



The Golden Age of Huawei CBG in Pakistan - Mr. Blueking Wang





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Adnan Khan
Managing Editor

Dear Readers,

Our world has been thoroughly transformed by digital technology. The possibilities of this new era of innovation are profoundly exciting. We seamlessly flow through apps and platforms in a natural way, adopting new innovative solutions in our everyday life at an extraordinary rate. At the same time, ICT is ensuring economic stability, national security and facilitation for social interaction within nations as well as between nations. Artificial intelligence, smart technology, robotics, AR, VR, drones and use of other such technologies have changed how things were dealt with in the past.

All of these innovations and developments have hyped the telecom and IT industries around the world. The complexity and fast pace technology changes have made the role of regulators even more important. Thus, the job of Pakistan Telecommunication authority (PTA) is becoming more and more complex which requires the regulator to stay up-to-date with all the latest developments. So, the important thing to consider is that how well-prepared PTA is to keep-up with dynamic environment? This is something that we have tried to discuss in our feature article "The regulator of Tomorrow: How & Why to reform PTA?"

The world is going through a massive digital transformation bringing surface many unique and innovative creations that were hard to even imagine a couple of years back. Pakistan can also benefit from this transformation by taking up the opportunities it offers. We have discussed in detail the fruits of this digital transformation for developing countries like Pakistan in our article, "Unlocking Value for Society: Why Pakistan needs digital transformation". It is a known fact that nations cannot prosper until the women are given equal opportunity in the growth process. Therefore, we have tried to emphasize on the importance of women in today's technological advanced world in two of our articles, each highlighting a different aspect of technology and the part women can play.

This time, our in-focus section features an exclusive interview of Mr. Blueking Wang, Manager, Huawei. Mr. Blueking leads the development of Huawei Consumer Business Group in Pakistan. He took up his current role in January 2017 and since that time has been responsible for driving sales, guiding brand strategy, enhancing distributor partnerships, service localization, and expanding the talent base of Pakistan offices.

Like always, our regular sections including phone reviews, Smart moves, TVC reviews, top applications and smartphone wish list are also part of our current issue. We always try to bring something new and interesting for our readers, we hope you guys will appreciate our efforts and give us your feedbacks so that we can improve further.

Enjoy Reading....!!!

Thank you,
Adnan Khan
Managing Editor

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THE REGULATOR OF TOMORROW: HOW & WHY TO REFORM PTA?



The role of IT and telecom has expanded way beyond the dominion of ICT sector; today health, education, transportation, governance, agriculture, entertainment industry etc are heavily reliant on technology. ICT is ensuring economic stability, national security and facilitation for social interaction within nations as well as between nations.

ARTIFICIAL INTELLIGENCE, SMART TECHNOLOGY, ROBOTICS, AR, VR, DRONES AND USE OF OTHER SUCH TECHNOLOGIES HAVE CHANGED HOW THINGS WERE DEALT WITH IN THE PAST. THIS COMPLEXITY AND FAST PACE TECHNOLOGY CHANGES HAVE MADE THE ROLE OF REGULATORS EVEN MORE IMPORTANT.

Policy makers are forced to respond with better and improved regulatory frameworks in order to foster both innovation and fairness. Typically, a telecom regulator performs three major functions.



By Rizwana Khan

Market efficiency:

The first and foremost responsibility of any telecom regulator is to ensure the sustainability of industry by promoting fair competition and efficiency of industry players. Regulator tries to creating enabling environment for the businesses through friendly policies and strong support system so that business could flourish and FDI increases.



Scarcity Management:

Spectrum is the central commodity to ensure smooth flow of ICT services but unfortunately it is a scarce resource that requires careful management. Given the growth of the mobile market, the spectrum continues to be a scarce national commodity. Spectrum management revolves around two key questions; how much spectrum should be released and how can the government control the use of that spectrum? The telecom regulator keenly focuses on current and future spectrum needs of the country and then decides how much spectrum it needs to release at a certain time.

Safeguard of customer welfare:

Protection of consumer rights is one of the key responsibilities of a telecom regulator. It makes sure that best quality services are provided while safeguarding consumer welfare.

Now with the telecom world changing, the ingenuity of the digital world has become quite unpredictable. New services, applications and technology are stimulating the market in an entirely different ways. The role of telecom regulator has expanded way beyond its conventional role. Competition has become fiercer, new technologies are introduced every now and then, 3G, 4G, 5G evolution has paced up, new players in telecom and IT business are entering the scene while mergers and acquisitions are also taking place.

TO ENSURE THAT EQUITABLE ENVIRONMENT IS PROVIDED TO TELECOM AND NEEDS OF CONSUMERS AND OTHER STAKEHOLDERS ARE MET, IT IS ESSENTIAL FOR REGULATORS TO UNDERSTAND CURRENT REGULATORY ISSUES AND APPROACHES FOR DEALING WITH THOSE ISSUES.

Therefore, constant re-evaluation of regulatory policies is very important. But unfortunately some regulators are not able to perform these roles successfully. For example in India the telecom regulations are extremely strict that make the survival of operators quite impossible. It was because of these harsh regulations that Telenor moved out of Indian market few years ago. The Indian government despite the pleas of operators releases spectrum in very small chunks to make more money. Although it does manage to secure small monetary gains but this move drastically impacts the industry players and consequently the general consumers. Similarly, Pakistan has also been unsuccessful in attracting any new player in the market due to its weak and outdated policies and unfriendly environment.

ICT is one of the biggest industries of Pakistan right now with numerous stakeholders who are working tirelessly to realize the dream of digital Pakistan. The investment and innovation from private sector has played an important role in the ICT boom of the country. There are number of companies that are now working in Pakistan, bringing new technology every now and then. Thus, the job of Pakistan Telecommunication authority (PTA) is becoming more and more complex which requires the regulator to stay up-to-date with all the latest developments. So, the important thing to consider is that how well-prepared PTA is to keep-up with this dynamic environment?

The growth and progress created through digitization has resulted in price cut down of digital services, mobile revolution and more connected internet users even in remote areas. While this digital convergence has benefited consumers and industry in a great way, it has also created challenges for the regulators. For example, the complexity of digital ecosystem markets has heightened regulatory uncertainty while the rapid pace of change makes regulations obsolete quickly. Policy makers all over the world have recognized these challenges and are working to introduce reforms that will benefit consumers and protect competition without impeding the socio-economic growth. PTA has also improved profoundly over the years and made lot of improvements in its infrastructure and policies. Last few years have been the golden years for our industry in which we achieved a number of milestones. Introduction of NGMS, telecom policy, cyber-crime bill are some of the most notable initiative taken by MoITT and PTA.

DESPITE GIVING A GREAT PERFORMANCE OVER THE LAST FEW YEARS PTA IS STILL FACING SOME SERIOUS CHALLENGES THAT ARE SLOWING DOWN THE OVERALL GROWTH.

Few of those major challenges are as follow:

Bureaucracy:

Like every other government organization, PTA also has a bureaucratic system. Although bureaucratic model of management is very democratic in nature in which well-structured organizations follow strict rules and regulations and keep check and balance on the employees. But since it is an old and rigid system, it slows down the decision making process hence resulting in loss of opportunity. IT and Telecom industry which is evolving at a very fast pace cannot afford to be decelerated in any manner.

THE EVER CHANGING AND TECHNOLOGICALLY ADVANCED INDUSTRY ON WHICH ALL OTHER INDUSTRIES ARE RELIANT REQUIRE AN INNOVATIVE ENVIRONMENT THAT IS FLEXIBLE AND UP-TO-DATE, SOMETHING AN OLD BUREAUCRATIC SYSTEM CANNOT PROVIDE.

Therefore, PTA needs to restructure its organization in a way that is adaptable to changing environment and makes timely decisions when and where required.



Outdated Procurement Rules:

In order to modernize itself, PTA not only needs structural changes but it also requires policy changes as well. Public Procurement Regulatory Authority is a autonomous body responsible for prescribing regulations and procedures for public procurements by Federal Government owned public sector organizations with a view to improve governance, management, transparency, accountability and quality of public procurement of goods, works and services still works under Ordinance of 2002. The competition Commission of Pakistan was established under the ordinance or 2007 while FAB is also following the policies and guidelines that were set in early 2000.

THE TIME WHEN WE NEED ROBUST AND FORWARD LOOKING POLICIES OUR TELECOM AND IT ORGANIZATIONS ARE RUNNING ON DECADE OLD REGULATIONS WHICH IS THE BIGGEST HINDRANCE IN INDUSTRY'S AND PTA'S GROWTH.

In fervently changing environment, it is highly important for the regulator to keep up with these changes by continuously updating policies and regulations. Unfortunately PTA has not been able to maintain the same pace. We lack policies and regulations at many fronts. For example we are still unsure about how to handle the growing online services, IoTs, drones, Artificial Intelligences, 3D printing, Augmented Reality etc. so what is needed from PTA right now is to do a comprehensive research and analysis of latest tech trends and then design policies and regulations accordingly.

Top Heavy oversight & Outside Interference:

Despite being an autonomous organization, PTA is not entirely free to take its decisions. For taxation, PTA has to work together with FBR, for cybercrime, gray market and other such issues PTA is reliant on FIA and other security agencies while spectrum management comes under the jurisdiction of FAB. And most importantly, PTA has to look up to MoITT before taking up every decision.

IN ORDER TO WORK TOWARDS THE BETTERMENT OF THE INDUSTRY AND PTA ITSELF, IT IS VERY IMPORTANT TO FREE PTA FROM INFLUENCES OF THESE OTHER ORGANIZATIONS. UNLESS AND UNTIL PTA IS FREE TO TAKE ITS DECISIONS ON ITS OWN, IT WON'T BE ABLE TO PERFORM UP TO ITS TRUEST POTENTIAL.

PTA should be given the upper hand in developing all such policies so that industry could move in the right direction and apprehensions of all stakeholders could be removed in appropriate and timely manner.

Lack of initiatives & innovation :

Since PTA is a government organization, it is heavily influenced by the political institution.

EVERY TIME A NEW GOVERNMENT IS FORMED IN THE COUNTRY, IT TRIES TO BRING ITS OWN PEOPLE IN ALL GOVERNMENT ORGANIZATIONS.

Offering government jobs to their supporters is sort of a reward method used by many politicians. By doing this they compensate their loyal supporters but in the process seriously damage the government institutions by hiring wrong people. Nepotism is a common practice in PTA as well. There are number of under qualified personnel appointed on the key posts who lack the will and ways to be an active part of a supposedly progressive organization but since they managed to build strong relations with their seniors through fawning and flattery, they enjoy a better position in the organization.

What needs to be done?

With continued advances in technology, regulators are facing growing challenges in developing and enforcing rules that protect citizens, encourage innovation and ensure fair markets. But realizing this vision can't happen overnight. It requires investment of financial resources, political capital to develop these capabilities, reengineer processes, and transform cultures to make the best use of them.

THE MOST IMPORTANT THING HERE IS TO DEVELOP A DETAILED AND COMPREHENSIVE STRATEGY TO DEVELOP A MODERNIZED TECHNOLOGY-ENABLED REGULATORY AUTHORITY AND THEN TO LAUNCH PILOTS, EXPERIMENT, LEARN, AND THEN SCALE WHAT WORKS THROUGHOUT THE ORGANIZATION.

Few months ago Pakistan Tehreek-e-Insaaf took over the government which is very forward-looking and progressive in its approach to run the country affairs. So we can expect that in the coming time we might see some major changes in the government setup including in MoITT and PTA.

ALTHOUGH THE MINISTER IT APPOINTED FOR MOITT RAISED MANY EYEBROWS DUE TO HIS NON-IT BACKGROUND BUT SINCE PTI ENVISIONS CREATING A DIGITAL PAKISTAN, WE CAN ASSUME THAT POSITIVE STEPS WILL BE TAKEN IN THIS DIRECTION.

In the previous government, PITB reached the new heights of success under the leadership of Dr. Umer Saif, a lot of growth was also witnessed in KPK province. We need similar kind of motivated and energetic people in PTA as well who are willing to take the initiatives and lead the authority from the front.

HOW SOCIAL MEDIA IS EMPOWERING PAKISTANI WOMEN



There is a saying, “Behind every successful man, there is a woman”. In today’s modern times the role of woman has expanded many folds and now she is not only behind the success of a man but she also plays an important role in the success of a nation. Women are an integral part of any society who play an important role in the development of a country. Therefore, they should be provided with platforms to utilize their talents and improve their standard of living. Unfortunately that is not the case in Pakistan. Social spaces of expression for women have increasingly been squeezed in Pakistan over the years.

Pakistan has become the sixth
Worst country for women to
live in according to
Thomson Reuters
Foundation

According to the Global Gender Gap Report (2017), Pakistan ranks 136th on the attainment of education index, 140th on health and survival and 95th on the political empowerment of women, out of the 144 countries assessed in the report. Pakistan scored 0.546 overall on a scale wherein a score of 1.0 represents parity and 0 represents disparity. The country's female/male population ratio was recorded at 1.06. The index denotes the country's widening gender gap over the decade, as it ranked 112 out of 115 in the year 2006. In the 2017 index, Pakistan only beat Yemen, whereas, even war-torn Syria is ahead of Pakistan.

In such bleak conditions internet and social media has acted as a silver lining for many Pakistani women.

Social Media has given them a voice that was previously suppressed in our male dominated society

Take example of an Islamabad based wheel chair-bound writer and model Muneeba Mazari, who is now considered a beacon of light and an inspiration by many Pakistanis. She took out on social media to express her thoughts and voicing her opinion regarding women power. Her positive role as a motivational speaker and her social work for women enabled her to represent Pakistan as the UN good will ambassador for gender equality and empowerment of women.

Many women opted for social media platforms like Facebook, Instagram and Snapchat leaving behind the old conventional ways of businesses hence, minimizing their dependency on others by becoming online entrepreneurs. Now women who cannot go out for a job have shifted to social media for the very purpose.

Women are now getting a chance to establish a business easily through social media, as now they can manage family and work simultaneously from the comfort of their homes

The idea of running a business remotely and still being able to cater to a large number of clients is a major attraction for women who want to do something in life. We can now find numerous groups and pages on different social media platforms that are run by women for business purposes. Maham Sohail runs a food delivery service page on Facebook, Home Bakers.

As the title suggests, she delivers homemade food items of everyday menu to her customers, operating from the comfort of her home. Another inspiring example is Samara sheikh a 23 years old young business woman, running online card business named Cartolina. Most women have made Facebook pages to sell their homemade

jewelry, food items, clothes etc. freelancing jobs are also advertised on social media platforms, some of which are exclusively for women.

Keeping in view women's interest in earning their living while sitting at home, many organizations have started projects to use the internet to teach and train women.

Hamara Pakistan is a campaign by Digital Rights Foundation which provides workshops and training programs for women via the social media

They offer a safe online environment for women to express their opinions. Besides creating job opportunities social media has also played a huge role in creating awareness among women. It has shed light on women's issues that were previously ignored or considered a taboo.

Social media has also empowered women to speak for themselves through the major platforms

For last many years women related issues were highlighted in Pakistan. An eight-year-old girl was raped and murdered in Kasur.

A few days after she was reported missing, her body was found in a pile of garbage, photos of which were circulated online. Social media users were enraged over the case as they demanded that the culprits be arrested and convicted immediately under the hashtag **#JusticeForZainab**.

Campaign **#MeToo** also went viral on social media in Pakistan.

The MeToo movement was raised against sexual harassment and many celebrities also took part in it.

Campaign **#Timesup** also took on social media, Time's Up started the public conversation about women's issues in Pakistan, highlighting the obstacles women encounter in their daily lives, both at personal and professional levels. **"Aware Girl"** is another campaign being run by Gulalai Ismail, who is a Pakistani activist. The campaign promotes equality and peace.

Websites such as Twitter, Facebook and Instagram have given women an amazing opportunity to not only raise their voices about important issues but at the same time these platforms have also given women an opportunity to start their own businesses.

As social media grows, it gives us the cultural influence to 'be the change'.

It has made women, and other minority communities realize how strong they are, together. Social media has played a major role in changing the way we communicate women issues.

Despite the entire backlash that social media undergoes, we should applaud the fact that due to these new technology discoveries, women's rights are taking center stage.

Digital power is partly responsible for this innovative, robust wave of awareness and independence.

By Rizwana Khan

TECH TWISTS

The Smartphone Zombies

"Smartphone Zombie" name is given to pedestrians who walk slowly and without attention to their surroundings because they are focused on their smartphone.

iPhone Vs Android

On January 9th, 2007 when Steve Jobs unveiled the original iPhone model; Google's Android team, which had been secretly working on a smartphone for two years, were forced to start all over again.

Apple's battery temperature science

Apple suggests 32° Fahrenheit as the lowest operating ambient temperature for the iPhone because a cold smartphone battery can drain faster than normal or it might say it has ample power remaining and then suddenly go dead.

The Gold in Phone

On a by weight basis, there is more gold in a smartphone than there is in gold ore. It takes a ton of ore to get 1g of gold. But you can get the same amount from recycling the materials in 41 mobile phones.

The Tech Drug

According to top addiction experts, "Giving your child a smartphone is like giving them a gram of cocaine".

iphone XS

Finer, Faster and Much more powerful

Design and Display:

IPhone XS is in most respects physically identical to the X from last year. That will make X owners less likely to upgrade, but for the rest of us it shouldn't be taken as a criticism: the X was a beautiful and convenient device to hold, use and look at, and the same things are true of its successor. The phone is slim, lightweight and cleanly designed: it's all about the screen, and the rest of the hardware gets out of the way.

There's no Home button, and almost no bezel around the edge of the display: this is a nearly all-screen handset. The rear of the XS, as on all of the iPhones released in 2017, is made of glass, thereby enabling wireless charging. But Apple tells us the glass has been reinforced, and is now less prone to cracking and scratching. The XS is dust- and water-resistant to the (effectively maximum) IP rating of IP68, up from IP67 on the iPhone X.



Processor, memory and storage

The iPhone XS is a fast and powerfully specced smartphone. It has a new (Apple-designed) A12 Bionic processor chip with six CPU cores and what Apple calls the Neural Engine, backed up by 4GB of RAM (up from 3GB RAM in the X and 8 Plus, and 2GB in the 8). The latter might not sound much, and Android phones often include 6GB or even 8GB, but Apple's optimisation between its phones and their iOS software is so slick that it can get by with less without compromising on performance.

Powering this year's iPhones is Apple's A12 SoC (systems-on-chip), a cutting-edge 7-nanometer processor. In mobile processing, the smaller the nanometers the better. You can choose from 64, 256 or 512GB of storage with, as usual, no option to add more with an SD card.

Battery Life

The XS comes with a 2,658mAh battery, which is a little smaller than the 2,716mAh one you'll find inside the X. Yet, thanks to the improved power efficiency of the A12 chip, Apple claims it'll last 30 minutes longer. The estimates are 12 hours of internet use and 14 hours of wireless video playback.

Connectivity

As well as the expected Bluetooth 5.0, the iPhone XS offers Gigabit LTE, which Apple has been surprisingly reluctant to hype up, reflecting that it is not yet offered very widely. But if you can find coverage it will yield far higher connection speeds than on the X.

You also get dual SIMs, but note that this is not offered by means of twin hardware trays. Instead you get a single SIM tray plus eSIM functionality, you could even have multiple eSIMs on top of the hardware SIM.

By Shaheer Riaz



Camera

On the iPhone Xs, you get a pair of 12-megapixel cameras on the rear. One is wide-angle and the other a 2x telephoto, both optically stabilised, with phase-detect autofocus accompanied by a quad-LED flash. The primary camera has a large sensor with 1.4µm pixels and a brighter f/1.8 aperture, while the secondary camera has a smaller sensor with 1µm pixels and a dimmer f/2.4 aperture. You can shoot stabilized 4K video with the rear cameras at 60fps, and the larger sensor on the primary camera which means the phone can capture greater dynamic range than the iPhone X. Facing the front, meanwhile, we have a 7-megapixel selfie camera with an aperture of f/2.2 and the ability to apply video stabilization, which the iPhone X wasn't able to do. This year's front-facing camera can also record its 1080p footage at 60fps, up from 30fps.

FINAL VERDICT:

The Apple iPhone Xs, just like the Xs Max, is a fabulous smartphone. If you're firmly an iPhone fan but prefer a smaller screen, then you won't be disappointed.

It has better battery life than the iPhone X, a better camera with better portrait photos, HDR capabilities and video, and it's a faster performer too. If you're coming from an iPhone 7 or a 6s, it's an even greater step forward, an expensive one too....!!!

Artificial Intelligence

What it is & Why it Matters?

By Laiba Mohsin



Artificial Intelligence has become the important part of our daily lives today. Our life has changed by AI because it is now used in a wide variety of day to day services.

Artificial intelligence (AI) is a branch of computer which emphasizes the creation of intelligent machines designed to work and react like humans. Back in the 1950s, the fathers of the field Minsky and McCarthy described artificial intelligence as any task performed by a program or a machine. Artificial intelligence was founded as an academic discipline in 1956. The field was founded on the claim that human intelligence can be so precisely described that a machine can be made to simulate it. The traditional goals of AI research include reasoning, knowledge representation, planning, learning, natural language processing, perception and the ability to move and manipulate objects.

There are basically two types of Artificial Intelligence. One is called the Narrow AI and the other is the General AI. Narrow AI based intelligent systems are taught how to carry out specific tasks without being explicitly programmed how to do so. Narrow AI is evident in the speech and language recognition of the Siri virtual assistant on the Apple iPhones, in the vision-recognition systems on self-driving cars, in the recommendation engines that suggest products you might like based on what you bought in the past. While on the other hand, general intelligence is quite different. It is the type of adaptable intellect found in humans. It is a flexible form of intelligence capable of learning how to carry out vastly different tasks. This sort of AI is more commonly seen in movies, the likes of HAL in 2001 or Skynet in The Terminator.

*Whenever anyone thinks of reducing the human effort,
Artificial intelligence is the only option that comes to mind*

Our lives have been changed by AI as it is used in a wide variety of day to day services. All of the major cloud platforms like Amazon Web Services, Microsoft Azure and Google Cloud Platform provide access to GPU arrays for training and running machine learning models. Even though, Google is also gearing up to let users use its Tensor Processing Units that include the custom chips whose design is optimized for training and running

machine-learning models. AI reduces human effort. Due to this reason, the people are using this technology to develop machine slaves to perform the different activities. It can speed up the process of work and gives an accurate result. The introduction of AI brought the idea of error-free world which was practically impossible otherwise.

The major tech firms that are winning the race in AI include

Amazon's Alexa is a revolutionary product that can help us scour the web for information, shop, schedule appointments, set alarms and a million other things using AI.

Cogito is quite possibly one of the most powerful examples of behavioral adaptation to improve the emotional intelligence of customer support representatives. Amazon's transactional A.I is something that's been in existence for quite some time, allowing it to make astronomical amounts of money online. Google Assistant, Tesla and Microsoft Cortana all perform certain tasks using AI.

There are many other examples of AI-based system that are in use today. AI has also an important role in gaming zone too. With AI, Computer and TV games got more development and updates in their fields. There was a time when "Super Mario" was considered as the best game. But nowadays there are different gaming bots introduced. Furthermore, the AI based smartphones have conquered the market nowadays. Companies have

the tech giant, Facebook that uses AI to help drive myriad public services like serving search results, offering recommendations, recognizing people, on-demand translation, spotting spam etc. Apple's Siri uses machine-learning technology to get smarter and better able to predict and understand our natural-language questions and requests.



begun creating special hardware and software dedicated to AI functionality. **Apple's latest iPhones support a neural engine chip which supports its Face ID facial recognition system.** Using AI, "True Depth" front-facing camera is able to create a 3D map of a person's face. Apple also created "Animoji" with this 3D facial-mapping information. The AI-focused hardware of iPhones improves graphics on its augmented-reality feature.



Then Samsung dabbled in the AI space by introducing its own assistant software called Bixby. Google's software allows for smart organization and sharing of photos. Google's popular photos app for iOS and Android is powered by artificial intelligence, to help you find groups of photos.

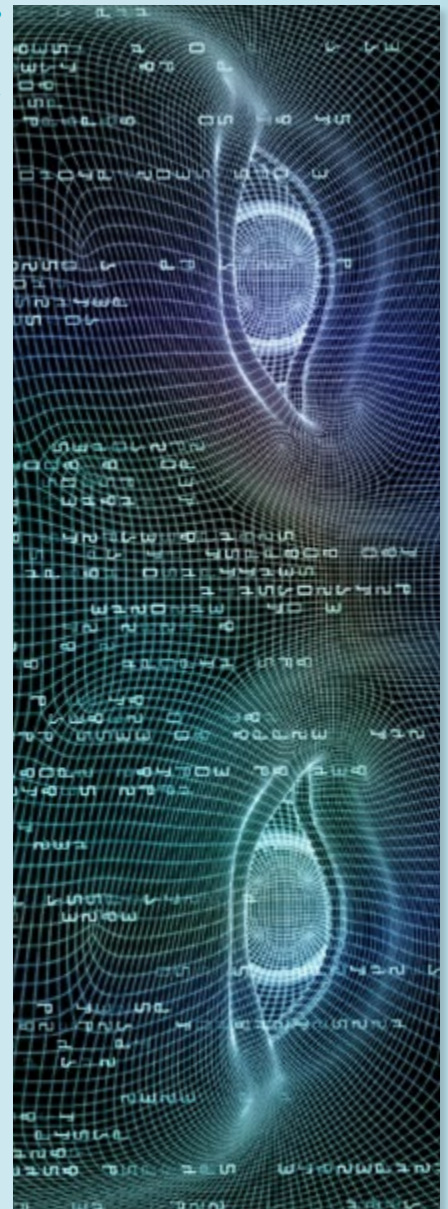
Google Assistant includes a number of voice-activated functions that are used to power Google's visual search engine called "Lens."

Huawei hails itself as the first mobile manufacturer to introduce a dedicated AI chip for smartphones.

Over the past few years, the information technology industry has developed into an all-powerful entity. It has played an important role in giving birth to the "digital era" in Pakistan.

ADD O AI, originating from Pakistan, is one of the emerging AI companies of Asia.

It has concluded various projects in microfinance, smart cities and farming sector in multiple countries. Moreover, ADD O AI has been working as an artificial intelligence advisory firm. Its main focus is on various multi-dimensional projects in AI which are expected to become a trendsetter in coming years. A new tech startup "Mountainise" was introduced this year in Pakistan. The purpose of starting Mountainise was to utilize machine learning and AI in order to promote performance marketing by setting up data analytics teams. Mountainise can take your business goals. It can amplify and executes them with the help of innovative solutions through machine learning and artificial intelligence.



Why It Matters???

There are a number of reasons why Artificial Intelligence matters. AI automates repetitive learning and discovery through data. AI is different from hardware-driven, robotic automation. AI performs frequent, high-volume, computerized tasks reliably and without fatigue. It adds intelligence to existing products. Smart machines can be combined with large amounts of data to improve many technologies at home and in the workplace.

AI analyzes the deeper data using neural networks that have many hidden layers. AI achieves incredible accuracy through deep neural networks. For example, your interactions with Alexa, Google Search and Google Photos are all based on deep learning. They keep getting more accurate the more we use them. In the medical field, AI techniques from deep learning, image classification and object recognition can now be used to find cancer on MRIs with the same accuracy as highly trained radiologists.

AI adapts through progressive learning algorithms to let the data do the programming.

When algorithms are self-learning, the data itself can become intellectual property. The answers are in the data. You just have to apply AI to get them out. These are the basic reasons behind its significance.

AI technology has become an important part of everyone's life. From small to big work everyone is using AI to generate leads and remove the work pressure.

A day will come when the manual work ends and everything will be machine based. Who knows what AI can do for us in the future; maybe there will be a whole society of Robots.

Honor Unveils Honor 8X

Honor 8x has been launched internationally in a grand event which was held in Dubai. Celebrities & other well-known personalities from different fields have attended this great event. Now Honor 8X has also launched in Pakistan. Before, its launch the device was also available for pre-order in Pakistan. The launch event of Honor 8X in Pakistan was held in Islamabad, Karachi, Lahore and Peshawar. The tagline of Honor 8X is "Beyond the Limits".

Brand Ambassadors of Honor 8X in Pakistan are Mehwish Hayyat, Asim Azhar, Momal Shaikh, Irfan

Junejo, Mansha Pasha & Nusrat Hidayat Ullah.

The handset comes with a new Kirin 710 processor with AI Chipset equipped with GPU Turbo Technology. When we look into the internal storage, the device is backed by 4GB of RAM and 128GB of ROM. Honor 8X is a mid-range smartphone but it gives excellent performance, and that is just because of octa-core Kirin 710 chipset. However, the device is packed by Mali-G51 MP4 GPU, which is not a high-performance gaming class component.

In 2018, Honor has released a number of smartphones with great value. Honor 8X has 3.5mm audio jack, furthermore, there is also a dual SIM slot, microSD card port, along with NFC and Bluetooth 4.2 connectivity. The rear fingerprint scanner of the device and face recognition are highly responsive

The powerhouse of Honor 8X is fueled by 3750 mAh battery. Fast charging capabilities come with 5V/2A rather than the 5V/4A option.

When it comes to the camera section, there is a dual camera setup on the back of the Honor 8X. The primary sensor has 20-megapixels of resolution with a f/1.8 aperture and Phase Detection Auto Focus. You can record video at 1080p 60fps. The front shooter has a 16-megapixel with a f/2.0 aperture.





Why Participate in Startup Competitions?

Have you ever thought about why majority of startups fails? Most people never try to figure out the reasons behind the failures, but it is very important to know primarily if you are planning a startup of your own. According to the Forbes magazine, 90% of startups fail, all for different reasons. Through careful research and planning, we can pick some smart tactics to make the startup successful in the industry.

Now-a-days, we can see rapid changes in the world of IT. **Many people have invested in IT industry but some of them got success and their startups turned into big business while others couldn't survive the competition.** Most startups fail because the founders lack the self-awareness and knowledge about the market. Startup competitions offer great help in giving the right direction to new entrepreneurs by providing them a great learning experience.

Entities like P@SHA, IGNITE, NIC (National Incubation Centre), TiE Islamabad are some of the names who are brewing startup competitions in Pakistan. P@SHA (Pakistan Software Houses Association) is a private entity founded in year 1992 to stimulate the software and service industry in Pakistan. Moreover, P@SHA strives in aiding the Pakistan's IT firms to get their voices heard on the global IT platforms. Similarly, IGNITE is another podium for startup competitions in Pakistan, and its sole purpose is to fix the innovation value chain in Pakistan with its primary focus on the IT sector.

The NIC (National Incubation Center) is a state of the art technology hub launched by the Ministry of IT & Telecom, IGNITE fund, Jazz and Teamup. Similarly TiE is also a non-profit organization for the entrepreneurs. TiE believes and works on their five basic developed pillars to infuse the concept of entrepreneurship through; mentoring, networking, education, incubating and funding. The inculcation of startup competitions in Pakistan is apparently a promising feature for the entrepreneurs and will instill a positive business mentality especially in the minds of young entrepreneurs. **Besides that, many universities like NUST, LUMS, Iqra University also hold startup competitions to promote and facilitate their students.** These university students then participate in international competitions as well which provides them even greater learning experience.

Participation in IT startup competitions is a great way to know the demand of the market and how entrepreneurs should plan the strategy for their business. By participating in such competitions they learn a great deal. If you are intrigued that how IT startup competitions can help you in your start up ideas, we have outlined some benefits.

NETWORKING OPPORTUNITIES:

Startup competitions are the best place to network. In these type of competitions you will not only be surrounded by people with innovative ideas that could change the world, but you will also get a chance to meet some of the most influential entrepreneurs and investors on the scene in the form of judges, mentors, and speakers. **It is a great channel to meet professionals and expand your network locally and globally.**

A strong network is key to startup success. You would also get a chance to interact with peers who have faced similar challenges. These relationships can help you to grow and develop your startup. Moreover, you can secure investors and meet mentors. This all will help you stay in the loop on what's happening in your field.

MENTORING:

In Startup competitions, startup founders, employees, and attendees are privileged to **one-on-one mentoring session with some of the most creative minds.** From tech titans to serial entrepreneurs, you will get a chance to know all the ideas you will ever need to grow your business.



EXPOSURE:

Even if you don't win the Startup competition, it is OK. As the main purpose of participation in these type of competitions is to get exposure. **Startup competitions for IT industry help placing you in front of notable investors throughout the conference.** Plus, you can get plenty of opportunities outside of the conference as well. The companies that host startup competitions usually have a strong PR arm. These companies design competitions just to bring investors and entrepreneurs under one roof so you would also get a chance to make strong PR with top industrialists.

FUN:

Being an entrepreneur can be stressful, maddening, and downright unenjoyably at times. The Startup competitions bring together like-minded individuals from across the world. The main purpose is to spur innovation, develop startup support, and have a little fun. **The startup competition is filled with engaging workshops that can help you wind down that high strung mentality and you take some time to relax.** Moreover, you can get rid of responsibilities for a while that entrepreneurship has placed on you.

FEEDBACK:

When you present your idea to an audience, you gain the opportunity to receive valuable feedback from potential investors and clients on your startup that in return provides you the knowledge that how you can develop your idea further. As the business idea is the heart and soul of any startup, you can use these competitions to conduct informal market research. You can gain meaningful feedback from your target market by meeting potential customers and present them with your product.

BUILD CONFIDENCE:

There is a great saying, "Practice makes perfect" **Startup competitions give you a platform to present your startup in a real, competitive, and high-stakes environment.** The valuable feedback from the judges will build your confidence. Moreover, it will allow you to perfect your pitch and be more comfortable to present it in the future.

MEDIA ATTENTION:

There are tons of reporters at the startup competitions. So you can reach out to schedule meetings with key journalists or might be some approaches you by them. It can be helpful to advance your startup.

Most people typically think that when it comes to competition, you have to win in order to be successful, which is not the case. **Startup competitions are about more than just winning.** We all know that running a start-up can be a tough task and being an entrepreneur you have to overcome many obstacles. This can sometimes weigh you down. However, after talking to fellow entrepreneurs you will realize that you are not the only one facing the hurdles but they are also going through the same thing. You will definitely feel good when you come to know that you are not the only one who is struggling and fighting in order to accomplish your vision of what you want to achieve plus it will be a great learning experience.

Smart Moves for smarter Nation

● Computerization of Police Stations CMS

Registration of a complaint (for example loss of an ID card or vehicle theft) at a police station used to be tedious work. The complainant had to visit the police station in person and there was no mechanism for follow-ups and no platform for police officials to check the total number of complaints at a particular police station. Police personnel were also considered unwelcoming and the procedures for lodging a complaint were unclear to the general public.



To resolve these issues, the PITB developed an automated web-based complaint management system. Details of the complaints and the complainants are entered in the system and a complaint number is provided to the complainant through SMS. The CMS system provides an interface to complainants to check the status of their complaint and a dashboard for police officials to monitor activity.

● NTC GoSmart Application

National Telecommunication Corporation has launched a smartphone application to facilitate its customers. The mobile application has provided mobility to existing NTC subscribers who are to be able to use their fixed line services using the mobile application (GoSmart) anywhere using internet. Through this application subscribers can enjoy low cost international calls and can be used during international traveling thus no international roaming charges.



● Itelaa Digital Reporting Hub

A web-based automation platform "ITELAA" for digitization of police FIR reporting system has been developed by KPITB. Under the pilot project in Malakand, establishment of a central command and control room to monitor centrally connected 14 Levy Posts and 6 Chowkis through ITELAA platform and online supervision of Malakand Levies force's operations through vehicle tracking system. After successful deployment in Malakand, the ITELAA platform will be introduced in all districts of Khyber Pakhtunkhwa to further enhance the image of police force and ensure peace and stability in the province.



KPITB will deploy the software "ITELAA" for automation of FIR/Roznamcha and other registers in locations identified by the Home and Tribal Affairs Department, Govt. of Khyber Pakhtunkhwa. For provision of ITELAA software at each Police Station/Post location, KPITB will be provided a software licensing fee by the Home Department for software provision, maintenance and technical support purposes.

Honor 8X

Stunning Design & Impressive Cameras

Display & Design:

Honor 8x has a 6.5-inch notch display that is wider than the notch we saw on the Huawei P20. It is understandable considering that it houses a 16 megapixel front cameras sensor and the earpiece with LED flash. On the back we have dual rear cameras, the LED flash and the fingerprint scanner. You will also notice its gradient colors blue and purple which Huawei calls the iris purple.

The Honor 8x feels nice in the hands and provides a unique glass body feel. Honor 8x is equipped with a 6.5-inch full view display 2.0 bezel size with full HD plus resolution. It has a 19.5x9 aspect ratio and boasts an 84% screen to body ratio.

There's also an option to adjust color modes from normal to vivid as well as color temperature from default to warm or cold. In addition to that, it has split-screen support; you can also hide the notch if you're not fond of it. We like the quality of the display as images and texts are sharp. It provides a good viewing experience whether you're browsing, watching videos or playing the games.

Processor & Memory:

Honor 8X has a 2.6 GHz octa-core processor with Hisilicon Kirin 710 chipset. This chipset is the best for networking, connectivity, and gaming. It comes with 6 GB RAM and 64/128 GB ROM and a card slot option that supports up to 400 GB.

Battery:

Honor 8x has a fixed battery of Li-Po 3750 mAh which is good enough but it would have been much better if they had provided 4000 mAh battery as it has a 6GB RAM with an octa-core processor that requires more power.



Camera:

The primary sensor offers 20-megapixels of resolution with a f/1.8 aperture and face Detection Auto Focus. Video recording is capped at 1080p 60fps, so there's no 4K recording option here.

The 20-megapixel camera offers plenty of details in well-lit shots and i not even one faced trouble finding the correct exposure. However, the Honor 8X's processing can oversaturate colors some of the time. Honor's big selling point with all of its recent phones are their AI camera capabilities.

The secondary camera is used entirely for depth calculation, enabling re-adjustable aperture and bokeh after taking the picture. The front-facing camera is a 16-megapixel affair with a f/2.0 aperture.



Final Verdict

The Honor 8x is a stylish smartphone with a full-screen notch display, decent battery timing and some great specs plus the price is perfect for midrange customers.



The Golden Age of Huawei CBG in Pakistan

Phone World interviewed Mr. Blueking Wang, Manager, Huawei CBG at the maiden launch of Huawei's nova Series in Pakistan. Mr. Blueking leads the development of Huawei Consumer Business Group in Pakistan, by overseeing a large and multi-dimensional team which has grown rapidly over the past several years. He took up his current role in January 2017 and since that time has been responsible for driving sales, guiding brand strategy, enhancing distributor partnerships, service localization, and expanding the talent base of Pakistan offices.

By Rizwana Khan

PW: Huawei entered Pakistan back in 2012. It has been six years of experience for you and the company. How challenging has this journey been so far?

Ans: Over the past six years since Huawei has successfully established itself in Pakistan as a global technology leader. The brand has received an overwhelming response in this emerging market, as we continue to gain the trust of our consumers. Being ranked among the top three smartphone brands in the world, we are setting new standards with continuous innovation, to cater to the evolving needs of numerous segments of consumers. In Pakistan, it is well reputed for offering cutting-edge technologies and revolutionary smart devices in different price ranges. Our products, both hardware and software, promise superior performance, advanced features, connectivity and craftsmanship. Thus, we are consistently

exceeding consumers' expectations, to become the most loved brand in Pakistan.

PW: How significant Pakistan remains for your global operations?

Ans: Since Pakistan is globally recognized as a rapidly emerging market for smart devices, Huawei's endeavors had enabled it to conquer 10.5% of Pakistan's market share in Q2 2017. This jumped to 22.2% at the end of Q2 2018 reflecting an year-on-year increase of 111.4%.

The smartphone market in Pakistan has developed robustly over the recent years.

It is a testament to the tremendous potential of this domestic market to grow in future. Huawei has plans to capitalize on this opportunity, with the introduction of next-gen smartphones, to deliver the ultimate smartphone experience for users.





PW: Over the years, smartphone industry has seen rapid changes, how do you see things shaping up in future?

Ans: The Pakistan market is highly receptive to innovative technologies.

Huawei is strategically introducing feature-rich devices to enable consumers to adopt 3G and 4G services, to capitalize on these great opportunities, being created by the evolution of telecom industry.

Huawei is known for creating the best-in-class smart devices to enrich its consumers' lives with delightful experiences and higher productivity, while the company is opening new vistas for technological innovations.

PW: How do you plan to counter challenges from other rivals such as Samsung and Apple in the region? Especially now when many Chinese smartphone brands have also entered the Pakistani market and have secured a very strong foothold?

Ans: Over the past two years, Huawei's performance has been extraordinary.

Market-Research and statistics show that; Huawei is closing in on the No. 1 spot in Pakistan with a difference of 0.9% remaining.

The GSMA Intelligence report states that; "Pakistan is poised to witness 17 million unique mobile phone subscribers till 2020". Therefore, Huawei is focused on capturing the maximum ratio of this market-growth. We have already seen indications of rapid growth for Huawei, as the year 2017 was incredible for Huawei CBG in Pakistan, where the company maintained a steady growth and increased its market share.

PW: What are Huawei's present and future strategies/plans for Pakistan? How is Huawei trying to expand its market coverage in coming days?

Ans: Our strategy for market penetration comprises of multiple prongs. We have built the trust of our consumers by ensuring unmatched reliability in our products. On the other hand, we have marketed the brand aggressively as a global leader in innovation, to improve awareness about our quality and reliability. In the beginning of 2016, Huawei's brand-awareness was at 79%, while the ratio of consumers' 'Consideration' for this newly launched brand was at 10% only. Within one year, at the end of 2017, Huawei's brand-awareness has risen to 91%, reflecting a growth of over 15%. Within the same period, consumer preference for Huawei increased tremendously. So today the 'Consideration' ratio for Huawei stands at 48%. This reflects a staggering 380% increase in the consumer's inclination to buy a Huawei device.

From December 2017 till September 2018, HUAWEI Mate 10 lite has reigned No. 1 in the mid-range segment (USD 200/- to USD 300/-) in Pakistan, leading the way for Huawei to soon become the number one brand in Pakistan.

PW: What set Huawei apart from other smartphone brands especially its Chinese competitors in terms of hardware and quality?

Ans: Continuing with its winning streak and the popularity of its powerful devices, Huawei expanded its market share in Pakistan to 22.2% in Q2 2018, reflecting an year-on-year increase of 111.4%. The GfK report in May

2018 has stated that; One-in-four customers across Pakistan chose HUAWEI Y7 Prime 2018 in the USD 100/- to USD 200/- segment, making it the bestseller in this category. Huawei has also achieved exceptional success in the entry-level segment to become the leading brand in this segment of Pakistan's market. Among the mid-range devices too, HUAWEI Mate 10 lite is the most preferred device in Pakistan in its price segment.

PW: Huawei is very focused on its camera feature; the 64 MP cameras, dual lens technology and other such extra-ordinary features have put Huawei on the top. What are your views on that?

Ans: Smartphone photography has tremendous potential and Huawei has instilled technological breakthroughs in smartphone imagery. It was the first company to debut the dual camera setup on the HUAWEI P9 in partnership with Leica – an industry first that later became the norm for every other smartphone. Once again, Huawei led the industry by debuting triple cameras on a smartphone with the HUAWEI P20 Pro. **We believe that smart-device cameras act as the consumers' eyes on the world around them.** More powerful cameras can promise the growth of social networking, live-streaming and Artificial Intelligence, etc. Vivid imaging and crisply captured videos allow better creative expressions and memory sharing by people.

PW: How soon would 5G technology become a reality, do you think Pakistani market is ready for 5G?

Ans: **Advancements in technology have given rise to the need of faster internet connectivity.** Therefore, 5G is the future of the internet. It will be commercially available in many countries by 2020, and we believe that it will be a groundbreaking experience for everyone. Huawei has been exploring 5G since 2009. It remains dedicated to innovation and 5G over the past few years. The company has injected at least USD 600 million in 5G research and innovation before 2018, achieving breakthroughs in areas such as the network architecture, spectrum usage, air interface tech, prototype development and field verification.

In Pakistan, we will launch 5G-enabled smartphones, but the onus of 5G connectivity lies with the telecom operators.

PW: What reforms do you think are needed to support the development of the ICT industry in Pakistan?

Ans: Huawei acknowledges that the Pakistan Telecommunication Authority's (PTA) has played a pivotal role in the robust growth of the IT and telecom sectors, by realigning the federal and provincial taxation policies to suit the evolving needs of this promising industry. Huawei has always been a prudent organization that abides by all the laws that govern the industry, while the company also advocates strict code of conduct to control illegal import of devices. Stringent qualification and auditing standards have been implemented for Huawei agents in Pakistan too.

PW: What are some groundbreaking innovations that we can expect from Huawei in the future?

Ans: Huawei can foresee a smart digital revolution that is bringing a paradigm shift in the socio-economic environment around the globe. Artificial Intelligence (AI) is enabling the next-level of global operations, accessibility and productivity. Huawei is pioneering powerful solutions based on AI, while the consumers can now enjoy unprecedented improvement in digital experiences. Huawei smartphones are now being upgraded to intelligent phones. We believe, by the year 2025, almost 90% of device users will have intelligent phones, with fascinating new advantages and features. **With our eyes on these amazing futuristic technologies, Huawei was the first company to innovate and bring AI technology to the common consumers,** with the Kirin 970 chipset powering its revolutionary smartphones. Huawei has the pride to introduce the first-ever smartphone processor that can perform AI tasks, using a dedicated neural processing unit (NPU) to deliver a seamless and ultra-fast AI experience. Continuing with our fascinating innovations, Huawei is rapidly transforming into an AI-first company, by integrating natural language and image-processing technologies into its new generation of devices.

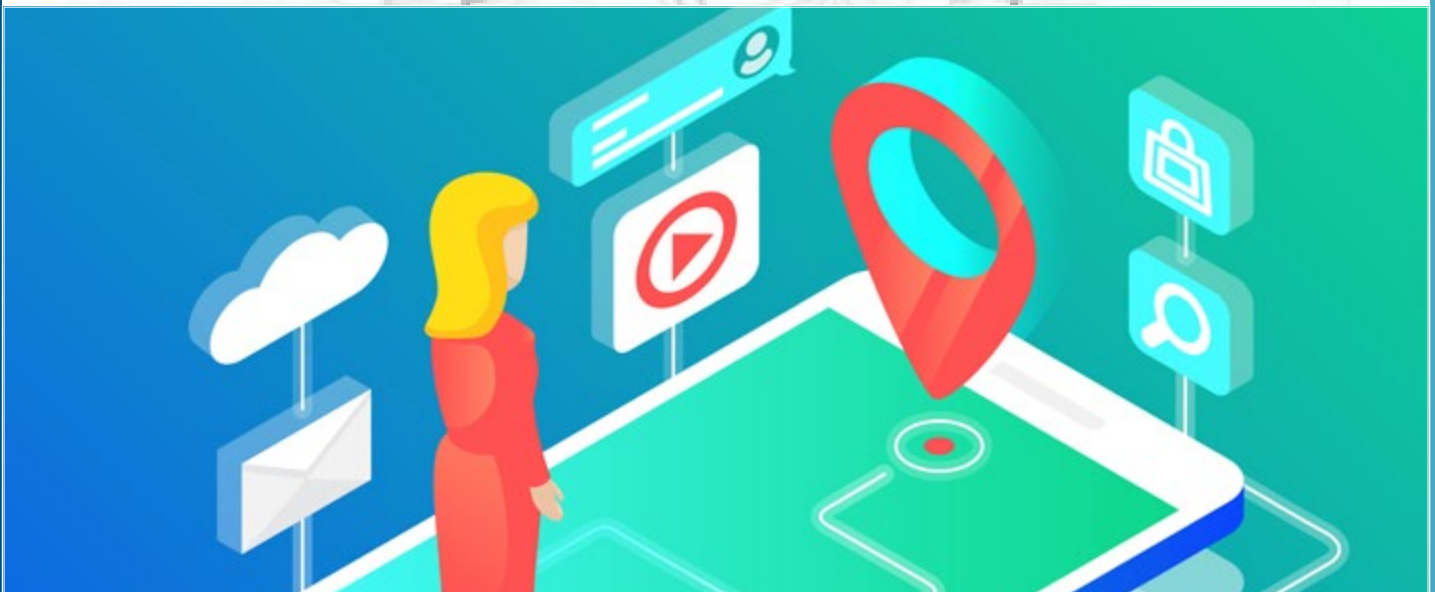
Unlocking Value for Society

Why Pakistan needs Digital Transformation

The world is changing day by day, opening doors for the new ideas and innovations. One of the hottest topics that we come across nowadays is Digital Transformation. The digital transformation is the amalgamation of digital technology into day to day activities of our lives. It is reforming the way how things were done, hence creating more value for the people.

**DIGITAL TRANSFORMATION NOT ONLY IMPROVES
THE EXISTING TECHNOLOGIES BUT ALSO
ENCOURAGES INNOVATIONS.**

Disruptive technologies such as Artificial Intelligence, Blockchain, Augmented and Virtual Reality, drones, advanced robotics and all other types of connected devices leveraging IoT and cyber-physical systems, as well as 5G connectivity and cloud platforms are continuously transforming our lives. Many developing countries are focusing on the digital transformation.



The main reason for accelerated adoption of the digital transformation is the internet penetration and use of mobile phones.

According to Ericsson's findings, the total number of mobile subscriptions was around 7.9 billion in Q1 2018 whereas; there are now 5.5 billion mobile broadband subscriptions. The introduction of Next Generation Mobile Services played a major role in this boom and laid the ground for the digital transformation. Now the world is moving towards 5G technology that will further strengthen this tech revolution.

The digital transformation has brought to surface many unique and innovative creations that were hard to even imagine a couple of years back. Take for example self-driving cars, many automakers, including Tesla, Nissan, General Motors, Uber, and Waymo, already hope to be either selling self-driving vehicles or at least using them in commercial ride-sharing services by 2025. A smart city can be considered as the epitome of digital transformation, which integrates all the traditional technologies with emerging ones to improve the quality of life. There are already more than 50 state-of-the-art smart cities in the world while many regular cities are also picking up some of the smart cities features.



The benefits of the digital transformation are unlimited; inclusive and sustainable growth, improved governance, and responsive service delivery are just to name a few.

Digital innovation can both generate value for business and unlock benefits for society, by creating jobs, saving lives and reducing emissions. Given the magnitude of change in competitive advantage that digital technologies can confer on adopters, the risks of slow or poor adoption of these innovations can be dire for industries, governments, individuals, and nations.

What we need right now is a holistic view of ICT and complementary investments; mobilization of demand for good governance and better services and promotion of public-private partnerships, among others.

PROMOTING AN INCLUSIVE INFORMATION SOCIETY WOULD EMPHASIZE DIGITAL LITERACY, LOCAL CONTENT, SOCIAL INTERMEDIARIES, AND GRASSROOTS INNOVATION.

Policy measures for the business transformation should include affordable access to Internet and digital technologies; mobile finance; digitally enabled government to business transactions; platforms to facilitate trade and e-commerce; and Internet-based training and business services.



Mastering the digital transformation process demands solid managerial and technical skills, leadership institutions, policies and regulations for a digital economy, and a competitive communication infrastructure and ICT industry. It calls for strategies to strengthen academic institutions and reposition them for a digital economy. It calls on stakeholders to define clear roles for government, business, and development partners, and to build competent institutions to lead the transformation process. We also need to work on key policy issues such as privacy and cyber security to promote a local ICT service industry that supports a vibrant transformation ecosystem.

The journey of the transformation is hard, especially for a country like Pakistan where people and entities are traditionally maintaining less technology savvy culture and are more inclined to resist digital transformation process. Therefore, the most daunting challenge of all is to sell the idea of change itself. We have seen great improvement in health, education, commerce, and governance and agriculture sectors of the country that has exerted beneficial impact on the socio-economic state of the country. Hopefully, the newly elected government of PTI will follow the same pattern and build the much needed digital infrastructure to promoting Information Technology (IT) sector of Pakistan.

Demis Hassabis

The Superhero of artificial Intelligence

Demis Hassabis is the Founder and CEO of DeepMind, a neuroscience-inspired AI company which develops general-purpose learning algorithms and uses them to tackle some of the world's most pressing challenges. In 2014, DeepMind was acquired by Google in their biggest ever European acquisition.

A child chess prodigy, Demis coded the classic game Theme Park aged 17. After graduating from Cambridge University in Computer Science, he founded videogames company Elixir Studios and completed a PhD in Cognitive Neuroscience at University College London. Science declared his research on imagination and memory as one of 2007's top breakthroughs.

“We need to help build a genuine understanding about how AI could affect the society so that we could anticipate and direct its impact together. “

He is a five-time World Games Champion, recipient of the Royal Society's Mullard Award, and a Fellow of the Royal Society of Arts and the Royal Academy of Engineering, winning the Academy's Silver Medal. In 2017 he featured in the Time 100 list of most influential people, and in 2018 he was awarded a CBE for services to science and technology. Computing history was made in 2016, when artificial intelligence software defeated the world's best human player at Go, an ancient Chinese game. This was no small feat: A single game of Go has more possible moves than the estimated number of atoms in the universe, making it extremely difficult for computers to master. The software, AlphaGo, was created by Demis Hassabis. The victory cemented Hassabis' place at the forefront of research into the most consequential emergent revolution in human history: the creation of advanced, super-intelligent A.I. As such, he'll be a vital part of the ongoing conversations about the existential risks and rewards artificial intelligence could bring.



Samsung Galaxy Note 9

The Best Big Phone

Samsung Galaxy Note 9 sports a 6.4" Super AMOLED quad HD plus display. The 516 pixels per inch giving it 2960x14 resolution. YouTube also gave its stamp of approval because the phone does support multiple resolutions and can decode YouTube vp9 codec. In addition, you can also watch movies on HDR as well that's high dynamic range giving you even more colors and better contrast than on screens.

Camera:

Samsung Galaxy Note 9 features a dual camera system similar to what you'd find on the Galaxy S9 Plus. It sports a dual aperture wide lens which can switch between F 2.4 and F 1.5 and it's also got a telephoto lens as well. Both cameras shoot the same scene when zoomed in. The cameras also have dual optical image stabilization whereas, the live focus feature allows you to change the amount of blur behind your subject both before and after the photo is taken.

The Qualcomm Snapdragon does show its chops here in the camera specifically as it allows for a few specific features, first of all, that super slow-mo feature we saw on the S9 is carried over to the note 9 that allows you to shoot at 480 frames per second at 720p. Speaking of high frame rates Snapdragon 845 processor enables greater low-light photography and the scene optimizer.



S-Pen:

The new and improved S Pen has now changed from a mere note-taking accessory into a full-fledged remote control. The addition of Bluetooth adds a few cool features to the s-pen for example, now it functions as a remote camera shutter letting you take pictures from up to 30 feet away there's also a presentation mode that controls the slide-show remotely when using Samsung's decks feature.

Battery:

The battery life on the Galaxy Note 9 is stunning with its 4000 mAh battery. A 4000 mAh battery is the biggest battery that's ever been included in a Samsung Galaxy Note phone. Samsung says they've also done extensive third-party verification. They took these extra measures because Galaxy Note 7 failed spectacularly due to battery problems in the past.

By Shaheer Riaz

**Memory:**

Samsung has been shipping phones with 64GB of storage at the base level for few years now but I was surprised to see that this year with Note 9 they started 128GB with 6GB of built-in RAM. They also have a second model which is packed with 512GB of storage with 8GB of RAM. Samsung Galaxy Note S9 also has the built-in SD card slot that supports 512GB.

Our Verdict:

On the whole, Samsung Galaxy Note 9 is an amazing device with great specs.

The price is a little high and people are not happy about it but it's a Samsung Note Series which is always a little expensive. S-Pen, memory and camera are some of the most notable features of Galaxy Note 9, a device definitely worth buying.

Time to Act

CLOSING THE GENDER GAP IN TECHNOLOGY

Mobile phones have the power to revolutionize in our lives. The Mobile technology influences our economy, society and personal lives. It facilitates people to access better information and communication opportunities. Moreover, it has enabled new services and products that have played an important role in improving the socio-economic conditions of our society. It especially has the power to transform women's lives by empowering them and giving them economic independence.

MOBILE TECHNOLOGY ENABLES THE WOMEN TO
OVERCOME PHYSICAL BOUNDARIES, ESPECIALLY IN
PLACES WHERE THEY ARE SEPARATED FROM THEIR
SUPPORT NETWORKS.

They feel more secure and confident when they have their own mobiles as they get better access to information, connectivity and life-enhancing opportunities.

Unfortunately, despite the improving mobile penetration, women are still left behind especially in third world countries like Pakistan.

This unequal access to mobile technology has no doubt put adverse effect on socio-economic growth. GSMA is one of the most active proponents of reduction in gender gap in mobile technology. It annually publishes Mobile Gender Gap Report that highlights the status and problems related to gender gap in mobile technology. Extensive data is collected through survey from more than 20 low- and middle-income countries across Asia, Africa and Latin America.



According to GSMA's gender gap in mobile technology 2018 report, Women are 10% less likely than men to own a mobile phone in low- and middle-income countries and over 1.2 billion women don't use mobile internet in these countries whereas, 26% women are less likely than men to use mobile internet. These figures show the significant gender gap in mobile usage. If we talk specifically about Pakistan,

THE REPORT STATES THAT ONLY 44% WOMEN OWN MOBILE PHONES WHEREAS 80% MEN ARE USING MOBILE PHONES.

The figures show huge gender gap in mobile ownership in Pakistan. On the other hand, mobile internet penetration is also very low in Pakistan that is only 10% of women in Pakistan use mobile internet compared to 26% of men.



This gender gap in technology exerts negative impact on the socio-economic growth of our country. It is one of the major reasons why Pakistan has still not reached the desired level of development. When we compare our economy with other developing countries, we will find out that our economy is not as stable as others. Pakistan is a developing country and the development of our country is not possible without the participation of women. There is a need to empower women in every field. In the era of tech revolution, it's not possible for any nation to grow if women do not get a chance to play their roles which is not possible without usage of technology.

Mobile phones enable women to overcome physical boundaries and stay in touch with their friends and family via phones making them more confident and independent. Mobile phones can also enable women to start business in a remote area and open gateway to financial Independence. Women can sell their products online and do freelancing and make decent earning to improve their living standards. Mobile phone enhances literacy in ways that empower women. They can use phones as communication and learning tool to educate themselves.

Although societies around the world have become quite modernized but the socio-cultural barriers are still prevalent that are hindering the women progress especially in developing countries like Pakistan. The patriarchal family system in Pakistan forbids women to take their own decisions and be completely independent. The literacy rate is also quite low in Pakistan as compared to other countries. Pakistan's literacy rate has declined from 60 percent to 58 percent, as revealed by the economic survey of Pakistan.

THE ONLINE SECURITY CONCERNS AND AFFORDABILITY OF HANDSETS FOLLOWED BY THE COST OF CREDIT ARE SOME OF THE OTHER REASONS FOR INCREASED MOBILE GENDER GAP IN PAKISTAN.

The government needs to minimize these barriers in order to encourage women to take up technology. In order to do so, GOVERNMENT SHOULD RUN MEGA CAMPAIGNS TO CREATE AWARENESS ABOUT THE BENEFITS OF MOBILE PHONES. Furthermore, in these type of campaigns, the dilemma of women regarding the mobile phones and internet should be addressed by educating them how they can use mobile phone for their protection. Other than that, conducting free seminars for women can also help them acknowledge the benefits of technology and via this they would be able to use the mobile on their own without relying on others.

THE GOVERNMENT SHOULD ALSO ANNOUNCE EXCLUSIVE SCHOLARSHIP FOR WOMEN IN THE FIELD OF TECHNOLOGY IN COLLEGES AND UNIVERSITIES SO THAT WOMEN TAKE MORE INTEREST IN THIS FIELD. The government should also provide secure cyber space for women so that they can use internet without the fear of harassment and online bullying. Private sector can also play its part in closing the gender gap in mobile technology for example mobile operators can offer special packages for women that are affordable and do not put extra burden on their pockets. More women focused apps should be launched to facilitate women and enrich their interest in technology. The schools should engage girls in technology from early age in order to develop their interest in the use of new technology.

Closing the mobile gender gap represents a substantial commercial opportunity for the industry and can provide an effective catalyst for economic growth. SUCCESSFULLY CLOSING THE MOBILE GENDER GAP WILL ALSO PROVIDE SUBSTANTIAL BENEFITS TO WOMEN, THEIR FAMILIES AND THEIR COMMUNITIES AND WILL CONTRIBUTE TO THE ACHIEVEMENT OF THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS. When women thrive, societies, businesses and economies thrive.



How to wipe a Hard Drive



Wiping a hard drive means completely erasing the drive of all its information but deleting and formatting doesn't do the job completely. You'll need to take an extra step to do that and we'll tell you how.

Follow the easy steps below to completely wipe a hard drive:

1. Back up anything you want to keep. When the hard drive wipe is complete, there will be absolutely no way to get anything on the drive back. If you've already been using an online backup service, you can safely assume that all your important files are already backed up online.
2. Download a free data destruction program. You can use this program to wipe a hard drive from outside of Windows, a necessary feature if you want to wipe the hard drive that Windows is installed on. Our favorite one is DBAN, it's probably the most widely used hard drive wiping tool.
3. Next, complete whatever steps are necessary to install the software or, in the case of a bootable program like DBAN, get the ISO image on a CD or DVD disc, or a USB device like a flash drive:
If you're using a CD or DVD, this usually involves burning the ISO image to a disc and then booting from the disc to run the program.
If you're using a flash drive or other USB drive, this usually involves burning the ISO image to the USB device and then booting from that USB drive to get started.
4. Wipe the hard drive according to the program's instructions. You can now install Windows on the drive, create a new partition, sell or give away the hard drive or computer, recycle or dispose of it, restore your backed up files, or whatever else you need to do.

If what you really want to do is just make sure that files you delete are really gone, a data wiping tool is more than you need. Download a free file shredder software program to destroy individual files on an as-needed basis.

JAZZ WINS PAKISTAN'S FASTEST MOBILE NETWORK SPEEDTEST AWARD FROM OOKLA

Islamabad, September X, 2018: The Speedtest® award from Ookla® goes to Jazz, Pakistan's leading digital communications company. Ookla, an independent global leader in internet testing analyzed tests from a large sample of genuine mobile users in Pakistan, and found Jazz to be significantly ahead of its competitor telecom networks.

Jazz is the country's fastest mobile network. This is significant because not only is Jazz the largest operator of the country, but also has the largest mobile internet user base of over 20 Million customers. Now, as Pakistan's fastest data network provider, Jazz consistently looks to offer subscribers the best online experience.

CEO of Jazz, **Aamir Ibrahim** said about the Speedtest award, **"When a global leader such as Ookla, recognizes Jazz's efforts to ensure that mobile communications technology remains at par with global standards, we consider it a huge win. We have always been committed to enabling users of our data services to upgrade their lifestyle for all things online."**

"With millions of tests taken using Speedtest every day, Ookla has developed a robust and comprehensive view of worldwide internet performance. It is our pleasure to recognize Jazz as the fastest data network in Pakistan based on our rigorous analysis. This award is a testament to the Telco's exceptional performance, as experienced by their own customers during Q1 and Q2," said Jamie Steven, Executive Vice President of Ookla.

Pakistan's fastest network by a huge margin

The analysis by Ookla is based on an analysis of over 700,000 user-initiated tests carried out nationwide. The findings recorded from mobile tests with the Speedtest® app during the first half of 2018 resulted in Jazz achieving a Speed Score™ of 17.03, whereas the average score for other competing networks was 9.32.

Jazz's best-in-class mobile experience

Jazz lives up to subscribers' demands with an ambition to roll-out the latest services and products, and a fast, reliable data network spanning the length and breadth of the country are reasons why the mobile operator is the network of choice for over 55 million subscribers and has the highest number of mobile internet users at over 20 million customers.



Uber's Caller Anonymization – New Saftely Toolkit for Riders and Drivers

Uber has announced the new Safety Toolkit which will be rolled out to the millions of riders, drivers and couriers using the app across Europe, Middle East, Africa and Pakistan. The toolkit will introduce new innovative features which aim to raise the bar on safety, and increase transparency and accountability for all users.

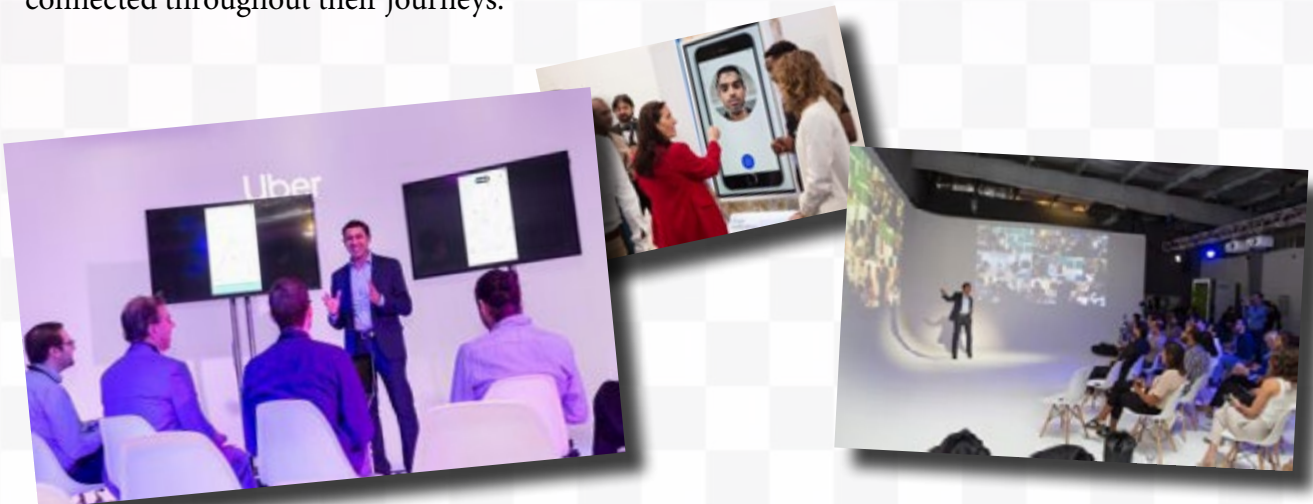
Since launching the app, Uber has provided millions of people with technology that allows them to get a ride at the push of a button, track every trip with GPS technology and report any issues 24/7 with a dedicated safety team. With the introduction of new safety features, the company aims to double down on safety and help make the Uber community safer.

Features that will be introduced as part of the new rider and driver safety toolkit, include:

1. **Emergency button** – With the push of a button in the app, riders and drivers/couriers can connect directly to local police when needed.
2. **Trusted Contacts** – Riders can more easily share their trip with up to five contacts and customise their trip sharing preferences.
3. **Safety Centre** – A new app-housed safety information hub where users can find information on insurance, our community guidelines, safety tips built with law enforcement and more.
4. **Share Trip** – Drivers can easily share their location and trip status with family and friends
5. **Caller anonymization** – Riders and drivers will be able to call each other while maintaining the privacy of their number while using Uber

Sachin Kansal, Uber's Global Head of Safety Product, said:

"There's nothing more critical than the safety of the people we serve. With about 15 million trips happening on the Uber app each day, we are putting safety at the heart of everything we do. That means working to help improve safety and developing innovative products that aim to increase transparency and accountability for all users on the app. We're proud to begin rolling out this new safety toolkit with the aim to double down on safety in our app and helping all users stay safe and connected throughout their journeys."



Huawei Mate20 Pro

The most audacious Chinese Phone Yet

Design & Display:

6.39-inch Huawei Mate 20 Pro has a glass body with gently curving sides laid over solid aluminum frames, and notches cut into both displays. Rather than a horizontal or vertical line, the Huawei Mate 20 series' three lenses are formed into a 2-by-2 box along with the camera's flash unit as the fourth member, forming a distinctive square. In a world where flagship phones are looking startlingly similar, this simple change makes the Mate 20 range stand out from the crowd. While the phone still sports Huawei's magical color-changing glass backs, a "featherline" pattern has also been added that helps to decrease the visual impact of greasy fingerprints on the back of the phone. Huawei has also added an extra layer to the back as well, something referred to as "vinyl tactility." This layer increases grip significantly on the back of the phone, while still permitting the phone to retain the premium feel of pure glass.

The OLED screen on the Mate 20 Pro is expansive, beautiful, and bright. The tall 1,440 x 3,120 format is a mixed blessing. You can use the 6.39-inch phone with one hand, but at the same time it can be hard to balance it in the palm of your hand. In-display fingerprint tech has been rumoured in high-end phones from Apple and Samsung for years and has yet to materialize, but with the Mate 20 Pro it is finally becoming mainstream.



Processor:

The Mate 20 series present the first Huawei phones to feature the new Kirin 980, the next advance of Huawei's processor tech. It's an eight-core processor, and Huawei's first built on the 7-nanometer process — basically, it's super-small. The Kirin 970 also boasted a single one of these cores, but Huawei claims that these two newer NPUs outstrip the older NPU by 134 percent in performance, and 88 percent in power efficiency.

Camera:

The triple-lens Huawei P20 Pro proved to be one of the best camera phones of the year. The phone still has three cameras on the rear. The primary snapper remains an incredibly high-resolution 40-megapixel snapper with a bright aperture of f/1.8. Even the telephoto camera has the same specifications: 8 megapixels with an aperture of f/2.2 and an optical zoom of 3x. What's new is that, instead of the third camera being just for black and white snaps, the Mate 20 Pro has an ultra-wide angle camera. Activated by tapping the zoom control in the camera app until you reach "0.6x", this shoots at the full-frame camera equivalent focal length of 16mm, which means you can shoot large groups of people from up close without using panorama mode.

By Shaheer Riaz

Dimensions:
157.8 x 72.3 x 8.6
mm

Display: 6.39
inches'

Battery: Non-
removable Li-
Po 4200 mAh
battery

Weight: 189g



Back: 40 MP+20 MP
+8MP
Front: 24 MP

Memory: 256 GB,
8 GB RAM or 128
GB, 6 GB RAM

Processor: 3.2 GHz
octa-core

Price: PKR.129,999/-

Memory:

You'll get 6GB as standard RAM with 128GB of onboard storage — with the option of boosting that up to 256GB via expandable storage. However, it's not like regular MicroSD expansion — Huawei is pushing a new proprietary nano memory card.

Battery:

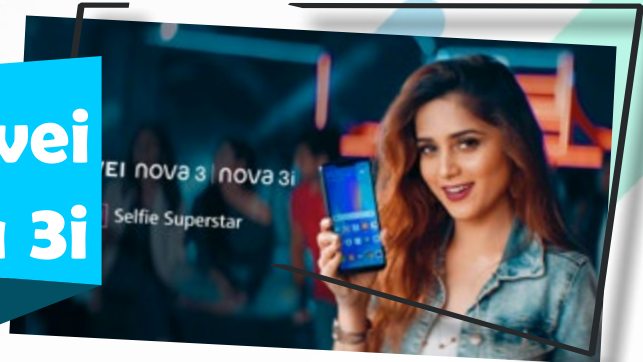
Mate 20 Pro gets better with a 4,200mAh battery. Huawei's SuperCharge fast charging is back, too; the 40W charger included with the Mate 20 Pro charges up to 70 percent battery in just 30 minutes. Another trick is the ability to charge other Qi-enabled phones by pressing them to the back of the Mate 20 Pro.

Verdict:

The Mate 20 Pro is the most tech-packed phone of the year, and Huawei has applied technology in more tasteful ways than it ever has before. Just like the Huawei P20 Pro, the camera is the highlight. No phone can handle as wide an array of situations as great as this one. Brilliant compositional flexibility, and great night shots even when using the second and third cameras, makes this the best phone around for travel photography.

TELECOM CAMPAIGNS

4 Huawei Nova 3i



Huawei's newest campaign to promote its latest Nova 3i smartphone in Pakistan is more than a mere introduction of Huawei's new devices. It is a great advert featuring stunning Aima Baig who highlights the selfie feature of the phone. The performance, music and overall feel of the advert is really good. The only negative thing about the advert is that it's too long which makes it a bit boring by the end.

Verdict: Nicely Presented Campaign

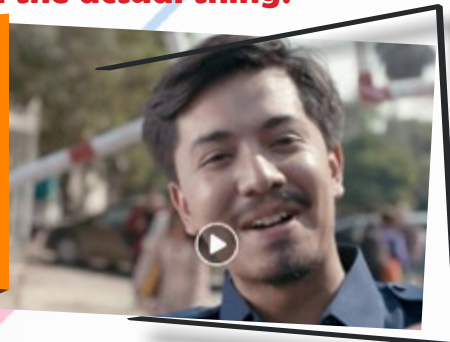
3.3 Xcell Mobile



Xcell mobile is a new entrant in smartphone market that started off with its very first in TVC. The story of the TVC is quite inspiring and over all acting and music gives you goose bumps but in an attempt to follow an unusual storyline, the basic idea of promoting the new smartphone has lost somewhere in the middle. So the production agency of the smartphone company needs to focus on the actual product rather than creating a heart wrenching story.

Verdict: Focus on the actual thing!

4.8 Careem



Careem has created a series of Adverts with tagline "Akele Na Jana Kamayai Chor Kar". These adverts are very well conceptualized and hit right on spot. The focus of the adverts is on part-time earning opportunities for Careem Captains. Other than the script, background and music, the praise-worthy performance of models have added the "WOW Factor" to the entire campaign.

Verdict: Zabardast Campaign!!!

By Fizza Atique

By Zainab Saeed

4

Honor 8X

Honor has launched the TVC of its latest smartphone with a tagline, “Live beyond the Limits”. Mahwish Hayat performed really well in the ad. She delivered the message nicely explaining that how this brand new phone is different from others and how its performance is better than the rest. The background music is also very good.

Verdict: Overall Ad is Amazing!

4.5

Uber

We saw for the very first time the ad of Uber for Pakistani audience. The commercial delivers the message of the comfort in travel that you can get during your ride. The Performers in the advert highlighted the punctuality of the uber's captain and show that how you can reach your destination on time. This short commercial of uber successfully grabbed the attention of viewers.

Verdict: Very Inspiring!

4.5

Jazz

The new TVC by Jazz is very simple yet classy. The performer delivers the message in a very simple way. The tagline of the ad is “Now that's super-duper”. The super-duper card of RS.600 offers 2000 MBs, 2000 Jazz Warid minutes, 2000 SMS & 150 other network minutes. It is a very short commercial with a clear message.

Verdict: Super Advert!!!

Samsung Galaxy A7 2018



OS: Android 8.0 Oreo
Display: 6.0 inches
CPU: 2.2 GHz Octa-Core
Camera: Tripple camera 24MP, Front 24MP
Memory: 128GB Built-in, 4GB RAM

Huawei Y9 2019



OS: Android 8.0 Oreo
Display: 6.5 inches
CPU: 2.1 GHz Octa-Core
Camera: Dual 16MP +2MP, Front 13MP +2MP
Memory: 64GB Built-in, 4GB RAM

Infinix Note 5 Stylus



OS: Android One
Display: 6.0 inches
CPU: 2.0 GHz Octa-Core
Camera: 16MP, Front 16MP
Memory: 64GB Built-in, 4GB RAM

Xiaomi Pocophone F1



OS: Android 8.1 Oreo
Display: 6.2 inches
CPU: 2.7 GHz Octa-Core
Camera: Dual 12MP +5MP, front 20MP
Memory: 128GB Built-in, 6GB RAM

Apple iPhone XS



OS: IOS 12
Display: 5.8 inches
CPU: Apple GPU (4-core Graph-ics)
Camera: Dual 12MP, front 7MP
Memory: 64GB/128GB/256GB Built-in, 4GB RAM

Apple iPhone XR



OS: IOS 12
Display: 6.1 inches
CPU: Apple GPU (4-core Graphics)
Camera: 12MP, front 7MP
Memory: 64GB/128GB/256GB Built-in, 3GB RAM

Huawei Nova 3i



OS: Android 8.1 Oreo
Display: 6.3 inches
CPU: 2.1 GHz Octa-Core
Camera: Dual 16MP +2MP, front 24MP + 2MP
Memory: 128GB Built-in, 4GB RAM

vivo V11 Pro



OS: Android 8.1 Oreo
Display: 6.4 inches
CPU: 2.3 GHz Octa-Core
Camera: Dual 12MP +5MP, Front 25MP
Memory: 128GB Built-in, 6GB RAM

Please Visit Our Website

www.phoneexpress.pk

House#7A, Street 22, F-7/2 Islamabad, Pakistan

Lenovo K9



OS: Android 8.1 Oreo
Display: 5.7 inches
CPU: 2.0 GHz Octa-Core
Camera: Dual 13MP +5MP, Front 13MP +5MP
Memory: 32GB Built-in, 3GB RAM

Samsung Galaxy A9 2018



OS: Android 8.0 Oreo
Display: 6.3 inches
CPU: 2.3 GHz Octa-Core
Camera: four cameras 24MP+10MP+8MP+5MP, front 24MP
Memory: 64GB Built-in, 4GB RAM

Apple iPhone XS Max



OS: iOS 12
Display: 6.5 inches
CPU: Apple GPU (4-core Graphics)
Camera: Dual 12MP, front 7MP
Memory: 64GB/128GB/256GB Built-in, 4GB RAM

Samsung Galaxy A8 Plus 2018



OS: Android 7.1 Nougat
Display: 6.0 inches
CPU: 2.2 GHz Octa-Core
Camera: Dual 16MP, Front 16MP +8MP
Memory: 64GB Built-in, 4GB RAM

Xiaomi Mi Mix 3



OS: Android 9.0 Pie
Display: 6.39 inches
CPU: 2.5 GHz Octa-Core
Camera: Dual 12MP, front 24MP+2MP
Memory: 128GB Built-in, 6GB/8GB RAM

Nokia 7 Plus



OS: Android One
Display: 6.0 inches
CPU: 2.3 GHz Octa-Core
Camera: 12MP, Front 16MP
Memory: 64GB Built-in, 4GB RAM

Xiaomi Mi 8 Pro



OS: Android 8.1 Oreo
Display: 6.21 inches
CPU: 2.7 GHz Octa-Core
Camera: Dual 12MP, front 20MP
Memory: 128GB Built-in, 6GB/8GB RAM

LG Q8



OS: Android 8.1 Oreo
Display: 6.2 inches
CPU: 1.6 GHz Octa-Core
Camera: 16MP, Front 5MP
Memory: 64GB Built-in, 4GB RAM

TOP MUST HAVE APPLICATIONS & GAMES FOR YOUR SMARTPHONE

LND Public

Rating : 3.9 Price: Free



LND Public is a android based application developed by PITB for public. This application is used to take simple tests to asses students of lower primary class.

Daraz Online Shopping App

Rating : 4.3 Price: Free

DARAZ: YOUR ONLINE SHOPPING APP - Use code 'NEW-DARAZ' to get amazing discounts!



Skillz- Logic Brain Games

Rating : 4.6 Price: Free



Want to test your memory skills or give your brain an exercise? Try this fun memory game to improve your memory, speed, get better accuracy, distinguish between colors and much more.

GITEX-2018

Rating : 4.6 Price: Free

Join attendees from 120+ countries and global media outlets in unpacking the big conversations and latest solutions around AI, blockchain, robotics, cloud and other mega trends,.



Real Cricket™ 18

Rating : 4.5 Price: Free



Welcome to the most authentic, complete and surreal Cricket experience on Android - Real Cricket™ 18

Hill Climb Racing 2

Rating : 4.6 Price: Free

From the Creators of the Original Hill Climb Racing Comes Hill Climb Racing 2! It's Bigger, It's Better And It's Much Much Funner!? Play the Best Free Time Killer Racing Game!



By Maryam Arshad

Happy Glass

Rating : 4.3

Price: Free



The glass is sad because it's empty. Your job is to draw a line to make the glass filled up with liquid and smile again!

Status Saver

Rating : 4.6

Price: Free

Loved a Friend's Status?

Well, You are at the Right App page. Check Desired status and save it in your gallery.

**Bookme.pk**

Rating : 4.3

Price: Free



With Bookme.pk you can get your desired cinema, bus and event tickets with ease. There are several promotions and discounts to choose from. We Believe That Suspense Should Only Be In Movies And Not When Buying Tickets. Bookme.pk, Tickets On The Go.

HumMart

Rating : 4.0

Price: Free

Hum Mart (Private) Limited is a subsidiary of Hum Network Limited. HumMart is a grocery products web store which aims at saving users from the hassle of going out and buying every day necessities.

**100 GB Free - Degoo Cloud Drive**

Rating : 4.5

Price: Free



Back up your data directly from your device. Choose what you want to backup, like your photos or docs and we store it all securely in Degoo's cloud drive

SuperFood - Healthy Recipes

Rating : 4.4

Price: Free

4.4 Healthy Recipes offers free access to tasty and healthy recipes using regional ingredients that you can save in our grocery list.

**Keep Trainer - Workout Trainer & Fitness Coach**Price: Free
Rating : 4.7

Home Workout & Fitness Trainer, an easy-to-use free app for you to keep fit and healthy, also a home workout trainer - no equipment app.

FROM 1G TO 5G

How the Internet Has Changed the World



1G 2G 3G 4G 5G

1 st GENERATION wireless network	2 nd GENERATION wireless network	3 rd GENERATION wireless network	4 th GENERATION wireless network	5 th GENERATION wireless network
<ul style="list-style-type: none">➤ First voice service➤ Analog signal protocols	<ul style="list-style-type: none">➤ Designed for voice➤ Improved coverage and capacity➤ First digital standard (GSM, CDMA)	<ul style="list-style-type: none">➤ Designed for voice with some data considerations (multimedia, text, internet)➤ First mobile broadband	<ul style="list-style-type: none">➤ Designed primarily for data➤ IP based protocols (LTE)➤ True mobile broadband	<ul style="list-style-type: none">➤ 1000 times faster than the current available 4G network➤ Include ultra HD holographic transmission cutting edge social networking services

WIRELESS SERVICES JUST HOW FAST ARE THEY?

GPRS	EDGE	3G	4G	5G
1997	1998	2001	2009	2020
50 kbps	250 kbps	384 kbps	50 mbps	6400 mbps

WHAT SIZE SHOULD YOUR WEBSITE BE?

Based upon studies that have shown the maximum allowed waiting time for a loading webpage is **4 seconds**

MAX	MAX	MAX	MAX	MAX
25 KB	125 KB	192 KB	75 MB	3.2 GB

HOW LONG WOULD IT TAKE TO DOWNLOAD A 600MB MOVIE?

1 day 12 hours 29 minutes 32 seconds	0 day 7 hours 16 minutes 54 seconds	0 day 4 hours 44 minutes 27 seconds	0 day 0 hours 0 minutes 43 seconds	0 day 0 hours 0 minutes 1 seconds
---	--	--	---	--

WHERE ARE WE HEADING

2013
EXABYTE
Every Month

FOR THE FIRST TIME EVER
MORE THAN ONE
OF DATA WILL TRAVEL ACROSS
THE GLOBAL MOBILE NETWORK



or



DOWNLOADING THE ENTIRE
STAR WARS
SERIES 130 MILLION TIMES



5G Vision

What 5G is about





HUAWEI Mate 20 series

Welcome to
A **HIGHER** INTELLIGENCE

Rs. 129,999



The Huawei Mate 20 and Huawei Mate 20 Pro certainly have a lot to live up to — Mate 10 Pro won Android Authority's Phone of the Year award in 2017, and the P20 Pro is one of the best Android phones you can buy right now.

The Mate series has always been about high-end specs, and the Mate 20 is no different.

Mate 20 comes with a 6.53-inch LCD display with an 18.7:9 aspect ratio, while the Mate 20 Pro has a 6.39-inch curved OLED display with a 19.5:9 ratio.

The Mate 20 Pro comes with a 4,200mAh cell, and the Mate 20 has a 4,000mAh battery.

On the front, both devices come with a 24MP camera.

The Mate 20 Pro is the star of the show here, featuring a 40MP standard lens with an f/1.8 aperture, 20MP ultra wide-angle lens with an f/2.2 aperture, and an 8MP telephoto lens with an f/2.4 aperture and OIS.

A Higher Intelligence: Huawei Unveils HUAWEI Mate 20 Series

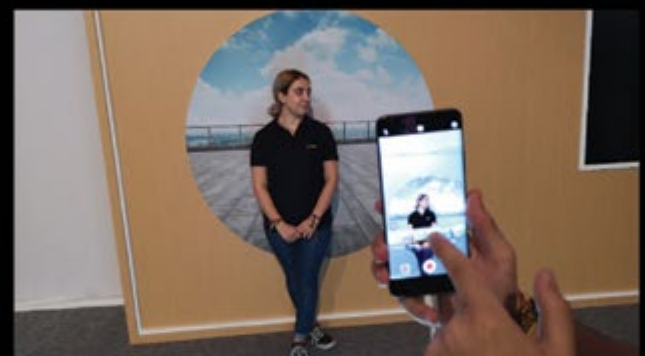


Huawei Consumer Business Group (CBG) has unveiled the much-anticipated HUAWEI Mate 20 Series to users in the Europe, Middle East and Africa region during two launch events that took place in Dubai and London. HUAWEI

Mate 20 Series packs extraordinary features including the world's first Leica ultra-wide-angle triple camera, reverse charging and more exciting features in collaboration with DTCM.



DUBAI — October 24, 2018



Vivo Launches the V11 & V11 Pro with an Immersive Design & In-Display Fingerprint Scanning in Pakistan

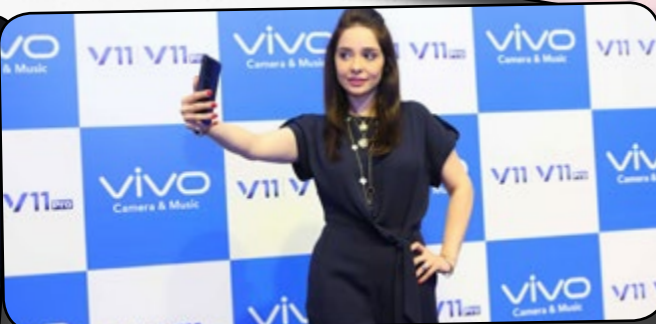
Vivo has unveiled the all-new Vivo V11 & V11 Pro in Pakistan. This new addition to the popular V series comes with an AI camera that helps users capture the picture-perfect moment in any scenario.

V11 & V11 Pro features key design breakthroughs, with the new Halo FullView™ Display paired with Starry Night and Nebula fusion colors, all enclosed within a curved 3D body to provide a seamless and immersive user experience.

The V11 Pro is the first in the V series to incorporate **In-Display Fingerprint Scanning** Technology, continuing Vivo's technology leadership in biometric security, while maintaining a sleek and stylish design.

"Innovating with consumers in mind is our priority. We are excited to introduce the AI-powered V11 & V11 Pro to create a more intuitive and personal mobile experience for our users," said Mr. Eric Kong, The CEO for Vivo Pakistan.

"With that in mind, we have made the perfect shot much easier to take with our AI Camera, added smarter AI services, and introduced our industry-leading In-Display Fingerprint Scanning Technology to the V series for the first time. We will strive to bring trend-setting innovations and the best experience to more consumers around the world." He added.



The **Vivo V11 & V11 Pro** were first up for pre-orders in Pakistan and the official sales started on 13th September. The price for V11 is **Rs. 39,999** whereas V11 Pro with In-Display Fingerprint Scanning is priced at **Rs. 49,999**.

vivo
Camera & Music

V11 | V11 Pro

In-Display Fingerprint Scanning*

Perfect Shot, Perfect Moment

*In-Display Fingerprint Scanning available in V11 Pro



HONOR 8X^{AI}

BEYOND LIMITS



6.5" Honor FullView Display



128GB Internal Storage



20MP AI Dual Camera

RS. 42,999



AI CAMERA

honor 8X^{AI}