SILICON TECHNOLOGIES, an IT professional company is serving Pakistan since 1993 with firm conviction and determination for the advancement of IT technology and provide state-of-the-art hi-tech products to its customers. Silicon is specialized in the following IT segments:

- Data Center Design, Consultancy and Turn Key Solutions
- Turn Key Power Protection Solutions
- Servers, Storage & Virtualization Solutions
- IT System Integration
- Networking Infrastructure and Services
- IT Resources and Project Management
- Service Level Agreement
- Network Communication Solution

As a result of our continuous efforts, we have achieved the strategic partnerships with the world leading IT firms like Microsoft, Cisco, Lenovo, Dell, Kingston, D-Link, Moxa, Vertiv, VMware, Symantec, Fortinet, Overland data, Eset, A.DLink, Silicon-Power, Kaspersky, Veeam, Toten & Matrix Network Power to provide world class quality IT solutions and services to our customers. We feel that selling the product or services is the only first step towards putting together a viable computing solution for our clients the real task starts when system is integrated to work under the Human–interfaced performing conditions. Therein lays our strengths in offering comprehensive range of pre & post-sales support and services. Our sales and support professional play an important role in identifying the overall needs of a customer before proposing a realistic solution. Our consistent growth and success stands as witness to our continued commitment to deliver high quality, flawless products and services.
Message From C.E.O

During the past years, we embarked upon a very successful expansion of our business. We have expanded our presence from only Karachi to Lahore, Islamabad and Peshawar. We developed new partnerships, secured major projects and accomplished numerous prestigious achievements awards.

I attribute our success to support provided by our customers, vendors, partners and of course the dedicated employees to whom I am deeply grateful.

Sincerely
Asif Waheed Khan

Message From C.O.O

Silicon Technologies has a history of responsible business conduct. We strongly believe that real business success is not just about profits measured in numbers but it is also, about how those numbers are achieved and how we can improve the customers IT automation Systems. Our corporate strategy reflects our commitment to sustainable business practices and balancing growth and productivity.

With an excellent track record, I can confidently claim that Silicon Technologies will continue to set new standards in fulfilling needs of our customers by providing latest IT infrastructure and solutions.

Sincerely
Mobeen-Ul-Haq

Mission:

Silicon Technologies core purpose is to foster technological innovation and excellence for the benefit of humanity. Our mission is to provide our Business Partners with a focused, separately managed program to enhance and compliment their business goals and allowing easy access to IT industry-leading portfolio of products and services.

Values:

Customer Satisfaction
Excellence
Innovation
Improvement Consistency
Integrity
Partnership
Self Respect
Transparency

Vision:

Leading by the philosophy of pursuing excellence, Silicon Technologies envisions being an innovative player in IT Infrastructure, Consultation, Integration & Support in Pakistan. Today with the hunger to grow and the attitude to compete globally tomorrow.
Be essential to the global technical community and to technical professionals everywhere, and be universally recognized for the contributions of technology and of technical professionals in improving global conditions.
IT Infrastructure Consultation, Integration & Support

Data Center Design, Consultancy and Turn Key Solutions
Data Center Services help you plan, design and build optimized cost-effective data centers and facilities to achieve a lean, resilient and flexible infrastructure that can sustain growth, deliver business value, meet increasing availability demands of the customers.

Turnkey Power Protection Solutions
Full range of Best in Class Industry Leading Power Protections Solutions, including Commercial and Industrial uninterruptible power supplies (UPS), VoltageStabilizers, Power Conditioners, DC (rectifiers) Solutions, PDU, LTS/ATS, Solar PV Solutions and Batteries, which out perform in mission critical operations.

Virtualization Solution
Most advanced solution in VMware vSphere for server consolidation to reduce the TCO, maintain robust environment with high availability single point of management and monitoring for critical and polite environments.

Infrastructure / Network Communication Solution
As in mind of global village, we provided complete solution of LAN and WAN which includes site to site connectivity LAN, using structured cabling with fiber optic / copper, we provide services from consultation to designing and integration, network optimization, analysis, management and monitoring by world’s leading testing equipment.

Storage Solution
Silicon has best skills in storage area where the client’s most critical concerns is to store the data safely. We provided storage loaders, libraries and disk based solutions according to enterprise business needs.

A Diverse Range of IT Services for your Business

Industrial Solution
For harsh environments Silicon provided industrial solutions include switching serial to internet, connectivity on PLCs, which cover the sensitive sectors like petroleum, textile, power and telecom.

Enterprise Computing Infrastructure
To effectively meet the overall enterprise business needs, Silicon provides planning, implementation services of wide range of Servers and desktops and any environment.

IT Security Solution
Today major concern of IT environments is security, Silicon Technologies provide complete solution of Network and Application Security for Enterprise and SMB environment working with some of well known products like Cisco, Fortinet, ESET, Kaspersky and Symantec on which solutions are designed based on customer requirements.

Mobility and IP Surveillance
Silicon has significant skills on IP surveillance with the touch of mobility which most demanding requirement from any sector to reduce the cables and improve the environment from security risk.

Managed Services/Service Level Agreements
Silicon also offered Service level agreements to valued customers for UPS, Servers, Networks, Surveillance, Data Center, Resident engineers, Laptops, Desktops through our certified technical team.
Shaheen Air International Limited (SAI) is established as a public limited company under the Companies Ordinance, 1984. It is mandated to carry on business of air transportation of passenger and cargo. It commenced its operations as the first Pakistani private airline in December, 1993.

**BUSINESS NEED**

To keep the services optimized and for on growing business needs. They decided to manage infrastructure on a specific centralized data center that should be modular, scalable, redundant and meets the TIA standards.

**SOLUTION**

We deployed complete Data center with cold aisle containment including power room. Data center was sized to consist of 10 racks with Cold Aisle containment solution, 3 x 40kW 2(N+1) Design Dual Circuit Down flow Precision cooling used in the Data Center, 2 x 60kVA Redundant UPS with long battery backup time. Centralized Comfort Cooling Solution for Power and NOC Room. NOVAC Fire Suppression and Detection System deployed with VESDA System for Data Center and Power Room.

**BENEFITS**

Redundancy in each level, 99.999% efficiency, with high availability able to run 24/7 operations. Provide and maintain the TIA942 recommended Temperature and Humidity level inside cold aisle containment. Saving the Total cost of ownership. Saving utility cost up to 50%. Overall decrease the ROI value. Maintain low PUE value for efficient data center.

CENTEGY Provide a professional ecommerce software solution that enables one to sell or display their products on the Internet to both consumers and trade customers. Utilising the full breadth of their design, build and project management skills, they deliver unique, tailored solutions to meet extremely sophisticated requirements.

**BUSINESS NEED**

To maintain and provide the best reliable and 24/7 operational services they planned to standardize the Data center that meets the TIA942 and IT requirements.

**SOLUTION**

Designed Data Center was sized to consist of 8 racks with Cold Aisle containment solution. Deployed 2 x 35kW (N+1) CRV in row precision cooling. Deployed 2 x 60kVA Redundant UPS with long battery backup time. Deployed Redundant Comfort Cooling Unit in Power, UPS, Battery, Staging NOC, Manager Room. IT staff sitting setup in NOC with monitoring system. FM-200 Fire Suppression and Detection System deployed in this Data Center.

**BENEFITS**

- 24/7 operational environment to maintain the Data save & secure for smooth operations.
- Quick Recovery disaster plans & arrangement.
- Maintain Low utility cost, ROI and PUE values.
- Provide and maintain the TIA942 recommended Temperature and Humidity levels inside cold aisle containment.
- Saving the Total Cost of Ownership.
**BUSINESS NEED**

As day by day growing business and network, Dawlance has planned to upgrade their existing Data center to meet standards as per tier TIA-942A/B as well they planned to renovate their server room of factories and plant. Purpose of renovation of all servers is make operational 24/7 remote monitoring site, security, work efficiency, control & manage manufacturing as per demand and supply. All remote site will be control by centralized Data Center, Head office.

**SOLUTION**

Centralized Data Center  
By focusing the need of customer, we installed a Vertiv Smart solution which consist of 4 Racks, 2 x 20kW Room Cooled Precision Cooling, 1 x 90kVA Modular UPS with dual independent path for the data center with standard battery backup time, Data center infrastructure environmental monitoring solution, Fire detection and suppression system NOVEC 1230.  
Factory 1,2,3,4 : Site preparation, Power work, Racks, Data cabling, Cable tray system, UPS power distribution, Fire detection system.

**BENEFITS**

- Improve the performance of IT equipment’s  
- Provide and maintain the TIA942 recommended Temperature and Humidity level inside Data center.  
- Saving the Total cost of ownership  
- Saving utility cost up to 50%  
- Overall decrease the ROI value  
- Maintain low PUE value for efficient data center

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**Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST)** (SZABIST) is a fully Chartered Institute established through a Legislative Act of Sindh Assembly (Sindh Act No. XI of 1995) and is approved and recognized by Higher Education Commission (HEC), Pakistan, as a degree granting institution. SZABIST has campuses in Karachi, Islamabad, Hyderabad, Larkana and Dubai (UAE), SZABIST is a registered member of the International Association of Universities (IAU), Paris; Association of Commonwealth Universities (ACU), London; Association to Advance Collegiate School of Business (AACSB), Singapore; Federation of the Universities of Islamic World (FUW), Rabat; Asia University Federation (AUF), Seoul; Asia – Pacific Quality Network (APQN), China and Management Association of Pakistan, Karachi.

**BUSINESS NEED**

SZABIST has constructed new building at their premises. To maintain their academic records and for ongoing education business they planned for centralized data center to manage the data and to entertain the students and faculty members.

**SOLUTION**  
SZABIST data center was deployed on two phases, overall solution consist of 6 racks with Cold Aisle containment solution. 2 x 20kW (N+1) 300mm CRV+ inverter base design in row precision cooling used in the Data Center. IT staff sitting setup in NOC with monitoring system. 2 x 20KVA Redundant UPS with long battery backup time. FM 200 Fire Suppression and Detection System for Data Center and Power Room.

**BENEFITS**

- 24/7 operational environment to maintain the Data save secure for smooth operation.  
- Security and monitoring on each level.  
- Reliability, modularity and scalability.  
- Quick Recovery disaster plans & arrangements.  
- Maintain Low utility cost, ROI and PUE values.
**The Defence Housing Authority, Karachi**, also known as the Pakistan Defence Officers Housing Authority or DHA, is an upscale real estate and property development organization administered by the Pakistan Army which develops housing for current and retired military personnel. It is a suburban housing development in metropolitan Karachi, Sindh, Pakistan.

**BUSINESS NEED**

This project is currently dealing with server infrastructure. DHA is looking to enhance their current infrastructure with the latest technologies where virtualization on VMware is considered an optimum approach for moving towards attaining that. In addition, DHA is revamping their infrastructure that is currently hosting the active infrastructure.

**SOLUTION**

Complete installation, configuration and implementation of Flex Chassis with Nodes connected a SAN with an additional server for centralized management. The virtualized environment will be with High Availability. The infrastructure that hosts the infrastructure will need to the dismantled and revamped with additional space to host the new equipment with management of the internal cabling.

**BENEFITS**

Most servers operate at less than 15 percent of capacity, leading to server sprawl and complexity. Server virtualization addresses these inefficiencies by allowing multiple operating systems to run on a single physical server as virtual machines, each with access to the underlying server’s computing resources. Server cluster into a single consolidated resource – which improves overall efficiency and reduces cost. Server virtualization also enables faster workload deployment, increased application performance, and higher availability.

**Asian Continental (Pvt.) Ltd. (ACPL)** is a Pakistan-based pharmaceutical manufacturing & marketing concern, focused on producing and delivering high-quality healthcare products to the consumer. Asian Continental have had a 30-plus year relationship with Yung Shin Pharmaceuticals, the largest pharmaceutical exporters of Taiwan, and that YSP has chosen ACPL as their business partner for Afghanistan and the rest of the Middle East speaks volumes about our international credibility. Asian Continental relationship with YSP transcends that of a typical manufacturer and country-agent and the two companies enjoy an extremely warm working environment.

**BUSINESS NEED**

As per growing business, supply demand, and need of industry Asian continental spread their manpower production machinery, network and other. To control and manage the rapid increase of this Hierarchy, Asian Continental planned to revamp their server room, where all data, site safety security, remote monitoring sessions, records will be taken and managed.

**SOLUTION PROVIDED**

To control & manage rapid increase of network in limited project timelines, it was tough job. By focusing their need and timelines we proposed Centralized Integrated Modular Portable Vertiv Smart Cabinet which is plug n play, all in one solution, easy to access and manage, one window solution. This Modular smart cabinet contains integrated UPS, Cooling, Environmental monitoring, PDU’s, Power Management, sensor, Automatics fans, LTS etc.

**BENEFITS**

24/7 operational environment to maintain the Data save secure and smooth operation security and monitoring on each level .Plug and Play .Portable, easy to relocate for remote site.

No need to prepare server room, no need to include multiple vendors, Minimum downtime and installation time Reliability, modularity and scalability. Quick Recovery disaster plans & arrangement Maintain Low utility cost, ROI and PUE values.
Adamjee Life Assurance Co. Ltd is one of the largest general Assurance companies in Pakistan, incorporated as a Public Limited Company on September 28, 1960 and is listed on Pakistan Stock Exchange Limited. Adamjee life has a unique advantage of having regional presence in United Arab Emirates (UAE) and maintains its standing through an unwavering commitment to its corporate philosophy. Adamjee’s competitive advantage is achieved by a combination of having the largest paid-up capital and reserves, and a well-diversified business portfolio.

▶ BUSINESS NEED

Since Adamjee is a financial institution and they are facing lots of issue under the data center landscape over 500 nodes, the big challenge was to minimize the packet loss and maintain the connectivity at broadcast backplane and users should register to servers without any delay.

▶ SOLUTION

We investigate their constraint and compute needs and proposed the solution on cisco NEXUS that is designed for Data Center. We removed old switch’s Catalyst 3750 Series which were based on 1G to Nexus N5K Switch along with 10G infrastructure between data center switch’s to Access Switches based on Two Tier Architecture. For the redundancy we provide stack of two switch’s to maintain redundancy fault tolerance through VPC and create link between data center switches to access via trunk.

▶ BENEFITS

Enhancement of the Architecture on high bandwidth keeping provision for what so ever they need in future, through low-latency along with two tier Architecture to avoid head-of-line blocking. Servers will utilized this network by their optimum speed without any delay.

IGI Founded in 1953 and head quartered in Karachi, IGI is a leading general insurance service provider in Pakistan. It is a flagship organization of ‘The Packages Group’ and maintains its position as the largest insurance company in Pakistan by market capitalization. Rated ‘AA’ by Pakistan Credit Rating Agency (PACRA).

▶ BUSINESS NEED

IGI Financial Services is looking to enhance their current infrastructure with the latest technologies where virtualization on VMware is being considered an optimum approach for moving towards attaining that.

▶ SOLUTION

Complete installation, configuration and implementation of VMware vSphere converting the linear and end-of-life infrastructure into a virtualized Hyperconverged environment with High Availability with storage medium hosted within the server and managed via VMware VSAN.
This project is currently dealing with server infrastructure VMware VSAN deployment on three Lenovo X3650 M5 servers migrated 17 physical servers having critical applications to virtual, configured two servers for DR site at Lahore office and configured Veeam backup and replication to replicate all critical virtual machine.

This is the first state of the art HYPERCONVERGED Technology deployment in Pakistan by Silicon Technologies

▶ BENEFITS

The purpose of the VMware, vSphere implementation project is to deploy state of art, fast, reliable and trouble free infrastructure. VMware is the global leader in virtualization and cloud infrastructure, delivers customer-proven solutions that accelerate IT by reducing complexity and enabling more flexible, agile service delivery. VMware enables enterprises to adopt a cloud model that addresses their unique business challenges. VMware’s approach accelerates the transition to cloud computing while preserving existing investments and improving security and control.
The Indus Hospital has now evolved into a Health Network with hospitals and public health outreach clinics spread all across Pakistan serving the under-served population of Pakistan with free of charge, indiscriminate and quality treatment. To focus on creating an excellence-driven, comprehensive, compassionate, free of charge and replicable healthcare system accessible to all. To enhance and build human capacities through quality education and research.

**BUSINESS NEED**

Technologies evolve rapidly in the medical field. All Staff Members & doctors were often trying out new equipment. Connecting these equipment to the network involved changing settings and verifying connections, and sometimes even rewiring, putting a considerable strain on the hospital’s budget. A network that requires setting changes and rewiring every time a new piece of equipment is connected cannot be called stable. Indus needed a flexible, safe, and secure network infrastructure that would allow to respond immediately to the rapid changes that occur in their field, provide independent security for each department, and be easy to manage. Indus hospital had a flat network without separation or network segmentation. Rather than separating by function, VLANs were assigned by floor. Doctors, staff, students, and medical equipment shared the same network, multiplying the attack surface and exposing the hospital to threats. Gaining visibility into suspicious behaviors on the network was challenging, and ensuring compliance and other regulations was a struggle.

**SOLUTION**

Indus Hospital decide to make a Technology partner in the infrastructure domain. Now, Silicon Technology is key Consultant to make the IT Infrastructure build from scratch which include Active & Passive, Surveillance, UPS etc equipment. We assist Indus on those Project which are governed or look altered by Indus Hospital Management. Some of success and solution are following on Indus nationwide:

- D’link End-to-End Solutions Which include Core/Distribution and Access Switches, IP Phones, D’link Fiber & Copper
- Fortinet Firewalls to make the Network Inbound & outbound in a secure way.
- HikVision IP Surveillance Solution.

Pakistan State Oil is a Karachi-based Pakistani state-owned multinational petroleum corporation involved in marketing and distribution of petroleum products. It has a network of 3,689 filling stations, out of which 3,500 outlets serve the retail sector and 189 outlets serve bulk customers. It controls a market share of over 60% of the total oil market with customer portfolio including dealers, government agencies, autonomous bodies, independent power projects and other corporate customers. It is involved in import, storage, distribution and marketing of a range of petroleum products including gasoline, diesel, fuel oil, jet fuel, LPG, CNG and petrochemicals.

**BUSINESS NEED**

Customer require roaming with seamless connectivity. Security and redundancy on link at their premises.

**SOLUTION**

We deploy Cisco Wireless Mobility Express solution for controlling the access Point and user roaming seamlessly. For user authorization Radius server is used. Further for Link redundancy we have configured LAG (Link Aggregation) between Cisco 2800 series access point & L2 Switch so we could achieve the bandwidth aggregation.
Powerful partnerships that deliver world-class results

As a result of our continued efforts, we achieved the strategic partnerships with the world leading IT concerns like:

**DATA CENTERS & POWER**
- Emerson Network Power/ Versvit
- Sacred Sun
- Ricar Power
- Distributor, Tier-I, ASP (Authorized Service Partner)
- Authorized Partner
- Authorized Partner

**NETWORKING**
- Active Components:
  - D-Link / Moxa
  - Cisco
  - Fortinet
  - Authorized Distributor
  - Premier Partner
  - Silver Partner

- Passive Components:
  - D-Link
  - Totan
  - CommScope
  - Matrix Network Power
  - Authorized Distributor
  - Authorized Distributor
  - Authorized Distributor
  - Authorized Distributor

**PC/NOTEBOOK/SERVERS**
- Lenovo
- Dell
- Tier-I Partner & AWSF (in Enterprise Business Group)
- Tier-2 Partner

**STORAGE/ MEMORY**
- Overland Data/ Tandberg Data
- Kingston
- Silicon Power
- Authorized Distributor
- Authorized Distributor
- Authorized Distributor

**SOFTWARE / SOLUTIONS**
- Microsoft
- Symantec
- VMware
- Eset
- Kaspersky
- Veeam
- Gold Partner / Cloud Silver Partner
- Silver Partner (MidMarket)
- Enterprise Partner
- Authorized Distributor
- Silver Partner for SMB and Enterprise
- Silver Partner

We feel that selling the product or services is only the first step towards putting together available computing solution for our clients; the real task starts when system is integrated to work under the Human –interfaced performing conditions. Therein lies our strengths in offering comprehensive range of pre & post sales support and services. Our sales and support professional play an important role in identifying the overall needs of a customer before proposing a realistic solution. Our consistent growth & success stands as witness to our continued commitment to deliver high quality, flawless products and services.

**DATA CENTER CERTIFIED ENGINEERS**
- 3 ENGINEERS
- 2 ENGINEERS
- 2 ENGINEERS

**CISCO CERTIFIED ENGINEERS**
- 6 ENGINEERS
- 3 ENGINEERS
- 2 ENGINEERS

**VMWARE / VEEAM CERTIFIED ENGINEERS**
- TECHNICAL SALES PROFESSIONAL
- 3 ENGINEERS
- 2 ENGINEERS
- 2 ENGINEERS

**MICROSOFT CERTIFIED ENGINEERS**
- 2 ENGINEERS
- 2 ENGINEERS
- 2 ENGINEERS
- 3 ENGINEERS
Transferring Knowledge Events

Silicon Technologies strives to educate our customers in making the best decision for their environment.

To best serve our customers, we collaborate with our vendors to organize targeted events where specific market verticals are invited to benefit the most from the hosted session.

So far, we have hosted 4 events in the year of 2017, the range from passive infrastructure focusing on data centers and it’s components and the strategic design aesthetics to active infrastructure delving into cloud solutions, hyper-converged architecture and applications.

**Silicon Technologies**
This event was hosted on 15th August, 2017

**Microsoft**
This event was hosted on March 16th, 2017 in collaboration with Microsoft with foreign delegates as guest speakers where we focused on the complete cloud solution offering of Microsoft elaborating the IaaS, PaaS and SaaS options.

**Lenovo**
This event was focused on the next generation of technologies in the cloud solution focusing on hyper-converged architecture which was hosted on March 31st, 2017

**D-Link**
Corporate attendees are not the only ones we focus on where we also make attempts to update our future corporate generation. With this in mind, we hosted an event with D-link on 13-Sep, 2017 to update the customers and visitors about the product offerings and the new technologies being offered.

**vMware**
This event was hosted on May 10, 2017 where we focused on the datacenter infrastructure and management.

**Cisco**
This event was co-hosted with Ingram Micro where we focused on the new technologies that Cisco has in its portfolio and how our customers can benefit the most from them.
Silicon Technologies Roadshow is a series of meetings across different cities in which top executives from companies have the opportunity to talk with us on current or potential business technological needs.

Silicon Technologies has completed 25 years in the IT business. We have achieved tremendous growth and have built a strong reputation for providing quality products and services to our customers. We have always tried to provide the best product and service to our customers. Recently, we have organized Product knowledge Road Shows throughout the country in major cities Karachi, Lahore, Islamabad, and Peshawar.

Corporate Meetup Karachi

Silicon Technologies' Successful Corporate Event 2018 in Karachi was held on 27-Feb and celebrated 25 Years of Silicon Technologies. Congratulations to all Silicon Team and customer who have attended the event and gave us positive comments, we highly appreciate your cooperation.

Corporate Meetup Lahore

Corporate Meetup Islamabad

Corporate Meetup Peshawar
Silicon Technologies has always strived to serve our customers better. We realize that there are times the needs of our customers have urgency associate with it and the swift deliveries are required.

To support our customer better and enhance the ex-stock availability of the products, we have inducted a warehouse as an additional location among others, covering 18000 sq yds. This warehouse covers a large outer area which can accommodate multiple 18-wheeler cargo and the inside is lined with aluminum coating to protect the inventory from any hazard while remove any environment effects. Complete surveillance of the area gives round the clock security.

The warehouse stocks all the hot-cakes of our product portfolio while we are also stocking additional inventory. This inventory is managed by intelligent ordering forecast keeping in view the exceeding demands of our market. This aspect of Silicon Technologies helps our customer enjoy fast availability and ex-stock options for their requirements.