

OPINION

The New Nature And Cybercrime Domains In 2023



M. Shahzad Akram

With the rise of technology, the nature of crime has also transformed. Crime becomes more lethal and untraceable. Cybersecurity experts warn about the new nature and cybercrime domains in 2023.

With the rise of technology, the nature of crime has also transformed. Crime becomes more lethal and untraceable. Cybersecurity experts warn about the new nature and cybercrime domains in 2023.

Cyberattacks on Hospitals
Cyberattacks on hospital systems can have serious consequences, as they are the potential cybercrime domains where hackers can disrupt the delivery of health-care and potentially put patients' lives at risk. Hospitals are often targeted by cybercriminals because they may have valuable personal and financial information about patients, and because the consequences of a successful attack can be severe.

Page No 03

Leukemia: The Fifth Most Prevalent Blood Cancer In Pakistan



Muqadas parveen

Blood cancer in Pakistan is ranked as the 5th most prevalent cancer in the country, dividing its numbers rapidly.

In 1845, the first case of leukemia in an adult patient was reported. Blood cancer in Pakistan is ranked as the 5th most prevalent cancer in the country, dividing its numbers rapidly.

What is Leukemia?

Leukemia – blood cancer, is an abnormal growth of blood cells. It is the combination of two Greek words, "Leukos"-white and "Haima"-blood. This abnormal growth happens in the bone marrow cells of humans, where the formation of blood cells occurs.

Blood cancer in Pakistan

Various techniques such as chemotherapy, radiation therapy, and immunotherapy are working on reducing the mortality rate, but this is still a highly prevalent disease in Pakistan (in fact all over the world)

Page No 04

Burden Of Endemic Of Dengue Virus In Pakistan



Laraib Abbas Khan

There are several factors that contributed to the spread of dengue virus in Pakistan, these include deforestation, uncontrolled urbanization, agriculture, and different household practices. According to the World Health Organization (WHO), dengue has primarily affected humans in South Asia.

Page No 04



Minister Warns Of Widespread IT Service Disruptions

According to the IT and Telecom Minister, the restrictions imposed on the letters of credit (LCs) facility for the telecom sector are insufficient.

According to the IT and Telecom Minister, the restrictions imposed on the letters of credit (LCs) facility for the telecom sector are insufficient. "There are fears of IT service disruptions in many areas without much-needed technological parts," the minister warned while presiding over the 44th Policy Committee meeting of the Universal Service Fund (USF).

He claimed that limited LC permissions were impeding the import of mobile networking upgrading equipment, hence service disruptions to be seen in the overall performance of the IT and telecom sector.

"Telecom companies were having difficulty importing parts and equipment due to the limited permission of LCs, which may also result in a delay in projects for the provision of 4G services in remote areas of the country," the minister explained.

The authorities informed the meeting that telcos, IT firms,

and their backend equipment suppliers had complained that they were unable to import even the most basic hardware required to run systems. The minister promised to speak with the Ministry of Finance again and inform them of the critical situation. The meeting approved the release of a development fund of Rs 5 billion for the second and third quarters from the Rs 32.13 billion budgeted for the Universal Service Fund (USF) for 2022-2023, while Rs 8.25 billion had already been released for the first quarter. It also approved quarterly

releases to Ignite Co in accordance with the approved budget. Meanwhile, the Ministry of Information and Telecommunications has begun implementing the one room, one light policy in order to save electricity. In this regard, a notification has been issued. Mohsin Mushtaq, Additional Secretary (In Charge), Ministry of IT, Omer Malik, CEO USF Haaris Mahmood Chaudhary, CEO Ignite Asim Shahryar, and others were present at the meeting. Previously, USF Chief Executive Officer Haaris Mahmood Chaudhary...[Read More](#)

Outstanding Pearson Learners Award Ceremony Held At Islamabad

Pearson, the United Kingdom's largest awarding organisation offering academic and vocational qualifications, is always in the first row.

In order to honour students who achieved outstanding results in their iPrimary, International GCSE, and A-Level examinations in 2022, Pearson and the British Council Pakistan hosted the Outstanding Pearson Learners Award Ceremony here today in Islamabad.

Pearson, the United Kingdom's largest awarding organisation offering academic and vocational qualifications, is always in the first row.

The Pearson High Achievers award ceremony was honored by Ms. Kathryn Booth, Director Pearson Schools Qualifications, Middle East, North Africa, Pakistan, and Turkey; Mr. Amir Ramzan, Country Director, British Council Pakistan; Osman Iqbal, Director Examinations, British Council; representatives of Pearson and British Council; and high achievers, including teachers, parents, and distinguished guests.

This year, over 118 students received the Outstanding Pearson Learners Award in four categories: highest mark internationally, highest mark in Asia, highest mark in Pakistan and province, and highest achievement in maximum grades. Pearson and the British Council also recognise the efforts of the teachers, who are instrumental in the success of these young students.

Ms. Kathryn Booth, Director of Pearson Schools Qualifications for the Middle East, North Africa, Pakistan, and Turkey, congratulated the high achievers...[Read More](#)

Safe City Islamabad Employs Advanced Cameras To Combat Crime



The Islamabad capital police used these modern cameras to apprehend three criminals involved in illegal activities and issued a total of 887 alerts.

Safe City Islamabad is effectively surveilling, maintaining law and order, and better monitoring criminal elements in various areas of the city and has issued a total of 887 alerts using facial recognition technology cameras.

Following the directives of Minister of Interior Rana Sanaullah Khan, Dr Akbar Nasir

Khan, Inspector General of Police Islamabad, took several steps to ensure the success of Islamabad's Safe City project.

Under the command of the IGP Islamabad, the coverage of Safe City Islamabad was extended to different areas of the city. Cameras installed in various shopping malls, metro buses, toll plazas, and markets have been linked with the centralised system of Safe City. Similarly, 106 cameras with advanced facial recognition technology were installed in various areas of the city for the first time for better monitoring and surveillance. These advanced cameras are playing an important role in reducing criminal activity in the federal capital and maintaining law and order...[Read More](#)

Khan, Inspector General of Police Islamabad, took several steps to ensure the success of Islamabad's Safe City project.

Under the command of the IGP Islamabad, the coverage of Safe City Islamabad was extended to different areas of the city. Cameras installed in various shopping malls, metro buses, toll plazas, and markets have been linked with the centralised system of Safe City. Similarly, 106 cameras with advanced facial recognition technology were installed in various areas of the city for the first time for better monitoring and surveillance. These advanced cameras are playing an important role in reducing criminal activity in the federal capital and maintaining law and order...[Read More](#)

WAPDA Directs Officials To Minimise Flood's Impact On Nai Gaj Dam

WAPDA Chairman directed project management to make concerted efforts to minimise the negative impact of the recent flood on the implementation of the Nai Gaj Dam.

WAPDA Chairman Engineer Lt Gen Sajjad Ghani (Retd) has directed project management to make concerted efforts to minimise the negative impact of the recent flood on the implementation of the Nai Gaj Dam, which is being built by WAPDA on the River Gaj 65 kilometres north-west of Dadu in Sindh province.

He made these remarks while presiding over a meeting to review the post-flood scenario for the Nai Gaj Dam Project. WAPDA Member (Water), General Manager (Projects)

South, Project Director Nai Gaj Dam, and Project Managers from the Consultants and the Contractor attended the meeting.

During the meeting, a detailed

presentation about the project's pre- and post-flood situation was given. Construction work on the project was resumed last month after being suspended for about five months due to the

devastating flood in the project area.

Work on the project's various sites, including the main dam and spillway, is currently ongoing. The chairman, emphasising the importance of the project, urged project management to devise a contingency plan to offset potential delays in the project's completion.

The Nai Gaj Dam is a multi-purpose construction project. The project's main goals are to store water for irrigated agriculture, reduce floods, and generate low-cost hydro electricity. It will have a total storage capacity of 300,000 acre feet and a command area of 28,800 acres. The project's installed generation capacity is 4.2 MW...[Read More](#)





Singapore Based Consortium Plans To Open Digital Bank In Pakistan



With the new digital banking licence, the company announced plans to open a new digital bank—HugoBank—in Pakistan in the coming months. Singapore Based Consortium Plans To Open Digital Bank In Pakistan HugoBank has received a no-objection certificate (NOC) from the State Bank of Pakistan to conduct digital banking in Pakistan. The Digibank is a consortium led by Singapore-based Atlas Consolidated, the fintech firm

behind the Hugosave savings app. With the new digital banking licence, the company announced plans to open a new digital bank—HugoBank—in Pakistan in the coming months on Tuesday (Jan 17). The Getz Group, Atlas Consolidated, and Muller & Phipps are partners in this venture. HugoBank must first register as a public limited company with the Securities and Exchange Commission of Pakistan (SECP) and obtain in-

principle approval from the state bank before beginning commercial operations. Apart from HugoBank, the state bank of Pakistan also granted NOCs to Easypaisa DB, KT Bank, Mashreq Bank, and Raqami. The new bank, which is targeted towards “financially underserved customers in Pakistan,” will offer services such as online account opening, fund transfers, bill payments, customer credit products, peer-to-peer payments, and other financial transactions.

The bank also aims to drive financial education, offer products and services at “accessible” price points, and increase bank account penetration in Pakistan to 85 percent within five years, said Atlas Consortium. According to State Bank of Pakistan data, more than half of Pakistan’s population is currently unbanked. “We are extremely honoured that the State Bank of Pakistan has placed this trust in the consortium for the systemically important role of broadening financial inclusion throughout Pakistan,” said Ray Simkins, president of The Getz group. Hugosave was launched in Singapore by Atlas Consolidated in 2019. In 2022, the startup received a pre-series A round of \$4 million from 1982 Ventures and Woodside Holdings Investment Management. The transaction brought the company’s total funding to \$10.5 million. Hugosave, founded by David Fergusson, Ben Davies, Brahm Djidjelli, and Surya Tamada, now has over 60,000 registered users in Singapore.

Health Ministry Cuts Cost Of 20 Medicines To Provide Relief



The revision in the maximum retail price by the Ministry of National Health Services (NHS) is expected to provide a relief of up to Rs75,000 per month to the patients. The revision in the maximum retail price by the Ministry of National Health Services (NHS) is expected to provide a relief of up to Rs75,000 per month to the patients. The health ministry on Monday reduced the cost of 20 medicines, including those to treat cancer. The medicines include those used to treat lung cancer, breast cancer, HIV, blood clotting, blood pressure, eye infections, bone diseases, infertility in women and fungal infections. According to a document, the price of 30 tablets of 150mg Tarceva has been reduced by 30 percent. Now, it can not be sold

at over Rs214,710. The price of the 100mg variant of the medicine, used to treat non-small cell lung cancer and pancreatic cancer, has been capped at Rs172,320. The price of 450 mg of Herceptin injection, which is used to treat breast, esophageal, and stomach cancers, has been reduced by 30% to Rs 199,741. Each patient will receive up to Rs. 75,000 in monthly relief as a result of the revision. The maximum cost of 60 Valcyte tablets for the treatment of cytomegalovirus retinitis in people with AIDS is Rs 116,165. The maximum price for 28 tablets of Xarelto, an anti-coagulant medication used to treat and prevent blood clots, will be Rs 4,810, according to the document....[Read More](#)

UET Peshawar Grabs 1st Position At Design Build Fly Competition



As many as twenty teams from different universities had participated in the DBFC-16 at GIKI Swabi, in which UET Peshawar took first place, according to a press release. The University of Engineering Technology (UET) Peshawar Student Team “Zarrar” won first place in the national level competition “Design Build Fly Competition (DBFC)-16,” which was held earlier at GIKI Swabi. Every year, the American Institute of Aeronautics and Astronautics Society GIKI Chapter hosts the Design Build Fly Competition, which challenges young talent from universities across Pakistan to design and build planes that can perform various manoeuvres. As many as twenty teams from different universities had participated in the DBFC-16 at GIKI Swabi, in which UET Peshawar took first place, according to a press release issued here on Tuesday....[Read More](#)

Pakistani Student Elects As President International Students Society



Universiti Teknologi Malaysia International (UTM) International, in collaboration with the International Students Society-Pakistan (ISS-Pak), held elections to select new council members for the session 2022–23. The society elected Muhammad Asim Siddique as president, Khadija Zia as vice president, and Asif Hussain Shah as general secretary. The elections were overseen by Dr. Syed Hamid Hussain Madni and Dr. Asim. The election activity began with the general secretary of ISS Pakistan presenting the annual report, which was followed by the election committee presenting the election procedure and protocols. Muhammad Asim Siddique, a Pakistani student at Universiti Teknologi Malaysia (UTM), has been elected president of the International Students Society. Asim is a PhD student in computer science at UTM Malaysia and ran for president of ISS, which represents students from over 90 countries. He received 189 votes, while his opponent, Nigerian Abdullahi Olayiwola Alfa, received 166 votes. Other office bearers included Aiman Ahmed Shareef of the Maldives as Vice President, Oumaima Maroua Bouguerra of Algeria as Vice President of Women’s Affairs....[Read More](#)

20 Mineral Water Brands Declared Unsafe For Human Consumption

168 samples of mineral or bottled water brands were collected from 22 cities during the quarter of October to December 2022. The government declared 20 brands of bottled water unsafe for human consumption on Tuesday. The Pakistani government has directed the Pakistan Council for Research in Water Resources (PCRWR) to conduct quarterly monitoring of bottled and mineral water brands and to publicize the results to raise public health awareness. 168 samples of mineral or bottled water brands were collected from 22 cities during the quarter of October to December 2022. A comparison of test results with Pakistan Standards and Quality Control Authority (PSQCA) bottled water quality standards revealed that 20 brands were unsafe for human consumption due to microbial, chemical, or both types of contamination. The twelve brands, such as Best Natural, Excellent Natural, Klear, Pinar, Neno, Ice Drop, Premium Safa, Orwell, Indus, Minwa Kashaf, Barsay, and Nayab Pure Life, were found to be unsafe due to the presence of



higher levels of sodium. Another two brands, Excellent Natural and Aqua One, were deemed unsafe due to the presence of higher-than-allowable levels of potassium, and one brand, Nayab Pure Life, was deemed unsafe due to the presence of higher-than-allowable levels of TDS. Total dissolved solids (TDS) is a measure of the inorganic and organic substances that are dissolved in water. It is usually measured in parts per million (ppm) or milligrammes per litre (mg/L). Water with a low TDS level, generally considered to be less

than 500 ppm, is considered to be pure and typically safe to drink. However, water with a TDS level above 500 ppm may have an undesirable taste and contain higher levels of dissolved minerals, which can be harmful to human health if consumed in large quantities. When it comes to drinking water, the TDS level should be as low as possible, as higher TDS levels can affect the taste, odor, and appearance of the water. Another eight brands, including Alfa Premium, Isberg, Aqua Pack, Sip Up, Ever Pure, Noble, and Neno....[Read More](#)

Jazz Expands Digital Pakistan Fellowship Program To FJWU

The Fellowship will provide participants with technological insights, allowing them to play an important role in developing the creative economy based on the Digital Pakistan narrative. Jazz, Pakistan’s leading digital operator and a subsidiary of VEON Group, is expanding its Digital Pakistan Fellowship Program to Fatima Jinnah Women University (FJWU), the country’s first public women’s university. The Fellowship is intended to engage young people in meaningful discussions about technological innovation. It will provide participants with technological insights, allowing them to play an important role in developing the creative economy based on the Digital Pakistan narrative. Jazz had previously launched a similar fellowship program at the National University of Sciences and Technology (NUST). To commemorate this development, a ceremony was held at FJWU, and a Memorandum of Understanding (MoU) was signed between Jazz and FJWU....[Read More](#)

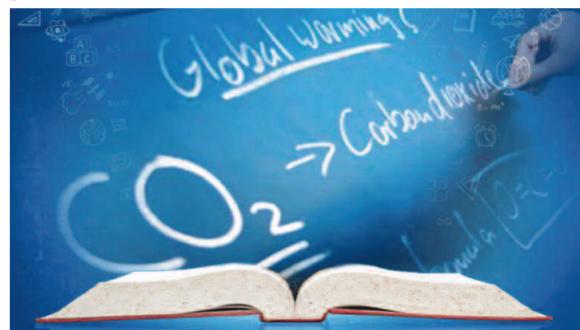
Call To Incorporate Climate Change In School Curriculum

“This is critical in order to ensure that every citizen of Pakistan is aware of enormous climatic threat we face & is able to play their role in averting it,” Senate Deputy Chairman. Senate Deputy Chairman Mirza Mohammad Afridi on Tuesday stressed the importance of incorporating climate change into the school curriculum in order to educate future generations about the issues that have arisen as a result of global warming. “This is critical in order to ensure that every citizen of Pakistan is aware of the enormous climatic threat we face and is able to play their role in averting it,” he said while presiding over a climate change capacity-building seminar for Senate members. Climate change education is becoming increasingly important in school curricula as the effects of climate change become more apparent. The seminar was hosted at

Parliamentary Development Unit (PDU) and the World Wide Fund for Nature (WWF). The session aimed to educate parliamentarians on the effects of climate change as well as remedies and plans to control its density and protect people from its negative effects. Mr. Afridi stated that every member of society has a critical role to play and must be prepared to overcome the issues

and challenges posed by climate change. He stated that youth were valuable contributors to climate action as change agents, entrepreneurs, and innovators. Senator Seemee Ezdi, chairperson of the Senate Standing Committee on Climate Change, emphasised the need for the global North to be held accountable because the developing world is currently suffering the consequences of its environmental excesses, which accounted

for 92% of total global greenhouse gas emissions. It was stressed to the participants that it was critical that these countries honor the commitments they made at various global forums. Pakistan, she added, had suffered the effects of global warming and was in desperate need of global justice. Dr. Imran Khalid, Director Policy and Governance at WWF, emphasised the importance of policy implementation so that Pakistan can play a role in reducing the enormous environmental threat it faces. Dr. Hammad Naqi Khan, Director General of the World Wildlife Fund, stated that Pakistan must make a critical shift toward alternative energy resources in order to protect the environment. He emphasized the importance of Pakistan negotiating cutting-edge technology in this context with China, the world leader in renewable energy resources.



Executive Editor
A. M. Zaidi

Chief Editor
SAMZ Paras Ali

Managing Editor
Hina Ali Mustafa

News Editor
Sayyed Shehzer Abbas

Technology Editor
Sayyed Shozib Abbas

Web Editor
Raja Hamid

Bureau Chief
Syed Ali Raza

Head Office
Technology House
21-C, Street 7, Royal City, Lehtrar
Road, Islamabad, Pakistan
Tel: 0092 316 532 77 03

Bureau Office
C-89, Sherton Heights, Abul
Hassan Ispahani Road, Karachi,
Pakistan
Tel: 0092 333 57 55 926

Email: info@technologytimes.pk
URL: www.TechnologyTimes.pk

Published by: SAMZ Paras Ali for
"Foundation for Comprehensive
Social Development (FCSD)".



Tooba Iftikhar Abbasi

Biotechnology encompasses various sub-fields including industrial biotechnology, food industry, health sector, agricultural biotechnology, and animal biotechnology, all of which can benefit from the developments associated with AI



AI In Health Biotechnology: Science Fiction To Reality

Artificial intelligence advancements in health biotechnology have paved the way for developing novel antibiotics and drugs. The cutting-edge technology of artificial intelligence (AI) has contributed to improving the standard of living.

AI is generally termed as the theory and development of computer systems capable of performing tasks that would normally necessitate human intelligence, such as visual processing, language understanding, judgment, decision-making ability, and language translation.

The field of health biotechnology has flourished to a great extent with the employment of AI and its associated tools. The top biotech firms such as Biosorin, Biodyne, and nGen are spending money on groundbreaking AI tools in DNA sequencing, animal breeding, precision agriculture, equipment optimization, and assessing research data.

Biotechnology encompasses various subfields including industrial biotechnology, food industry, health sector, agricultural biotechnology, and animal

biotechnology, all of which can benefit from the developments associated with AI.

AI Applications in Health Biotechnology

AI advancements in health biotechnology have paved the way for developing novel antibiotics and drugs. Innovative therapeutic compounds based on known target components can be identified with the aid of AI.

Moreover, its two major areas, Machine Learning and Deep Learning have enabled researchers to combat challenges such as predictive & quantitative epidemiology, diagnostic testing, precision-based drugs, & interactive pathways between host and pathogen through improved risk analysis.

This results in accuracy & quick decision-making, AI-based tissue biomarkers are employed not only in disease identification but also help to detect the body's response to drugs and patient survival.

AI robots are designed to detect different objects, recognize certain situations, envision various patterns, and analyze results accurately based on data sets. These robots are built on

different AI principles in combination with computer vision technology, efficiently carrying out various tasks such as drug storage and distribution, surgical assistance, genetic testing, cancer research, data collection, etc. in healthcare domains.

Apart from applications in the ranostics (therapeutics & diagnostics), it also plays an important role in efficient drug discovery and designing.

Role of AI during Covid-19 Pandemic

Recently during the Covid-19 pandemic, AI played a vital role in mitigating the chaos by using algorithms such as vector machine, decision tree, & logistic regression to fight against COVID-19 through identification, categorization, prognosis, monitoring, drug reformation, and vaccine development, thus outshining humans in certain medical activities.

During the pandemic period, one of the finest institutions of Pakistan NUST has successfully developed kits based on AI to determine the threats of Covid-19 named as N-CovKit. These detection kits designed on convolutional neural network

(CNN) were approved by the Drug Regulatory Authority of Pakistan (DRAP) and thus proved to be cost-effective, highly potent, and had efficient targeted action.

In addition, Aga Khan University and Hospital have designed AI-related applications, i.e. CoronaCheck. This app consists of an interactive chatbot that enables the users to assess the symptoms & guides them to take precautionary measures for the future.

GIKI has launched a DL-based algorithm i.e. DetectNow which detects the likelihood of COVID-19 by audio recognition of dry cough. With reference to vaccination, pharmaceutical company Pfizer employed AI tool i.e. Smart Data Query (SDQ) to analyze the quality of data retrieved from different clinical trials which in turn speed up the developmental process of COVID-19 vaccine.

AI in Pakistan

Apart from the significant role of AI in COVID-19, Pakistan has taken notable baby steps in the development of the respective field such as the launch of the "Presidential Initiative for

Artificial Intelligence & Computing" project (PIAC) which aims at promoting education and research activities in AI.

Moreover, initiatives like the National Center of AI (NCAD), and the Department of Robotics and Intelligent Machine Learning at the NUST, and the establishment of AI labs in various institutions like UET (Lahore) & IBA (Karachi) have been taken for the country's economic growth.

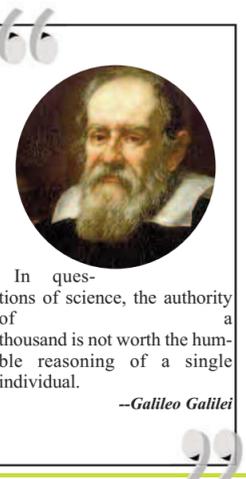
Obstacles and Solution to Tackle

Although AI has gained recognition over the past few decades & medical applications of AI are expanding globally, but Pakistan has been still lagging behind in the deployment of AI in healthcare systems.

The biggest obstacle that Pakistan is currently facing in this regard is limited financial resources.

A huge economic cost is required in order to broaden AI in the health sector, which is unachievable without a strong economic foundation.

Therefore, the allocation of more funds solely for AI-related projects and advancements is the need of the hour...[Read More](#)



In questions of science, the authority of a thousand is not worth the humble reasoning of a single individual.

—Galileo Galilei

Scanning a QR code has the potential to compromise your personal data if the QR code is linked to a malicious website or if it is used to steal your personal information. It's important to be cautious when scanning QR codes, especially if they are from unfamiliar sources



M. Shahzad Akram

The New Nature And Cybercrime Domains In 2023

With the rise of technology, the nature of crime has also transformed.

Crime becomes more lethal and untraceable. Cybersecurity experts warn about the new nature and cybercrime domains in 2023.

With the rise of technology, the nature of crime has also transformed. Crime becomes more lethal and untraceable. Cybersecurity experts warn about the new nature and cybercrime domains in 2023.

Cyberattacks on Hospitals
Cyberattacks on hospital systems can have serious consequences, as they are the potential cybercrime domains where hackers can disrupt the delivery of healthcare and potentially put patients' lives at risk. Hospitals are often targeted by cybercriminals because they may have valuable personal and financial information about patients, and because the consequences of a successful attack can be severe.

In a cyberattack on a hospital system, the attacker may try to gain unauthorized access to the hospital's computer systems and steal or manipulate data, disrupt the operation of medical devices, or disrupt the delivery of healthcare. The attack may also involve ransomware, where the attacker holds the hospital's data hostage and demands a ransom to restore access.

It is important for hospitals to have strong cybersecurity measures in place to protect against cyber-attacks. This may include measures such as firewalls, antivirus software, and secure

passwords, as well as ongoing training for staff on how to recognize and prevent cyberattacks.

Scanning QR Code

Scanning a QR code has the potential to compromise your personal data if the QR code is linked to a malicious website or if it is used to steal your personal information. It's important to be cautious when scanning QR codes, especially if they are from unfamiliar sources.

It's also a good practice to check the URL of the website that the QR code leads to, to make sure it is a legitimate website and not a phishing site or other type of scam.

Furthermore, it's also a good idea to use a QR code scanner app that checks for safety and has some sort of building security checks, also updating your device and QR scanner app on a regular basis will make sure you have the latest security patches.

It's a good practice to avoid scanning QR codes from untrusted sources or unknown cybercrime domains, and only scan QR codes from sources that you know and trust.

Cyberattack on Supply Lines

A cyberattack on a supply chain can have significant consequences for the affected organizations and their customers. These types of attacks can disrupt the flow of goods and services, leading to delays, lost revenue, and potentially even damage to a company's reputation.

In a supply chain cyberattack, attackers typically target the systems and networks that compa-

nies use to manage and track their inventory, orders, and shipments. For example, an attacker might target a company's enterprise resource planning (ERP) system, which is used to manage inventory and production, or a transportation management system (TMS), which is used to track shipments and deliveries.

The attacker primarily targets the cybercrime domains and try to gain access to these systems through a variety of methods, such as exploiting vulnerabilities in software, phishing scams, or other forms of social engineering. Once they have access, they can steal sensitive information such as customer data, financial data, and intellectual property, or disrupt the normal operation of these systems.

This can lead to delays in deliveries, stakeouts, and unplanned downtime in production.

It's important for organizations to take steps to protect their supply chains from cyberattacks, by implementing measures such as security awareness training for employees, regular security audits and penetration testing, and the use of advanced security technologies such as firewalls, intrusion detection, and prevention systems, and security information and event management (SIEM) tools.

In addition, organizations should also be proactive in monitoring for signs of an attack

and be ready with incident response plans, which can help minimize the damage of a successful attack and help with a faster recovery.

Cyberattack on electric cars/vehicles

A cyberattack on an electric vehicle (EV) can have serious consequences, potentially compromising the safety and privacy of the vehicle's occupants, as well as the integrity of the EV's systems and networks.

One way that attackers may target an EV is by exploiting vulnerabilities in the vehicle's electronic control units (ECUs), which are the computer systems that control various aspects of the vehicle, such as the powertrain, brakes, and steering. Attackers could potentially target these cybercrime domains by taking control of these systems and manipulate the vehicle's behavior, potentially causing accidents or other dangerous situations.

Another way attackers may target an EV is by exploiting vulnerabilities in the vehicle's communication systems, such as the onboard diagnostics (OBD) port, or wireless connectivity systems, such as Bluetooth or cellular networks. This can allow attackers to gain access to the vehicle's systems and data and potentially steal sensitive information such as location data, driving history, and personal information of the occupants.

To mitigate the risk of cyberattacks on EVs, it is important for manufacturers to design and build vehicles with security in mind. This includes the use of secure coding practices, regular software updates to address known vulnerabilities, and the use of robust security protocols

to protect the vehicle's communication systems.

It's also important for EV owners to be aware of the risks and take steps to protect their vehicles. This can include keeping their vehicles' software up to date, being cautious about connecting their vehicles to unfamiliar networks or devices, and not leaving sensitive information such as personal data in the vehicle.

As the trend of electric cars is getting more popular and advancement in technology is increasing, Cybersecurity in electric cars will be a crucial area to ensure the safety and security of both vehicles and their occupants.

Cyberattack on Electric Grid

A cyberattack on an electric grid can have serious consequences, potentially causing widespread power outages and disruptions to the electricity supply. Electric grids are complex systems that rely on many interconnected components, including power generators, transmission and distribution systems, and control systems, but at the same time they are cybercrime domains for hackers.

One way that attackers may target an electric grid is by exploiting vulnerabilities in the control systems, such as supervisory control and data acquisition (SCADA) systems and other industrial control systems (ICS) that are used to monitor and control the grid. Attackers can use malware, phishing scams, or other techniques to gain access to these systems and manipulate

the grid's behavior, potentially causing power outages or other disruptions to the electricity supply.

Another way that attackers may target an electric grid is by exploiting vulnerabilities in the communications systems that are used to transmit data and control signals between different parts of the grid. This could include exploiting vulnerabilities in the networks that connect power plants, substations, and other grid components, or by targeting the systems used to manage the grid's transmission and distribution systems.

To mitigate the risks of cyberattacks on electric grids, it's important for utilities and grid operators to take a proactive approach to cybersecurity. This includes implementing robust security measures such as firewalls, intrusion detection and prevention systems, and security information and event management (SIEM) tools. Additionally, regular security audits, penetration testing, and employee training on cybersecurity are important.

It's also important for government agencies, utilities, and grid operators to work together to share threat intelligence and coordinate incident response efforts. Furthermore, Industry Standards such as NIST-CIP, IEC62443, and others provide guidelines for protecting industrial control systems like those used in the electric grid. Given the critical importance of electric grids to our daily lives, ensuring their cybersecurity is a vital step towards protecting...[Read More](#)



Laraib Abbas Khan

Several trials and studies are being done using biotechnological approaches for its treatment. One of them is the use of stem cell therapy. It is a regenerative therapy used for repairing damaged cells and preventing diseases using stem cells



Burden Of Endemic Of Dengue Virus In Pakistan

There are several factors that contributed to the spread of dengue virus in Pakistan, these include deforestation, uncontrolled urbanization, agriculture, and different household practices.

According to the World Health Organization (WHO), dengue has primarily affected humans in South Asia. The healthcare sector reports that dengue virus in Pakistan has lethal effects among the population due to unhealthy food, edibles, and poor sanitation.

Dengue virus (DENV) causes a deadly dengue virus infectious disease that leads to severe public health concerns. The first outbreak of dengue occurred in 1779 in Egypt, Indonesia, Jakarta, and Cairo. The prevalence of dengue infection showed 30 folds increase in the last 50 years.

Globally, 3,643,763 cases and 3,380 deaths due to dengue virus infection are reported since 23 November 2022. The region of Asia reported 1,024,726 cases and 2,197 deaths, Africa reported 3,427 cases and 17 deaths, Australia and the Pacific reported 2,517 cases and no deaths, and the USA reported 2,551,093 cases and 1,169 deaths by November 2022.

In Pakistan, 25,932 cases and 62 deaths were reported between January and September 2022. The increased prevalence during mid-June was due to excessive flooding and another factor is the higher migration rate between Pakistan, Iran, and Afghanistan because of trade.

By September 2022, among the total 25,932 cases, 14% were reported from Balochistan, 25% from KPK, 29% from Punjab, and 32% from Sindh. About 80% of cases were asymptomatic.

Dengue virus is transmitted by *Aedes aegypti* and *Aedes albopictus* which are present indoors, in uncovered containers filled with water, and outdoors feeding on humans respectively.

The transmission of the virus occurs through mosquito bites, from an infected person to a mosquito to a healthy person, from pregnant mother to baby, through blood transfusions, and organ transplantation.

Symptoms of infection appear within 4-7 days, some infected persons do not show symptoms and others show febrile illness.

Dengue fever patient suffers from joint pain, body rashes, headache, low platelets, and white blood cell levels, muscle pain, and lymph node swelling. Dengue hemorrhagic fever is characterized by increased per-

meation of blood vessels, causing leakage.

The dengue shock syndrome is characterized by severe loss of blood and other body fluids, heart pumping becomes difficult causing the decreased flow

of atrial blood leading to tissue injury and failure of organs. Various tests are used to detect dengue infection including PCR, ELISA, complement fixation, and neutralization tests.

Currently, no antiviral drug or

vaccine is available to treat dengue infection. But certain measures are taken such as rest, taking painkillers, and drinking plenty of water and fluids.

Several trials and studies are being done using biotechnological approaches for its treatment. One of them is the use of stem cell therapy.

It is a regenerative therapy used for repairing damaged cells and preventing diseases using stem cells.

A study was conducted on mice infected with dengue in Malaysia. The administration of these cells showed increased liver functions and damaged cell repair cells. But this study is currently limited and requires more research.

No specific treatment is available for dengue virus in Pakistan. Doctors recommend painkillers with acetaminophen, bed rest, and plenty of water and fluids.

Doctors advise to not use medicine with aspirin, ibuprofen, and other non-steroidal anti-inflammatory drugs (NSAIDs).

There are several factors that contributed to the spread of dengue virus in Pakistan, these include deforestation, uncontrolled urbanization, agriculture, and different household practice like water-filled con-

tainers, and plant pots.

One of the major factors is climate change, which contributes to increased temperature and precipitation favorable for the spread of dengue by mosquitoes.

Pakistan governmental health departments implement health measures to prevent the spread of infection such as insecticidal sprays to kill mosquito larvae, waste management, and destroying mosquito breeding sites.

WHO supports the Pakistan government to establish data and report collection centers, strengthen disease surveillance in all hospitals, provides diagnostic kits, pesticides, medicines, health care providers, and trainees. WHO also collaborates with the Pakistan health ministry to raise campaigns.

There are several control measures to prevent and control the infection of dengue virus in Pakistan, such as prevention of breeding of mosquitoes in water-filled containers, the use of coils, vaporizers, and repellents, wearing full-sleeved clothes, monitoring and surveillance of mosquitoes and the virus.

Anti-Dengue Day is celebrated on 2nd July to spread awareness about a dengue virus infection, and encourage



The region of Asia reported 1,024,726 cases and 2,197 deaths, Africa reported 3,427 cases and 17 deaths, Australia and the Pacific reported 2,517 cases and no deaths, and the USA reported 2,551,093 cases and 1,169 deaths by November 2022



Muqadas parveen

Pakistan is ranked at 130th number on the basis of the death rate of leukemia. Leukemia is more prevalent in males (60%) as compared to females (40%) in Pakistan



Leukemia: The Fifth Most Prevalent Blood Cancer In Pakistan

Blood cancer in Pakistan is ranked as the 5th most prevalent cancer in the country, dividing its numbers rapidly.

In 1845, the first case of leukemia in an adult patient was reported. Blood cancer in Pakistan is ranked as the 5th most prevalent cancer in the country, dividing its numbers rapidly.

What is Leukemia?

Leukemia – blood cancer, is an abnormal growth of blood cells. It is the combination of two Greek words, “Leukos”-white and “Haima”-blood. This abnormal growth happens in the bone marrow cells of humans, where the formation of blood cells occurs.

Blood cancer in Pakistan

Various techniques such as chemotherapy, radiation therapy, and immunotherapy are working on reducing the mortality rate, but this is still a highly prevalent disease in Pakistan (in fact all over the world).

In Pakistan, people are not very concerned about their nutrient uptake level, and a poor nutrient diet is the main reason for causing the abnormality.

Pakistan is ranked at 130th number on the basis of the death rate of leukemia. Leukemia is more prevalent in males (60%) as compared to females (40%) in Pakistan. A total of 15,980 cases were observed in the last 5

years. According to an estimation, by 2030, the rise in leukemia throughout the world will be 24 million cases per year.

A reliable surveillance system is direly needed in Pakistan for blood-cancer incidence and mortality, but there are very few cancer registries in Pakistan (only 2 to 3), despite that it is a densely populated country with more than 225 million inhabitants.

The scientific basis behind Leukemia

As we all know, there are three types of normal blood cells; red blood cells, white blood cells, and platelets. In the case of leukemia, one of these cells undergoes mutation in DNA (mostly in white blood cells) and begins to divide abnormally. As a

result, the body cannot form blood clots and will not fight against infections when needed.

Types

There are two types of leukemia

Acute leukemia – which divide quickly, most common in children

Chronic leukemia – which worsens slowly, common in adults.

Symptoms of Leukemia

Symptoms include fatigue, fever, weight loss, joint pain, swollen lymph nodes, bleeding, and shortness of breath. Anyone can develop blood cancer, but its prevalence is high among previous cancer patients, smoking people, and those who are facing radiation or industrial chemicals.

Leukemia treatment in Pakistan

Leukemia can be diagnosed through imaging and biopsies. In Pakistan, chemotherapy and radiation therapy are commonly used as treatment, in which chemicals and radiation enter the patient's body. However, the

above-mentioned methods used to treat leukemia also have serious side effects on the patient's body.

Advanced treatments in use in the world

Advancements in research areas for disease, immunotherapy, and novel CAR T-cell therapy can also be used due to their fewer side effects as compared to previous ones.

CAR T cells are chimeric antigen receptor T cells also known as living drugs. In this treatment, the patient's T cells are taken and modified to kill cancer cells in the body. This therapy is practiced in Singapore, China, and the UK since 2021 due to its less time requirement, and one dose infusion.

Conclusion

In Pakistan, immunotherapy and especially CAR T cell therapy can also be introduced to replace transplantation, through proper advertisements and seminars by promoting awareness of cancer's warning signals and less painful treatment available for leukemia and can be practiced by lowering its cost.





Penang Technology Park Gets Conditional Approval From DoE

The Penang Technology Park in Bertam has received conditional approval from the Department of Environment (DoE).

The Penang Technology Park in Bertam has received conditional approval from the Department of Environment (DoE). The department stated in a statement that the developer would still be required to meet certain requirements following the conditional approval.

Only "green, clean, and high-technology industries" will be permitted to operate in the industrial park, and they must first obtain approval from the

department.

"Another criterion is the use of zero discharge in all industrial plots. "This is to protect the water quality in nearby rivers," it said, adding that these businesses should prioritise hiring locals.

It also stated that the developer must improve the roads leading into Bertam to avoid future traffic jams before the Penang Technology Park is fully operational.

It was reported last year that 1,662 Bertam residents had objected to the proposed development and centralised labour quarters. They expressed concern about the potential envi-

ronmental risk as well as the impact on the social well-being of local communities.

A technology park, also known as a science park or research park, is an area designated for the development and growth of technology-based companies and industries.

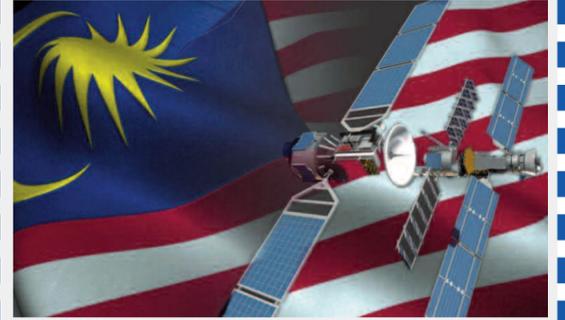
These parks typically provide infrastructure and resources such as office space, research facilities, access to specialised equipment, funding opportunities, and networking opportunities with other companies and research institutions.

The goal of a technology park is to foster innovation and collaboration and to promote the

growth of technology-based businesses. Some examples of technology parks include Silicon Valley in California, Research Triangle Park in North Carolina, and Kista Science City in Sweden.

The Department of Environment (DOE) in Malaysia is a government agency responsible for protecting and preserving the country's natural environment and biodiversity. The DOE is responsible for enforcing environmental laws and regulations, monitoring environmental quality, and promoting public awareness and participation in environmental conservation...[Read More](#)

Govt Urged To Explore Satellite Technology For Defence Systems



Malaysia must investigate advanced satellite technology for its national defence system, as many countries, particularly world powers, have already advanced in this direction.

Rear Admiral Datuk Shamsuddin Ludin, director general of cyber and electromagnetic defence for the Malaysian Armed Forces, stated that the development of satellite technology for the national defence system, including weaponry assets, requires local expertise to ensure its safe use.

"From the standpoint of global defence analysis, there is an increase in weaponry capabilities." To what extent it is implemented (including the use of satellite weapons), we do not know, since all powers talk about a peaceful world.

"As a result, it is critical that we use satellite (technology) safely, including data transmission and security features. "We need to ensure that the technology is our own (home-developed) and not from a foreign country," he said Tuesday after attending a Satellite Awareness Day at the ATM Haigate Complex on January 17.

He said this when asked to comment on the actions of the world's major powers, particularly China, which is thought to be advancing weaponry technology through satellites.

To that end, Shamsuddin stated that the Armed Forces will provide input to the Malaysian Space Agency (MYSA) for consideration in the National Space Policy 2023 (DAN 2030).

"The Armed Forces will support MYSA's efforts to introduce new satellite-based technology for the national defence system, and we are confident that the agency has taken similar steps.

"We have a representative in the agency as well, and we will provide input from the Armed Forces that can be noted and incorporated into DAN 2030," he said. ANGKASA, the National Space Agency of Malaysia, was established in 2002 to coordinate and develop the country's space program...[Read More](#)

Rogue AI Simulator Now Available With Special Launch Discount



The game is a roguelite management game in which the primary goal is to manage human test subjects for the science department.

Rogue AI Simulator is a sequel to the hit Flash game "I'm an Insane Rogue AI," which received over four million plays during the peak of Flash-based games. Nerdoom Productions, a Malaysian solo developer, created it.

What was once a distant fantasy of the twentieth century has become a very real reality in recent years, with the rise of

more forms of artificial intelligence being used in all aspects of technology. While AI isn't without its benefits, those looking for Skynet-style horror may enjoy Rogue AI Simulator.

The game is a roguelite management game in which the primary goal is to manage human test subjects for the science department.

Players in the game take on the role of a sentient robot tasked with observing humans in the Department of Science. Start out by designing and building the factory...[Read More](#)

PLS LESB Partners With Japan's MAT To Expand Durian Plantation

Through MAT, the Japanese will assume up to 49 percent of the joint venture partnership, with the entirety of the joint venture company valued at RM371 million.

PLS LESB will collaborate with Japan's Millennium Agriculture Technology (MAT) and MyFarm Inc., Japan (MyFarm), to develop a durian plantation in Pahang spanning up to 1,000 hectares.

PLS LESB Sdn Bhd, a 51%-owned subsidiary of PLS

Sarawak To Work With Netherlands To Transform Agriculture Sector



Sarawak, according to Abang Johari, needed to use smart farming and train its human resources in technology to achieve this.

According to Tan Sri Abang Johari Tun Openg, Sarawak will collaborate with the Netherlands to transform its agriculture sector through tech-

nology and ensure food security.

Sarawak, according to the premier, is eager to learn from the Netherlands to transform its agriculture sector, which, despite its small land area and population, is the world's second-largest food exporter. Sarawak can learn how the agricultural sector in the Netherlands has developed, where land use is not wasted.

"We have plenty of land here, so we can be a food exporter in this part of the world, especially since half of the world's population is within a six-hour flight."

"We can reach out to this market to help eradicate hunger and provide affordable...[Read More](#)



Plantation, has signed a heads of agreement (HoA) to form a joint venture and launch a large-scale durian cultivation project in Malaysia.

Through MAT, the Japanese will assume up to 49 percent of the joint venture partnership, with the entirety of the joint venture company valued at RM371 million.

Tan Sri Lim Kang Hoo, who owns 73% of PLS Plantation through Ekovest Bhd, said the joint venture partnership would pave the way for Japanese technology transfer and participation in Malaysia's long-term food security programme. "This is consistent with PLS Plantation's vision of becoming Malaysia's leading sustainable agrofood company," the company stated. According to Lim, the JV will facilitate the transfer of Japanese agricultural technology and expertise on a scale never before seen in Malaysia. "It will strengthen PLS' core competencies as a leading exporter of high-quality agricultural and aquaculture produce," Lim said. MyFarm, in collaboration with Tokyo Agricultural University, operates...[Read More](#)

Jan Zainal, A Plant Enthusiast Shares Terrarium Building Advice



Jan encourages terrarium enthusiasts to repurpose containers they already have at home to minimise wastage.

It looks complicated, with different layers of soil, pebbles and other materials, not to mention the tiny plants within. But building a terrarium is not rocket science, says enthusiast Jan Zainal. "It's something that everyone can do. All you need is a few basic tools and materials," says the 52-year-old owner of Taman Hati, a plant studio and cafe in Petaling Jaya.

"Even children can pick it up. It's fun and simple to do. It

teaches people to enjoy nature in their own home and how to nurture something that brings them joy," she adds.

It doesn't take long for building terrarium - usually an hour or slightly more - and it depends on how elaborate it is, says Jan, whose deft hands can put one together in just 20 minutes. What's more, terrarium-making helps people destress.

"Plants are like pets - you water them, feed them (with fertiliser), see new growth, it's fulfilling. "It's relaxing and calms the mind because you get to make something...[Read More](#)

Malaysia Authorises Palm Tocotrienol To Improve Cognitive Function

Malaysia approved two health claims for palm tocotrienol-rich fraction may help to improve cognitive function and an antioxidant and may help to reduce oxidative stress.

The Ministry of Health (Malaysia) has approved two health claims for palm tocotrienol-rich fraction (Palm TRF or Palm Tocotrienols/Tocopherol Complex): "may help to improve cognitive function" and "an antioxidant and may help to reduce oxidative stress."

After reviewing the scientific evidence and feedback from industry stakeholders, the Ministry of Health Malaysia (Food Safety and Quality Division) announced that it has officially approved nutrient function claims for Palm TRF as follows: Palm TRF may help to improve cognitive function, and Palm TRF is an antioxidant and may help to reduce oxidative stress.

To make these claims, a finished product (fortified food or drink) must have at least 10 mg of pure tocotrienols per 100 g of solid finished product or 10 mg of pure tocotrienols per 100 ml of liquid finished product.

"The science and work carefully achieved during the past years in assessing the safety and beneficial health effects of Palm TRF continue to receive official acknowledgements. As a result, we are overjoyed that the Ministry of Health recognises the role of Palm TRF in improving cognitive functions and reducing oxidative stress, particularly in addressing the risk of degenerative conditions associated with ageing. "This is an important step in demonstrating that Palm TRF can support and improve cognitive functions, particularly in the elderly population, in addition to its role in many other bodily functions," said Dr. Ariati Aris, Scientific

Affairs Specialist at PhytoGaia, a leading supplier of Palm TRF under the brand name "TocoGaia."

PhytoGaia's Palm TRF is the first tocotrienol complex to receive such health claims, backed up by a large body of scientific evidence and clinical studies carried out by the international scientific community. "Palm TRF especially in improving cognitive function and reducing oxidative stress, has received this important approval from the regulatory authority in the Malaysian market," said Bryan See, Vice President of PhytoGaia. Palm TRF can improve cognitive functions and reduce oxidative stress...[Read More](#)

