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One of the many benefits of using artificial intelligence (AI) is to help us view societal problems from a different perspective

Opinion on page 03

Tayyab Awan

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OPINION

Why Start An **Anonymous** Blog?



Paras Ali

hese days people are interested in anonymous blog, one of the main reasons is to diversity from their already existent online presence.

There might be several reasons that may inspire you to start an anonymous blog. One of the main reasons for people these days to blog secretly is to diversify from their already existent online presence. The diversified topic may not suit the tastes of the already existing reader audience; you may try to mix two genres, but that might also prove to be risky.

Page No 03

While Science Consumes, **Technology Produces A Tribute To Engr Masood Hasan**



Shamail Abbas

ngr Masood Hasan, a leading technologist of the country and the father of chemical engineering (Chem-1) of Pakistan, passed away after a glorious innings spread over 95 years.

The Defence Production

sector was developed under his vision and leadership during the decade of the 1970s. Pakistan Aeronautical Complex Kamra, Heavy Industries Taxila, expansion of Pakistan Ordinance Factories, reorganization of SUPARCO and several other smaller projects were started during that period. After completing his masters in Industrial Chemistry from the Punjab University, he went on to study Chemical Engineering at the Case Western Reserve University USA from where he received an MS Degree in 1948.

Agriculture **Marketing** In Pakistan



Muhammad Adnan

griculture marketing includes all the L processes, channels and services involved in moving an agricultural product from the producer to ultimate consumer. This system comes some problems at different levels of production and selling. Agricultural Marketing Systems In Pakistan, the agricultural marketing system is predominantly a private sector activity. The provincial food departments and a parastatal, the Pakistan Storage and Supplies Corporation (PASSCO), are responsible for procuring wheat up to a target amount, after which the private sector may procure wheat. Similarly, Trading Corporation (TCP) of Pakistan, under the federal Ministry Commerce, on advice from the Ministry of Food, Agriculture.

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ARPU Of CMOs In Pakistan **Drops To Lowest In World**

of IT & telecom, leading telecom CEOs expressed concern about sector's deteriorating financial health, which was sending nation into a digital dark age.

Pakistan now has the lowest average revenue per user (ARPU), which is a crucial indicator of the financial health of cellular mobile operators (CMOs), at \$0.80 per month.

In a meeting with the minister of IT and telecom, leading telecom CEOs expressed concern about the sector's deteriorating financial health, which was sending the nation into a digital dark age.

The CEOs of Telenor Pakistan, PTCL Group, Jazz, and Zong all expressed concern that the industry was in danger of collapsing as a result of the "wrong policy of pegging tele-

com licence prices with the US dollar and delay in opening Letters of Credit (LCs) for telecom equipment imports."

Aamir Ibrahim stated in a tweet that the industry's average revenue per user (ARPU) must remain above \$1.5 to survive, as the cost structure of the telecom sector has been dollarized in terms of spectrum fees, capex, fuel, electricity, etc.

He said that the industry also could not afford the regulatory approach to restrict tariff increases any more.

Julian Gorman, the head of the Asia-Pacific GSMA, similarly expressed concern while stating that while the lowest ARPU in the world indicated affordability, it was not prescriptive and needed to be taken into account in the context of the industry's financial sustainability. If significant steps are not

taken to find a solution to the crisis and promote growth, "Digital Pakistan risks collaps-

ing," he warned. The industry was in a crisis, it was told to the minister, due to an unprecedented rise in operating costs, primarily fuel, electricity, interest rates, and currency devaluation. Two telecom operators reported a combined loss of about Rs30 billion in calendar year 2022, according to publicly available data. In a tweet expressing his opinions, Hatem Bamatraf claimed that the cost of doing business had significantly increased due to the ongoing depreciation of the Pakistani rupiah (PKR) against the US dollar. It is becoming detrimental to the dream of Digital Pakistan to expect telecom companies to make significant investments in infrastructure modernization while earn- unrealistic...Read More

We need to take immediate action and come up with a plan for regulatory relief to prevent slowing down the nation's digital development." Irfan Wahab also discussed the problems facing the telecom industry and stated in a tweet that "while the telecommunications industry generates its revenue in PKR, spectrum auctions, renewals, and instalments are priced in USD, exposing Telcos to massive currency devaluation risk." Before Telcos' ability to support further digital transformation is irrevocably depleted, this mismatch must be corrected.

Expecting investment in infrastructure development and an increase in service quality at a time when the industry's profit is steadily declining amidst rising operational costs

COMSTECH Awards 2023 Open For Nominations In **Nine Categories**

Nominations for these awards must be received by March 31, 2023, from scientists and researchers who are OIC members and are currently employed in those countries.

This year, there are nine categories in which COMSTECH is looking for nominations for COMSTECH Awards 2023. Nominations for these awards must be received by March 31, 2023, from scientists and researchers who are OIC members and are currently employed in those countries.

Science academies, national research councils, universities, research organisations, and internationally renowned scientists who are residents of and active in OIC member states are invited to submit nominations for the COMSTECH Awards

The committees of eminent scientists and experts in the field, chosen by the Coordinator General COMSTECH, will judge the nominations.

In addition to accepting applications for the Lifetime Achievement Awards in Physics and Mathematics, COMSTECH is also accepting submissions for the Excellence in Science & Technology Awards, which include the Young Researcher Awards, Best Scientific Book Awards, Best Patent Awards, and Best Research Paper Awards in the fields of Biology, Chemistry, Mathematics, and Physics.

Through its prestigious awards, COMSTECH honors the outstanding research accomplishments of the scientists who work and reside in OIC member states. Every award comes with a certificate, a shield of honor, and money....Read More

YIC, NEP NICs Sign MoU To **Promote Startup Cultures In Swat**



13 technology incubators have been set up across all of Pakistan's provinces in association with a few public universi-

Memorandum Understanding (MOU) has been signed between the Youth

International Conclave (YIC) and the National Expansion Plan of NICs (NEP NICs) in Swat. The MOU's goal is to advance Swat's entrepreneurial and startup cul-

The MOU was signed to advance Swat's entrepreneurial ship....Read More

and startup cultures by Mazhar Ul Islam, Community Manager NEP NICs Swat, and Engineer Umar Farooq Gul, President of Youth International Conclave (YIC).

A number of representatives from the business community, the government, and other interested parties were present at the signing ceremony. Young people can learn about entrepreneurship and startups on the YIC platform and get involved with

By giving young people the resources, tools, and mentorship they require to launch or expand their own businesses, the organisation hopes to foster a culture of innovation and entrepreneur-

PMIS Registers Over 6 Lac Prisoners, 9 Lac **Visitors Across** Punjab Jails

More than 6 lakh prisoners and more than 9 lakh visitors have been registered under the Prison Management Information System (PMIS).

More than 6 lakh prisoners and more than 9 lakh visitors have been registered under the Prison Management Information System (PMIS), which was created by the Punjab Information Technology Board (PITB) for the Punjab Prisons Department.

In addition, 43 jails in Punjab have over 13,000 HRM profiles. This came up during a meeting to review the progress, which was presided over by PITB Chairman Faisal Yousaf. Other senior officials, including PITB Additional Director General (ADG) Syed Qasim Ifzal, attended the meeting.

The Prison Management Information System (PMIS), which was developed to computerize inmate data, monitor staff, and handle other administrative tasks online, was made known to the meeting's atten-

Chairman Faisal Yousaf stated that the traditional manual system in prisons has been digitalized, and now includes services like online bank payments, visitor management, medical care, food delivery from the canteen, and more.

He added that the Prison Management Information System had enabled the digitization of various prison operations, including the management of hospitals, human resources, duty summaries, stores, etc. He said, "There has been a lot of improvement and transparency in the administrative affairs of prisoners and other matters."

Modern IT technologies must be implemented in prisons immediately in order to improve



daily business operations' efficiency and transparency and to treat prisoners' data systematically for quick information retrieval.

In order to develop a Prisons Management Information (PMIS), System Department, Punjab UNODC, Pakistan signed a memorandum of understanding on July 2, 2014.

As a result, a Pilot Project was started in the District Jail of Lahore, and the UNODC provided hardware and software support to the Punjab Prisons. In addition to maintaining an extensive database of the staff and inmates, the PMIS project aims to automate every aspect of prison functionality.

With hardware assistance from UNODC Pakistan, it has now been expanded to 20 prisons in the province following the success of the pilot project....**Read More**

SAPSUT's Organizes First Science **And Tech Expo**

The first "Science and Tech Expo" was put on by the SAPSUT to encourage collaborations between academic institutions and business

The first "Science and Tech Expo" was put on by the Shuhada-e-Army Public School University of Technology (SAP-SUT) to encourage collaborations between academic institutions and business.

Vice-Chancellor of Shuhada-e-Army Public School University of Technology Brigadier (r) Dr. Zafar Muhammad Khan said during the opening ceremony that the institution had been designed in a contemporary manner to support technical education.

He claimed that the initial Science & Tech Expo was

ing students and businesspeople a forum to familiarise them with the demands and needs of the modern world

He claimed that students were receiving the most up-to-date

ply the country's industrial secincluding Rashakai Economic Zone, with skilled labour, enabling the full realisation of the advantages of China-Pakistan Economic Corridor



projects. "Government and industrialist patronage for technical education is a must to usher in a new era of economic development and prosperity not only in Khyber Pakhtunkhwa, but in the entire country," the VC said, adding that promotion of technical education would also lead to employment opportunities for young people. Zar Alam Khan, the president of the Nowshera Chamber of Commerce and Industry, who was the chief guest at the event, announced that they had officially signed an agreement with the technical university under which the local industrialists would support the students wholeheartedly and offer them and opportunities....Read More





SATURDAY, FEBRUARY 25, 2023

PMDC Launches Interactive Online Portal To Facilitate Doctors



An interactive online portal has been launched by the Pakistan Medical and Dental Council (PMDC) to assist doctors throughout the nation

A Pakistan Medical and Dental Council representative stated that after making all necessary preparations for the changeover from the PMC (Pakistan Medical Commission) to the PMDC, the Council launched its registration interactive online portal as a matter of priority.

"We invite all the local graduates, numbering over 10,000, who have been patiently awaiting their permanent registration to submit an online registration application."

He added that despite waiting a long time to register, these graduates were unable to do so due to the strict regulations put in place by the previous PMC. He asserted that the PMDC started issuing certificates of good standing and renewals on the first day and that 1,500 registration certificates were issued. The representative claimed that despite the National Licensing Examination (NLE) requirement, the Council continued to grant permanent registration certificates to doctors in Pakistan... Read More

Hybrid Wheat The First Choice To Solve Food Crisis Worldwide: Prof. Zhao



The "wheat revolution" in Pakistan is becoming more urgent due to a number of issues, including high seed & fertilizer prices, along with natural disasters.

The Prime Minister of Pakistan tweeted last year, "The World Food Day highlights the need for global efforts to ensure food security in various countries of the world," expressing his worries about the impending food shortage following the floods. Millions of hectares of standing crops were destroyed by devastating floods in Pakistan in 2022.

Without a doubt, wheat, a staple food, has also been severely impacted. Approximately 80% of Pakistani farmers are involved in the production of wheat, and 40% of the country's total agricultural land is under wheat cultivation. It is impossible to overstate the significance of wheat production in Pakistan.

The "wheat revolution" in Pakistan is becoming more urgent due to a number of issues, including high seed and fertiliser prices, along with natural disasters like floods...Read More

Experts Criticize One Serene Residence Project For Subpar Work

The Pakistan Environmental Protection Agency (Pak-EPA) held a public hearing on the EIA report of a skyscraper 'One Serene Residence Project' planned for DHA-III.

The Pakistan Environmental Protection Agency (Pak-EPA) held a public hearing on the environmental impact assessment (EIA) report of a skyscraper 'One Serene Residence Project' planned for DHA-III. Experts, academics, and students who were present criticized the project's proponent for their poor work.

The One Serene Residence project proponent's representatives, along with Deputy Director of EIA and Monitoring Khalid Mehmood Chaudhary and Deputy Director of Legal Aamir Abbas Khan, presided over the public hearing.

A thorough description of the current environmental conditions, a project description, an analysis of the impacts, and suggested mitigation measures to be implemented during project execution are all included in the public hearing required by the Pakistan Environmental Protection Act, 1997, and the review of the IEE/EIA Regulations, 2000.

The One Serene Residence Project is a 14-story high-rise residential development designed to provide federal capital residents with the most upto-date living space with all necessary amenities in one location.

The project has 238 units, two basements, a lower ground floor, a ground floor, a mezzanine floor, and ten upper floors. It also has green spaces, pools, lounge areas, and terraces. Additionally, there are two basements and a lower ground

floor with parking for about 375 cars.

The project's land spans 13.72 kanals, and the proposed project's covered area will be 585,000 square feet. The project includes residences, fitness centres, swimming pools, parks, and open areas. It had a \$3.51 billion price tag and would take three years to complete.

The project's proponent's EIA report focused primarily on the federal capital's flora and fauna, environmental conditions, potential environmental effects of the project, and mitigation strategies to ensure environmentally friendly development.

Pakistan Environmental Protection Act, 1997 primarily addresses how environmental issues are handled, with minor provisions for environmental impact analysis and handling hazardous issues. Additionally, it outlines the definition of environmental offences and the associated penalties.



Human Organ Transplantation Act 2023 Ready For Approval

The Punjab Human Organ Transplantation Authority Act 2023, according to the acting provincial health minister, is prepared for approval.

Under the leadership of acting health minister Dr. Javed Akram, a meeting of the Punjab Human Organ Transplantation Authority (PHOTA)'s monitoring committee was held in the department of specialized health, research, and medical education.

DG Punjab Human Organ Transplantation Authority Prof. Dr. Shehzad Anwar, CEO Punjab Health Care Commission Saqib Aziz, Dr. Izhar Chaudhry, members of the monitoring authority, Special Secretary Shoaib Jadoon, Special Secretary Syed Wajid Ali Shah, and Dean Pakistan Kidney and Liver Institute and Research Centre Prof. Dr. Faisal Dar participated via video link conference. The Organ Transplantation Authority's director general presented the monitoring authority's agenda.

Dr. Javed Akram, the interim provincial health minister, said: "The public should benefit from



Punjab Organ Transplantation Authority's increased activity. The right to life may be compensated if the patient's organs are used to save their lives. There should be no leniency for those involved in the illegal transplantation of human organs."

He continued, "There is a strict law in place. For the employees of the Punjab Human Organ Transplantation Authority, we will conduct capacity building. It has been suggested that those who donate their organs to patients in need should be eligible for a civil award from the government. The Punjab Human Organ Transplant Authority Organ registers donations." PHOTA is a provincial regulatory body that was established in 2013, in response to a number of incidents that exposed a tradition of illegal trade and transplantation of human cells, organs, and tissues in the province with the highest population in Pakistan.

The PHOTA is the main provincial organisation in charge of overseeing stem cell and organ transplantation procedures as well as initiatives to boost organ donor registration and donation in Punjab....*Read More*

Rapid Urbanization In Pakistan Puts Pressure On Job Market

In Pakistan, there has been a significant pressure on the job market and urban infrastructure due to the massive influx of people from rural areas.

Rapid urbanization in Pakistan is primarily due to a lack of employment opportunities. People from rural areas move to cities in search of higher paying jobs and better working conditions, according to Dr. Naveed Iftikhar, an urban economist and researcher.

In Pakistan, there has been a significant pressure on the job market and urban infrastructure due to the massive influx of people from rural areas. In order to relieve the pressure and provide young people with employment opportunities, the government must work with the private sector. The government and private sector working together will contribute to the development of a nation where young people are encouraged to pursue education and training.

Due to a lack of investment in industries that produce jobs, Pakistan has not been able to generate enough employment opportunities...*Read More*

Trade Talks To Seek Access For Pakistani Products To IT Market In USA

Objective of increasing Pakistan's exports would remain elusive if we don't support this industry. "Minister was speaking to business owners & IT professionals from Pakistan in US.

"IT is our future. The objective of increasing Pakistan's exports would remain elusive if we don't support this industry "The minister was speaking to business owners and IT professionals from Pakistan in America. According to early reports, the talks were primarily about increasing Pakistani products' and workers' access to the US IT market.

The objective of increasing Pakistan's exports would remain elusive if we don't support this industry. "The minister was speaking to business owners and IT professionals from Pakistan in America.

The Commerce Minister and his team were hosted by US Trade Representative Ambassador Katherine Tai for discussions on the US-Pakistan Trade and Investment Framework Agreement (TIFA). Masud Khan, the US ambassador to Pakistan, and Secretary of Commerce Muhammad Sualeh Faruqi also attended the

eeting. The I

The US team included Assistant United Trade Representative Chris Wilson and Chief Trade Administrator Doug McKalip of the Biden administration. With a \$12 billion bilateral trade volume, the US continues to be Pakistan's top export market despite recent political tensions.

to the US market.

The participants recommended fostering an environment that would support the development of Pakistan's IT industry as well as the country's trade relations with the US.

The recommendations included streamlining the taxation of IT businesses, developing the skills of IT professionals, simpli-



During a virtual meeting with Pakistani-American IT professionals, the commerce minister stated that the IT sector could experience exponential growth with better infrastructure and the right policies. Pakistan also wants to increase the amount of agricultural products it exports fying transactions, adding IT courses to high schools and colleges, and improving inter ministerial coordination.

The Pakistani American IT professionals requested the establishment of a consulate in San Francisco to act as an IT hub for local experts and

Pakistani professionals. One of the main agenda items at the TIFA talks was, according to the minister, enhancing Pak-US cooperation in the IT sector.

He hoped that the momentum brought about by high-level negotiations would lead to notable advancements in all pertinent fields, including the IT and technology sectors.

The Special Representative for Commercial and Business Affairs, Dilawar Syed, and the minister met on Wednesday at the Pakistani Embassy to go over various possibilities for boosting bilateral trade. According to a press release from the Pakistani Embassy, "matters relating to bilateral trade, foreign direct investments, business operations of US companies, and exports to the United States were discussed during the meet-

After a nearly 8-year hiatus, the TIFA ministerial meeting has resumed, which was welcomed by the commerce minister. He predicted that the momentum created by the restart of these high-level negotiations would result in a breakthrough in the two nations' ability to realise their potential for trade.

80 Companies Participate In Career Fair Hosts By GIK Institute



There is no shortage of talent in the nation, according to Tahir Irfan Khan, vice chancellor of Abbottabad University of Science and Technology.

The Ghulam Ishaq Khan Institute of Engineering Sciences and Technology organizes Career Fair on Thursday for students, and it attracted up to 80 national and international companies from all over the nation. The event was launched by Eric Zong, Huawei's director for Pakistan's partner development division.

The ceremony was attended by representatives from the companies, pro-rectors, deans, and department heads, faculty, research associates, engineers, directors, members of the Career Fair Committee, and students.

In their interactions with academic institutions, the company representatives interviewed final-year students for positions

in their respective businesses. In June of this year, the final-year students should finish their BS studies in a variety of engineering and management science fields.

The country's alarmingly high unemployment rate and the fact that company representatives were interviewing students for jobs in their organisations before they had finished their BS engineering degrees made officials of the companies claim that it was an unusual day in the academic calendar of the institute.

Eric Zong and Prof. Dr. Fazal Ahmed Khalid questioned the companies' hiring practises, corporate cultures, and methods for integrating new emerging technologies into their organisations while overcoming a number of difficulties. Eric Zong praised the Career Fair's bringing together of academia and industry on one stage...*Read More*

OPINION



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"Programming today is a race between software engineers striving to build bigger and better idiot-proof programs, and the Universe trying to produce bigger and better idiots. So far, the Universe is winning.'

--Nick Cook





Paras Ali

Sensitive issues like divorce, sicknesses or bankruptcy are only explored by people who connect with the topic individually



Why Start An Anonymous Blog?

nese days people are interested in anonymous blog, one of the main reasons is to diversity from their already existent online presence.

There might be several reasons that may inspire you to start an anonymous blog. One of the main reasons for people these days to blog secretly is to diversify from their already existent online presence. The diversified topic may not suit the tastes of the already existing reader audience; you may try to mix two genres, but that might also prove to be risky. This narrative blog venture into the six main reasons that a person needs to consider before starting an anonymous blog:

Leading Separate Lives

Blogging anonymously can help you in keeping both your professional and personal lives separately. On a personal front, if you would like to describe one of your passions on your blog, you would not have to worry about its consequences on your official personality or if you already have an established blog and would want to venture into newer grounds without the expectation and the hype, anonymously blogging is the answer. People always compare the prior successes with the new front that you would want to explore individually.

There can be a lot of subject matters that will not gain the approval of your family and friends. Even professionally, you create a different image in the minds of the clients to keep your profession on track. You might want to reveal your sensitive side in your blog, even though it is something important that you share with others, it could prove intimidating to others and bring shame to you,

if your identity is revealed. Sensitive issues like divorce, sicknesses or bankruptcy are only explored by people who connect with the topic individslips made by co-workers or your manager or frustrating experiences with difficult clients, an anonymous blog is your go to place. By remaining anonymous, you are not only protecting your own integrity but also the integrity of your colleagues and the company's clients. You may even find a lot of other bloggers who are already releasing their frustrations through these anonymous

You have to protect your identity not only professionally but also make sure that your safety is not compromised and the written matter does not land you in the midst of accusations.

Non-disclosure Agreement

There are many employers and clients who may have a non-disclosure agreement clause in their documentation which may forbid them legally there are pressing subject matters that you may want to write about and share with the readers, to get their valued feedback. Revealing your identity and writing something that the readers will not associate with your already existent framework may prove to be risky.

An ardent professional always discussing on areas of his genre will not be expected to share sensitive information out of his usual context. In fact anonymous blogging facilitates disassociation from your previously created online image. The readers will read the anonymous blog just for its content, not because they know the writer.

Ghost Writers in the

Ghost writers are gaining popularity all over the internet for tackling sensitive issues with ease, as their identity is not at stake. Some of them even reveal their identity once their anonymous blog starts gaining popularity. But as always beware that there are always two sides to the same coin.

If you think that by remaining anonymous, you can abuse or tarnish someone's reputation, you cannot remain protected for too long,

as the lashed on individual or company is sure to come after you. Spreading lies anonymously will also not draw your readers towards your blog.



that a person faces through these sensitive times are hard to talk about and if you do not do it anonymously, the people you come into contact in your daily life may even judge you and form opinions on the basis of your blog posts.

Protecting others while protecting yourself

If you are working two jobs in order to pay your bills and would want to vent out the **Avoiding Controversies**

You are in a line of work, but the topic that you want to discuss on your blog could be controversial and not connected to your professional life.

The topics of conversations could range from medicine, local politics, and terrorism to education.

You always do not want to be associated with every topic that you discuss on your blog. writing, but as long as it is a secret, they cannot hold the law against you. **Venturing into New Waters** A blogger always has his best write-up in the field or genre of

his expertise. But at times

them. By remaining anony-

mous, you can share your expe-

riences and avoid any such

legal accusations. Some of the

clients or former employers

may still want to probe your

People are sometimes clever enough to identify the true blogger with the way he writes or the issue he discussed.



Shamail Abbas

The Defence Production sector was developed under his vision and leadership during the decade of the 1970s. Pakistan Aeronautical Complex Kamra, Heavy Industries Taxila,

expansion of Pakistan Ordinance Factories, reorganization of SUPARCO and several other smaller projects were started during that period



While Science Consumes, Technology Produces A Tribute To Engr Masood Hasan

Hasan, a leading technologist of the country and the father of chemical engineering (Chem-1) of Pakistan, passed away after a glorious innings spread over 95 years.

The Defence Production sector was developed under his vision and leadership during the decade of the 1970s. Pakistan Aeronautical Complex Kamra, Heavy Industries Taxila, expansion of Pakistan Ordinance Factories, reorganization of SUPARCO and several other smaller projects were started during that period. After completing his masters in Industrial Chemistry from the Punjab University, he went on to study Chemical Engineering at the Western Reserve University USA from where he received an MS Degree in 1948.

He was hired by Unilever and attended their executive management programme in UK. There was no looking back; the 'Technologist' had been launched. He started local manufacturing of several Unilever products that included Dalda Banaspati as well. From there he moved to Wazir Ali Industries for the launch of Tullo Banaspati and Treet Soap.

Masood Hasan moved back to Lahore in the 1960s where he launched a consulting firm by the name of EWP Consultants which played a key role in bringing the first-generation computer to Pakistan. Later he founded United Consultants before being appointed Federal Secretary Defence Production by the Bhutto regime. He was not alone; with him, several technocrats were inducted through lateral entry into senior administrative positions.

The Defence Production sector was developed under his vision and leadership during the decade of the 1970s. Pakistan Aeronautical Complex Kamra, Heavy Industries Taxila, expansion of Pakistan Ordinance Factories, reorganization of SUPARCO and several other smaller projects were started during that period.

Masood Hasan maternal uncle Hamid Ghani, who was Chief Engineer in Pakistan Railways at the time of Partition, was appointed Project Manager to build POF Wah in 1953. After completing the ordnance factory, he was sent to build the Karachi Shipyard. Between the two, half of Pakistan's basic industrialization took place. They remain, unsung heroes of the country, as they neither

sought publicity nor self-projection. While Ghani Sahib is buried in Karachi, Hasan Sahib chose Lahore.

He served briefly with the Zia regime and returned to his home town to launch another consulting firm by the name of EMMAY Associates where he worked till his retirement about ten years ago. During this period the Doon School Boys got together to build Chand Bagh School on the Muridke-Sheikhupura link road on the pattern of their founding institution

In the 1973 version the idea was dropped and it is time to revisit this approach as there is dichotomy between the NAB laws and the Common Law that our courts follow

It is a not-for-profit residential school where students are taught social responsibilities to keep their campus and surrounding localities clean. It is the Doon School version of Pakistan. Lt. Gen (R) Ghulam Jillani Khan and Hasan Sahib, both Doon School alumni, led this project from the front with a vision to develop university-level education at the same location. With a campus spread over 190 acres it will perhaps one day emerge as an Education City.

In 2017 he was invited to speak at the annual Dr Khalifa Abdul Hakim Lecture Series where he delivered a very powerful speech on 'Technology and Development'. He strongly advocated the need of developing and applying appropriate technologies leading to socio-economic development. His definition of technology was simple," A tool

to solve problems all sorts". According to him, there was a time when people approached philosophers for answers, now technology has taken over that role, for which qualified technologists are needed. Scientific research world over has resulted in technological advancement through a well-developed framework and linkage between academia and industry. approach has not been adopted by the Islamic Ummah.

Organizations like COM-STECH (Commission Science and Technology for OIC) remains ineffective due to inappropriate leadership, vision and guidance. In the decade of 1970s, the National Commission for Science and Technology, which reported directly to the Prime Minister, was established to foster technological growth but it remains dormant due to bureaucratic control. Technical ministries like Science and Technology should be led by technocrats rather

than bureaucrats.

Unfortunately, in the land of the pure the importance of technology is grossly misunderstood and overlooked. Technology is the application of science to produce products and facilitate human effort. Technology takes over where science reaches its limit. What works in the laboratory under controlled conditions has to be mass produced by understanding and application of technology.

While science consumes, technology produces. I had the opportunity of working on his team for over a decade before taking on the Chairmanship of Pakistan Science Foundation. His parting words were, "One can achieve a lot if one does not seek credit or personal benefits". That was the generation that laid the foundations of the new land.

Pakistan needs Technology to move forward and become an Asian Tiger like China, Malaysia, Singapore, Taiwan, and South Korea our derailment has to come to an end

Together we worked on projects of national importance. In the 1990s the Saindak Copper and Gold project had started. Due to lack of large-scale commercial mining experience in the country, the venture was in trou-

ble from day one. It was my first opening in the land of the pure. While we did our best to ensure complete transfer of technology together with building a trained work force, no one within the organization or the federal min-

istry was interested. It seemed everyone had their own agenda to seek personal benefits. Despite warnings the entire project was handed over to the Chinese contractor, who have been mining there for the last about 20 years and now seek extension to dig out the remaining copper, gold and silver. Had the transfer of technology taken place at that time we would have been in a position to develop the Reko Diq project ourselves instead of the big mess that we face today. He insisted on Administrative Accountability instead of judicial that we have today. Masood Hasan propagated the development of Standard Operating Procedures (SOPs) as a first step towards accountability. He always quoted Article 212 of the constitution of 1972 that called for the establishment of Administrative Courts for this purpose. In the 1973 version the idea was dropped and it is time to revisit this approach as there is dichotomy between the NAB laws and the Common Law that our courts follow...Read More

OPINION





Wholesalers provide seed either from the previous crop stocked by them or as dealers on behalf of seed companies—national and multinational seed companies as well as the public sector provincial seed corporation



Agriculture Marketing In Pakistan

keting includes all processes, channels services involved in moving an agricultural product from the producer ultimate consumer. This system comes some problems at different levels of production and selling.

Agricultural Marketing Systems In Pakistan, the agricultural marketing system is predominantly a private sector activity. The provincial food departments and a parastatal, the Pakistan Storage and Supplies Corporation (PASSCO), are responsible for procuring wheat up to a target amount, after which the private sector may procure wheat.

the Trading Similarly, Corporation (TCP) of Pakistan, under the federal Ministry of Commerce, on advice from the Ministry of Food, Agriculture, and Livestock (MINFAL), imports wheat, fertilizers, and occasionally other food commodities such as sugar and puls-

At the retail/wholesale stage the factor and product markets are linked. The pivotal market functionary, the commission agent (arhti), acts as input supplier (dealer and wholesaler) and produce purchaser.

The agent also provides inputs on credit to regular customers, both for production and consumption needs, farmers pay an exorbitant implicit interest rate. Though the agent is providing important services, the service charged is exploitative though justified on the basis of risk.

Agricultural inputs include seed, fertilizer, and agricultural mechanization. Most hybrid seed in Pakistan is imported. Local seed is often of low quality

yet Pakistan has no AEZ restrictions to be self sufficient and export seed.

Public sector research is increasingly unable to deliver new varieties commercially acceptable to growers. Parastatal and government participation in the seed market complicates market signals as their poor quality seed is sold below real costs and without profit. Farmers generally retain cereals seed from previous crops or purchase it from fellow farmers, wholesalers, or commission agents.

Wholesalers provide seed either from the previous crop stocked by them or as dealers on behalf of seed companiesnational and multinational seed companies as well as the public sector provincial seed corpora-

Both the private and public sectors are involved in seed marketing. About 600 registered private sector seed companies import or produce oilseed and vegetable seeds and market them; multinational seed companies deal mainly in hybrid seed, although recently, a national company has also started producing and marketing hybrid paddy seed.

Fertilizers The private sector produces and sells fertilizer, although the government imports fertilizer when supplies fall short. In 2006/07, the annual consumption of nitrogenous fertilizer was about 2.6 million nutrient tons.

This off-take is about 9.5 percent lower than the previous year. In the same year, about 979 thousand nutrient tons of phosphate fertilizer were used—15.1 percent higher than the previous

The off-take of potash was only 43,000 nutrient tons, but was an increase of almost 60 percent over the previous year. To encourage balanced use of fertilizer, the government has provided a subsidy of Rs 250 per bag on Aiammonium Phosphate (DAP).

The recommended Nitrogen to Phosphate ratio is 2:1, compared to historic use of over 3 N to 1 P. In 2006/07 the ratio improved to 2.7:1. This is despite manifold increase in the price of phosphatic fertilizer. The gap between local production and consumption is filled through imports by the public and pri-

vate sectors.

The private sector handles pesticide formulation, manufacture, and trade; the public sector has virtually no role except for aerial sprays and locust control meas-

Any approved pesticides can be formulated and produced, or imported. During 2006/07, 15,500 MT of pesticides were imported, while 75,000 MT were locally for-

Farmers generally apply pesticides without giving consideration to the infestation level and often spray the crop unnecessarily. Similarly spraying and disposal of leftover pesticides and containers pollutes the environ-

The indiscriminate use of a wide range of pesticides is creating health and environmental hazards. The extension departments in the provinces need to disseminate widely the safe, correct methods of pesticide application.

Output marketing

The private sector plays the major role in marketing of agricultural products, except for wheat, for which the public sector is the major player.

Farmers of most crops, except for sugarcane, dispose of their produce through commission agents (arhti), who also generally act as wholesalers, through itinerant village dealers, who purchase small quantities at the

Sugarcane is sold directly to sugar mills.

The commission agents and wholesalers sell wheat either to the public sector procurement centres or to flour mills directly. Most cereals are sold by wholesalers to retailers.

The price of most commodities is negotiated according to the prevalent market rates, while cottonseed price is determined as per spot rate of the day in the Cotton Exchange.

Perishable commodities, particularly vegetables, are auctioned through the commission agents. Occasionally, itinerant dealers also purchase standing crops such as maize, fodder, and vegetables.

The majority of orchard owners sell their standing crop to contractors, who generally are front persons for the fruit commission agents. Contract farming is a recently introduced arrangement, but only on a limited scale.

The main maize product makers negotiate a pre sowing contract with the maize growers. For the past few years, fruit processors and exporters have also entered into agreements with orchard owners directly, bypassing commission agents, for the supply of a given quantity of fruits at a negotiated price.

More recently, the two cashand-carry companies have also started buying vegetables and fruits from growers. There is ample opportunity to integrate farmers, supermarkets, processors, and exporters into value

chains. Cross-Cutting Issues

The following cross-cutting issues have a bearing on the food and agricultural system includes

government price control of agricultural output, inadequate investment in research and dissemination of technology packages to farmers; Inadequate investment in related infrastructure; governance; outmoded legal and regulatory mechanisms; environmental issues;

and gender issues. Output Price Control

The government, for political exigencies, interferes in commodity prices through announcement of minimum support price (MSP) for various crops, particularly wheat and sugarcane.

Historically, the MSP for wheat has been much lower than the import parity price for wheat, discouraging farmers to invest in optimal inputs for wheat cultiva-

Similarly, subsidies on wheat flour also lead to misdirected benefits and exclude poor consumers who do not have access to the public sector wheat distribution outlets.

The price of sugarcane is fixed higher than the import parity price. As a result, the consumers have to purchase sugar at a higher price, which otherwise could be imported at a lower price.

The district administrations occasionally fix the prices of milk, beef and mutton, vegetables, and fruits such that they are lower than the cost of production, when the supply of these commodities exceeds demand Investment in Research and Extension

Historically, the allocation to research and extension has not been commensurate with the sector's contribution to the GDP. It is less than 2 percent, which is significantly lower than the requirement.

Moreover, the research system is not demand based, which limits the utility of research to the

emerging needs of the sector.

The devolution in Pakistan has further weakened the capacity to interface between research and farmers.

Rural Infrastructure

The existing availability of related rural infrastructure, such as rural roads, warehouse and storage facilities, cold storage and cool chains, power, and agricultural markets, are inadequate to cope with the increasing demand for services.

The present agricultural markets, particularly for perishable commodities, are inadequate. Without the upgrading and expansion, accelerating the rural non-farm economy in general, and fostering agro-based rural enterprises, value addition initiatives would be constrained for want of adequate investment, either by the public sector or under public-private-partnership arrangements.

Governance

The present level of access to factors of production, particularly timely availability of inputs to small and marginalized farmers is a severe constraint to produc-

The situation is especially less conducive for an equitable distribution of canal irrigation. Similarly, poor access to land records and title deeds limit the ability of small farmers to access credit services. Moreover, in disputes over property, records of land rights, or tenancy the redressed mechanism is cumbersome, costly, and in most cases unfavourable to the small and vulnerable. Legal and Regulatory Mechanism The existing laws and regulatory mechanisms to ensure protection from malpractices of market functionaries, such as supply of unapproved and substandard inputs, delayed payments for supplied commodities, protection against tenancy



Tayyab Awan

In general, artificial intelligence is leveraged in many ways to improve healthcare systems. German-based Siemens Healthineers is a leading medical technology company that integrates AI into many of its innovative technologies



AI For Good, 10 Wonderful Examples Of Using Artificial Intelligence

ne of the many benefits of using artificial intelligence (AI) is to help us view societal problems from a different perspective.

While there's been much hubbub about how AI might be misused, we must not overlook the many ways AI can be used for good. Our global issues are complex, and AI provides us with a valuable tool to augment human efforts to come up with solutions to vexing problems. Here are 10 of the best ways artificial intelligence is used for good.

Cancer Screening

Artificial intelligence, powered by deep-learning algorithms, is already in use in healthcare. Specifically, AI's imaging capabilities are promising for cancer identification and screening, including breast cancer. Artificial intelligence is also used to predict the development of diseases across a healthcare network. A group at Mount Sinai used deep learning-based AI algorithms to predict the development of diseases with 94% accuracy, including cancers of liver, rectum, and prostate. Thanks to published cancer research, clinical trials, and drug development, there's a plethora of data that AI can help to review and then guide healthcare decision-making.

Save the Bees

Did you know The World Bee Project is using artificial intelligence to save the bees? The global bee population is in decline, and that's bad news for our planet and our food supply. In a partnership with Oracle, The World Bee Project hopes to learn how to help bees survive and thrive by gathering data through internet-of-things sensors, microphones, and cameras on hives. The data is then uploaded to the cloud and analyzed by artificial intelligence to identify patterns or trends that could direct early interventions to help bees survive. Ultimately, artificial intelligence makes it easier to share real-time information on a global scale and take action to save the bees.

Another way artificial intelligence is used for good is to help people with disabilities overcome them. Huawei used AI and

augmented reality to create StorySign, a free mobile app that helps deaf children learn to read by translating the text into sign language. The company also created Track.Ai, an easy-to-use, affordable device that can identify visual disorders in children so treatment can begin before the disorders cause blindness. Facing Emotions, another AI app created by Huawei, translates emotion into short and simple sounds. The app assesses the emotion it sees on another's face to help blind people "see" the emotion of the person they are talking with. The app uses the rear camera on the phone to evaluate the nose, mouth, eyebrows and eyes, and artificial intelligence to analyze the expression on these facial features and what emotion they convey-contempt, anger, fear, disgust, sadness, happiness and surprise.

Climate Change

We can make tremendous progress in solving one of the world's biggest issues with the support of artificial intelligence. Climate change is a gargantuan problem, but several thought leaders in AI and machine learning believe technology might be able to tackle it. Machine learning can improve climate informatics-machine learning algorithms power approximately 30 climate models used by the Intergovernmental Panel on Climate Change. Artificial intelligence can also help educate and predict the impacts of climate change on different regions. Researchers from the Montreal Institute for Learning Algorithms (MILA) use GANs (generative adversarial networks) to simulate the damage of severe storms and rising sea levels.

Wildlife Conservation

Another way AI is put to work for the planet is in conservation efforts and allows underfunded conservationists an opportunity to analyze data inexpensively. A team from the University of Hawaii's Kauai Endangered Seabird Recovery Project used AI to analyze 600 hours of audio to detect the number of collisions between birds and power lines. In another effort to halt the decline of endangered species by using AI, the University of Southern California Center for

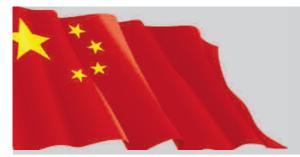
Artificial Intelligence in Society uses an unmanned aerial vehicle to spot poachers and locate animals. The data collected by the drone is sent back to be analyzed by machine learning tools that use game theory to help predict poacher and animal activity. AI is also used by Wild Me and Microsoft to automatically recognize, log, and track endangered animals like whale sharks by analyzing photos people upload to the internet. Combat World Hunger

One of the most viable tools in the fight to end the world hunger crisis is artificial intelligence. It can analyze millions of data points to help determine the perfect crop, develop seeds, maximize current output, and control herbicide application precisely.

Many applications are in use already, but one we'll highlight here is the Nutrition Early Warning System (NEWS) that uses machine learning and big data to identify regions that are at increased risk of food shortages due to crop failure, rising food prices and drought

Reduce Inequality and Poverty

Although one of the criticisms with AI algorithms is the human bias that can be introduced via skewed algorithms or training data sets, AI can actually help reduce inequalities. The Center for Data Science and Public Policy of the University of Chicago's project Aequitas and IBM's AI Fairness 360 are open source toolkits that can track and correct bias. Smart text editor Textio, that makes job descriptions more inclusive, helped one publisher grow its percentage of women recruits to 57 percent, from just 10% previously. Imperial College of London is training AI to Identify inequality based on street images of living conditions in cities, with the aim to ultimately use this information to improve the situations. Similarly, AI analyzes satellite imagery in a Stanford University project to predict regions of poverty, which can then influence economic aid. Another way AI/machine learning is working to end poverty is through IBM's Science for Social Good directive Simpler Voice to overcome illiteracy...Read More



CHINA





China Launches **Zhongxing-26 Communications** Satellite Into Orbit

Operator China Satcom describes the satellite as an important piece of national space infrastructure and helping to meet national requirements for connectivity.

Following a break for Chinese New Year, orbital launches resumed on February 23 with China's launch of the Zhongxing-26 communications

Zhongxing-26 (ChinaSat-26) communications satellite was successfully launched into geosynchronous transfer orbit by a Long March 3B rocket at 6:49 a.m. Eastern (1149 UTC) from Xichang, southwest China

Within an hour, the China Technology Corporation CASC) announced the launch

Zhongxing-26 uses both chemical and electric propulsion and is based on the DFH-4E satellite bus. The China Academy of Space Technology at CASC created the country's first satellite with a data rate of over 100 gigabits per second (Gbps) (CAST). The satellite reportedly has 94 Ka-band user beams, according to CAST.

Compared to the 2017 launch of the 26-beam, 20 Gbps Zhongxing-16, this is 3.5 times more powerful. With the aid of Viasat in-flight connectivity technology, passengers on Sichuan Airlines' Airbus A320 flights have had connectivity thanks to that satellite.

Operator China Satcom describes the satellite as an important piece of national

space infrastructure and helping to meet national requirements for connectivity.

Zhongxing-26 will mainly provide broadband access for fixed terminals and aviation in shipborne users in China and surrounding areas from 125 degrees East in the geostation-

The overall cost was 2.3 billion yuan (\$333 million), according to a feasibility study. It was China's first launch since Jan. 15, when activities

were suspended for the Chinese New Year. With more than 60 launches planned for 2023, this will be the fifth Long March launch this year. A total of 20 or more launches are planned by various Chinese commercial companies. The 56-meter-tall Long March 3B

will launch for the first time in 2023 with this mission.

The three-stage rocket has four boosters: a third stage made of liquid hydrogen and liquid oxygen, and a hypergolic mixture of hydrazine and dinitrogen tetroxide.

The workhorse of Chinese launches to GTO is the launcher. The rocket, which took off from inland at Xichang, has resulted in a number of debris incidents downrange.

The Long March 7A, billed as a greener, next-generation launcher that uses keroseneliquid oxygen and launches from the coast at Wenchang, has yet to increase its launch rate in order to replace the ageing Long March 3B. It most recently launched a pair of classified satellites on Jan. 9.

China's Envoy Xie Zhenhua Wins Nobel Sustainability Award



The seasoned climate diplomat was given the honour for his outstanding work in promoting global cooperation for sustainable development and addressing global climate change.

The Nobel Sustainability Trust Foundation in Sweden has given Xie Zhenhua, China's special envoy for climate change, the Outstanding Contribution in Sustainability award for the year 2022. The seasoned climate diplomat was given the honour for his outstanding work in promoting global cooperation for sustainable

development and addressing global climate change. In a video acceptance speech, Xie Zhenhua expressed his gratitude and stated: "The honour is the recognition of achievements China has made after years of coping with climate change and

encouraging sustainable development. China has succeeded in eliminating the poverty completely over the past ten years, with an average annual growth rate of energy consumption of 3% supporting an average economic growth of 6.5

China's experience demonstrates that, rather than impeding economic growth, efforts to safeguard the environment and combat climate change can encourage new growth drivers, generate new employment opportunities, and boost the effectiveness and quality of development.

Cui Aimin, China's ambassador to Sweden, offered his warm congratulations and emphasised that China's role in combating climate change and advancing sustainable...Read More

Chinese Scientists Designs Powerful Droplet Based Nanogenerator



The tiny device which was inspired by electric ray fish, can light up more than 1,260 LED bulbs, each rated above three volts, with a single discharge, they claimed.

With an output of 3,000 volts, Chinese researchers claim to have created the most potent droplet-based nanogenerator to date. The team reported their findings in a paper that was peer-reviewed and published in journal Energy Environmental Science.

The tiny device, Droplet Based Nanogenerator, which was inspired by electric ray fish, can light up more than 1,260 LED bulbs, each rated above three volts, with a single discharge, they claimed.

The device used an alternative energy source to achieve 1,600 volts, breaking the previous record of 237 volts held by a droplet-based nanogenerator, according to the researchers.

Song Qunliang and Guo Hengyu from the Southwest University Institute for Clean Energy and Advanced Materials and the Chongqing University State Key Laboratory...Read More

Chinese Startup **Advancing Technology** For Quantum Computing Chips

Engineers from the 2017founded startup Origin Quantum are hard at work testing products at China's first trial quantum chip production line in Hefei, Anhui province.

A Chinese company is working hard to perfect its technologies in quantum computing chips, the next strategic frontier where major economies are frantically trying to establish a beachhead, despite Washington's increasingly strict chip export restrictions on

Engineers from the 2017founded startup Origin



Quantum are hard at work testing products at China's first trial quantum chip production line in

Hefei, Anhui province. The processor for quantum computers is a quantum computing chip. These cutting-edge chips are outfitted with "qubits," which are the distinguishing feature of quantum computing over traditional computing. A qubit can have a value that is either 0, 1, or a quantum superposition of 0 and 1. In contrast, a classical computing bit can only have a value of 0 or 1.

As a result, some equations and algorithms can be processed by quantum computers exponentially more quickly than by traditional computers. A quantum computer's power increases with the number of qubits it has, according to Jia Zhilong, vice president of Origin

Jia reported that in January 2022, a production line for superconductor chips went into operation. 1,500 batches of chip products have been produced so far. To speed up the production of quantum computers on the assembly line, more innovative tools have been created. Origin Quantum created the NDPT-100 in December...Read More

Policies To Maximize Solar Power Applications Are On Way: Experts



This year the nation's new photovoltaic installations are predicted to reach a range of between 95 and 120 gigawatts according to recent projections from the CPIA

Officials and experts predict that PV capacity will grow at a record rate this year, and more policies are in the works to support this growth and maximize solar power applications. National

Administration's deputy head of the new energy and renewable energy bureau, Xiong Minfeng, recently stated that additional efforts are anticipated to promote technical innovation, cultivate a positive business climate, and explore novel scenarios of solar power applications and novel business models in response to issues that impede the industry's development, such as the lack of land available for the installation of PV facility installations and the lack adequate storage...Read More

Steam Platform Not Well Prepared For Launch Of Horror Video Game



The disruption started at 12:00 CT, an hour before Sons of the Forest's scheduled release, and it has now lasted for at least 45

Steam is a digital video game delivery service run by Valve. These platforms need to be well prepared whenever a big game launches. It would seem that the Steam platform did not make adequate preparations for the Sons of the Forest survival hor-

ror game's release. Users of the digital distribu-

tion platform Steam are reporting a bug just before Sons of the Forest's official release. On social media, Steam users who distribute digital games are complaining about the disruption.

The disruption started at 12:00 CT, an hour before Sons of the Forest's scheduled release, and it has now lasted for at least 45 minutes. Some Steam users are still having trouble as of this writing. It should be noted that not everyone is likely to be unable to access Steam...Read More

Strengthen Basic Research Imperative For Self Reliance In Sci & Tech

Third group study session of Political Bureau of the CPC Central Committee on strengthening basic research was held on Tuesday afternoon, and it was presided over by Xi Jinping.

The third group study session of the Political Bureau of the CPC Central Committee on strengthening basic research was held on Tuesday afternoon, and it was presided over by Xi Jinping, general secretary of the Communist Party of China (CPC) Central Committee.

Xi emphasised the importance of basic research to achieve higher levels of self-reliance and greater strength in science and technology. Professor Gong Qihuang gave a lecture on the importance of basic research and Xi made an important speech.

Xi emphasised that the Party and the government have always valued research and that a new round of scientific and technological revolutions and industrial transformations is underway. Interdisciplinary research and integration are progressing, and scientific research paradigms are undergoing important transformations.

According to Xi, it is critical to

address major technological challenges from the source and the bottom in order to respond to international science and technology competition, achieve higher-level self-reliance and greater strength in science and technology, foster a new development pattern, and promote high-quality development.

Xi stressed that we must strengthen the forward-looking, strategic, and systematic layout of basic research, which is the initial end of the scientific research chain from research to application and then to produc-

"We must adhere to the princi-

ples of targeting global scientific and technological frontiers, serving the economy, meeting major national needs, and striving to improve people's lives and health. We must integrate frontier science and technology with the major national strategic needs and economic and social development goals."

"We should keep abreast of the sci-tech trends and the strategic needs of the country, strengthen feasibility studies, select and evaluate major basic research projects, give full respect to the opinions of scientists, grasp the general trends, and make "a good first move."...Read More

