its robust expansion, driven by technological advancements, increased investments, and a growing emphasis on efficiency across various sectors. The industrial automation market was valued at approximately USD 233.81 billion in 2024 and is projected to reach around USD 569.27 billion by 2034, reflecting a compound annual growth rate (CAGR) of 9.31% over the forecast period.[1]

In 2023, the Asia-Pacific region's industrial automation market was valued at USD 60.48 billion. Estimates place growth at USD 65.31 billion in 2024 with forecasts to surpass USD 128.23 billion by 2031.[2] China accounted for 35.6% of this market, with rapid industrialization and urbanization fueling demand for automation solutions.

The North American market was valued at USD 68.35 billion in 2023, with expectations to reach $73.62 billion in 2024 and over $140.62 billion by 2031. The United States, in particular, has seen substantial investments in automation to enhance productivity and maintain global competitiveness.

Europe maintains a significant share of the industrial automation market, with countries like Germany, France, and the United Kingdom leading the charge. The region's focus on sustainability and energy efficiency has propelled the adoption of automation solutions, particularly in manufacturing and process industries.

Industrial Automation Market Size 2024 to 2034 (USD Billion)



Source: https://www.precedenceresearch.com/industrial-automation-market

Private equity investment in the industrial automation sector has surged remarkably. By September 20, 2024, investments reached USD 14.87 billion, surpassing the full-year total of USD 7.17 billion in 2023, a surge approaching the record capital deployment of 2021.[3] Notably, the third quarter of 2024 alone saw investments totaling USD 11.36 billion across 42 deals, a significant increase from USD 780 million across 57 deals in the same period in 2023.

Regionally, the Asia-Pacific attracted approximately USD 8.39 billion in investments from January 1 to September 20, 2024, up from USD 4.05 billion in 2023. The U.S. and Canada recorded combined investments of USD 4.19 billion in the same period, a substantial increase from USD 1.07 billion in 2023.

[1] Experts, P. S. a. E. (2025, January 22). Industrial Automation Market Size to Surpass USD 569.27 bn by 2034. Retrieved from https://www.precedenceresearch.com/industrial-automation-market

[2] Consegic Business Intelligence. (2025, March 22). Industrial Automation Market Size, Trends, Forecast To 2031. Retrieved from https://www.consegicbusinessintelligence.com/industrial-automation-market

[3] Global private equity investment in industrial automation surges. (2024, November 21). Retrieved from https://www.spglobal.com/market-intelligence/en/news-insights/articles/2024/9/global-private-equity-investment-in-industrial-automation-surges-83445701

The Automation Ecosystem

Industrial automation refers to the use of technology and machines to control and manage manufacturing processes and operations without significant human intervention. Essentially, it involves using software, robots, sensors, and other devices to automate repetitive tasks in factories and production plants. This can lead to increased efficiency, improved product quality, reduced labor costs, and higher safety levels.

The industrial control products market presents a dynamic landscape, with various segments influenced by distinct drivers and challenges.

Segmentation by Type:

Distributed Control Systems (DCS): Designed to manage complex industrial processes, ensuring safe, fault-tolerant, and optimized operations.

Supervisory Control and Data **Acquisition (SCADA):** Enables real-time data collection and control, playing a crucial role in industrial monitoring and management.

Programmable Logic Controllers (PLC): Used for automation in machinery and processes, supporting the production of diverse goods and services.

Manufacturing Execution Systems (MES): Facilitates control and optimization of manufacturing processes to enhance production efficiency.

Other Solutions: Includes Human-Machine Interface (HMI), Enterprise Manufacturing Intelligence (EMI), and Asset Management (AM) systems.

Segmentation by Application:

Project Engineering and Installation: Covers the design, installation, and commissioning of automation systems.

Maintenance and Support: Ensures continuous system functionality with minimal downtime, maximizing efficiency.

Consulting Services: Assists businesses in identifying optimal automation solutions tailored to their needs.

Operational Services: Involves ongoing process management to enhance automation system utilization and cost efficiency.

> *The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency. The second is that automation applied to an inefficient operation will magnify the inefficiency.*
> *– Bill Gates, philanthropist and ex-founder of Microsoft*

Key Industry Players

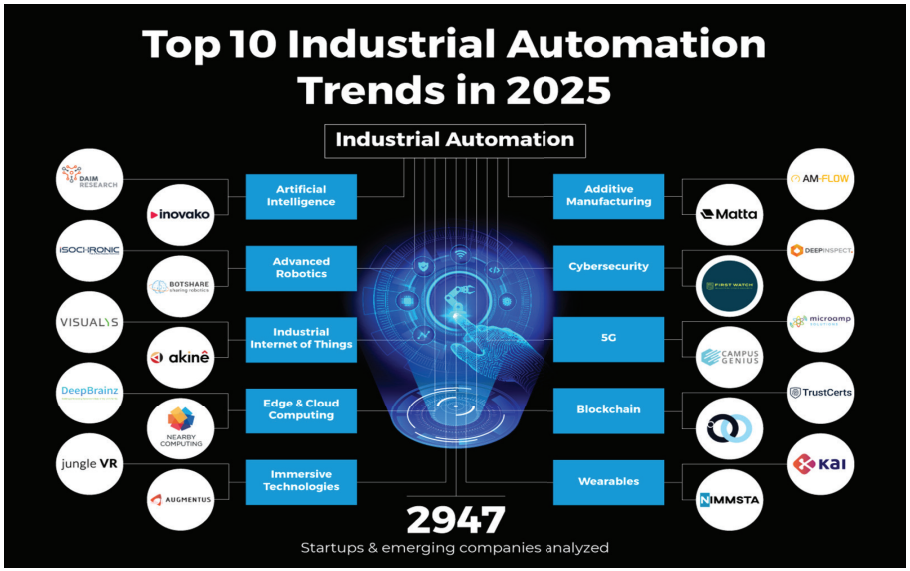
Several companies have been instrumental in shaping the industrial automation landscape. Here we highlight some key events over the last year:

- **Siemens AG:** In October 2024, Siemens announced the acquisition of Altair Engineering for USD 10.6 billion, aiming to enhance its industrial software offerings.[4] Altair Engineering is a global leader in computational science and artificial intelligence software. The company specializes in open architecture simulation and AI solutions, with software used in various industries, including energy, aerospace, and healthcare. Siemens plans to integrate Altair's simulation technology into its Siemens Xcelerator platform, particularly its digital twin offering.
- **Schneider Electric:** The French multinational corporation, specializing in digital automation and energy management, reported a net profit increase to 4.27 billion euros in 2024, driven by an 11.5% organic revenue growth in its energy management sector, exceeding forecasts.[5] The company intends to propose a progressive dividend of 3.90 euros per share, up 11% on year. Schneider provides integrated end-to-end lifecycle AI-enabled Industrial IoT solutions with connected products, automation, software and services, delivering digital twins to enable profitable growth for customers. Schneider Electric has been named "The World's Most Sustainable Corporation" for the second time by Corporate Knights, marking the first time a company has topped the Corporate Knights Global 100 twice.[6]
- **Rockwell Automation:** Benefiting from U.S. tariffs encouraging domestic manufacturing, Rockwell has seen increased demand for its automation products, with the market projected to grow at 10% annually, potentially exceeding USD 300 billion by 2030.[7] The company provides industrial automation and digital transformation solutions. It has a market cap of $29.2 billion, and operates through three segments, Intelligent Devices, Software & Control, and Lifecycle Services. The company won the prestigious Factory of the Future Award in 2022.[8]
- **ABB Ltd.:** Recognized for its robotics and power technologies, ABB has been pivotal in advancing automation solutions across various industries. ABB, a Swedish-Swiss company, is a global technology leader in electrification and automation. The company recently launched GMD Copilot, an AI-powered digital assistant designed to optimize the operation and maintenance of gearless mill drives.[9] GMD Copilot offers users immediate, context-specific information, instantly providing a complete overview of the system intended to improve the decision-making of GMD operation and maintenance.

[4] *Revill, J. (2024). Siemens' $10.6 billion Altair deal strengthens its industrial software offering. Reuters. Retrieved from https://www.reuters.com/markets/deals/siemens-buy-engineering-software-firm-altair-106-bln-deal-2024-10-30*
[5] *Kienle, N. (2025). Schneider Electric Beats Market Views. WSJ. Retrieved from https://www.wsj.com/business/earnings/schneider-electric-profit-revenue-beat-market-views-233317b1*
[6] *Media Relations- Edelman on behalf of Schneider Electric, J. P. G. (2025). Schneider Electric Named The World's Most Sustainable Corporation for a Second Time. Business Wire. Retrieved from https://www.business-wire.com/news/home/20250122056876/en/Schneider-Electric-Named-The-Worlds-Most-Sustainable-Corporation-for-a-Second-Time*
[7] *How Is Rockwell Automation's Stock Performance Compared to Other Automation Stocks? (2025, March 20). Barchart. Retrieved from https://www.tradingview.com/news/barchart:gc8d6d712094b:0-how-is-rockwell-automation-s-stock-performance-compared-to-other-automation-stocks*
[8] *Rockwell Katowice wins Factory of the Future 2022 Award | Rockwell Automation | UK. (2025, March 21). Retrieved from https://www.rockwellautomation.com/en-gb/company/news/press-releases/rockwell-katowice-wins-factory-of-the-future-2022-award.html*
[9] *ABB launches GMD Copilot to streamline gearless mill drive operations. (2025, March 21). Retrieved from https://new.abb.com/news/-detail/124091/zurich-switzerland-march-11-2025*

Key Trends in Industrial Automation

Industrial automation is rapidly evolving, driven by technological advancements and economic pressures. Several key trends stand out, reshaping manufacturing and industrial processes with measurable impacts.



- **Industrial robotics** adoption continues to surge. The International Federation of Robotics reported that global industrial robot installations reached 553,000 units in 2023, a 5% increase from 2022, with projections for 2025 nearing 600,000 units annually.[10] Asia leads, accounting for 70% of installations, particularly in China, which deployed over 200,000 robots by 2023.

  Examples include Tesla's Gigafactory in Shanghai, where 95% of car body production is automated, producing a Model Y car every 30 seconds.[11] Collaborative robots (cobots), designed to work alongside humans, grew 14% in 2023, with Universal Robots' UR10e model enabling small firms to automate tasks like palletizing for under USD 50,000.[12]

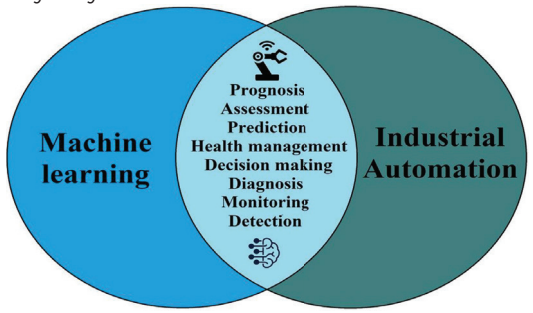
- **The Internet of Things (IoT)** is expanding. The number of IoT devices is expected to almost double from 15.9 billion in 2023 to more than 32.1 billion in 2030.[13] The number of IoT use cases being adopted by enterprises specifically grew 53% between 2021 and 2024 and 92% of enterprises report positive return on investment from their implementations.[14]

- **Artificial intelligence (AI) and machine learning (ML)** are optimizing production. A 2024 McKinsey report found companies using AI-driven automation outperformed their peers by a factor of 3.4.[15] Companies that apply AI in industrial processing plants have reported a 10 to 15% increase in production and a 4% to 5% increase in EBITA. Globally, as per estimates approximately USD 1 trillion in value remains to be captured from the industrial sector.[16]

  A representative example is Siemens' MindSphere platform which has significantly enhanced productivity for various industrial companies. For example, Hosokawa Micron Limited (HML) integrated MindSphere into its manufacturing facility, leading to a 15% improvement in uptime, a 10-12% increase in capacity, and over 10% reduction in energy consumption.[17]

- **Additive manufacturing (3D printing) is scaling up.** The market hit $20 billion in 2023, with industrial use growing 11% yearly.[18] General Electric's 3D-printed jet engine fuel nozzles, now numbering 100,000+, cut weight by 25% and assembly steps by 80% versus traditional methods.[19] Metal 3D printers, like those from Desktop Metal, dropped in price to $100,000 from $500,000 a decade ago, broadening access.[20]

- **Digital twins**—virtual replicas of physical systems—are mainstream. Gartner predicts 70% of large manufacturers will use them by 2027, up from 20% in 2022.[21] Rolls-Royce's digital twin of its Trent XWB engine tracks 10,000+ parameters per flight, slashing time between maintenance for some engines by up to 50%, enabling it to dramatically reduce its inventory of parts and spares, and also greatly improving the efficiency of its engines, saving 22 million tons of carbon to date.[22] Software costs for digital twins have fallen 40% since 2020, per Deloitte.



[10] *IFR World Robotics 2024 International Federation of Robotics. (2025, March 20). Retrieved from https://ifr.org/img/worldrobotics/Press_-Conference_2024.pdf*
[11] *Lambert, F. (2024). Tesla claims a 95% automated production at Gigafactory Shanghai. Electrek. Retrieved from https://electrek.co/2024/07/17/tesla-claims-automated-production-gigafactory-shanghai*
[12] *UR10e Medium-sized, versatile cobot. (2025, March 20). Retrieved from https://www.universal-robots.com/products/ur10e*
[13] *IoT connections worldwide 2022-2033 | Statista. (2025, March 20). Retrieved from https://www.statista.com/statistics/1183457/iot-connected-devices-worldwide*
[14] *The top 10 IoT use cases. (2025, February 27). Retrieved from https://iot-analytics.com/top-10-iot-use-cases*
[15] *Barbosa, F., Doheny, M., Korbel, M., Lehmitz, S., Luse, A., Mori, L., & Sellschop, R. (2023). AI: The next frontier of performance in industrial processing plants. McKinsey & Company. Retrieved from https://www.mckinsey.com/capabilities/operations/our-insights/ai-the-next-frontier-of-performance-in-industrial-processing-plants*
[16] *Borden, K., Huntington, M., Kamat, M., Singla, A., Wijpkema, J., & Wiseman, B. (2022). The future is now: Unlocking the promise of AI in industrials. McKinsey & Company. Retrieved from https://www.mckinsey.com/industries/automotive-and-assembly-/our-insights/the-future-is-now-unlocking-the-promise-of-ai-in-industrials*
[17] *Siemens' MindSphere helps Hosokawa Micron connect its entire digital factory. (2025, March 21). Retrieved from https://www.connectivity4irco.uk/article/179189/Siemens--MindSphere-helps-Hosokawa-Micron-connect-its-entire-digital-factory.aspx*
[18] *Tyrer-Jones, A. (2024). 3D Printing Industry hits new high at $20 billion according to Wohlers Report 2024, deeper insight from Terry Wohlers - 3D Printing Industry. 3D Printing Industry. Retrieved from https://3dprintingindustry.com/news/3d-printing-industry-hits-new-high-at-20-billion-according-to-wohlers-report-2024-deeper-insight-from-terry-wohlers-229477*
[19] *Saunders, S. (2021). GE Aviation Announces 100,000th 3D Printed Fuel Nozzle Shipped from Auburn Plant - 3DPrint.com | The Voice of 3D Printing / Additive Manufacturing. 3DPrint. Retrieved from https://3dprint.com/284243/ge-aviation-announces-100000th-3d-printed-fuel-nozzle-shipped-from-auburn-plant*
[20] *The Best Metal 3D Printers in 2025. (2025, February 25). Retrieved from https://all3dp.com/1/3d-metal-3d-printer-metal-3d-printing*
[21] *Attaran, M., & Celik, B. G. (2023). Digital Twin: Benefits, use cases, challenges, and opportunities. Decision Analytics Journal, 6, 100165. doi: 10.1016/j.dajour.2023.100165*
[22] *Rolls-Royce turns to digital twins to improve jet engine efficiency. (2021, June 10). Retrieved from https://www.cio.com/article/188765/rolls-royce-turns-to-digital-twins-to-improve-jet-engine-efficiency.html*

> *Since 2014, we've helped one of our airlines avoid 85 million kilograms of fuel and over 200 million kilograms of carbon dioxide. We did that by taking data on how the pilot is flying the plane, how the plane is operated, how they do the operational funding around that. We found data and insights that helped them to make better decisions. In areas where they felt there were barriers to change, we helped them design new policies, new procedures.*
> ***– Stuart Hughes, chief information and digital officer at Rolls-Royce.***

Cybersecurity investment is rising as automation increases vulnerability. A recent IBM threat intelligence report finds a 71% year-over-year increase in cyberattacks.[23] Nearly 1,700 ransomware attacks successfully breached industrial organizations last year, an increase of 87% over the previous year, causing 25% of affected sites to halt operations, while 75% of attacks caused some degree of operational disruption.[24] In a very prominent case, the 2021 Colonial Pipeline attack halted 45% of U.S. East Coast fuel supply, prompting a 25% spike in security spending.[25]

Reskilling		Upskilling
An employee learning a new set of skills in order to perform a different job.	VS	An employee learning additional skills to be better equipped to do their current job.
Skills learnt are not related to current job role.		Employees improve their existing skills and learn skills related to their current job role.
Involves a change in career.		Does not usually involve a change in career.
Facilitated through job shadowing other employees.		Facilitated through training programs such as online learning, microlearning, classroom training, etc.
Helps organizations retain good talent.		Helps employees get new opportunities and develop talent for personal growth.

[23] *IBM Security X-Force Threat Intelligence Index 2024. (2025, March 21). Retrieved from https://www.ibm.com/reports/threat-intelligence*
[24] *Robert Lemos, C. W. (2025). Industrial System Cyberattacks Surge as OT Stays Vulnerable. Dark Reading. Retrieved from https://www.darkreading.com/cyber-risk/industrial-system-cyberattacks-surge-ot-vulnerable*
[25] *Bussewitz, F. B. A. C. (2021). Colonial Pipeline Hack: What We Know About Shutdown of Largest Fuel Pipeline in US. NBC10 Philadelphia. Retrieved from https://www.nbcphiladelphia.com/news/national-international-al/colonial-pipeline-hack-what-we-know-and-how-will-it-impact-gas-prices/2809830/?noamp=mobile&os=appref%3Dapp&ref=app*



Workforce reskilling is critical. The World Economic Forum estimates that by 2030, automation will lead to the creation of some 170 million new jobs and the displacement of 92 million jobs.[26] ABB has expanded its Robotics and Automation education program, now operating over 40 training centers worldwide. These facilities educate more than 30,000 students, apprentices, and workers annually.[27] A McKinsey survey revealed that 66% of executives consider addressing potential skills gaps related to automation and digitization within their workforces as a top-ten priority. Moreover, 62% believe they will need to retrain or replace more than a quarter of their workforce between 2018 and 2023 due to advancing automation and digitization.[28]

> *Change needs to happen now. As companies turn to robotic automation to offset labor shortages, improve efficiency and increase resilience, workers need the skillsets to use automation to perform their jobs and augment their own roles. Businesses need to join forces, cooperating with education institutions and Governments to ensure that society is prepared for jobs of the future. Only through this can we fully utilize flexible automation and unlock value from the ongoing re-industrialization.*
> ***– Sami Atiya, President of ABB's Robotics & Discrete Automation Business***

These trends—robotics, IIoT, AI, 3D printing, digital twins, cybersecurity, and reskilling—reflect a shift toward efficiency and resilience. Automation is not merely a future promise—it is today's reality.

[26] *The Future of Jobs Report 2025. (2025, January 07). Retrieved from https://www.weforum.org/publications/the-future-of-jobs-report-2025*
[27] *ABB survey reveals re-industrialization at risk from global "education gap" in automation. (2025, March 21). Retrieved from https://new.abb.com/news/detail/94493/prsrl-abb-survey-reveals-re-industrialization-at-risk-from-global-education-gap-in-automation*
[28] *Illanes, P., Lund, S., Mourshed, M., Rutherford, S., & Tyreman, M. (2018). Retraining and reskilling workers in the age of automation. McKinsey & Company. Retrieved from https://www.mckinsey.com/featured-insights/future-of-work/re-training-and-reskilling-workers-in-the-age-of-automation.*

Pakistan and Industrial Automation: Round Peg for a Round Hole!

As energy and AI drive the future of automation, Pakistan may perhaps be at the right place at the right time. Pakistan is strategically located at the nerve center of oil trade, has developed infrastructure to transport goods, and also has a young and energetic workforce as the developed world transitions to an aging population.

Industrial automation in Pakistan has been progressively gaining momentum, driven by technological advancements and a growing recognition of its benefits across various sectors. This evolution is characterized by increased adoption of robotics, artificial intelligence (AI), and other automation technologies aimed at enhancing productivity and global competitiveness.

The industrial robotics market in Pakistan is projected to reach a revenue of $2.55 million in 2025. This segment is expected to experience an annual growth rate of 1.02% from 2025 to 2029, culminating in a market volume of $2.66 million by 2029.[29] The AI market size in Pakistan is expected to show a compound annual growth rate of 27.76% from 2025 to 2030.[30]

The government of Pakistan is actively promoting adoption of Industry 4.0 technologies, including the Internet of Things (IoT), AI, robotics, big data analytics, and cyber-physical systems, to enhance industrial efficiency and global competitiveness. Special industrial and technology zones have been created along with incentives to promote investment. Various large-scale and low-cost training programs have been launched over the years to create a skilled workforce. Seminars and initiatives are routinely conducted to emphasize the importance of automation and smart manufacturing in driving industrial growth.



[29] Industrial Robotics - Pakistan | Statista Market Forecast. (2024, March). Retrieved from https://www.statista.com/outlook/tmo/robotics/industrial-robotics/pakistan
[30] Artificial Intelligence - Pakistan | Market Forecast. (2024, March). Retrieved from https://www.statista.com/outlook/tmo/artificial-intelligence/pakistan

The Two Pillars of Pakistan's Industry: Textiles and Automobiles

Pakistan's industrial landscape is predominantly shaped by two sectors: textiles and automobiles. These industries are not only significant contributors to the nation's GDP but also pivotal in employment generation and export earnings.



Textiles: The Fabric of the Economy

The textile industry stands as Pakistan's largest manufacturing sector, employing nearly 25 million people. It contributes approximately 8.5% to the country's GDP, 62% of export revenues, and accounts for about 54% of total export earnings.[31]

In the fiscal year 2024, textile exports reached $16.55 billion, marking a modest growth of 0.93% despite challenges like new taxation measures and rising energy costs.[32] The first quarter of FY2024-25 saw a 9.51% increase in textile exports, totaling USD 4.52 billion.[33] Key contributors to this growth include readymade garments, knitwear, and bedwear.

Pakistan is among the world's largest cotton producers and holds one of the highest spinning capacities in Asia. The industry comprises over a thousand ginning units and several hundred of spinning units.

A notable recent success story is Gadoon Textile Mills Limited, which posted a record revenue of PKR 72.72 billion in FY2023-24, reflecting a 25.4% increase from the previous fiscal year, an increase largely driven by increased sales volumes and higher prices.[34]

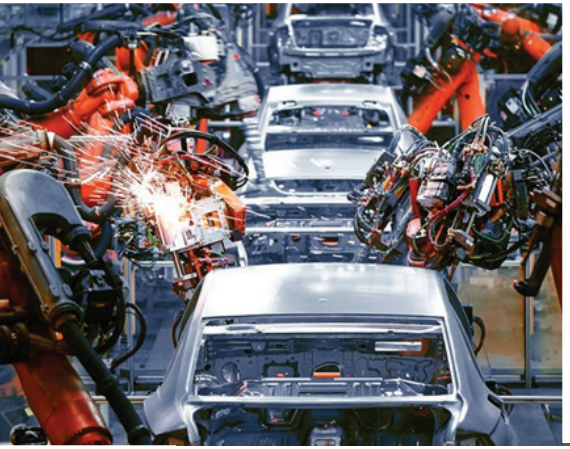
[31] (2024). Pakistan. Asia Garment Hub. Retrieved from https://asiagarmenthub.net/agh-countries/pakistan
[32] Hassan, K. (2024). Pakistan's Textile Exports Reach $16.55 Billion in Fiscal Year 2024. The Prime Pakistan. Retrieved from https://theprimepakistan.com/pakistans-textile-exports-reach-16-55-billion-in-fiscal-year-2024/
[33] News desk. (2024). Textile export increases 9.51% to $4.520b during 1st quarter 2024 - Pakistan Observer. Pakistan Observer. Retrieved from https://pakobserver.net/textile-export-increases-9-51-to-4-520b-during-1st-quarter-2024/
[34] SpaGreen. (2025, April 15). Gadoon Textile Mills posts strong revenue of R72bn in FY24. Retrieved from https://www.inp.net.pk/ur/article-detail/inp-wealthpk/gadoon-textile-mills-posts-strong-revenue-of-r72bn-in-fy24

Automobiles: Driving Industrial Growth

The automotive industry is among the fastest-growing sectors in Pakistan, accounting for 2.8% of the GDP and employing over 6.8 million people as of 2024. Between 2014 and 2018, the industry experienced a growth rate of 171%. The industry contributes PKR 30 billion to the national exchequer in terms of taxes and duties.[35]

Pakistan's automobile industry is the fastest-growing in Asia. It's a major player in the country's manufacturing landscape, with a focus on both passenger and commercial vehicles, and two-wheelers. The market is dominated by manufacturers like Honda, Toyota, Hyundai, Kia, and Suzuki. The introduction of the Auto Policy 2016-21 offered tax incentives to new automakers, encouraging the establishment of manufacturing plants in the country.





The industry is undergoing a transformation, with a focus on innovation, technology, and localization, due in large part to a move towards electric vehicles. Some Pakistani car assemblers are also starting to export vehicles, indicating growth and potential in international markets.

These two sectors are integral to Pakistan's economic framework, offering substantial contributions to GDP, employment, and exports. While the textile sector continues to be a cornerstone of export earnings, the automotive industry presents vast potential for growth and diversification. Strategic investments, supportive policies, and infrastructural development are essential to harness the full potential of these sectors and drive sustainable economic growth.

[35] *Automobiles | Board Of Investment. (2025, April 15). Retrieved from https://invest.gov.pk/automobiles*

K-Electric: An Industrial Automation Success Story

K-Electric (KE), Karachi's primary electricity provider, has undergone a significant transformation through the strategic implementation of industrial automation. This initiative has markedly improved operational efficiency, reduced losses, and enhanced customer satisfaction.

KE has long been responsible for generating, transmitting, and distributing electricity to Karachi and its adjoining areas. Historically, the company grappled with challenges such as high transmission and distribution losses, frequent load shedding, and customer dissatisfaction. In 2005, only 6.6% of Karachi was exempt from load shedding, highlighting the severity of these issues.[36]

To address these challenges, KE embarked on a comprehensive automation strategy encompassing several key initiatives:[37]



Aerial Bundled Cables: KE introduced ABC to combat electricity theft and reduce T&D losses. These insulated cables are more secure and reliable, significantly decreasing illegal connections and technical losses.

SAP-Plant Maintenance: The adoption of the SAP-Plant Maintenance module facilitated digitization of asset maintenance and operational processes. This system enabled systematic recording of preventive maintenance, streamlined shutdown procedures, and introduced an on-system "Permit to Work," enhancing overall operational efficiency.

[36] *Bhutta, Z. (2023). KE claims meeting most of targets. Express Tribune. Retrieved from https://tribune.com.pk/story/2448317/ke-claims-meeting-most-of-targets*
[37] *IrfanRasheed. (2021). K-Electric-Investor-Presentation-Apr16. Scribd. Retrieved from https://www.scribd.com/document/524122110/K-Electric-Investor-Presentation-Apr16*

Mobile Meter Reading: KE implemented mobile meter reading technology, allowing for digital recording and wireless transmission of meter readings from the field. This advancement reduced human error, expedited billing processes, and improved data accuracy.

Smart Meters and GIS Integration: The company deployed approximately 60,000 smart meters and integrated Geographic Information System (GIS) technology. These tools provided greater visibility into power consumption patterns, facilitated loss identification, and enabled targeted interventions to reduce theft and technical losses.

AI-powered Customer Service Chatbot: KE recently launched Kineto, an AI-powered chatbot, to provide fast, seamless, and 24/7 support to millions of KE customers, eliminating the hassle of long queues.[38] Within its first weekend, more than 3,200 users engaged with the chatbot, generating nearly 13,000 interactions.



Since its privatization, KE has invested approximately USD 4.4 billion (PKR 544 billion) in system improvements. This capital expenditure resulted in the addition of 1,957 megawatts of generation capacity and a 12 percentage point improvement in fleet efficiency, from 30% in 2005 to 42% in 2023. The commissioning of a 900 MW re-gasified liquefied natural gas (RLNG) power plant in late 2023 further increased efficiency by approximately 49%.

The automation initiatives yielded substantial operational improvements:

- **Reduction in Load Shedding:** By 2023, 71% of Karachi was free from load shedding, a significant improvement from the mere 6.6% in 2005.
- **Enhanced Customer Service:** The implementation of digital meters and mobile meter reading streamlined billing processes, reducing errors and enhancing customer satisfaction.
- **Loss Reduction:** Transmission and distribution losses were halved, and the integration of smart meters and GIS technology enabled precise identification and mitigation of losses.

These automation strategies have proved a game changer and have transformed KE into a vibrant and profitable company, and provide a good template for further such interventions in the public sector.

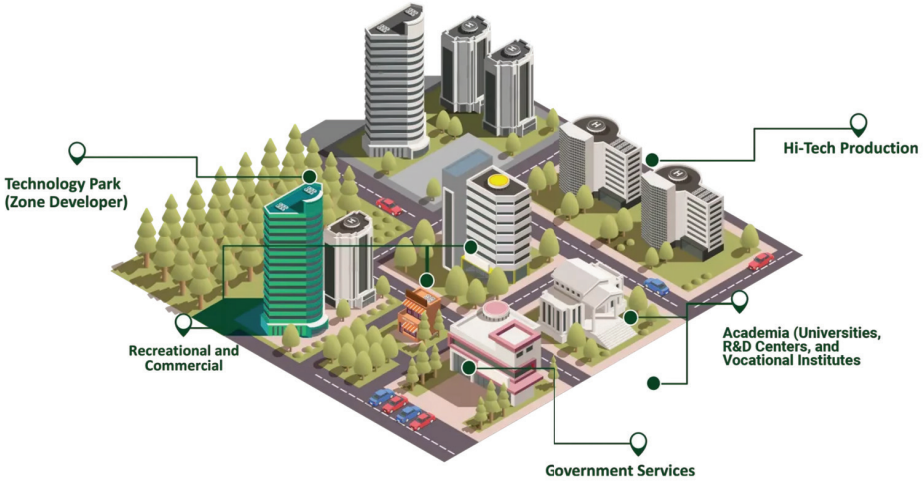
[38] *Correspondent. (2025). KE launches AI-powered chatbot Kineto. The News International. Retrieved from https://www.the-news.com.pk/print/1295617-ke-launches-ai-powered-chatbot-kineto*

Fostering Innovation – Pakistan's Special Technology Zones

Pakistan recently introduced Special Economic Zones (SEZs) and Special Technology Zones (STZs) as pivotal initiatives aimed at accelerating industrialization and technological advancement in the country. These zones are designed to attract both local and foreign investment, foster innovation, and enhance exports by providing a conducive environment with various incentives.[39]

SEZs are equipped with state-of-the-art infrastructure to support an automation-driven industry. For instance, the Rashakai SEZ, located near the M-1 motorway, spans 247 acres and includes facilities like internal roads, power supply, gas connections, and communication networks. This zone is expected to create over 70,000 direct and 250,000 indirect jobs. The Quaid-e-Azam Business Park, situated in Sheikhupura, has attracted interest from over 300 companies across sectors like auto parts, electronics, pharmaceuticals, logistics, mobile phone manufacturing, and IT.[40]

As of 2021, Pakistan had approved 22 SEZs. These zones encompass over 15,000 acres, with more than 3,000 plots demarcated. Notably, three SEZs—Korangi Creek Industrial Park, M3 Industrial City, and Value Addition City—have sold all their plots, while others like Hattar and Khairpur SEZs have achieved approximately 90% plot sales. The per-acre price of industrial plots varies significantly, ranging from PKR 3 million in Khairpur to PKR 65 million in Korangi Creek.[41]



[39] *Press Information Department. Four New Special Technology Zones Notified (2025, March 26). Retrieved from https://pid.gov.pk/site/-press_detail/26164*
[40] *Si. (2020). Quaid-e-Azam Business Park, Sheikhupura: Location, Plot Prices & More | Zameen Blog. A blog about real estate, lifestyle and tourism in Pakistan | Zameen Blog. Retrieved from https://www.zameen.com/blog/quaid-e-azam-business-park-sheikh-upura-updates.html*
[41] *Rahman, A. (2021). SEZs Can Play Major Role in Economic Growth: SBP Study. ProPakistani. Retrieved from https://propaki-stani.pk/2021/11/26/sezs-can-play-major-role-in-economic-growth-sbp-study/*

In August 2024, the Special Technology Zones Authority (STZA) announced the notification of four new STZs:

1. NUST Special Technology Zone in Islamabad
2. Tech7 Special Technology Zone in Islamabad
3. Mindbridge Special Technology Zone in Lahore
4. Capital Smart Technology Zone in Rawalpindi

These zones collectively offer 1.4 million square feet of high-quality tech infrastructure across 130 acres, with an initial infrastructure investment of PKR 30 billion. They are projected to attract over PKR 150 billion (over USD 500 million) in investments from technology companies within the next 2-4 years and have the capacity to employ more than 50,000 professionals, with an export potential exceeding USD 350 million annually.

The NUST Special Technology Zone is a good example to illustrate the potential of this initiative.[42] The Zone will host startups, SMEs, and anchor tenants working in areas such as artificial intelligence, chip design, and other emerging technologies. This initiative aims to foster a vibrant AI innovation ecosystem and strengthen Pakistan's position in the global AI landscape. The zone will also house N-ovative Health Technologies (NHTPL), a leader in the production of advanced medical devices — including Bare Metal Stents (BMS), Drug-Eluting Stents (DES), and Percutaneous Transluminal Coronary Angioplasty (PTCA) balloon catheters. With the STZ designation, it is anticipated that the site will evolve into a comprehensive health technology cluster, attracting other enterprises in healthtech, medical devices, biosciences, and pharmaceuticals, and ultimately establish itself as the largest health-focused tech hub in Pakistan.

Two separate portions of land on the campus of the National University of Science and Technology have been granted Special Technology Zone status. The first parcel, spanning around 8 acres, is designated for the development of the NSTP Towers — a hub designed to host startups, SMEs, and anchor tenants working in areas such as Artificial Intelligence, Chip Design, and other emerging technologies. This initiative aims to foster a vibrant AI innovation ecosystem and strengthen Pakistan's position in the global AI landscape.

The strategic objectives of establishing these zones include:

- Boosting technology exports
- Encouraging import substitution
- Attracting foreign direct investment in technology
- Facilitating technology transfer
- Promoting research and development
- Creating job opportunities
- Developing human capital

These goals aim to position Pakistan as a key player in the global technology arena. These zones are projected to significantly contribute to Pakistan's economy by fostering technological advancements, industry-academia collaboration, and attracting top talent to support groundbreaking R&D projects.

[42] NUST Celebrates Landmark Achievement: Awarded Special Technology Zone (STZ) Status! | NUST. (2025, April 15). Retrieved from https://nust.edu.pk/news/nust-awarded-special-technology-zone-stz-status

GroupID by imanami

Imanami

Imanami, a technology company specializing in identity and access management (IAM), offers solutions that streamline group and user management within Active Directory (AD) environments. Their flagship product, GroupID, automates the creation and management of AD groups, enhancing security and operational efficiency for organizations. By focusing on simplifying complex identity management tasks, Imanami helps enterprises reduce manual errors and improve productivity.



In recognition of its contributions to the IAM sector, Imanami was listed among the "20 Most Promising IAM Solution Providers" by CIOReview in 2019. citeturn0search4 This acknowledgment underscores the company's commitment to delivering effective identity management solutions that meet the evolving needs of modern enterprises.

Imanami's product suite includes GroupID, which offers features such as group management, user management, password management, and identity governance. These tools are designed to automate and simplify the administration of AD groups and users, ensuring that organizations maintain secure and efficient access controls across their IT environments.

Serving a diverse clientele across industries like healthcare, legal, education, and telecommunications, Imanami's solutions are tailored to address sector-specific challenges in identity management. The company's emphasis on providing top-notch technical support further enhances its reputation as a reliable partner for organizations seeking to optimize their identity governance frameworks.

Primary Products

- **GroupID:** Automates AD group and user management, enhancing security and efficiency.
- **Password Center:** Provides self-service password management to reduce helpdesk calls and improve user productivity.

Techliance

Techliance is a digital transformation company specializing in IT services, with expertise in web development, mobile app development, and emerging technologies. Serving industries such as e-commerce, healthcare, finance, education, and logistics, Techliance provides tailored solutions that enable businesses to leverage the latest technological advancements.

With over 16 years of experience, Techliance has completed more than 400 projects, demonstrating its capability to meet diverse client needs. The company maintains an 80% client retention rate, indicating strong customer satisfaction and long-term partnerships. Operating from three international offices, Techliance has invested over 327,600 development hours into its projects, showcasing its dedication and expertise in the IT services sector.

Techliance's service offerings include custom software development, mobile app development for iOS and Android platforms, web development utilizing technologies like ReactJS, NodeJS, Vue.js, and Laravel, erce solutions, cloud solutions, and business process automation (BPA). These services are designed to address the specific needs of various industries, ensuring that clients receive solutions that are both effective and efficient.

The company's commitment to quality and innovation has been recognized through various awards and accolades. Techliance has been acknowledged as a top mobile app development company by GoodFirms and has received recognition from Clutch as a leading B2B company in Asia. These honors reflect Techliance's dedication to delivering high-quality IT services and solutions.



SIPSAP Optimization

SiPSAP Optimization is a global provider specializing in delivering SAP Business One solutions, focusing on ERP implementation, optimization, and customization. Headquartered in New Jersey, USA, with additional offices in Malaysia and Pakistan, the company offers reliable, agile, and cost-effective IT services tailored to meet specific business needs. SiPSAP addresses growth challenges for organizations across various industries by leveraging SAP technology to enhance operational efficiency and profitability. The company holds an ISO 9001 certification, demonstrating its commitment to quality management. As a wholly owned subsidiary of TEU Global, SiPSAP is recognized for its expertise in SAP Business One and its ability to deliver value-added services that align with industry best practices. With a strong global presence and a track record of successful ERP implementations, SiPSAP is considered a trusted partner in digital transformation.

With over 12 years of experience, SiPSAP has successfully completed hundreds of projects across diverse industries, from retail to manufacturing. The company has accumulated over 327,600 development hours, delivering tailored SAP solutions that streamline business processes and maximize profits. Operating from multiple international offices, SiPSAP's robust team of certified SAP professionals ensures seamless project delivery with a focus on customer satisfaction and operational excellence.

SiPSAP's product suite includes SAP Business One, a comprehensive ERP solution that integrates key business areas such as finance, inventory, and customer relationship management. The company also offers SiPSAP Optimization Solutions, which enhance the core functionalities of SAP Business One to meet specific client needs. Their CRM Manager provides tools for effective customer relationship management, while the Payroll Processing Addons streamline HR operations by automating payroll tasks. Additionally, SiPSAP develops web-based plugins to extend the capabilities of existing systems, ensuring clients have access to tailored solutions that drive efficiency and growth.

Primary Products

- **SAP Business One:** A comprehensive ERP solution that integrates key business functions to provide a unified view of operations.
- **CRM Manager:** A tool designed to enhance customer relationship management by providing features for customer management, lead tracking, and sales order processing.
- **Payroll Processing Addons:** Solutions that automate payroll tasks, including employee data handling, attendance integration, and tax management, to streamline HR operations.

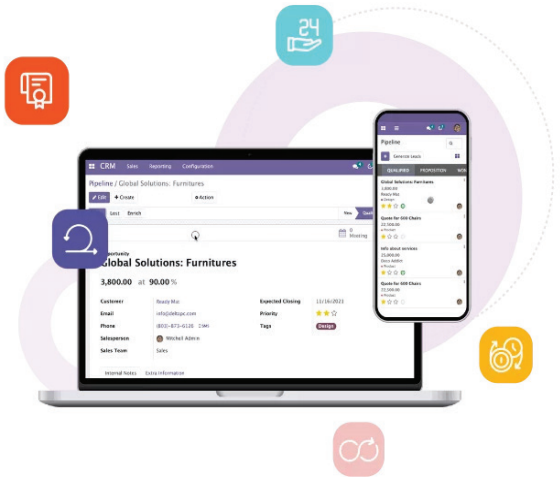
synavos

Synavos Solutions

Synavos is a technology solutions provider specializing in ERP implementation, custom software development, and managed IT services across various industries. By leveraging advanced technologies, Synavos facilitates digital transformation, enabling organizations to optimize operations and enhance efficiency. With a focus on delivering tailored solutions, the company supports clients in navigating the competitive digital landscape.

With over a decade of experience, Synavos has earned industry recognition for its high-quality services. The company holds numerous certifications, reflecting its commitment to excellence. Notably, Synavos received the Top IT Startup – Gold Award from the Pakistan Software Export Board (PSEB) for the fiscal year 2017-2018, acknowledging its expertise in ERP systems and custom development solutions.

Operating globally with a team of over 100 skilled professionals, Synavos serves clients in diverse markets. The company boasts a 99% customer retention rate and has successfully completed numerous high-impact projects. Their unique approach to managed IT services ensures clients benefit from agile solutions tailored to evolving business needs.



Synavos offers a range of products designed to streamline business processes. Munshi is a SaaS-based payment management solution aimed at small and medium-sized enterprises (SMEs), simplifying financial tasks to enhance efficiency and growth. CAMS (Copying Agency Management System) is a process management system developed to integrate operations related to Copying Agencies within court systems, promoting transparency and reducing malpractices.

Primary Products

- **Munshi:** A SaaS-based payment management solution that streamlines financial processes for SMEs, enhancing operational efficiency.
- **CAMS:** A process management system designed to integrate court operations, ensuring transparency and efficiency in the provision of certified copies.

TERAHZ SOLUTIONS

TeraHz Solutions

TeraHz Solutions is an innovative IT services company specializing in delivering advanced solutions across various industries. The company offers tailored services in cloud computing, artificial intelligence integration, IT infrastructure management, digital transformation, business process automation, custom software development, cybersecurity, and data analytics. By leveraging the latest technologies, TeraHz Solutions aims to optimize business operations, enhancing productivity and fostering sustainable growth in an increasingly connected world.

Over the years, TeraHz Solutions has garnered recognition for its excellence in technological innovation and commitment to customer satisfaction. The company has received multiple industry accolades for its technical prowess and successful project deliveries, standing out for its ability to offer scalable, efficient, and cost-effective IT solutions. With a strong reputation in the market, TeraHz continues to be a trusted partner for businesses seeking reliable and forward-thinking technology solutions.

TeraHz Solutions has delivered numerous successful projects, collaborating with global enterprises across diverse sectors. The company boasts an impressive client retention



rate and showcases a strong portfolio of case studies where its IT solutions have led to significant operational improvements. TeraHz is known for its expert team, operational excellence, and its ability to integrate advanced technologies with business strategies, making it a leader in the IT service sector.

Among its offerings, TeraHz Solutions provides cloud solutions that enable businesses to migrate and manage their operations in the cloud, ensuring scalability and flexibility. Their artificial intelligence integration services help organizations implement AI technologies to automate processes and gain insights from data. Additionally, TeraHz offers IT infrastructure management to maintain and optimize clients' IT environments, ensuring seamless and efficient operations.

LMKT Pvt Ltd

LMKT is a full-service technology company based in Pakistan, specializing in Geographic Information Systems (GIS), integrated security solutions, telecom Operational Support Systems (OSS) integration, and ICT infrastructure. The company provides scalable IT services across diverse industries, with a strong emphasis on smart cities, smart buildings, agri-tech, and clean technology. LMKT aims to enhance operational efficiency and foster innovation, assisting clients in meeting complex challenges through advanced technological solutions.

Over the years, LMKT has received significant recognition for its contributions to the tech industry, particularly in GIS and integrated security solutions. The company has partnered with global brands such as Cisco, Huawei, and Microsoft, earning a reputation for delivering high-quality, reliable services. Their collaborations with government and enterprise clients further solidify their position as an industry leader. Notably, LMKT was recognized at the 13th Annual P@sha ICT Awards for its products V-Connect and V-Secur®. V-Connect offers service providers a scalable software platform for unified communication and mobility for landline customers, while V-Secur® is a state-of-the-art integrated security management system that transforms buildings into smart facilities.

With a proven track record in smart city development, LMKT has optimized urban infrastructures, contributing to more sustainable and efficient cities. Their expertise spans several verticals, and the company operates successful technology incubation programs, aiding startups in their growth. LMKT continues to expand its reach with numerous impactful projects in both the public and private sectors.

Among its offerings, LMKT provides Geographic Information Systems (GIS) solutions that integrate asset data with existing systems to enhance situational awareness, essential for maximizing returns on utility investments. Their integrated security solutions, exemplified by V-Secur®, offer multi-tiered security management systems that transform buildings into smart facilities. Additionally, LMKT's telecom OSS integration services streamline workflows by unifying data across various platforms, improving operational efficiency.

Primary Products

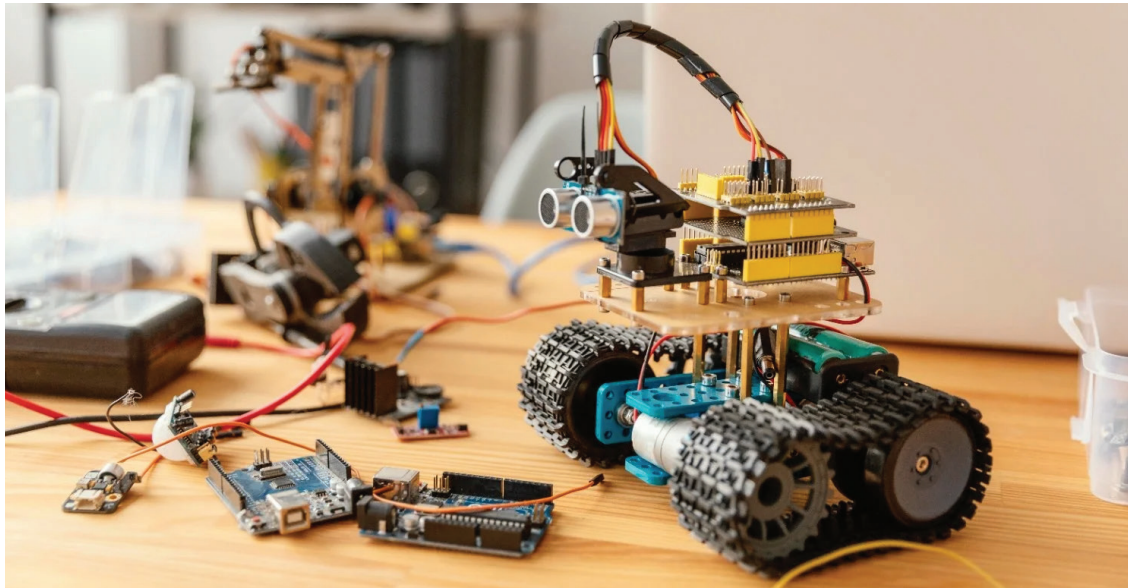
- **V-Connect:** A scalable software platform providing unified communication and mobility solutions for landline customers.
- **V-Secur®:** An integrated security management system that transforms buildings into smart facilities.
- **Enterprise GIS Solutions:** Customized GIS solutions designed for enterprises requiring integrated functionality across multiple departments.

Pakistan Automation

Pakistan Automation is a digital solutions provider specializing in enhancing manufacturing excellence through cloud-based platforms that enable real-time production monitoring and data-driven decision-making. The company offers a range of IT services, including web development and Power BI solutions, to help businesses streamline operations and gain valuable insights through advanced technology.

Recognized for its commitment to quality and customer satisfaction, Pakistan Automation has established itself as a trusted supplier of electronics and automation tools. The company has built a reputation for delivering high-quality, reliable services, earning loyalty from students, hobbyists, and professionals alike. Their product offerings are sourced from reliable suppliers, ensuring that customers receive durable and high-performance components. Furthermore, Pakistan Automation emphasizes ongoing innovation by regularly updating its product catalog with the latest electronics technologies.

With a proven track record in smart city development, Pakistan Automation has helped optimize urban infrastructures, contributing to more sustainable, efficient cities. Their expertise spans across several verticals, and the company operates a successful technology incubation program, helping startups thrive. Pakistan Automation continues to expand its reach with numerous impactful projects in the public and private sectors.



MALIK AUTOMATION

Malik Automation

Malik Automation is a leading provider of automation and industrial solutions, dedicated to enhancing operational efficiency and quality across products, processes, and machine and plant control systems. Based in Lahore, Pakistan, the company has extensive expertise in delivering advanced solutions for PLC automation, RTU automation, HMI, and SCADA systems for both local and network operator interfaces.

With a proven track record, Malik Automation specializes in serving diverse industries, including Food & Beverage, Water, Oil & Gas, and Pharmaceuticals. Each project is handled by a team of seasoned process experts, ensuring that customer requirements are not only met but exceeded.



Combining years of hands-on experience with a deep understanding of emerging technology trends and industry standards, Malik Automation designs innovative, tailor-made solutions. These solutions are crafted to improve performance, increase competitiveness, and address the unique challenges of each client.

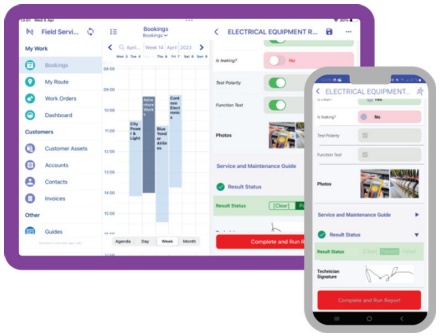


resco.net
technology on the move

Resco

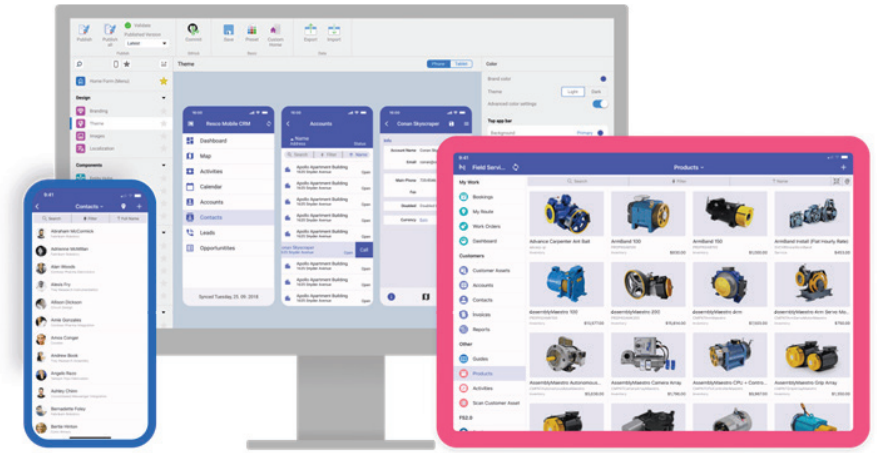
Resco is a premier intelligent building systems Integration company, delivering cutting-edge solutions, industry-leading technology, and exceptional services to clients across diverse sectors, including commercial, residential, healthcare, airports, hospitality, and government. The company specializes in Integrated and Intelligent Building Management Systems, enabling diverse systems to operate seamlessly as a unified platform. These advanced systems optimize energy efficiency, enhance building performance, and respond intelligently to critical events, ensuring smarter and more efficient operations.

Since its inception in 1990, Resco has been at the forefront of introducing next-generation building automation, integration technologies, and security solutions. Through strategic partnerships with globally renowned manufacturing and engineering companies, Resco brings state-of-the-art innovations to the market.



The company is led by a team of seasoned professionals with expertise in Intelligent Building Solutions (IBS) and Optical Solutions. This team focuses on addressing the complexities of end-to-end system implementation and integration, ensuring each project delivers exceptional value and meets the highest standards of performance.

Guided by its vision to lead in integrated building technologies, Resco is committed to delivering advanced, creative solutions that bring unparalleled value to its clients. Its mission is to enhance building performance through innovative and efficient systems, empowering customers to focus on improving their core business performance.



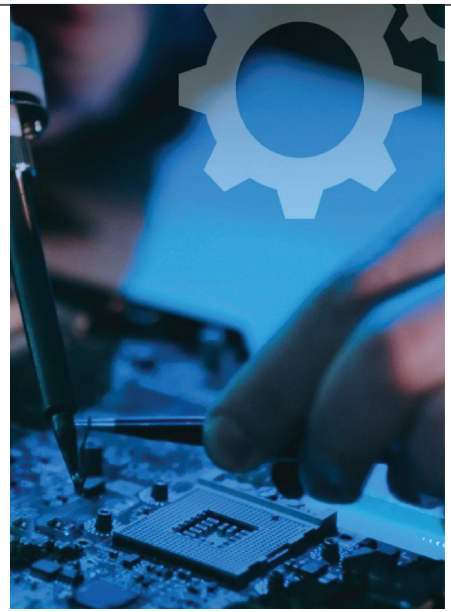
VIPER®
Proudly Pakistani

Viper

Viper Technology, established in 1995, is built on the core values of diligence, trustworthiness, humility, and consistency. Over the years, it has evolved into a leading provider of innovative IT products and services across various industries. With a strong commitment to leveraging cutting-edge technologies, Viper enables its clients to optimize business processes and maximize the value of their IT investments.

The company's product portfolio has expanded from offering branded desktops to a comprehensive range that includes Viper Pacer Desktops, Viper Wiz Servers, and Viper Notebooks. Additionally, Viper Technology provides Managed Data Center Services across major cities in Pakistan, including Karachi, Lahore, Islamabad, and Peshawar, addressing the needs of diverse industries such as technology, banking, education, and healthcare.





Despite initial challenges in a market dominated by global giants like Dell, HP, and Apple, Viper has consistently achieved recognition for its excellence. It became one of the first certified Intel partners in Pakistan in 1997, offering solutions powered by Intel's latest technologies. Over time, Viper has forged partnerships with industry leaders such as Dell and Cisco and earned accolades including Intel's Premier Partner recognition and the title of Bestselling Company.

With a strong track record and commitment to innovation, Viper Technology continues to be a trusted partner for clients seeking reliable, high-performance IT solutions.

Primary Products

- **Viper Pacer Desktops**
- **Viper Wiz Servers**
- **Viper Notebooks.**

IOP International Office Products (Pvt) Ltd.

International Office Products

International Office Products (Pvt.) Ltd. (IOP), established in 1984, is one of Pakistan's oldest and most prominent IT companies. It began as the first organization authorized to market IBM products, starting with typewriters, and later expanded its portfolio as an IBM Business Partner, offering personal computers, servers, software, and other solutions.

In 1994, IOP further solidified its position in the industry by partnering with Microsoft. By 1998, it achieved the distinction of becoming a Direct Large Account Reseller (DLAR), the highest level of Microsoft partnership.

As a pioneer in local IT innovation, IOP introduced Pakistan's first branded PC under the name MangoPC and developed packaged business solutions through Mango Software Solutions (MSS), formerly Compusoft. Renowned for its reliability and credibility, IOP has evolved into a comprehensive provider of Total IT Solutions, delivering cutting-edge technologies and services to meet diverse business needs.





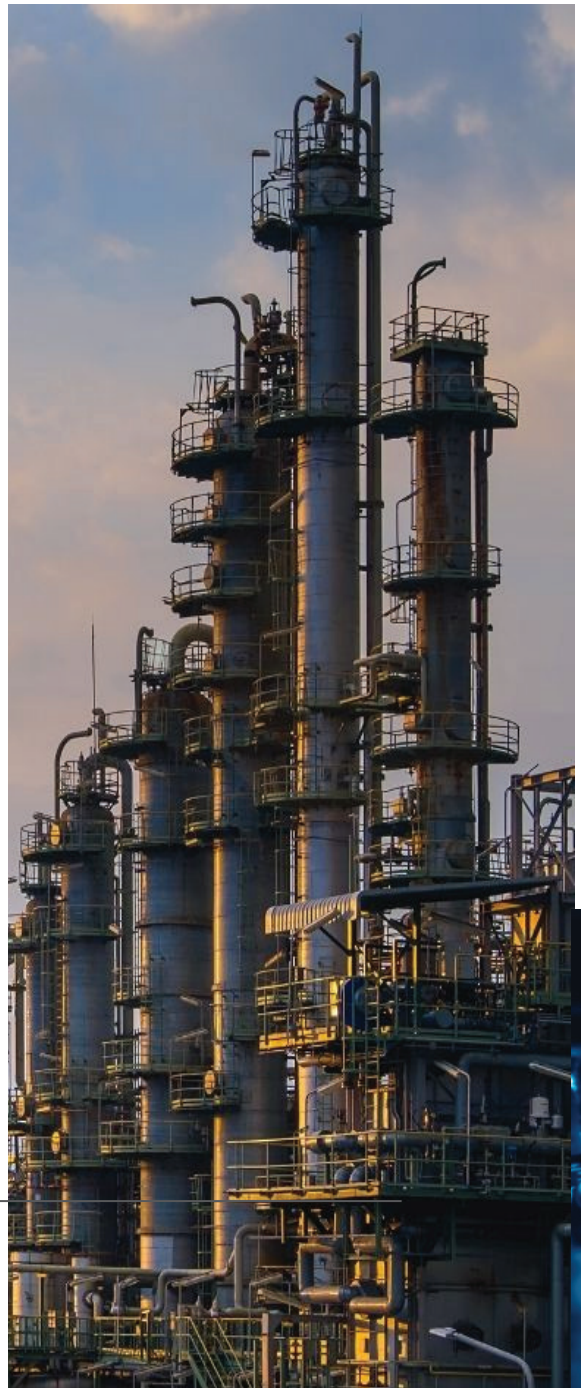
The Automators Pvt. Ltd.

The Automators Pvt. Ltd. (TAPL) is a leading provider of comprehensive industrial automation solutions in Pakistan. With over 17 years of experience, TAPL specializes in delivering optimal and cost-effective automation services across various industries, including oil and gas, cement, sugar, FMCG, pharmaceutical, fertilizers, and power generation plants.

TAPL has established strategic partnerships with renowned global brands such as Honeywell, Siemens, and LEEG, ensuring the provision of high-quality products and services. Their team of skilled professionals offers end-to-end support, encompassing engineering design, project completion, commissioning, and start-up phases.

Primary Products

- **Control Valves**
- **Transmitters**
- **Variable Frequency Drives (VFDs)**
- **Motors**



AVANCEON
Tomorrow's solutions, today.

Avanceon

Avanceon is a leading industrial automation and information technology company specializing in delivering innovative solutions across various industries. With expertise in automation, manufacturing execution systems (MES), digital transformation, and comprehensive support services, Avanceon helps clients achieve operational excellence and sustainable growth.

The company has received numerous accolades, reflecting its commitment to excellence. It was recognized as one of the Top Workplaces in Philadelphia for 2022, showcasing a strong culture of innovation and employee satisfaction. Avanceon is also certified by the Control System Integrators Association (CSIA), demonstrating adherence to industry best practices and high standards in system integration. Additionally, it has been listed among the System Integrator Giants, acknowledging its significant contributions and leadership in the automation industry.

With a strong global presence, Avanceon operates in multiple regions, including Pakistan, Qatar, and the United Arab Emirates, with subsidiaries like Avanceon FZE Dubai and Avanceon Automation & Control W.L.L Qatar. Founded in 1989, the company has decades of experience in industrial automation and control systems, offering tailored solutions across diverse sectors. To ensure continuous operational efficiency, Avanceon provides 24x7 emergency assistance, scheduled maintenance, version control, and training services, making it a reliable partner for businesses seeking automation excellence.

Primary Products

- **Automation Solutions**
- **Digital Transformation**
- **Manufacturing Analytics**
- **Support Services**
- **People Development**

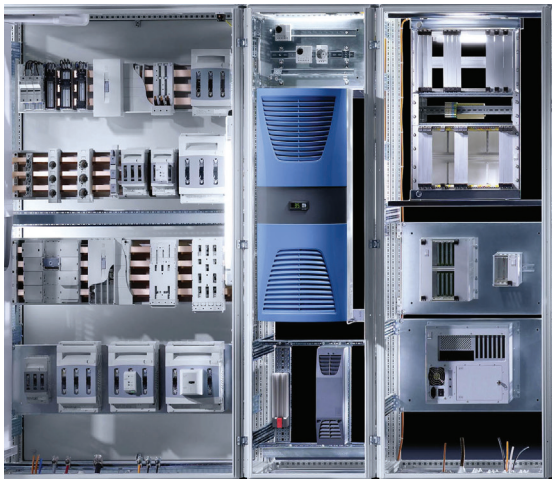


PakPLC

PakPLC is a premier industrial automation consultancy and product supplier based in Karachi, Pakistan. With over 35 years of experience, the company specializes in providing cutting-edge control systems and engineering services to a diverse range of industries, including pharmaceutical, chemical, packaging, automotive, textile, food and beverage, battery manufacturing, cement, and petrochemical sectors. Their expertise encompasses the supply of Programmable Logic Controllers (PLC), Human-Machine Interfaces (HMI), Variable Frequency Drives (VFD), servo drives, and related control equipment from renowned brands such as Siemens, Mitsubishi, Allen Bradley, and Omron.

While specific awards and certifications are not detailed on their website, PakPLC's extensive industry experience and partnerships with leading automation brands underscore their credibility and commitment to delivering high-quality automation solutions. Their successful execution of numerous projects across various sectors reflects their expertise and reliability in the field.

With a history spanning over three decades, PakPLC has established itself as a trusted name in industrial automation. The company has served a diverse range of industries, demonstrating its versatility and ability to provide tailored solutions that meet specific sector requirements. Offering a comprehensive suite of services, PakPLC specializes in installation and commissioning, system design, PLC and HMI programming, field wiring, calibration, startup tests, control system upgrades, troubleshooting, maintenance, and electronic repair of industrial controls. This extensive expertise ensures that clients receive high-quality automation solutions designed for efficiency and reliability.



Primary Products

- **Programmable Logic Controllers (PLCs)**
- **Human-Machine Interfaces (HMIs)**
- **Variable Frequency Drives (VFDs)**
- **Servo Drives**
- **Customized Solutions**

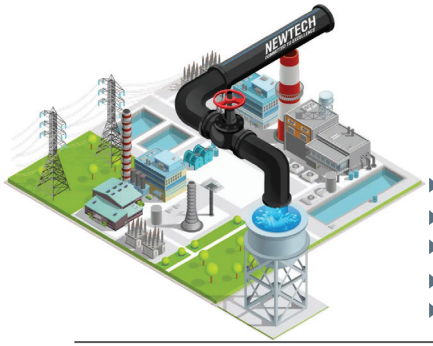
Newtech

Newtech Automation is a leading provider of factory and industrial automation solutions in Pakistan, specializing in the distribution of high-quality automation products. As an authorized distributor for renowned brands such as Fatek, Weintek, Dorna, and Hystar, Newtech offers a comprehensive range of products, including Programmable Logic Controllers (PLCs), Human-Machine Interfaces (HMIs), AC servos, hydraulic components, and other industrial automation equipment. Their mission is to streamline operations and boost productivity for various industries by delivering innovative and reliable automation technologies.

While specific awards and certifications are not detailed on their website, Newtech Automation's status as an authorized distributor for multiple reputable brands underscores their credibility and commitment to quality in the industrial automation sector.



Newtech boasts a diverse product portfolio, offering an extensive range of automation solutions, including over 100 Fatek PLC models, various Weintek HMIs, Dorna servos and steppers, and Hystar hydraulic components. To ensure a seamless customer experience, the company provides free support during working hours (10:00 AM to 7:00 PM), allowing clients to receive timely assistance for their automation needs. Additionally, Newtech prioritizes convenience through its efficient shipping process, delivering products directly to customers' doorsteps for a hassle-free procurement experience.



Primary Products

- **Programmable Logic Controllers (PLCs)**
- **Human-Machine Interfaces (HMIs)**
- **AC Servos and Steppers**
- **Hydraulic Components**
- **Other Automation Equipment**

IS Automations

IS Automation (Pvt.) Ltd. is a Lahore-based company specializing in industrial automation and instrumentation. They offer a comprehensive range of products and services tailored to enhance efficiency and productivity across various industries, including power, chemical, pharmaceutical, oil refinery, pulp and paper, processing plants, cement, and fertilizers. Their expertise encompasses designing and installing automation systems, providing measuring devices for pressure, temperature, flow, and level, as well as control system analyzers.

While specific awards and certifications are not detailed on their website, I.S Automation's successful collaborations with multinational and large national organizations across diverse sectors underscore their credibility and commitment to delivering high-quality automation solutions.

I.S Automation has been operational since at least 2014, demonstrating years of experience in the industrial automation sector. The company serves multiple industries, including power, chemical, pharmaceutical, oil refinery, pulp and paper, processing plants, cement, and fertilizers, showcasing its versatility in addressing various industrial automation needs. With a comprehensive product range, I.S Automation offers a wide array of solutions, such as flow meters, valves, temperature transmitters and sensors, level transmitters, pressure transmitters and gauges, control valves, boiler parts, PLCs, HMIs, and VFDs (inverters), providing clients with diverse automation solutions.

Primary Products

- **Pressure Measurement Instruments**
- **Temperature Measurement Instruments**
- **Flow Measurement Devices**
- **Control System Analyzers**
- **Level Measurement Instruments**
- **Control Valves**





LEO Corporation

LEO Corporation Pakistan is a leading provider of high-quality products and services across various sectors, including electrical, mechanical, chemical, poultry and dairy industries, and the oil and gas field. The company specializes in automation and control solutions, offering innovative strategies to enhance productivity and operational efficiency for its clients.

While specific awards and certifications are not detailed on their website, LEO Corporation's extensive experience and successful collaborations with renowned brands like Fatek, Siemens, and Mitsubishi underscore their credibility and commitment to delivering high-quality automation solutions.



LEO Corporation, established in 1989, brings over three decades of expertise in designing and manufacturing electrical and electronic equipment, including uninterrupted power supplies and voltage stabilizers. The company operates across multiple sectors, such as electrical, mechanical, chemical, poultry and dairy industries, and the oil and gas field, demonstrating its versatility and ability to provide tailored solutions for various industry needs. Committed to a client-centric approach, LEO Corporation actively involves customers in projects, leveraging their knowledge of their operational environment to develop innovative solutions that enhance productivity and deliver significant cost savings.

Primary Products

- **Automation and Control Systems**
- **Power and Electrical Solutions**
- **Renewable Energy Solutions**
- **Smart Industrial Battery Chargers**
- **Poultry and Dairy Solutions**

Intech Process Automation

Intech Process Automation is a leading global industrial automation company specializing in process control, instrumentation, and digital transformation solutions. With a strong presence in Pakistan, Intech provides innovative and reliable automation services tailored to industries such as oil and gas, power, chemicals, and manufacturing. The company focuses on delivering cutting-edge technology and engineering expertise to optimize operational efficiency and ensure seamless process automation.

Intech Process Automation has been recognized for its excellence in industrial automation and engineering services, earning a reputation for delivering high-quality solutions. The company has successfully partnered with major global clients, reflecting its strong technical expertise and industry leadership. Additionally, Intech adheres to international standards and certifications, ensuring compliance with best practices in process automation and system integration.



Intech has a global footprint with operations across multiple countries, including Pakistan. The company has completed numerous successful projects in critical industries such as oil and gas, power, and petrochemicals. With a team of highly skilled engineers and automation specialists, Intech provides comprehensive solutions that enhance productivity, reduce operational costs, and improve system reliability. Its commitment to innovation and customer satisfaction sets it apart as a trusted automation partner.

Primary Products

- **Process Control and Automation Systems**
- **Industrial Instrumentation Solutions**
- **SCADA and Remote Monitoring Systems**
- **Safety and Security Systems**
- **Industrial IoT and Digital Transformation Solutions**
- **Advanced Analytics and AI-Driven Automation**

CrestPak

Crest Pak is a leading provider of industrial automation, control systems, and power solutions, catering to a wide range of industries. The company specializes in delivering state-of-the-art automation, electrical, and instrumentation solutions designed to enhance operational efficiency, reliability, and performance. With a strong focus on technological innovation, Crest Pak offers customized solutions tailored to meet the unique needs of its clients.





Crest Pak has established a strong reputation in the industrial automation sector, earning recognition for its high-quality solutions and engineering excellence. The company collaborates with leading global brands and adheres to international quality and safety standards. Its commitment to delivering superior automation solutions has positioned it as a trusted partner for industrial clients across various sectors.

With years of industry experience, Crest Pak has successfully implemented numerous automation and control projects across different industries. The company's extensive product portfolio includes advanced control systems, electrical components, and power management solutions. Crest Pak's dedication to customer satisfaction, technical expertise, and continuous innovation sets it apart as a reliable automation and electrical solutions provider.

Primary Products

- **Programmable Logic Controllers (PLCs)**
- **Human-Machine Interfaces (HMIs)**
- **Variable Frequency Drives (VFDs)**
- **Industrial Sensors and Instrumentation**
- **Power Management and Distribution Systems**
- **Process Control Solutions**

Taj Automation

Taj Automation is a premier provider of industrial automation solutions, specializing in PLC systems, HMI interfaces, motion control, and process automation. The company offers cutting-edge technology to enhance manufacturing efficiency, improve system reliability, and streamline industrial processes. With a focus on innovation and quality, Taj Automation serves a diverse range of industries, delivering customized automation solutions tailored to client needs.

Taj Automation has earned a strong reputation in the automation sector, recognized for its technical expertise and high-quality solutions. The company collaborates with top-tier global automation brands, ensuring compliance with international industry standards. With a commitment to excellence, Taj Automation has successfully delivered advanced automation systems to numerous clients across various sectors.

With years of experience in industrial automation, Taj Automation has executed multiple successful projects, reinforcing its position as a trusted automation partner. The company's diverse product portfolio and extensive technical support enable businesses to optimize production, reduce downtime, and enhance operational efficiency. By leveraging the latest technological advancements, Taj Automation continues to drive innovation in industrial automation and process control.

Primary Products

- **Programmable Logic Controllers (PLCs)**
- **Human-Machine Interfaces (HMIs)**
- **Motion Control Systems**
- **Servo Motors and Drives**
- **Industrial Sensors and Instrumentation**
- **Power and Energy Management Solutions**



10Pearls

10Pearls is a global AI consultancy and digital technology partner specializing in reimagining, digitizing, and accelerating business transformation. With expertise in AI/ML, blockchain, IoT, NLP, and AR/VR, the company delivers cutting-edge solutions tailored to industry-specific challenges. By integrating workflow automation, product management, user experience design, cloud architecture, software development, data intelligence, cybersecurity, and quality assurance, 10Pearls ensures that every solution aligns with business objectives and drives measurable impact.

Serving a diverse clientele, including Global 2000 enterprises, high-growth mid-sized businesses, and innovative startups, 10Pearls operates across various sectors such as healthcare, financial services, energy, education, real estate, retail, and high-tech. Headquartered in the Washington, DC metro area, the company has a workforce of over 1,300 professionals distributed across North America, Latin America, the United Kingdom, and South Asia. Recognized by The Washington Post as a purpose-driven organization, 10Pearls maintains a strong commitment to balancing profitability with social impact.

With a product-first mindset, the company accelerates AI innovation through its AI Launchpad, transforming concepts into proofs of concept within 90 days. Its agile and high-velocity delivery model ensures seamless execution, while deep industry insights make solutions relevant and effective. A global presence enables 10Pearls to scale digital transformation efforts across multiple regions, ensuring regulatory compliance and security in sectors such as healthcare and finance.

The company's reputation for excellence has earned it widespread industry recognition. It has been featured in the Inc. 5000 list of fastest-growing private companies in the U.S. for six consecutive years and has been acknowledged by Forrester and Gartner as a top partner for AI consulting, software development, and digital transformation. Additionally, 10Pearls has received multiple honors, including the Exelon IT Honor Roll for Diversity, Equity & Inclusion (DEI), Financial Times' Fastest Growing Companies in America, and Built In's Best Places to Work. CEO Imran Aftab was also named a finalist for the Ernst & Young Entrepreneur of the Year award.

Trusted by industry leaders such as AARP, Coca-Cola, Capital One, PayPal, Adobe, National Geographic, and Johnson & Johnson, 10Pearls continues to push the boundaries of digital innovation. With an unwavering focus on AI, DevOps, agile methodologies, and customer experience, the company remains at the forefront of technological advancements, helping businesses navigate the complexities of the digital age with confidence.

Xeven Solution Pvt Ltd



Xeven Solutions is a leading provider of innovative digital solutions, specializing in AI-driven transformation and automation for businesses across diverse industries. With a focus on cutting-edge technologies, the company delivers tailored AI solutions that seamlessly integrate with existing infrastructures, enhancing operational efficiency, decision-making, and profitability. Its expertise spans machine learning, deep learning, natural language processing, computer vision, predictive analytics, and generative AI, enabling businesses to harness the power of data-driven insights for sustained growth.

A rapidly expanding company with a global footprint, Xeven Solutions has successfully served over 500 clients, delivering impactful projects in healthcare, real estate, fintech, and beyond. Its commitment to innovation extends to supporting startups and entrepreneurs, helping them optimize business processes with advanced digital solutions. By prioritizing client relationships and quality deliverables, the company ensures that every solution is designed to meet unique business needs while driving measurable success.

At the core of its approach is a structured methodology that combines pattern identification, user story mapping, wireframing, model development, and seamless deployment. This ensures a smooth transition from concept to implementation, allowing businesses to adopt AI technologies with confidence. With a passionate team of experts dedicated to pushing technological boundaries, Xeven Solutions continues to redefine the digital landscape, empowering organizations to thrive in an increasingly AI-driven world.

> *Xeven Solutions has improved the client's existing app. Xeven Solutions utilizes their expertise to deliver comprehensive, user-friendly solutions. Their team manages projects well and has excellent documentation processes and communication.*
> ***– Aram Saffarian, President of Treaty Health***

> *The Xeven Solutions team has finished 2/3 of the project and completed every milestone so far. Their workflow is good; their members communicate regularly through Zoom, and they collaborate well with the client via GitHub, Jira, and Slack. They solve problems fast and deliver information on time.*
> ***– Jeff Moye, Founder of Moye***



Venturenox

Venturenox is a technology-driven company founded out of a deep passion for building innovative digital products. Unlike traditional software development firms focused solely on staff augmentation, Venturenox is committed to engineering scalable, cloud-native solutions that enable startups to solve complex problems efficiently. With a strong emphasis on research and development, the company continuously refines its frameworks for product development and modern infrastructure, ensuring that every solution is built with long-term sustainability, security, and scalability in mind.

At the core of its philosophy is a dedication to first principles thinking, where every decision is rigorously evaluated against fundamental design and ethical considerations rather than short-term trends. This approach fosters the creation of highly functional ecosystems—technologies, workplaces, and communities that are structured to benefit all stakeholders. By integrating standardized frameworks with deep technical expertise, Venturenox accelerates product development, helping startups establish a strong technical foundation while focusing on innovation and differentiation.

Operating as a venture studio, the company blends agile methodologies with lean execution, allowing products to evolve in response to market demands. Its expertise spans microservices architecture, big data, machine learning, DevOps, and cybersecurity, providing startups with the technical infrastructure to build a competitive advantage. With a team selected through a meticulous evaluation process, Venturenox ensures that every member aligns with its values of transparency, continuous learning, and excellence.

More than just a development partner, Venturenox plays a pivotal role in shaping technology ecosystems that drive long-term success. By leveraging pre-built components and proven engineering playbooks, it enables founders to scale confidently while maintaining a focus on product innovation. Its commitment to open-source communities and collaboration with academia further reinforces its mission of advancing technology as a force for progress.

> *For more than 20 years, I have worked in different technology domains and started multiple companies. I am really passionate about technology and the possibilities it opens up. I like to create well-positioned ecosystems which utilise technology and design to achieve great things. I founded Venturenox to be able to do exactly that.*
> ***– Jaffar Hussain, Founder & CEO***

Million Web Services

Million Web Services is a full-service IT company specializing in workflow automation, digital marketing, cloud computing, and data center solutions, dedicated to helping businesses thrive in the digital era. With a customer-centric approach and a commitment to innovation, the company delivers tailored solutions that enhance online visibility, optimize technological infrastructure, and drive business success. Its expertise spans search engine optimization, social media management, pay-per-click advertising, and advanced analytics, ensuring that clients achieve sustainable growth through strategic digital marketing.

The company's cloud computing solutions provide secure, scalable environments, enabling seamless cloud migration, infrastructure as a service (IaaS), and robust cybersecurity measures. Its data center services ensure reliable hosting, secure backup solutions, and dedicated technical support, empowering businesses with uninterrupted digital operations. By leveraging cutting-edge technologies and industry best practices, Million Web Services helps organizations navigate the ever-evolving technological landscape with confidence.

Renowned for delivering high-quality services at competitive prices, the company has earned a reputation for reliability and excellence. Since its inception, it has successfully served hundreds of businesses, helping them establish a strong digital presence while ensuring cost-effective and results-driven solutions. Its team of skilled professionals is dedicated to timely project delivery, offering unlimited revisions and expert consultation to tailor strategies that align with each client's unique goals.



Beyond technical services, Million Web Services is recognized for providing secure, high-performance hosting solutions, ensuring business continuity with advanced firewalls, DDoS protection, and regular backups. Its scalable cloud solutions enable businesses to expand effortlessly, leveraging modern infrastructure without the need for significant upfront investment. With a deep understanding of emerging trends and technologies, the company remains at the forefront of digital transformation, equipping clients with the tools they need to stay ahead of the competition.

By integrating creativity with technology, Million Web Services also excels in graphic design and web development, crafting visually appealing branding materials, engaging social media content, and responsive, mobile-friendly websites. Its expertise spans various platforms, including WordPress, Shopify, and Magento, ensuring tailored solutions that align with business objectives.
With a decade-long track record of success, Million Web Services has solidified its position as a trusted partner for businesses looking to establish a strong digital presence. Its unwavering commitment to quality, strategic execution, and customer satisfaction ensures that every client receives unparalleled support in achieving their business goals.

> *Hired them to make a website for my e-commerce business and they made a super-responsive one in just 3 working days. They deliver work quickly without compromising on quality. The best IT services company for a reason.*
> ***– Tony BertramFrederick, MD***

> *Working with them was a breath of fresh air. Their professionalism, creativity, and technical expertise blew us away. They took the time to understand our needs and executed beyond our expectations.*
> ***– John SmithCOO, TechSolutions Inc.***

> *They helped me with SEO and I can't believe that my website got ranked in just 2 months. I now get organic leads every single day and it has helped me boost my business bottom line.*
> ***– Mary SmithPine Bluff, AR***



Rapid Compute

RapidCompute stands as Pakistan's first enterprise-class public cloud computing platform, delivering robust and flexible Infrastructure as a Service (IaaS) solutions designed to support mission-critical business applications. Established in 2012, it operates as a key offering of CYBERNET, Pakistan's leading internet service provider and a part of the Lakson Group. With a strong foundation in innovation and reliability, RapidCompute enables organizations to accelerate operations, optimize costs, and scale seamlessly.

Built to meet the evolving demands of modern enterprises, its cloud infrastructure is strategically distributed across multiple data centers nationwide, including three in Karachi and one in Lahore. This network of geo-redundant facilities enhances reliability and ensures secure data backup, allowing businesses to select their preferred primary and disaster recovery sites with confidence.

The platform is further distinguished by its multi-hypervisor support, providing customers with the flexibility to choose from Citrix Xen, VMware, or KVM, tailored to their specific operational needs.

Offering a comprehensive suite of cloud-based products, RapidCompute facilitates enhanced computing, networking, storage, security, and management solutions. Whether businesses require scalable compute services, OpenStack-powered platforms, high-performance storage, or advanced cybersecurity measures, the platform delivers cutting-edge capabilities designed for efficiency and security. Committed to maintaining the highest industry standards, RapidCompute is PCI DSS compliant, adheres to GDPR regulations, and holds multiple ISO certifications, reinforcing its position as a trusted cloud partner for enterprises across Pakistan.

Vaival Technologies

Vaival Technologies is a leading consultancy and software development company dedicated to delivering cutting-edge engineering and automation solutions. Since its inception in 2010, it has established itself as a visionary organization and a trusted technology partner for global brands. With a commitment to staying ahead of the curve, Vaival seamlessly integrates innovation with expertise, enabling businesses to navigate digital transformation with confidence.

Specializing in custom software development, blockchain solutions, and IT staff augmentation, the company provides tailored services that drive operational efficiency and business growth. Its expertise extends across mobile application development, UI/UX design, and cloud solutions, ensuring businesses receive scalable and future-ready technology. With a team of highly skilled engineers and developers, Vaival excels at building decentralized blockchain networks, secure enterprise applications, and user-centric digital products that enhance productivity and engagement.

Operating on a subscription-based model, its Software Development as a Service (SDAAS) ensures continuous adaptability to evolving business demands. The company's multi-disciplinary approach extends across industries, catering to sectors such as e-commerce, healthcare, finance, education, logistics, retail, telecommunications, and manufacturing. By leveraging AI, IoT, and blockchain technology, it enables businesses to streamline operations, enhance security, and deliver superior customer experiences.

With a presence spanning over a decade, Vaival has successfully completed numerous projects for enterprises worldwide, earning a reputation for excellence and reliability. Its extensive talent pool of engineers, designers, and strategists collaborates closely with clients to develop high-performance solutions that align with their unique objectives. Whether enhancing connectivity in telecommunications, optimizing logistics, or revolutionizing e-learning platforms, Vaival remains dedicated to empowering businesses through technology-driven innovation.Custom Software Development Company.

> *Vaival's software developers have impressed us with their skills and talent. We needed engineers for multiple tech stacks, and they fulfilled every requirement efficiently, also helping us reduce our operational cost. Their commitment to delivering high-quality solutions has truly exceeded our expectations.*
> *– DaanMeet Aimy*

Wateen Telecom Limited



Wateen is a leading information and communications technology company in Pakistan, recognized for its commitment to providing seamless connectivity solutions across industries. With a rapidly expanding fiber-optic network, the company has played a pivotal role in shaping the country's internet infrastructure, ensuring businesses and individuals have access to reliable, high-speed communication services.

As one of the foremost telecommunications providers, Wateen delivers cost-effective and efficient networking solutions tailored to meet the evolving demands of enterprises. Its expertise in digital connectivity allows businesses to optimize operations and enhance productivity through state-of-the-art technology and robust infrastructure.

By offering innovative and user-friendly internet solutions, the company continues to drive digital transformation across multiple sectors.

With an extensive and rapidly growing fiber-optic network, Wateen is among the largest infrastructure providers in Pakistan. Its comprehensive range of services supports organizations in their digital evolution, enabling them to stay ahead in a competitive landscape. Through continuous innovation and a customer-centric approach, Wateen remains dedicated to advancing Pakistan's digital ecosystem and empowering businesses with world-class connectivity solutions.



Automation & Power Solutions (APSol) Pvt Ltd

APSol (Automation & Power Solution) Pvt Ltd. is a pioneering force in Pakistan's automation and power utility sector, delivering cutting-edge electrical components and control systems since 2008. Specializing in PLC and SCADA-based solutions, the company excels in designing, engineering, and contracting for industrial automation, power management, and energy efficiency. With a strong emphasis on innovation, APSol integrates globally renowned technologies to optimize manufacturing, energy distribution, and smart control systems. Their end-to-end services—from product training to system implementation make them a trusted partner for industries seeking reliable automation and power solutions.

APSol's reputation as a "dynamic and visionary" company is reinforced by its collaborations with industry giants like Schneider Electric, BELUK, and REO Elektronik—global leaders in power management and automation. Their expertise has been leveraged by high-profile clients, including Coca-Cola, Toyota, Engro, and GE Energy, showcasing their capability to handle large-scale industrial projects.APSol's Intelligent Load Management System (ILMS) and Generator Synchronizing solutions have been deployed in critical sectors like cement manufacturing (Pioneer Cement, Cherat Cement) and energy, ensuring seamless power transitions and cost efficiency.

With over 15 years of industry leadership, APSol has cemented its reputation by delivering more than 50 major automation and power management projects across Pakistan. Their expertise spans critical sectors, from implementing PLC/SCADA systems for sewage treatment plants to deploying scalable solar solutions ranging from 200W to 2500W for homes and businesses. Clients report significant cost savings—up to 25% in energy expenses—through APSol's intelligent load management and VFD-driven efficiency solutions. Backed by strategic partnerships with global leaders like Schneider Electric, BELUK, and REO Elektronik, the company ensures access to cutting-edge technology, reinforcing its position as a one-stop solution for industrial automation and sustainable power management.

Primary Products

- **Generic:**
  - Power Management Systems
  - Control Panels
  - Solar Solutions
  - PLC/SCADA Integration.
- **Specific:**
  - Auto Feed System (AFS) for Sugar Cane – Precision automation for agro-industries.
  - Building Management System (BMS) – Smart control for commercial infrastructures.
  - REO-Backed Custom Inductors – High-efficiency components for heavy industries.

Accrescent Engineers (Pvt.) Ltd

Accrescent Engineers has emerged as one of Pakistan's fastest-growing electrical design and automation firms. Specializing in power systems, industrial automation, building management solutions, and instrumentation, the company handles projects ranging from quick service calls to large-scale design-build venture

Accrescent's two decades of experience speak volumes. The company has successfully executed projects across industrial automation, SCADA/PLC systems, and energy management, earning client trust through milestones like the implementation of substation automation and intelligent building management solutions. A standout success story includes their work in switchgear manufacturing, where advanced technologies and precision engineering set industry benchmarks.





With over 24 years in operation, Accrescent boasts numerous completed projects , ongoing ventures, and a presence in Pakistan's key industrial sectors. Their unique edge lies in end-to-end services—from design and installation to maintenance and troubleshooting—backed by a team skilled in PLCs, SCADA, and green energy solutions.

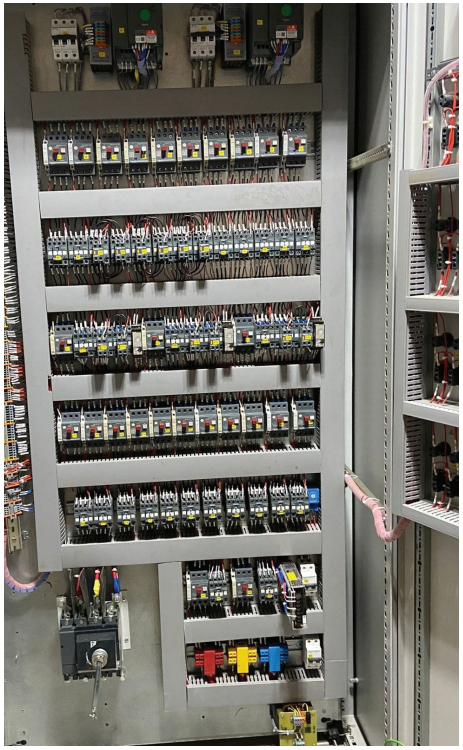
Primary Products

- **Automation & Control Systems: Substation Automation, Process Control.**
- **IBMS and ELV: Integrated Building Management Systems and Extra Low Voltage solutions for smart infrastructure.**
- **Energy/Busbar Systems: Efficient power distribution solutions.**
- **E&I Contracting: Turnkey electrical and instrumentation projects.**
- **Green Energy and Switchgear Manufacturing: Custom sustainable solutions and high-quality switchgear production.**

Protech Automation

Protech Automation is a Lahore-based industrial solutions provider specializing in smart automation, PLC programming, and HMI/SCADA systems. Known for integrating AI and data analytics, they optimize operational efficiency with services like predictive maintenance and real-time monitoring. Their four-phase workflow (Planning, Execution, Review, Delivery) ensures structured project management, catering to industries seeking precision and innovation.

Protech Automation backs its expertise with measurable results, reporting a 95% success rate in trading services and industrial training—a testament to their reliability in high-stakes industrial environments. Their engineering services maintain a 90% proficiency rate, reflecting precision in automation and system design. What truly sets them apart is their 24/7 customer support, a critical asset for industries where downtime isn't an option. These metrics underscore their commitment to delivering consistent, round-the-clock solutions for clients.





Primary Products

- **Generic:** Industrial automation, boiler systems, solar solutions, and plant automation.

Specialized

- **Custom PLC/VFD programming.**
- **Fire alarm and building management systems.**
- **Tailored HMI/SCADA designs.**

PowerHouseExpress

PowerHouseExpress has carved a niche as Pakistan's go-to destination for premium yet affordable electrical accessories and smart home solutions. From cutting-edge automation gadgets like smart Wi-Fi dimmers and security locks to essential wiring services, they blend quality with unbeatable pricing. Their curated range spans global brands—Schneider Electric, ABB, Clipsal, and Vteke—ensuring authenticity without the premium price tag.

With a catalog boasting over 30,000+ ready-to-ship products, PHE ensures that customers across Pakistan have access to premium electrical solutions. Offering nationwide delivery, multi-layer secure payment options, and dedicated customer support, the company has established itself as a go-to destination for electrical accessories. Competitive pricing remains a key strength, ensuring that quality products remain accessible to a broad audience.

Primary Products

- **Smart Home Automation (e.g., sensors, locks)**
- **Lighting (chandeliers, solar lights)**
- **Kitchen Appliances (air fryers, roti makers)**
- **Electrical Tools (extension sockets, isolators)**

Specialized

- **Smart Wi-Fi Dimmers:** Budget-friendly at 40% below market rates.
- **Schneider Electric Sockets:** The top-selling premium range.
- **ABB Industrial Plugs:** Favored by commercial clients for durability.



Speedy Automation

Speedy Automation is a leading engineering and automation solutions provider in Pakistan, specializing in industrial control systems, process optimization, and environmental monitoring. With a strong focus on energy efficiency, precision measurement, and automation, the company offers end-to-end services—from installation and calibration to project management and inventory solutions. Their expertise spans industries like textiles, FMCG, and energy, helping clients streamline operations, reduce costs, and maintain compliance.

Certified by the Weights & Measurement Authority and holding ISO 45001:2018 for Occupational Health & Safety, Speedy Automation is a trusted name for quality-critical processes. Their calibration and custody transfer solutions are renowned for "meeting the highest accuracy standards for fiscal transfer," minimizing costly measurement errors. The company has delivered projects for giants like Nestlé Pakistan, Unilever, and Colgate-Palmolive, with success stories in boiler efficiency optimization and emission monitoring for textile mills.

With 40+ years of industry experience, Speedy Automation has cemented its reputation as a leader in industrial automation and process optimization. Serving 2,000+ satisfied clients across 100+ industries, the company is an authorized provider of precision solutions like trace moisture/gas measurement and SWACS (Steam, Water, and Chemical Solutions). Their reliability is further underscored by long-standing partnerships with global giants such as PepsiCo, Coca-Cola, and Kohinoor Energy, demonstrating their ability to deliver high-impact results for tier-1 clients.



Primary Products

- **Generic:** Industrial automation, energy metering, inventory management.
- **Specific:**
  - Flow Metering Solutions: High-accuracy custody transfer for fuel/chemical loading.
  - Smart Combustion Monitoring: Emission control systems for compliance.
  - Analytical Solutions: Turnkey SWACS for water/chemical plants.

National Institute of Electronics (NIE)

Established in 1979 under Pakistan's Ministry of Science & Technology, the National Institute of Electronics (NIE) is a pioneering force in electronics R&D, training, and innovation. With a mandate to advance indigenous electronics capabilities, NIE specializes in digital/power electronics, computer hardware/software, and industrial automation. Over four decades, it has evolved into a hub for cutting-edge projects, from semiconductor design to energy-efficient tech, while fostering collaborations with academia and industry.

NIE's expertise is reflected in its strategic partnerships with national/international universities and industries. Its Technology Business Incubation Center and Energy Conservation projects (like LED lights and solar controllers) highlight its practical contributions. Anecdotal success stories include retrofitting solutions for Pakistan's industrial sector, though detailed testimonials are scarce.

With 45+ years of legacy since its founding in 1979, NIE has anchored its work in three core areas: digital electronics, power systems, and computer engineering. Today, its ambitions stretch toward semiconductor self-reliance, cutting-edge nanoelectronics R&D, and boosting local manufacturing—such as mobile phones and medical devices—to reduce import dependency. Driving these initiatives is its highly specialized workforce, with engineers and scientists trained at leading global institutions, ensuring NIE remains at the forefront of Pakistan's technological advancement.

Primary Products

- **Generic:** R&D consultancy, electronics training, industrial automation.
- **Specific:**
  - Solar charge controllers & energy audit tools.
  - Security systems (access control, vehicle tracking).
  - Medical tech (fiber scopes) and consumer electronics (laptops, energy meters).



Pakistan Machine Tool Factory (PMTF)

Established in 1968 with Swiss collaboration (Oerlikon Bührle), PMTF is Pakistan's premier manufacturer of high-precision machine tools, automotive transmission parts, and die-casting components. Spanning 226 acres—including a 57-acre residential colony—the ISO 9001:2015 certified facility combines European engineering standards with indigenous expertise to serve industries from automotive to defense. Known for its CNC machinery, gear manufacturing, and metallurgical labs, PMTF has been a cornerstone of Pakistan's industrial growth for over five decades.

PMTF's Swiss-designed infrastructure and rigorous quality control have earned it a reputation as a shadow defense project, capable of emergency mobilization.its ISO certification and partnerships with global giants like Oerlikon Bührle underscore its credibility. The factory's in-house training institute produces skilled engineers, and its apprenticeship programs are vital for national technical manpower development. A notable success story includes producing traction gears for locomotives, reducing reliance on imports.

With a workforce of 800+ skilled professionals, including engineers and technical staff, PMTF combines human expertise with cutting-edge infrastructure. The company's 57-acre residential colony underscores its commitment to employee welfare, fostering a self-sustaining ecosystem. Over 50+ years of operation, PMTF has built robust local supply chains while expanding its export footprint. Its facilities rival global standards, featuring CNC machining centers, precision gear testing labs, CMM-equipped metrology labs, and heat treatment shops—ensuring every component meets stringent international benchmarks.



Primary Products

- **Machine Tools:** CNC lathes, milling/drilling machines, and hack saws for industrial workshops.
- **Automotive Components:** High-tolerance gears, pinions, and shafts for tractors, buses, and locomotives.
- **Die-Cast Solutions:** Aluminum parts for gas meters, motorcycles, and automotive wheels.
- **Heavy-Duty Equipment:** Marble-cutting quarry machinery and steel flanges for oil/gas pipelines.

INTEK AUTOMATION

Established in 1998, Intek Automation has cemented itself as a premier provider of industrial automation and power generation solutions across Pakistan and the Middle East. Specializing in turnkey and custom systems, the company serves diverse sectors—from textiles, defense, and telecom to beverages and pharmaceuticals—delivering seamless integration of cutting-edge technology. With strategic alliances with global giants like Mitsubishi, Weintek, and Fatek, Intek combines technical expertise with reliability, ensuring clients "solutions that just fit" their operational needs.

Intek's 25+ years of industry dominance and partnerships with top-tier brands (e.g., Emko, Opkon, TouchWin) underscore its credibility.

With 500+ integrated automation systems deployed across industries, Intek Automation has proven its technical prowess at scale. Backed by 7 global manufacturing partners, including Mitsubishi and Weintek, the company guarantees access to cutting-edge technology. Its services—spanning industrial automation, maintenance, retrofitting, and scalability-focused upgrades—cater to clients nationwide in Pakistan and key Middle Eastern markets, solidifying its regional dominance.

Primary Products

- **Industrial automation & equipment customization.**
- **Power generation systems (industrial/ domestic).**
  Rental, repair, and calibration services.

Specific Solutions

- **PLCs (Programmable Logic Controllers) by Mitsubishi/Fatek.**
- **Human-Machine Interfaces (HMI) – Weintek/TouchWin.**
- **Variable Frequency Drives and Generator Safety Modules.**
- **Battery chargers & engine speed controllers**



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and we'll take it from there.

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About this Industry Roundup

Pakistan Software Export Board developed this paper by hiring services of independent consulting firms to prepare this roundup on Industrial Automation sector. The paper focuses on Pakistan-based companies in this vertical and apprises the reader of the expertise available in this domain.

Disclaimer

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