

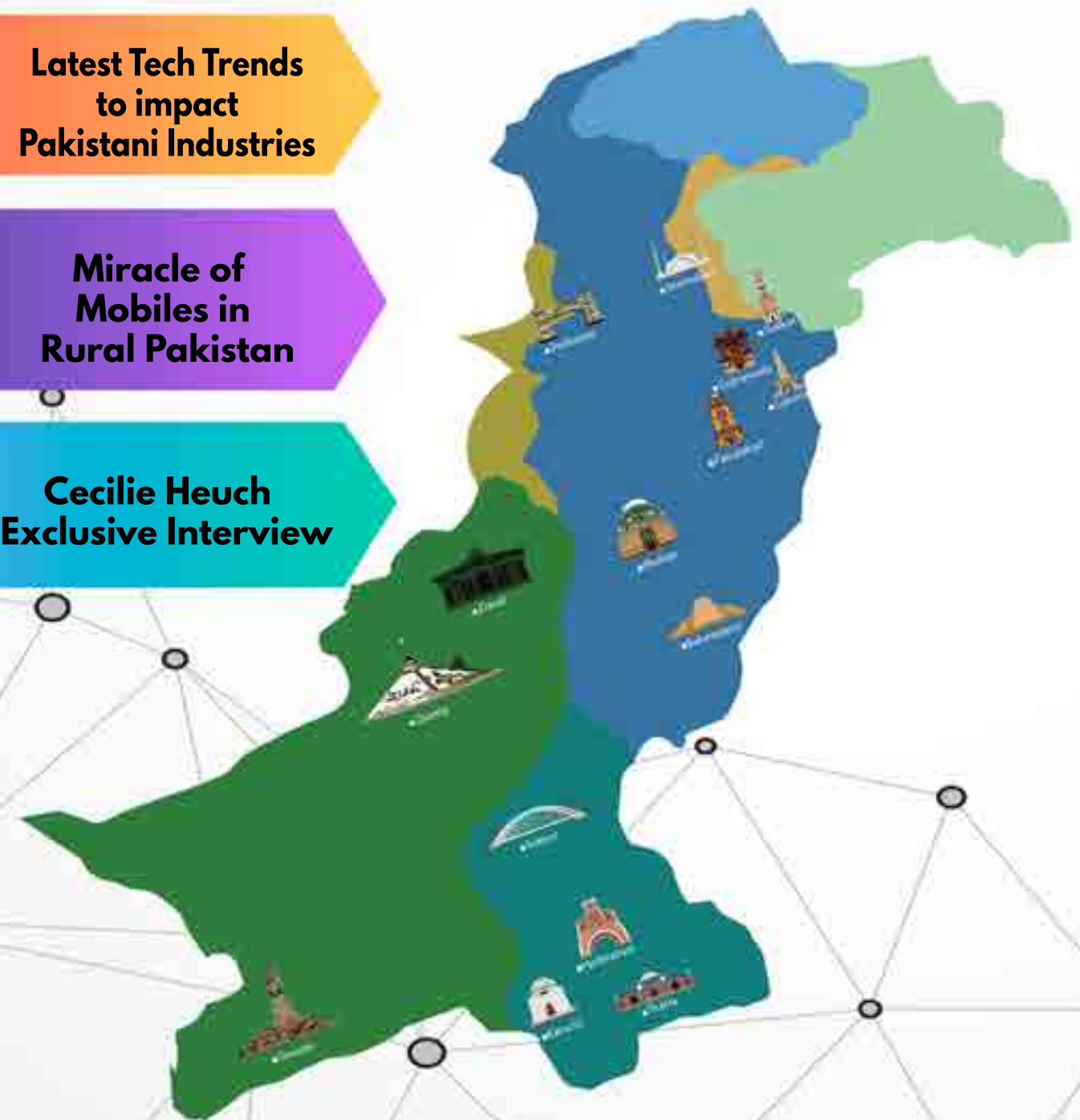
phoneWorld

Issue 37 | March-April 2019

**Latest Tech Trends
to impact
Pakistani Industries**

**Miracle of
Mobiles in
Rural Pakistan**

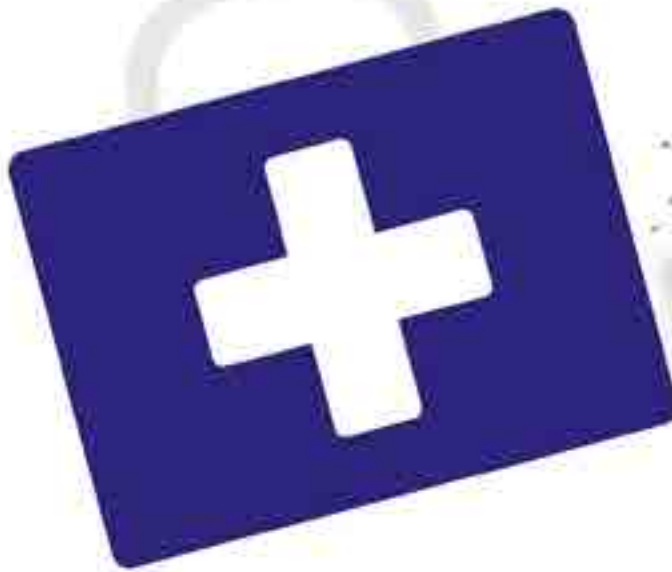
**Cecilie Heuch
Exclusive Interview**



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Adnan Khan
Managing Editor

Dear Readers,

The growth rate of Pakistan's telecommunication sector has been impressively fast-paced and contributed a lot in bringing Mobile Broadband services to the country and has contributed \$ 4.42 billion to National exchequer during July 2014 to June 2017. In 2014 there were only 114 million mobile subscribers that quickly rose to 152 million mark by the end of November, 2018. While the 3G/4G subscribers also grew at an impressive rate from 13 million in 2014 to 60 million in November 2018.

Now 5G is has become the talk of the town and telecom industries around the world are gearing up for the next tech revolution, Pakistan being one of them. We have discussed the miracles of mobile industry in rural Pakistan in one of our articles hoping that it will give an insight to our readers.

2018 was a good year for our industry although it was slower than the previous couple of years but still the industry managed to put some impressive work forward. Now that we have headed in to a new year, we are face to face with some key challenges that are blocking the overall growth of the industry.

We have shed light on "Tech Revolution: How Latest tech trends will impact Pakistani Industries". Our current issue also includes exclusive articles on cyber security, start-ups in Pakistan and why digital marketing is important.

This time, our in-focus section features an exclusive interview of Cecilie Heuch - Executive Vice President, Chief People Officer at Telenor. Heuch comes from the position as Chief HR Officer of DNV GL Group, a position she has held since 2006. Previous working experience includes different managerial positions in Norsk Hydro, including 4 years as Business Manager and Business Development Manager in Hydro Agri.

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

Feedback

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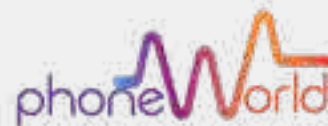
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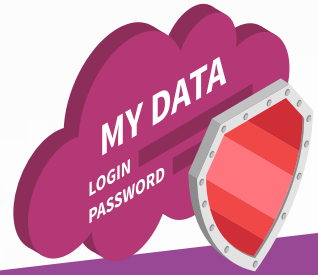
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Miracle of Mobiles in Rural Pakistan



**Infocus Interview
Cecilie Heuch - EVP, Chief
People Officer at Telenor**



**Data Encryption
Is it Enough Security People?**



**Personality corner
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LATEST TECH TRENDS TO IMPACT PAKISTANI INDUSTRIES

Technology has become a game changer. Realizing the fact that it is not possible to get progress in any industry without the adoption of advanced and latest technologies, most industries and businesses have started the digital transformation journey. Especially in Pakistan, we can see that both small and large industries are adopting the latest technologies for better output in order to compete in the international market.

Realizing the fact that it is impossible to progress in any industry without the adoption of advanced and latest technologies, most industries and businesses have started the digital transformation journey

Many new and unique ideas are finding their way into real and useful technologies. Moreover, there is no chance of slowing down technology's expansion and growth any time soon. In most Pakistani industries, these modern technologies have reshaped the operations and performance.

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By adequately leveraging the power of modern technology, the industries can reform, accelerating growth, help to reduce poverty, improve healthcare and education, and drive sustainable economic progression. Here are some of the key tech trends that are changing the industrial scene in Pakistan.

Artificial intelligence (AI)

Artificial intelligence aims to create intelligent machines and has become an essential part of the fourth industrial revolution. There is a lot of excitement about artificial intelligence and its development. No doubt, AI is still in its early stages of development, but it has already found its way into industries and companies.

Presently, we have observed that AI is entering in almost all spheres of business ranging from chatbot features to AI-powered legal transcription services. Now we may see

its practical uses in industries, like healthcare, manufacturing, education, and others.

By adequately leveraging the power of modern technology, industries can reform, accelerate growth, help reduce poverty, improve healthcare & education, and drive sustainable economic progression

Due to machine learning, deep learning and natural recognition capabilities, AI is the fastest adopted technology and can be used by various industries both large and small. AI trend is going to affect business and drive innovation through industries for years to come, because of its limitless potential.

Pakistani Government is also aware of the importance of Artificial intelligence, so it has started PIAIC, to train student and enable them to grasp AI and Machine Learning but still, a lot more needs to be done. The private sector is also making progress in introducing AI in Pakistan; a bot, named RUBA — Real Urdu Bot Automation has been designed by C-Square in collaboration with Genesys. RUBA is a Siri-styled virtual voice-enabled personal assistant. The bot is able to interact with the user in Urdu and respond in Urdu while carrying simple tasks from checking your bank account balance to sending a text message on your behalf.

Real Urdu Bot Automation has been designed by C-Square in collaboration with Genesys. Whereas, RUBA is a Siri-styled virtual voice-enabled personal assistant

The internet of things (IoT)

At present, there is an increased demand for more devices and connectivity globally. This new trend has already begun to affect modern business, and we can see that it will continue to do so in the coming years. The demand for more IoT devices is increasing due to its unique performance. The smart devices and gadgets are becoming a standard for consumers as well as for businesses slowly and gradually. The perfect example of IoT

is Devices that include Amazon's Alexa, Echo, Google's Assistant, and some others, which are very famous among users nowadays.

The Internet of Things is the idea that all technological devices can be connected to the internet and each other in an attempt to create the perfect marriage between the physical and digital worlds. How will this impact various industries? It depends on the nature of every industry. For example, in marketing, advertising, media or business management, IOT could provide a wealth of information on how consumers engage with products by tracking their interactions with digital devices. In turn, this data could be used to optimize marketing campaigns and user experiences.

There are some major IoT based projects being funded by Ignite such as Xbits, CricFlex, Innovative Digital Curriculum for Science Education, in-hospital and Energy Watch

Currently, in Pakistan, there are some major IoT based projects being funded by Ignite, like Xbits, CricFlex, Innovative Digital Curriculum for Science Education, in-hospital and Energy watch. With the increasing demand for IoT products, Pakistan has an opportunity to capitalize on this trend. The big industrialists can collaborate with the young tech entrepreneurs to revamp their industry and improve their efficiency a million times more.

Cyber security awareness

Nowadays, the usage of the digital world is increasing. Customers and businesses are quite active on various social platforms. However, at the same time, they are not safe as today the risks of cyber-attacks are greater than ever. This issue has led to increased awareness about cyber security and highlighted that there is a need for proper security measures for both businesses and individuals.

In the coming years, the demand for cyber security will be increased, and the trend will affect everyone. No doubt, all those businesses that operate online must both protect themselves and their customers from the risks of cyber-attacks. Furthermore, consumers will be more careful while dealing with businesses and will most likely prefer those companies having proper security.

The attacks by Indian hackers on Pakistani websites and recent banking sector debacle have called for the prompt attention to strengthen the cyber space in the country



The attacks by Indian hackers on Pakistani websites and recent banking fiasco has called for the prompt attention to strengthen the cyber space in the country. Pakistan has launched its first ever Cyber Security Centre at Air University, Islamabad to protect the country's cyberspace, economy, and infrastructure from cyber-attacks.

Augmented and Virtual Reality

AR and VR are likely to affect companies across the board as they adopt the technology to help them engage customers more effectively and optimize their sales and marketing efforts. It's also a potentially useful tool for learning and is increasingly being adopted by educational organizations.

AR and VR technologies are already available for consumer experiences, like retail and real estate

AR and VR technologies are already available for consumer experiences, like retail and real estate. AR and VR, in particular, can be used in various industries, that include manufacturing, healthcare and medicine, as well as in commerce businesses.

We can see a continuous development of these technologies, and this trend will affect even more industries and companies in the coming years. However, in Pakistan augmented reality is a relatively new concept but major telecom and media hubs are starting to introduce it to their consumers in entertaining and user-friendly ways.



Cloud Integration

Nowadays, a number of Cloud-computing has already entered too many companies and numerous companies are opting for cloud-based solutions. This new technology trend is becoming more important each year, and will eventually become a standard for modern organizations in the coming years.

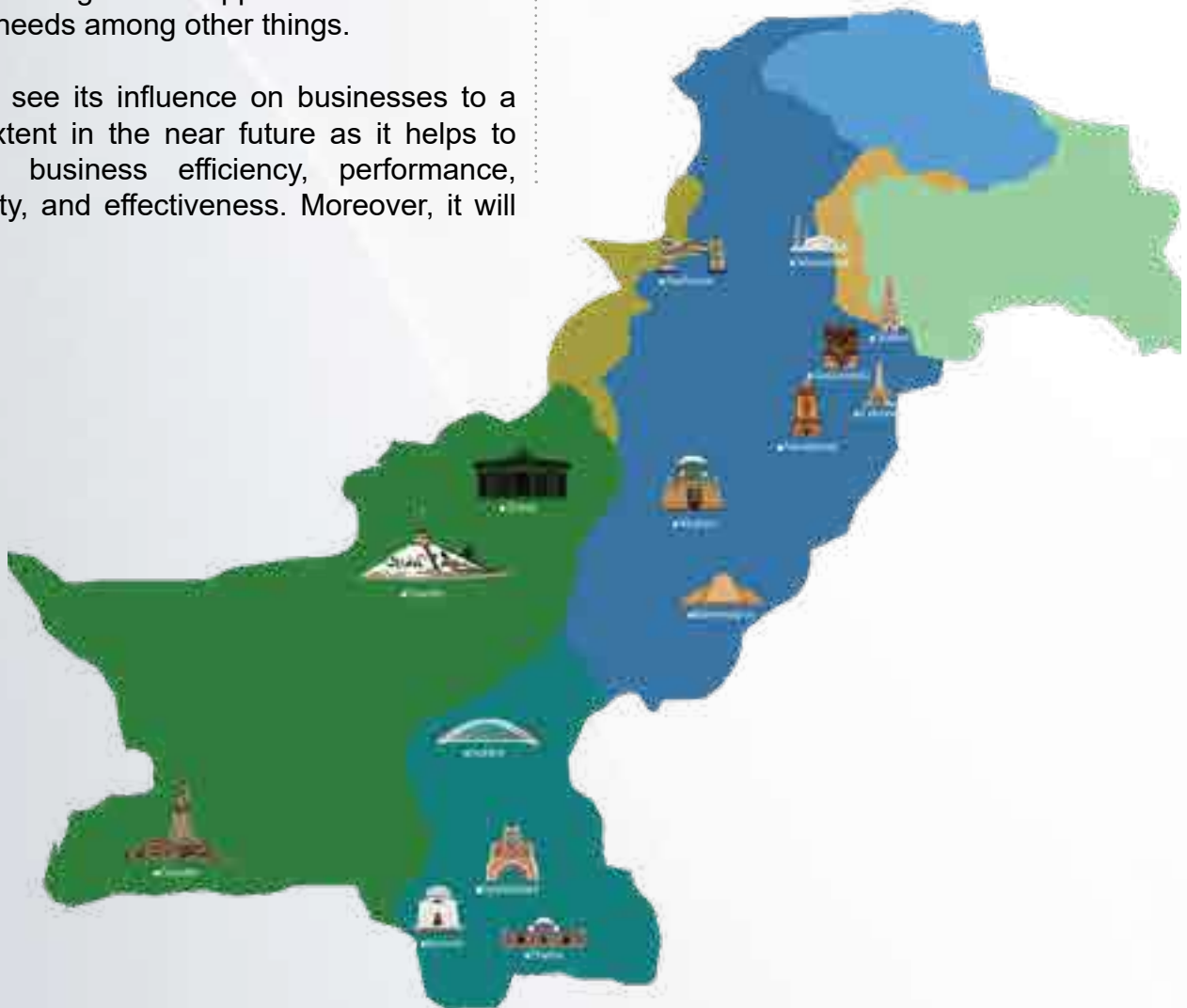
In the coming years, no industry will go untouched by modern technology trends that have the potential to revolutionize the industrial sector is phenomenal. Therefore, Pakistan needs to take steps in the right direction to fulfill its digital dream

Cloud is presenting unique opportunities for businesses to store files, leverage external resources, including hardware and software, as well as large scale opportunities based on current needs among other things.

We can see its influence on businesses to a great extent in the near future as it helps to improve business efficiency, performance, scalability, and effectiveness. Moreover, it will

also help them to become more cost-efficient. Cloud computing is providing more security and reliability to businesses than other solutions, which makes it highly demanded, therefore, Cloud-based tech trends will most likely continue to affect businesses in the future as their benefits cannot be ignored.

Exciting times have started where technology trends will affect all the industries and improve their efficiency. In the coming years, no industry will go untouched by these technologies as their potential to revolutionize the industrial sector is phenomenal. Therefore, Pakistan needs to take the steps in the right direction to fulfill its digital dream.



Miracle of Mobiles in Rural Pakistan

Mobile connectivity has transformed the lives of billions. More than two-thirds of the global population is now connected to the mobile, making it one of the most far-reaching technologies worldwide. It is the primary and sometimes the only channel to access the internet and life-enhancing services, especially for the people living in rural areas. Though internet connectivity



has paved its way in many economies, Pakistan, however, has been lagging behind when compared to the size of its economy. The rural areas of Pakistan are the most beautiful part of this country. However, the other side that is putting a shade on the beauty of these areas is the low literacy rate, poverty, lack of infrastructure and fewer opportunities; therefore, mobile technology is a ray of hope for the rural areas of Pakistan.

More than two-thirds of the global population is now connected to the mobile, making it one of the most far-reaching technologies worldwide

The role of mobile technology is eminent to reach budding entrepreneurs in rural communities.

Although still in its nascent stages, more young people are becoming entrepreneurs and forming

start-ups to take control of their future. The development community and the Government have shown their commitment by supporting entrepreneurs through projects dedicated to mentoring, incubating and funding start-ups.

However, a lot of these initiatives are targeted at urban youth. Keeping this in view, UNDP is trying to reach millions of youth that are illiterate, in rural and remote locations and deliver training to them on entrepreneurship as an employment option by designing a pilot experiment to provide training over mobile phones using voice messages in collaboration with Telenor.

UNDP is also working to develop design an app and online platform to deliver more content on entrepreneurship training for internet-connected young people in Pakistan.

Pakistan's Health Sector is also transforming; Mobile Technology is the key reasons behind it.

Mobile technology is making it possible to virtually connect patients to a doctor from anywhere at any time. Mobiles help the practitioners to access a patient's EHR, review medical histories, send follow-up emails, and even complete prescriptions as well.

Mobile health apps give doctors, administrators, and patients greater flexibility with which they can generate better health awareness. There are a lot of Apps that are playing a vital role in the Health Sector of rural Pakistan, such as Mytabeeb.pk, Findmydoctor.pk, Ring MD, Pharmapedia Pakistan and Marham are some of the mobile Apps that help you book appointments, and consult with doctors online.

Mobile technology has also been an extremely transformative tool for rural agriculture. Mobile phones have allowed farmers to gain access to market prices before traveling long distances to markets. It has enabled to quickly transfer exact information about wholesale retails for crops, allowing farmers to be able to negotiate deals with traders and improve upon timing to get crops to the market. Other innovations include the use of mobiles to track livestock reproduction.

Mobile technology is making it possible to virtually connect patients to a doctor from anywhere at any time

These livestock related applications also help keep track of feed types, schedules, local veterinary contact information and precise market prices of cattle. For improving the agriculture sector of Pakistan, Agri Assistant Mobile App is launched in order to help Farmers. It is the first application of its kind in Pakistan to offer farm marking on a digitized map for real-time collection of soil samples. Interesting use of mobiles can be seen in Thar where camel owners used to put a bell around their animals' necks so that in case it was lost, the owners could hear where the camel is in the desert.

Now the bells have disappeared, and the owner's mobile number is now hung at the same place so

that if someone finds it, he will be able to call the owner of the mobile number.

Mobile health apps give doctors, administrators, and patients greater flexibility with which they can generate better health awareness

Pen was once considered the mightiest thing however, now the 'pen' should be replaced with SMS, Tweet or meme. The foundation of these is the internet connectivity and mobile phones. As in rural Pakistan, chaar divari is a dilemma that is set for women to keep them trapped inside the house. But with this situation, educated women are given the choice to continue their careers or raise a family.

Mobile phones have allowed farmers to gain access to market prices before traveling long distances to markets

Many few are allowed to manage both. In such circumstances, Mehreen Kashif from Larkana operates a business of hand-embroidered apparel and bed linen without leaving her home. It has been four years since she launched her work-from-home enterprise through a Facebook page and then contacting clients through WhatsApp.

UNDP is trying to reach millions of youth that are illiterate, in rural and remote locations and deliver training to them on entrepreneurship as an employment option using voice messages with Telenor

Through reliable internet connections and affordable data packages now relatively isolated communities of the country can participate in the country's small- and medium-sized business.

While connectivity options are plenty in the larger cities of the country, cellular operators have been successful in selling the modern amenity in smaller cities and towns as well as to lower-income groups.

With affordable talk-time packages, even basic cell phone users can stay in touch with employers, middlemen or families they leave behind for the sake of livelihood.

Through reliable internet connections and affordable data packages now relatively isolated communities of the country can participate in the country's small- and medium-sized business

Mobile technology has helped provide schools, teachers, and parents access to meaningful data and tips to help students succeed. Consequently, the mobile phone has changed the way we think, we consume information, our habits, and our interactions, and even the relationships we build.

The mobile phone has changed the way we think, we consume information, our habits, and our interactions, and even the relationships we build

Mobile technology has given a voice to people from rural areas that were cut off from the world during cataclysmic events. That voice can reach

out for help when local tragedy strikes, and for the first time these people are not alone. They can share their plight using mobile communication through text, voice, and, most importantly, images, and bring about real change.

Mobile technology is enriching our lives. Besides its conventional role of connecting people to their loved ones, it is now also saving lives, creating opportunities, educating people, giving voice to the unheard and making healthcare possible for those otherwise without it.

Besides its conventional role of connecting people to their loved ones, it is now also saving lives, creating opportunities, educating people, giving voice to the unheard and making healthcare possible for those otherwise without it

It's an exciting time to be watching mobile technology. There's no telling how far we will go with the technology of the not-too-distant future, but it will be a fantastic ride.



Linus Torvalds- the Revolutionary Developer who designed Linux

Linus Torvalds, (born December 28, 1969, Helsinki, Finland), Finnish computer scientist who was the principal force behind the development of the Linux operating system. He wrote it as a part of his Master's thesis titled, 'Linux: A Portable Operating System' at the young age of 21.



At age 10 Torvalds began to dabble in computer programming on his grandfather's Commodore VIC-20. In 1991, while a computer science student at the University of Helsinki (M.S., 1996), he purchased his first personal computer. He was not satisfied, however, with the computer's operating system. His PC used MS-DOS (the disk operating system from Microsoft Corp.), but Torvalds preferred the UNIX operating system he had used on the university's computers.

He decided to create his own PC-based version of UNIX. Months of determined programming work yielded the beginnings of an operating system known as Linux. In 1991 he posted a message on the Internet to alert other PC users to his new system, made the software available for free downloading, and, as was a common practice among software developers at the time, he released the source code, which meant that anyone with knowledge of computer programming could modify Linux to suit their own purposes. Because of their access to the source code, many programmers helped Torvalds retool and refine the software, and by 1994 Linux kernel (original code) version 1.0 was released.

Linus Torvalds was named by Time magazine as the 'one of the most influential people in the world'. Listed in The Britannica Guide's 'The 100 Most Influential Inventors of All Time', he is also listed 17th on the Time magazines poll of 'Time 100: The Most Important People of the Century'. He is one of the world's most renowned software programmers, who revolutionised the computer industry.

He even has an asteroid and an asteroid moon named after him. He is the owner of the Linux trademark and is one of the highest authorities who decide the incorporation of new codes. He has a total of 35 applied and granted patents internationally. He served as one of the chief architects of the Linux kernel operating system and currently works as the main coordinator of the project. He has authored a memoir titled, 'Just for Fun: The Story of an Accidental Revolutionary'.

Samsung Galaxy A50

By **Shaheer Riaz**

The best mid-range smartphone

Samsung Galaxy A50, the best midrange option with all premium features such as 4GB RAM and 4000 mAh powerful battery. It seems like Samsung is back in the market to give a tough time to its competitors, Samsung A50 is a perfect device for midrange users at a perfect price of **PKR.51,999/-**.

Design and Display

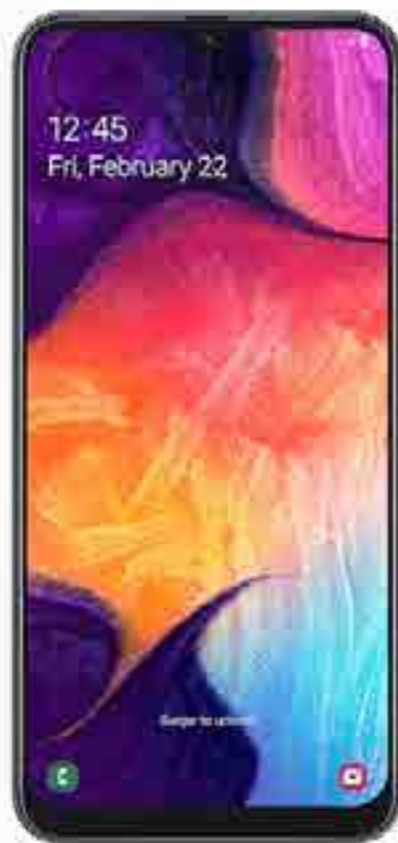
The Samsung Galaxy A50 is a 6.4-inch device that supports 1080 x 2340 pixels resolution screen plus it has Super AMOLED capacitive touchscreen. It supports 16M colors, that means it is a perfect device for game users. I played PUBG on Samsung A50 and it worked brilliantly due to its graphics card (Mali-G72 MP3), the game went totally smoothly without any lags and bugs.

Samsung A50 has a perfect slim body with long 6.4 inches screen, it has a 25MP u-notch front camera display whereas, the function keys are working within in the screen. The top edge only has the mic while the opposite edge has speakers, secondary mic, microUSB type-C port and audio jack of 3.5mm.

Camera

Samsung Galaxy A50 features triple camera lenses, one is 25 MP with f/1.7 aperture and PDAF, the other one is with 8 MP lens, f/2.2 aperture and 12mm (ultrawide) and the last one has 5 MP, f/2.2 with a depth sensor. All these three lenses are placed in a vertical line with LED flashlight.

The main features are live focus, normal photo and video. Its top side has many options such as settings, flash options, timer options, ratio setting, and effects option. We can also create AR emoji in it, add a filter some more stickers etc. Another feature of AR emoji that I find kind of cool is the ability to have the camera read your face and then

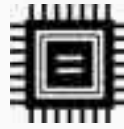


create a bitmoji like character of you. We can customize the character's facial features like skin tone, clothing and so on.

Network and Battery

A 4000 mAh battery which is the largest battery that's ever been included in a Samsung midrange device.

The Samsung Galaxy A50 is a 4G supportive device. Its WIFI supports 802.11 a/b/g/n/ac bands with some more features such as dual-band, WiFi Direct, and hotspot. This device has an in-display fingerprint scanner which is slower than Vivo V15 Pro. it would be better if you use a pin code lock.



64/128 GB, 4/6 GB RAM



6.4 inches
1080p supportive



25MP+8MP+5MP



PKR.51,999/-

Pros

1. Super AMOLED Display
2. 4000 mAh Battery

Cons

1. Slow in-display fingerprint scanner

Samsung Galaxy A50 is a complete package with many premium features such as AMOLED display, 4GB RAM and 4000 mAh big battery. If you are looking for a good midrange device then Samsung Galaxy A50 is a perfect choice for you.

Smart Moves for smarter Nation

Assasay

Assasay is an asset Management System, especially developed for the management of fixed assets.

The system is used to assign and generate QR-Code against each fixed asset. There are two applications developed to use the system, a web based application for getting register and uploading fixed assets data from a spread sheet, and a mobile application that is being used for scanning the generated QR-Code.

Once the code is scanned using mobile Application, all relevant information related to an asset is shown up to department's user. Name and details of all departments have been added to the system, a designated person from each department can visit the website for registration and select department and nature of department to get register.



DATA centres

The PITB has established a Tier-III Data Centre at Arfa Software Technology Park for consolidation of IT services deployed across provincial government departments.

The Data Centre offers co-location, IAAS, PAAS, and other cloud services to both the public and private sector. The centre is equipped with latest technology infrastructure for sophisticated and powerful computing. The state of the art HVAC systems and uninterrupted power solutions are specially designed for efficient and uninterrupted service delivery.

The centre guarantees 24/7 availability and the uptime of services to 99.998%. There is efficient utilization of spare capacity to eliminate resource wastage.



Process Serving Agency

PSA is both Mobile and Web Application developed for the process automation of issuing of summons and notices from different courts. In the Manual Process, Respondent or a person who shall receive notice from honorable Judge may refuse in court that he/she didn't receive any notice from the Court, or on the other side a Process Serving Agent (PS Agent) who is responsible to dispatch the court's notice may not visit the desired place.

The newly created notice shall have all related information of Notice and the Person's details who shall be receiving the notice; after new notice is created it is then marked to the Process Serving Agent of the same district or to Court of the other District.



Process Serving Agency

TECH TWISTS

01



The GIF Story

In 1994, the company who had a patent on GIFs tried to charge a fee for using GIFS. The PNG was invented as an alternative, and the company backed down.

02



Walk Your Fingers

On an average work day, a typist's fingers travel about 12.6 miles.

03



Don't use iTunes to make a Nuclear Bomb

When signing up to iTunes, if you accept their Terms & Conditions, you agree to not use it to make nuclear weapons.

04



Ubuntu

Ubuntu is one of the more popular distributions of Linux. The word Ubuntu comes from an African word meaning "I am because of you".

05



The Morse Code @

In 2004, the "at" symbol used in emails (@) became the first new character to be added to Morse code in several decades! The new character, known as the "Commat".



Responsibility and Empowerment are key elements of our management philosophy
Cecilie Heuch - Chief People Officer at Telenor

PW: Telenor is known for its flat hierarchical culture and it has set benchmarks across industries. What are the key characteristics that hold together the Telenor culture and form its DNA?

Answer: Our management model is based on trust. It forms the organizational culture of Telenor and makes us an attractive workplace. This has given us a competitive edge in all the countries in which we operate.

Responsibility and empowerment are key elements of our management philosophy. We set clear expectation and goals and strive to avoid micro-managing activities. We also have a set of key behaviors that guide the way we work.

They are: Always Explore; Create Together; Keep

Promises; Be Respectful. Be Respectful, is especially an exemplification of how to operate: We believe in the unique human ability to understand what matters for people. We want to meet everyone at eye level, listen and show that we care.

We set clear expectation and goals and strive to avoid micro-managing activities

We believe that work and life go hand-in-hand at Telenor. We believe in a balance. We like to have fun at work and we are firm believers in the power of teamwork. That is why we have open office spaces and flexible seating in all our offices across Scandinavia and Asia.

Leaders and employees work together in the same space cultivating, innovating and solving tasks at hand.

When we first established this open office model in 2003, it was advanced for its time and was recognized by various publications around the world including Harvard Business Review. Such an environment is the foundation to a culture that recognizes all voices are equal, are contributors and deserve recognition no matter what position you have in the company.

PW: What does diversity mean for Telenor? What's your view of diversity at workplace, how has it evolved and what value does it bring?

Answer: At Telenor, we believe diverse teams create better solutions. We actively seek different perspectives enabled by our strategy, policies, management commitment, development initiatives, work space and internal digital communication tools.

Diversity is important for competitiveness, for our ability to innovate and for our ability to collaborate effectively- resulting in products and services which are more aligned with the need of our customers. We are open and honest in saying that Telenor's diversity and inclusion agenda is continuously being worked on. It's a journey that is continuously evolving. Along our journey, we have reached milestones which have warranted merits, but it is a journey which always requires commitment, attention and awareness in order to make bigger strides.

PW: Where does Telenor stand with respect to diversity & inclusion and what does it aim for in that regard?

Answer: We have set clear targets to improve diversity across our footprint. Transparent reporting, clear rules and systems are among our key ways of work. More than 50% of our employees, and 95% of our customer base, are from Asia.

In Thailand and Malaysia, we have 60% and 50% women in the workforce, respectively. From 2015 to 2018, the percentage of women in

senior leadership positions across the Group increased from 20% to 28%. By 2020, we would like to see this increase to 30%.

From 2015 to 2018, the percentage of women in senior leadership positions across Telenor Group increased from 20% to 28%. By 2020, we would like to see this increase to 30%



happen by themselves. Increased commitment to initiatives, for example, makes a difference. In 2016, Telenor implemented a six-month paid maternity leave policy for women employees as a minimum standard globally. This is unique in many of Telenor's markets, particularly for Telenor's five Asian markets, where the local standard is less than six months.

In Pakistan, we have a yearly training programme called 'Naya Aghaaz' which enables women to re-enter the workforce after a leave of absence

In Pakistan particularly, we have a yearly training programme called 'Naya Aghaaz' (New Beginning) which enables women to re-enter the workforce after a leave of absence. In addition to the six-month paid maternity leave, we also provide re-entrance benefits such as on-site child care, driving courses for women, flexi-hours and the ability to work from home.

Beyond gender parity, we believe in inclusion and non-discrimination of all degrees with respect to age, religion, race, language and disabilities. Similar to gender parity, we have enablement programmes which reflect our commitment to diversity. For example, Telenor Open Mind programme is a unique job training programme that provides people with physical disabilities or mental health challenges a chance for employment and to gain hands-on work experience.

Since 2015, this programme has been running in several of our Business Units, including Telenor Pakistan. As a modern business, in order to serve our entire customer base as best as we can, we must rely on perspectives, skills and insights from across the societal spectrum.

PW: What are Telenor's key achievements when it comes to fostering an enabling working environment?

Answer: Telenor has been recognized in all its markets for its progressive and effective HR practices. Last year, Telenor Pakistan won 'Best

Practice Award' by the Center for Global Inclusion in 'Flexibility, Work life Integration and Benefits' category at the Diversity and Inclusion Conference 2018. This was topped by the 'Employer of Choice Award for Gender Balance' by the International Finance Corporation (IFC) and Pakistan Business Council (PBC) and another accolade at the OICCI Women Empowerment Awards while competing against 39 other organizations. In previous years, Telenor Pakistan has also won the Top Employer and Best Place to Work awards.

Another testament to our work culture is the recognition of our Asian businesses for their progressive and effective HR practices. Digi, our Malaysian Business Unit, was ranked among the top 50 most diverse and inclusive organisations globally in Thomson Reuters' 2018 D&I Index Ranks.

Last year, Telenor Pakistan won 'Best Practice Award' by the Center for Global Inclusion in 'Flexibility, Work life Integration and Benefits' category at the Diversity and Inclusion Conference 2018

In Norway, Telenor ranked 15th amongst 79 largest listed Norwegian companies according to the 2018 SHE Index conducted by EY. Policies and targets, gender pay gap, talent, as well as, actions and measurements, were all taken into consideration. Telenor strongly believes in the saying "what gets measured, gets done". We are fully committed to gender parity and to accelerate change.

PW: With Telenor being a multinational organization, how do you bring together the people and culture on such a big scale?

Answer: Although we span 8 markets globally with 20,000 employees, Telenor's unique culture binds us together as one company, and it is what makes us different from our competitors. Our strategy is intrinsic in the work we do on a day-to-day basis. We stand



behind a purpose.

Although we span 8 markets globally with 20,000 employees, Telenor's unique culture binds us together as one company, and it is what makes us different from our competitors

We connect customers to what matters most. We provide relevant and personalized services to our customers; we help to empower societies. How we do this is reflected in our four key behaviors and in what manner is reflected in our policies such as our Code of Conduct. All these elements are a shared commitment and passion from employees which are reflected in our culture.

PW: What changes and trends do you see surfacing in the global job market? What are the key skills of the future?

Answer: How timely you ask this question! In May, Telenor will be publishing a new study titled 'Workforce Trends 2020'. Seven trends which

we feel will rise in prominence next year are: People and HR Analytics; Purpose-driven company; Diversity and Inclusion; Health and Wellbeing; Flexible culture; Chief Coach Officer; as well as Upskilling and Reskilling.

We believe skills required in the immediate future are data & analytics, personalized marketing, automation & process, cloud and virtualization, cyber security, customer facing IT, and product management to name a few

On upskilling and reskilling, in the realms of internet of things (IoT), artificial intelligence (AI) and 5G – which all play critical roles in the age of data and our digital future.

We believe skills required in the immediate future are data & analytics, personalized marketing, automation & process, cloud and virtualization, cyber security, customer facing IT, and product management to name a few.



You will be able to find more on Workforce Trends 2020, and our reskilling and upskilling internal initiatives on Telenor.com.

PW: How are Telenor employees contributing towards the economy and what is their motivation?

Answer: In an independent study by Frontier Economics titled “The Mobile Effect: How Connectivity Enables Growth” (which quantifies the impact of the telecommunications sector on the economies in the five Asian countries where Telenor Group operates – Bangladesh, Pakistan, Myanmar, Thailand and Malaysia), it found that Telenor has brought USD\$4.3 billion in economic value to our Asian markets in 2017.

Meeting these connectivity demands requires significant investment, especially in networks. From 2014 to 2017, Telenor invested USD\$6.2 billion in its five Asian markets, making the company one of the top three foreign investors. The study also revealed that our 12,600 employees

across Asia are 3.5 times more productive than the average telco sector employee and 50 times more than the average worker.

From 2014 to 2017, Telenor invested USD\$6.2 billion in its five Asian markets, making the company one of the top three foreign investors

Being able to empower societies and impact customers through connectivity is a true motivation in and of itself at Telenor.



Vivo V15 Series Launched in Pakistan with World's First 32MP Pop-up Selfie Camera

Vivo has unveiled the all-new V15 & V15 Pro smartphones in Pakistan at a star-studded event in Lahore. The V15 Series brings the first model beyond the NEX to incorporate the industry's first 32MP Pop-up Selfie Camera with upgraded AI technology that combines a stunning full-screen smartphone with an intelligent personal assistant that understands and anticipates consumer needs.



Vivo once again is breaking new ground by elevating the mobile experience with this latest affordable V series addition that packs in many high-end technologies that usually feature in only the most premium phones.

In addition to the Pop-up Selfie Camera, the V15 Series includes cutting-edge technologies like AI Triple Camera that takes pro-photography on the smartphone to another level, plus the in-display fingerprint scanning.



Taking inspiration from the ground-breaking NEX, V15 Series carries the same Pop-up camera, but better. V15 Series comes with a staggering 32MP Front Camera to capture even better selfies with unrivalled clarity. Vivo has further upgraded the mechanics & design enhancements also ensure the camera is sturdy enough to withstand daily wear-and-tear.

V15 Series now has a staggering 91.64% screen-to-body ratio, creating an unprecedented immersive viewing experience for gaming and video viewing. The Super AMOLED Ultra FullView™ Display of the V15 Pro now has a 19.5:9 aspect ratio, 6.39 inches. Its side and top bezels are reduced to a razor-thin 1.75mm and 2.2mm respectively.

The V15 series is available in the market at Rs. 64,999 in Topaz Blue color, while the V15 is available at a price of Rs. 49,999 in Topaz Blue and Glamour Red colors.



Huawei P30

A Triple Camera Phone

By Shaheer Riaz

Design and Display

First of all, it is more compact and more comfortable to hold in the hand. The build quality is equally great as the Huawei P30 Pro, we do have that same sturdy metal frame with good physical buttons and great placement. The back of the phone is made of glass that provides great premium looks. At the back of the phone, you'll also find a triple camera setup instead of four cameras found on the pro mode. We'll get more into the cameras later on.

Huawei P30 has a smaller OLED display (6.1 Inches) than the Huawei P30 Pro (6.47 Inches) that I found to be pretty nice and sharp (even more pixel density than the Huawei P30 Pro due to having the same resolution). Colors are on-point, it is a really bright display and can easily be used under direct sunlight.

Camera

The overall image quality is really impressive and it's comparable to most of the flagships out there (even better than most). The pictures taken using the Huawei P30 are sharp, very detailed and have a dynamic range which usually is on point.

The P30 has 3x optical and 5x hybrid zoom that lets you take high-quality telephoto pictures.

Network, Battery & Processor

The Huawei P30 uses the traditional earpiece so the call quality is really good. I also found signal reception to be great, GPS is accurate and Wi-Fi is fast there are also plenty of sensors.

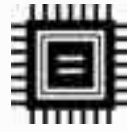
Battery life has been excellent, on average, you should expect to get over 10 hours of screen on time depending on how much you



use the device. We can fully charge the phone in just over one hour, unfortunately, there is no wireless charging feature.

When it comes to hardware, the P30 uses the same Kirin 980 chipset like the P30 pro model. You also get plenty of RAM (6GB) and storage (128 GB).

If you are a gamer, you can expect excellent gaming performance as the device can handle all the 3D, graphics intensive games.



128 GB, 8 GB RAM



Non-removable Li-Po
3650 mAh battery



6.1 inches
1080p supportive



46MP+16MP+8MP



PKR.124,999/-

Pros

1. Amazing Display
2. Brilliant Camera

Cons

1. Too Pricy

Huawei P30 is a solid flagship smartphone that has plenty of premium features and it cost less than the Huawei P30 pro, still, it is a very expensive device. It is all in one kind of device, brilliant camera lenses with the best-built quality.

You simply cannot ignore Digital Marketing in 2019.

3 Reasons you should Learn Digital-Marketing

Here are a few of many solid reasons, enough to persuade you to learn Digital Marketing.

1) Your Target Audience is Online!

As of January 2019, We have 5.11 Billion Mobile Users in the world, that's an increase of a total of 100 million (2%) compared to January 2018. Out of that, Pakistan has over 159 Million mobile users as of March 2019 (PTA).



Today we have 4.39 billion Internet users in the World, that's a growth of 9 percent (equaling a whopping figure i.e. 366 million) compared to January 2018. According to PTA, Broadband users of Pakistan reaches 68 Million while 3G/4G users to 66 Million.

Currently there are 3.48 billion people who are Social Media, that's over 9 percent (288 million) growth since January 2018. Out of that 3.48 billion, Pakistan has 37 Million active social media users (according to a report by "WeAreSocial.com").

Out of the total number of social media users mentioned above, 3.26 billion people use it on their mobile devices. Compared to January 2018, 297 million new users started using social media on their mobile phones, representing an increase of more than 10 percent.

Do you see the growth in trend of people adapting technology and internet?!

Learn to target them!

> Learn what's important to your target audience and how to reach them (you can use free tracking tools like Google Analytics / Google Search Console, and more)

> Learn Search Engine Optimization! (To better implement the use of those "Keywords" your audience use to look for a "product" or "service" like the one you offer)

2) "Data" is Important for Your Business/ Brand

Data regarding your audience is really important for your brand.

Modern technology and free platforms such as "Google Analytics" from Google make it easier than ever to gather and use that data to create highly targeted marketing campaigns.

You can learn more about who visits your website, about their locations (cities), their age groups, their gender, you can even track whether they used their laptop / desktop or a mobile device like smartphone or a tablet. You can also track the behavior of each visitor to your website or blog, like for how long he/she stayed, which pages on your site he/she visited and much more. Amazing, right?!

Google Analytics helps you track each and every visitor you get to your website through:

- Organic Search (SEO)
- Paid Search (PPC)
- Social Media
- Referrals (Backlinks)
- Direct Traffic

There are 10s of other professional analytical tools you can use once you have good grasp of using them.

3) The Role of the Ever-Growing Social Media

As mentioned above, 3.48 billion people use



Social Media from around the world. If your business is online or offline, you need to develop your Social Media Marketing strategy and reach the audience you are looking for.

You can make use of all social media networks like Facebook, Twitter, Instagram, Pinterest and more. Make your business pages/accounts to help you communicate directly with the end users, answer their queries, complaints and suggestions.

Using social media, you can build a good image around your brand and beat your competition. You can also manage your reputation, build strong relationships and maintain them, improve your brand loyalty and ultimately increase AWARENESS!



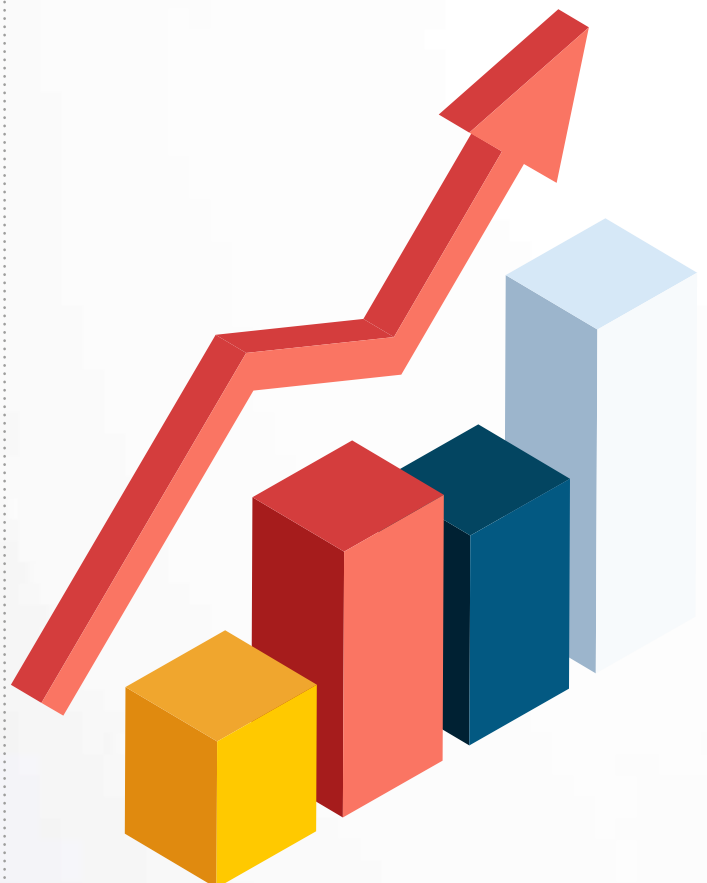
So, basically, your digital marketing skills will help you grow your online or offline business, in a very effective manner.

The concepts that you learn in digital marketing or marketing, will help you in other aspects of your life as well. For example, marketers have skills to



influence others because they know how human psychology works and how do humans react to different things.

Even if you do not want to opt for Digital Marketing as a profession, you should try and learn the fundamentals of it.



Airlink Communication & Huawei Technologies Join hands for the Next Generation Cloud Computing & Data Centre in Pakistan

Airlink Communication and Huawei Technologies join hands for the Cloud Data Center in Pakistan. The landmark agreement was reached at “Pak China Trade and Investment Forum”. The Cloud will be named as Huawei Airlink Cloud and this collaboration will be first of its kind in Pakistan.

The main focus of this agreement is to bring a revolution in Media and Finance Industries of Pakistan by introducing world-class IT Solutions and infrastructure.

Airlink Communication has remained preferred partner of Huawei in Pakistan since 2012. This agreement is in continuation of sustained business relations between the two companies.

The CEO of Airlink Communication, Mr. Muzzaffar Hayat Piracha, lauded this historical engagement between the two companies and said that Airlink Communication believes in bringing the best IT solutions to Pakistan and it will continue to play its role in the growth and development of Pakistan's economy.

Mr. Piracha also shared that Airlink Communication will further strengthen its relationship with Huawei Technologies to reach other sectors in near future.

Huawei CEO, Mr. Chinlinchun said in this regard “With Airlink's contribution Huawei will offer solutions for media and finance industry, work will facilitate into global content sharing, high cloud platform like OTT etc, where commitment will come in content sharing.

Adding important content, a milestone in finance industry Huawei will provide Agility service, business investment, service intelligence, etc to make Pakistan more and more advanced in the field of technology”



Data Encryption

Is it Enough Security for the People?



Every once in while you ask yourself these questions about the data you have been sharing with your family or your friends over the internet or simply store in your mobile phones; is it secure? Is it just between us? Does anyone else have access to it?

Let me pop the little bubble for you today. The answer is-a No. it means nothing is 100% secure over the internet.

This article will inform you of the data security level you enjoy, guide you towards what to do

and what not to do in order to be more secure. But before getting into that let's understand the primary concepts.

'Data' mean; any type of packeted information you have stored or shared such as files, Documents, Photos, Videos, and Audios etc

Firstly, what does 'Data' mean; any type of packeted information you have stored or shared such as files, Documents, Photos, Videos, and Audios etc.

What is Data Encryption?

The word encryption by definition means ciphered, coded, secured. Data Encryption is a process through which our data is made secure for sharing and storing. In simple words the data we intend to send to the receiver is readable.

Data Encryption is a process through which our data is made secure for sharing and storing

When it is sent it is encrypted in the form of unreadable format which can only be read by either the sender, the middle man/party that encrypts and transmits or the receiver. When data reach the receiver, it is again decrypted to a readable form.

As evident from the above-mentioned process there is a third person who has access to your data. So are you comfortable with that? Not At All Indeed!



There exists another form of data encryption known as End-to-End-Encryption. It involves absolutely no one else except the sender and the receiver. No third party at all has the access to your personal data.

This is so far the safest encryption we have. So whenever there's an option of end to end data encryption, always go for it. Unfortunately, most of the apps we have been using do not consist of end to end encryption while some don't even have

any kind of data encryption policy at all.

Whatsapp, Signal, Telegram and Threema are some of the safest apps that offer end to end data encryption. Now coming on to the big news, all the apps you trust with your 'Super Private Stuff' such as NQ Vault, App Lock, CM Locker and all such apps they in actual have 'zero' privacy at all.

Most of the apps we have been using do not consist of end to end encryption while some don't even have any kind of data encryption policy at all



Not only that, these apps only change the file name or move them to a different location (in the app) which is simply password protected and can be easily accessed by anyone through a 'File Browser'.

Whatsapp, Signal, Telegram and Threema are some of the safest apps that offer end to end data encryption

And if these applications are deleted by someone with physical access to your phone, all your precious data will be lost.

The worst part is that these apps either do not encrypt the data at all or encrypt very little of the

data. Which, by now, you should know what this means.

Anyone and everyone trying to get to your data may get their hands on it with a mere struggle.

What to Do:

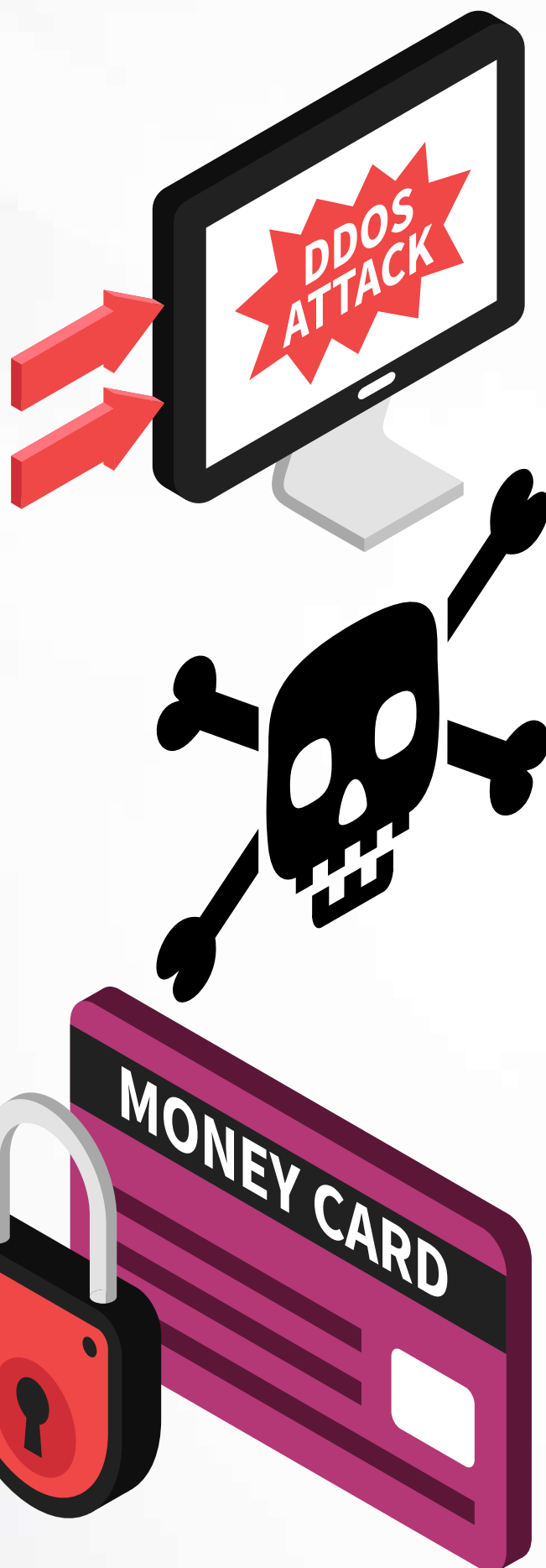
1. DO NOT CAPTURE OR STORE things you don't want anyone to see. Because whatever you do, it is never safe in there! Some things are better to be saved in the memories alone.

2. Download and use Apps from trusted sources that provide end-to-end data encryption. Don't trust the number of downloads of the apps as most of the people are not aware of this stuff. Do a detailed research before downloading and using apps for confidential matters.

3. When using public Wi-Fi always use VPN (virtual private network); which is a secure tunnel between your device and the internet. VPNs are used to protect your online traffic from snooping, interference and censorship.

4. Rather than downloading and using third party vault apps just keep your mobile secure and try to use built-in privacy options if needed.

People should work on improving security where they are most vulnerable—on their own devices. These precautions can only lessen the chances of becoming a victim of the cyber-criminals but there is **ONE GOLDEN WAY** to be 100% safe. Go back to one. And Repeat!



WARNING!

Tecno Camon i4 Campaign that Rocked the Minds!

Tecno Mobile is one of a leading mobile company, has recently launched Camon i4 in a seamless way. TECNO gradually revealed their phone by launching the different aspects one by one in the newspaper. The four advertisements were being featured in the local newspaper of which the first one had a teaser that the new launch is named as Camon i4.

Second day the Dot Notch Display feature was focused in the advertisement that holds the selfie camera along with proximity and light sensors. Dot-notch is the latest trend in the market and gives away more of screen space to the user.

The third day featured the Triple Rear AI Cameras, teasing the audience the upcoming phone will have triple camera feature and finally, right after the launch event the specifications and price of the phone were revealed.

The entire process of the launch was one of the most appealing processes because TECNO unveiled its phone with great hype and suspense. Initially, the phone was being rumored to be launched followed by a collaboration with an RJ and the people who pre-booked their phone were also invited to their launch event as well followed with a creative campaign in the local newspaper.

Furthermore, the launch event of Camon i4 took place and it was hosted by none other than Cybil Chauhdary and Ahmed Ali Butt. This event was also attended by numerous celebrities.



Camon i4 stands out with the product slogan of “Capture More Beauty” which reflects the triple camera, which is one of the most breathtaking features in this mobile phone added with a 6.2-inch dot-notch display in the Camon Series. The best part is the reasonable price of just Rs.21, 499/-.



Vivo V15 Pro

32MP Pop-up Selfie Camera & 48MP Triple Camera

A perfect device at a perfect price range, that's how you can describe Vivo V15 Pro. Although the Vivo V15 Pro is the most expensive device of Vivo but its worth it because of its pop up selfie camera and 48MP triple camera lens.

Design and Display

A vibrant 6.39 inch full HD Plus Super AMOLED panel with rich colors and contrast. I like the in-display fingerprint sensor it feels very futuristic and it also makes the design of the phone look a lot techy.

The top side of Vivo V15 Pro has a motorized selfie camera, mic, and a 3.5mm audio jack whereas, the bottom is packed with SIM jacket, a secondary mic, a micro USB port 2.0 and speakers. The right edge of Vivo V15 Pro has volume keys and a power button while the left edge has a memory card jacket and a Google help button.

Camera

The cameras of Vivo V15 Pro are just incredible. The back cameras are 48 MP, f/1.8, 1/2", 0.8µm, PDAF, 8 MP, f/2.2, 13mm (ultrawide), 5 MP, f/2.4, depth sensor. If we combine all these three back camera lenses then it is a 61MP jam-packed mobile phone.

If you have Vivo V15 Pro then you don't need of any DSLR. The results are remarkable while the front camera lens has 32MP motorized selfie pop-up camera.



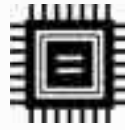
Network, Battery & Processor

The vivo v15 pro is a 4G enabled phone with the access of 3G and 2G network also. It also gives us access to Wifi, Bluetooth, and FM Radio while WiFi is using standards of 802.11 a/b/g/n, Wi-Fi Direct, and hotspot. Its powerhouse is packed with a fixed Li-Po battery of 3700 mAh, a very reasonable and decent battery choice.

A 4G smartphone with this kind of battery is perfect for daily use as it gives us 13-14 hours of consecutive usage on 3G/4G. The excessive usage of 3G/4G services drain the battery very quickly.

Vivo V15 Pro is mechanized with advanced Octa-core system with chipset of Qualcomm SDM675 that supports 1080p Full HD displays, along with Full HD video recording and playback.





128 GB, 6/8 GB RAM



Non-removable Li-Po
3700 mAh battery



6.39 inches
1080p supportive



46MP+8MP+5MP



PKR.64,999/-

Pros

1. 48MP camera
2. 6/8GB RAM

Cons

1. UI is dull

Vivo V15 Pro, a device with so many heavy features such as motorized selfie camera, 48MP camera lens, 8GB RAM and much more. It is the most loaded device by Vivo till now.



Aims to bring Products integrating trendy Design and carefree experience to young people

1. What exactly is realme? Who is the main target group of realme?

Realme is a technology brand focusing on providing quality smartphones. It was founded on May 4 (Chinese National Youth Day), 2018 by Li Bingzhong, leading a team of young people with smartphone industry experience across different nations. Realme is powered by Oppo.

We are an internet company which creates products with powerful performance at the crossroads of technology and design. Realme hopes to touch young consumers across the world

2. What sets apart realme from OPPO?

Realme is a young brand built by a young team for young consumers. realme aims to bring products integrating trendy design and carefree experience to young people. realme will focus more on the development of light assets.

This means that it shares the same consumer centric philosophy. Besides that, the factory and brand offerings are also similar such as both brands share the same quality control methodologies, same after sales services and same network of service centres globally.



3. Could you please share with us something about your cooperation with Daraz?

The first-generation realme products are sold exclusively on Daraz. Our cooperation with Daraz has enabled realme to more directly reach out to the many young consumers across Pakistan.

4. Have your product R&D and design been independent of OPPO? Which technologies will be shared by the two brands in the future?

Currently, realme has its own independent R&D and design teams, to provide products integrating

carefree experience and trendy design, based on the idea that "Power Meets Style".

5. Do realme products support the bands in European countries?

Currently, realme products only support some European bands.

6. Is realme a strategy for OPPO to focus on online sales channels of mobile phones?

No, realme is an independent brand.



Tecno Camon i4 Review

Design and Display

Tecno CAMON i4 has 6.2 inches' screen and screen to body ratio is almost 80% which is brilliant. It supports the resolutions of 720 x 1520 pixels with IPS capacitive touchscreen. Density per pixel is almost 271 dpi that is huge for clear and detailed visibility of icons and texts.

On the overall, the Camon i4 is built with the combination of metal and plastic. It weighs 174 gram and it's shipped in multiple colors that include Midnight Black, Nebula Black, Aqua Black, and Champagne Gold colors.

Camera

Camon i4 has an impressive set-up. The rear primary camera is 13 MP with a secondary camera of 8MP and lastly the third 2MP dept sensor.

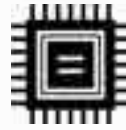
The triple cameras work together to produce HDR, great photos and they shoot 1080p videos at 30 seconds per frame. Other features on the camera include LED flash, panorama, and HDR. Selfies lovers will get an impressive front-facing camera of 16MP which has FaceID for security.

Memory and Processor

Under the hood, the Camon i4 is powered by a MediaTek MTK6761 HelioP22 processor with octa-core that runs at a speed of 2.0 paired with Mali-T720 for graphics.

On the memory side, it is packed with 64GB ROM and 4GB RAM and it is also available with 32GB ROM and 3GB RAM. All Tecno i4 variants have a slot for micro SD card which enables users to expand the memory up to 128GB.





32 GB, 3 GB RAM



**Non-removable Li-Po
3400 mAh battery**



**6.2 inches
720p supportive**



13MP+8MP+2MP



PKR.21,499/-

Pros

1. Triple camera
2. Awesome Price Range

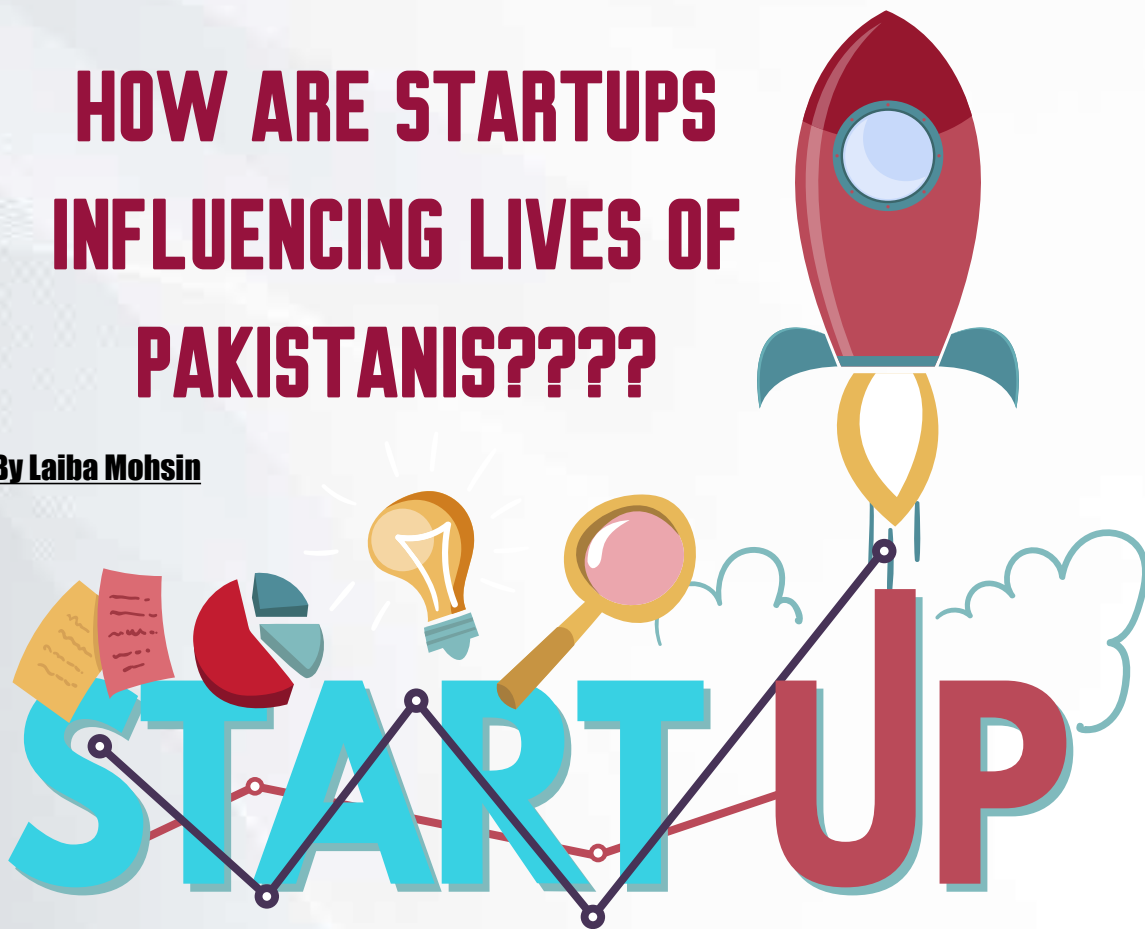
Cons

1. Slow Face unlock

Tecno CAMON i4 is an affordable mid-range device loaded with the premium features. The device runs very smoothly without any bugs and lags. It is a perfect smartphone at such a reasonable price.

HOW ARE STARTUPS INFLUENCING LIVES OF PAKISTANIS????

By Laiba Mohsin



Startups are actually companies initiated by entrepreneurs to search for ascendible business models. These are newly emerged business ventures that aim to develop a viable business model to meet a marketplace need or problem. Like many other countries, the culture of startups in Pakistan is thriving. In addition to that, many startups in Pakistan are gaining international recognition due to the use of modern technology in their new ventures.

Many startups in Pakistan are gaining international recognition due to the use of modern technology in their ventures

Startups can be very small companies but they can play a significant role in economic growth of a country and the livelihood of its people. Unemployment is the rudimentary problem of Pakistan and startups create more jobs which mean more employment, and more employment means an improved economy.

So, the startups in Pakistan are really driving our society towards a better economy by providing job opportunities to many people. Travellia, Marham, Cargar, Campusfeed are some of the startups that are reshaping the way Pakistanis work.

Startups can be very small companies but they can play a significant role in economic growth of a country and the livelihood of its people

These kinds of startups are also contributing to economic dynamism in Pakistan by spurring innovation and injecting competition. Also, startups are smaller and less structured. Together with this, they are also innovative and can help in improving business models, processes, and portfolio.

So, the startups in Pakistan are also more adaptive to disruptive technologies and changes in market conditions.

The startup drive in Pakistan is also encouraging the women to come forward and work equally like the men. For example, Home Foodies is a platform that enables housewives to set up their own food businesses from within the comfort of their homes.

Startups are also contributing to economic dynamism in Pakistan by spurring innovation and injecting competition

In addition to this, there are many startups in Pakistan that are developed and run by women; Sprinkle's Café, Zaib's Stitches, KB Mustard Oil, Memuna's Dress Designing, Sephora Beauty Salon, Handy Vac, Gems & Jewelry Business, DOCH Pvt. Ltd, Rider School Van Service, Organic Jiyo etc are some of the women-led ventures for other women.

Sprinkle's Café, Zaib's Stitches, Memuna's Dress Designing, Sephora Beauty Salon, Rider School Van Service, Organic Jiyo etc are some of the women-led ventures for other women.

Startups are also enhancing the versatility of the people working for them. As startups are quite flexible, so they allow the people to work at the hours, the place and in the manner that suits them. It is benefiting the Pakistani's who want to do more than one jobs.

In addition to all this, there are many local startups that are also benefiting other industries of the country. For example, Ricult is a Pakistani agricultural tech startup that enables smallholder farmers to access credit and services like purchasing inputs and selling harvests. It eliminates the need of middlemen and loan sharks.

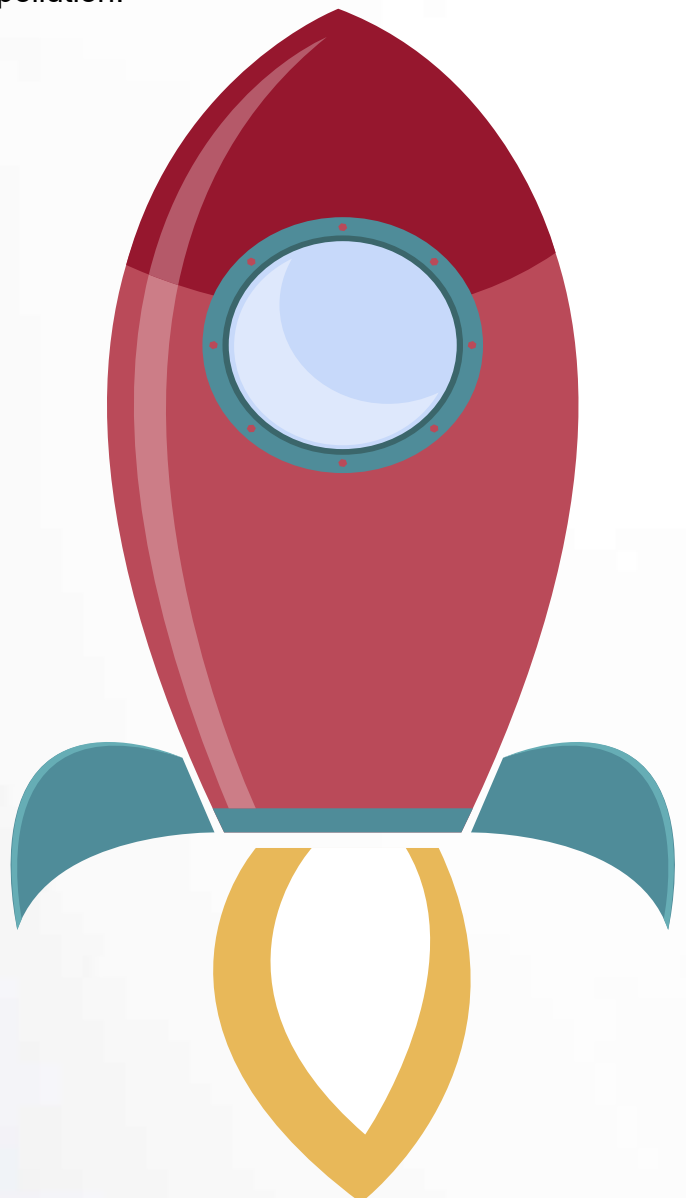
Ricult is a Pakistani agricultural tech startup that enables smallholder farmers to access credit and services

Another startup is the HAC Agri that offers a range of fruits and vegetables by directly connecting

with farmers. It provides an access to the best products and offer advantage to harvesters.

JF Labs is also a startup that provides Agricultural Drone Services. It enables farmers to enhance the quality of cultivation process through detailed and precise imaging. There are many such startups that are playing a significant role in the betterment of the agricultural sector.

Some of the startups are also helping to maintain the sustainable living environment. As we all know that pollution is one of the major problems in our country. So, in order to eradicate it, such startups must be introduced that can help to maintain an eco-friendly environment. "Modulus Tech" and "Sustainable Living Environment" are among those startups that are helping to reduce pollution.



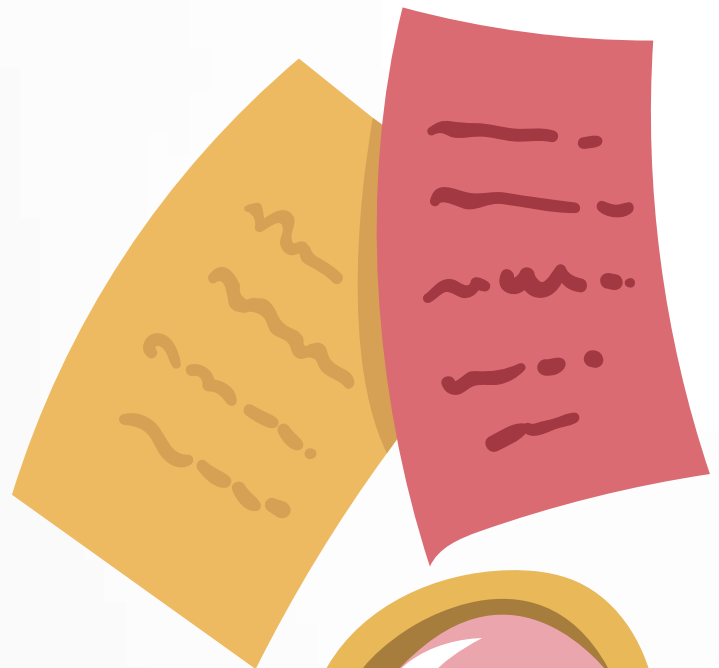
Last but not least, some startups are also playing an important role in the Health sector of Pakistan as well. For example, Marham is a health-tech startup that provides quick medical help to the patients in terms of right doctor identification, booking appointments and sharing quick access points of the doctors. Excel labs, sehat kahani, Oladoc are some of the health related startups that are delivering good health care solutions producing ease and comfort for the people all over the country.

Government should introduce new firms in IT sector that will immensely boost the local technology industry, besides providing a chance to create more jobs and develop the nation as a whole

Pakistan is at the cusp of startup drive. Pakistan's government should take steps to help in expanding such business ventures. All the talented and innovative minds should be given opportunities to come forward and give life to their ideas.

The government of Pakistan can achieve something comparable by channeling local entrepreneurs into industries like defense, healthcare, ports, oil and gas, education and governance. Government should also introduce new firms in IT sector that will immensely boost the local technology industry, besides providing a chance to create more jobs and develop the nation as a whole.

Moreover, the government should encourage growth across all industry sectors including low, mid and high-tech firms. It will definitely take sometime but expanding the number of startups in the country will definitely benefit all the sectors of Pakistan.



START UP



Best Android Launchers of 2019

Customize the looks of your Android Device



The launcher is a way we organize, manage and arrange our applications on an android system. We can totally change the look of our Android device and depends upon our choice. A launcher includes a series of different home screens, app shortcuts and different widgets or an application drawer. Every android device has some launcher but some of them are very tricky and complicated. If you haven't found the best one, then here are some Best Android Launchers, we think will satisfy you.

1. Nova Launcher:

Although Nova Launcher is now more than six-year-old, it is playing a very important role in android launchers market. The biggest reason for its success is its simplicity because it has a very simple and easy layout with a mix of customization and convenience. It makes your android device looks like a Google pixel phone or similar to Samsung Galaxy S9. All the things work with ease and grace in Nova Launcher and it is considered as the most smooth launcher among all other Android launchers. It is the best android launcher and totally goes with your choice, either you want to make a complex theme or just a simple layout.



2. Action Launcher:

Action Launcher is another popular one among the Best Android Launchers on the market. The reason for its success is Quick and simple, it has Quicktheme, Quickdrawer, Quickpage, Quickbar. Everything is very quick in action launcher furthermore its one of the fastest android launcher. Action Launcher is considered as a fast android launcher that gets what you want to do rapidly with the goal that you can return to doing whatever you really need to complete. It is one of the most customizable Android launchers with a quick and fast speed.



3. Smart Launcher 5:

The smart launcher is working for several years but it picked up a hype after smart launcher 5. The main reason for its becoming famous among Android Launchers is its new home screen feature that has a new gridless widget-placement system. They have also changed the look of a smart launch which looks very easy with it. It automatically divides your applications among several categories.



4. Blackberry Launcher:

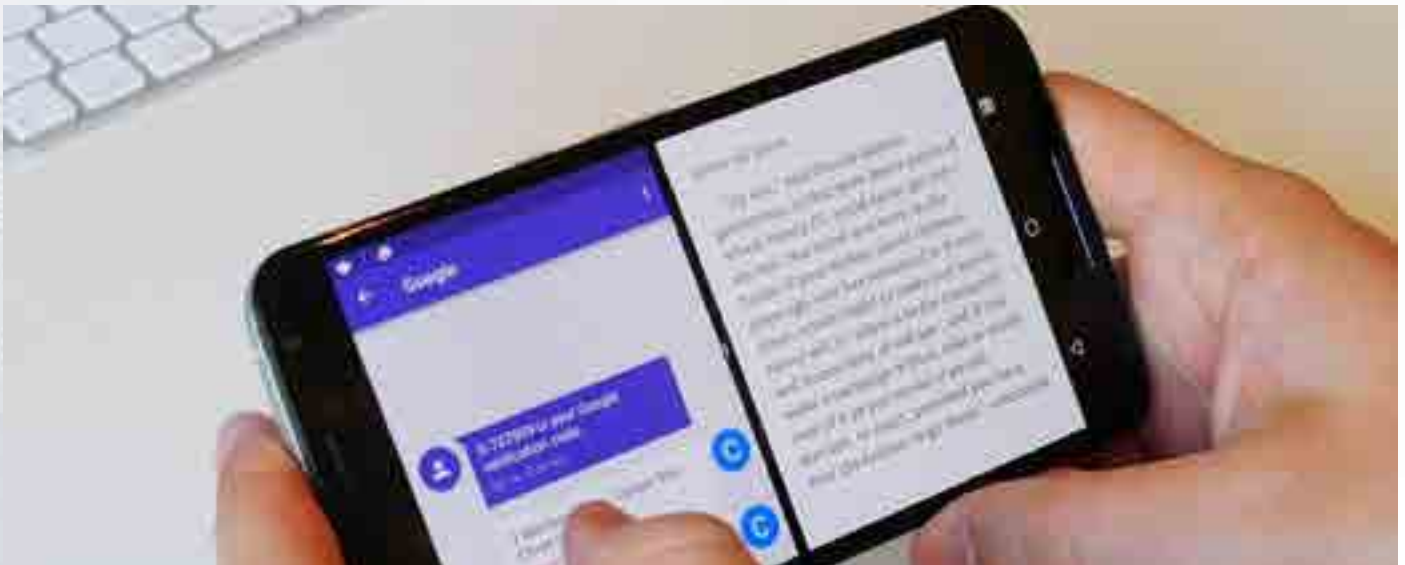
From its name, it looks like it is blackberry launcher but after migration of BBX to android. They have introduced a blackberry launcher that is available on Google Play store. It is a stable android launcher that is mostly useful for new blackberry android devices. BlackBerry Launcher gives you the access to set the thing the way you want to and enjoy the launcher efficiency at its best. Keyboard shortcuts on BlackBerry Launcher are exclusive to BlackBerry's physical keyboard phones.



5. Microsoft Launcher:

If you think that Microsoft Launcher is similar to windows phone launcher then you are totally wrong. It doesn't look alike windows phone launcher, it has a completely different android native experience. The Microsoft launcher is one of the Best Android Launchers among all other Android launchers. In some cases, it beats Nova launcher because it offers edge-edge widget replacement.





To help you easily set up split-screen on your Android phone, follow these easy steps.

1. Find compatible apps

Not all apps support split-screen mode on Android – the likes of Netflix, camera mode and certain games like Candy Crush need to be viewed in full-screen mode.

To figure out which apps you can use in split-screen mode, you need to head to the recently used apps container – you can do this by pressing the square icon to the bottom of the screen, or swiping up on certain phones if you have three-key navigation disabled.

This brings up your recently used apps, so you can easily return to something you were doing previously.

You'll notice above some of the apps is an icon consisting of two small boxes, one on top the other – this indicates which apps you can use for split-screen mode, so if there's no icon you're out of luck.

2. Select the first app from the multi-tasking menu

To start split-screen mode on Android, select this icon for the app you want to be on top. When you do the screen will be cut in half, with the app you chose at the top, and the main menu at the bottom.

3. Select your second app from the compatibility list

To open a second app, scroll through the list of compatible apps shown in the empty half and tap the one you want to fill that part of the screen. The bar between the apps can be moved, so if you want one to be much smaller than the other just press and hold on the divide and drag it until it's in the perfect position for you.

How do I turn off split-screen on Android?

To get rid of one of the apps simply press the black bar between the apps and drag it to the top or bottom of the screen, so the app you want to keep takes up the whole display again.

If you want to close both apps, follow the instruction above to close the first one, and then you can close the other how you would any other app, by pressing the home button.

TELECOM CAMPAIGNS

Honor 8C



A very motivational and fascinating advertisement. The performer Asim Azhar has performed well and grabbed the attention of viewers with his charismatic performance. He delivered the message in a very decent way with the proper selection of words. In fact, the dialogues of the ad are appreciable and impressive. The background music is also amazing. The overall ad is great and different than other smartphones ads.

Verdict: Marvelous ad!

The new ad of Nokia smartphones is short but nice. The message has been delivered so smartly that it is not impossible to get Nokia smartphones, but it is impossible to leave these phones. The ad is very simple, and the graphics are good.

Verdict: Simple and nice ad!

Nokia



OPPO F11 Pro



Oppo F11 pro new ad is short and simple. The background music is nice. The phone is shown from every angle. The key features of the phone are highlighted. The major focus is on the camera of the phone as it comes with a pop-up camera.

Verdict: It is fine!

Telenor : Monthly ultra Package



Telecom operators need to bring some creativity in their adverts. We are done with watching a guy chatting with girl due to low rate package provided by the company. It is high time that Telenor hires a creative team that can produce some other story line. Like any other advert, this monthly ultra-package advert reveals the package detail. The music and voice over is quite annoying.

Verdict: Below Average!

Easy Paisa has launched a series of adverts with same theme but different features and cast. This is a brilliant idea of advertising a same product in different ways as it means something different for every customer. In every advert, the actors are revealing advantages of downloading easy Paisa app.

Verdict: Excellent effort!

Telenor : EasyPaisa



Telenor : Microfinance bank



Telenor Microfinance Bank has the habit of producing best message oriented ads for public. In this Telenor Microfinance Bank advert, Outhao Pehla Kadam, the company has covered all the issues of a common man. This inspiring and message oriented ad is directed in the best way it could be. We just loved the camera shots. The voice over and over all music has done justice to the ad.

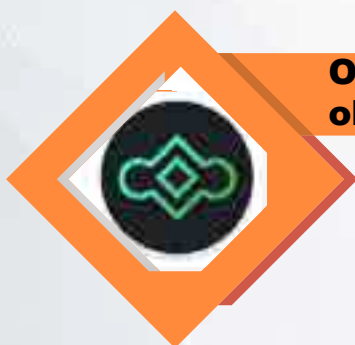
Verdict: Good effort!

Top Applications and Games for your Smartphone



Brilliant

Brilliant creates inspiring, interactive learning experiences for ages 10 through 110. Award-winning teachers, researchers, and professionals illuminate the soul of math, science, and computer science through fun, bite-sized problem solving explorations.



Orphic : Read & learn some obscure words

Orphic provides you with a long list of cool words found in various languages, especially English. You can also save them to your favorites. Copy these words to your clipboard and paste them wherever you like.



Lynx Privacy-Hide photo/video, Free 5GB Backup

Lynx is a professional app designed to protect a hide mobile privacy. All your private photos and videos can be password-protected and automatically synced to a 5GB free cloud space to save your device space.



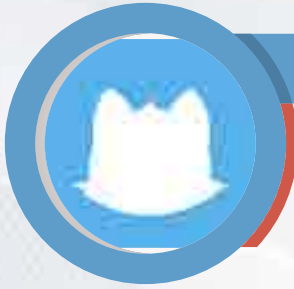
1Password - Password Manager and Secure Wallet

1Password: the password manager that's as beautiful and simple as it is secure. Simply add your passwords, and let 1Password do the rest.



World Around Me

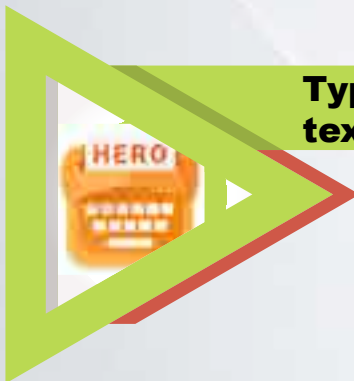
World Around Me is a unique way to find useful places around you - such as restaurants, ATMs, shops, bus/metro stations and more. WAM uses your phone's camera to give you a completely new way of exploring a place, anywhere in the world.

**Cleanfox - Clean Your Inbox**

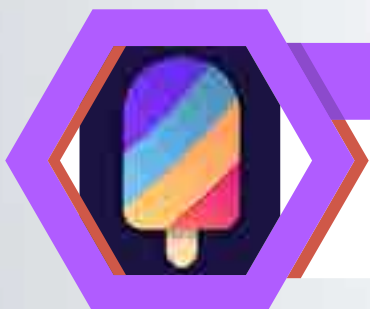
Cleanfox is a 100% free app to delete and unsubscribe from unwanted newsletters and spam with one click. Cleanfox is a free anti spam.

**Hide Photos, Video and App Lock - Hide it Pro**

Hide photos & videos from your photo gallery and access them easily using a secret PIN code. Now you can easily share your phone without worrying about privacy.

**Typing Hero: Text Expander, Auto-text**

Typing Hero is a text expander app that transforms (expands) your own keyword to any lengthy text you want in an instant. Simply start by adding frequently used text to Typing Hero, set a keyword for each text, and enable Typing Hero service.

**Walli - 4K, HD Wallpapers & Backgrounds**

New Feature! Automatic wallpaper changer: change your wallpaper in an automatic way with the new Walli Playlist feature.

**Apex Weather**

This weather widget is a full featured, completely customizable digital clock and weather forecast app.



Pakistan's Online Store with Official Warranty



Huawei P30 Pro

Price : PKR.174,999/-
Display: 6.5 inches
Memory: 256GB ROM,
8GB RAM
Camera:
40MP+20MP+8MP



Samsung Galaxy S10 Plus

Price : PKR.219,999/-
Display: 6.4 inches
Memory: 512GB ROM,
8GB RAM
Camera:
12MP+12MP+16MP



Vivo V15

Price : PKR.49,999/-
Display: 6.53 inches
Memory: 64GB ROM, 6GB RAM
Camera: 12MP+8MP+5MP



Samsung Galaxy A70

Price : PKR.61,999/-
Display: 6.7 inches
Memory: 128GB ROM,
6GB RAM
Camera: 32MP+8MP+5MP



Oppo F11 Pro

Price : PKR.54,999/-
Display: 6.5 inches
Memory: 128GB ROM,
6GB RAM
Camera: Dual 48MP+5MP



Nokia 8.1

Price : PKR.69,900/-
Display: 6.2 inches
Memory: 128GB ROM,
6GB RAM
Camera: Dual
12MP+13MP



Tecno Camon X Pro

Price : PKR.28,999/-
Display: 6.0 inches
Memory: 64GB ROM,
4GB RAM
Camera: 16MP



Realme 3

Price : PKR.28,999/-
Display: 6.2 inches
Memory: 64GB ROM,
4GB RAM
Camera: Dual 13MP+2MP



Huawei Y9 2019

Price : PKR.37,999/-
Display: 6.5 inches
Memory: 64GB ROM,
4GB RAM
Camera: Dual 16MP+2MP



Tecno Camon i4

Price : PKR.21,499/-
Display: 6.2 inches
Memory: 32GB ROM,
3GB RAM
Camera: 13MP+8MP+2MP



Realme 2 Pro

Price : PKR.46,999/-
Display: 6.3 inches
Memory: 128GB ROM,
8GB RAM
Camera: Dual 16MP+2MP

HOW IS IOT REVOLUTION PROCEEDING

TO RULE THE FUTURE?

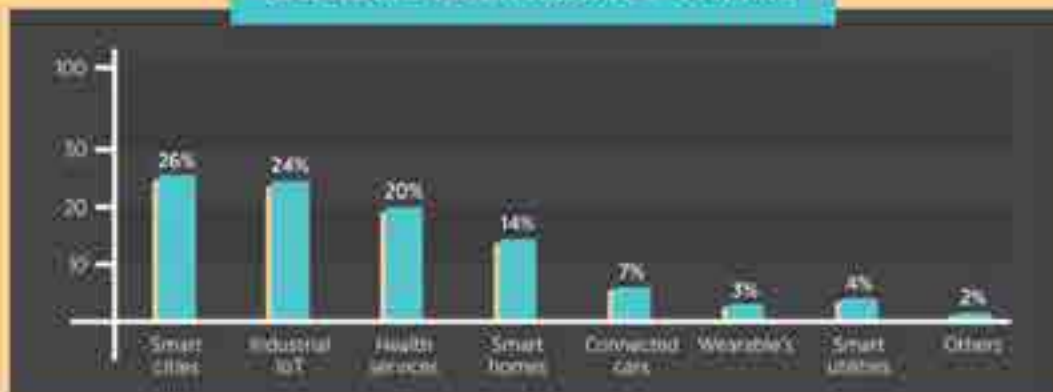
WHAT IS IOT?

Internet of things (IoT) is an ecosystem of connected physical devices that are accessible through the internet.

HOW DOES IT WORK?

IoT devices contain sensors and minicomputer processors which integrate different devices collect data by the sensors via machine learning. Essentially, IoT devices are mini computers which are connected to the internet.

GLOBAL IOT MARKET SHARE



5 THINGS IN WHICH IOT MAKES THINGS SMARTER:



Enterprise IT operations



Impressions in retail and healthcare



Wider connectivity options



Security concerns



Blockchain technology

IS IOT THE BEST CHOICE FOR EDUCATION?

IoT can transform the traditional learning culture with a different approach that excites students with a creative and fun learning approach.

OVERALL BENEFITS OF IOT IN EDUCATIONAL INSTITUTIONS

- ▶ Poster boards into IoT enabled boards
- ▶ Interactive gaining of knowledge
- ▶ Attendance monitoring system
- ▶ Superior safety features
- ▶ Learning anywhere and anytime
- ▶ No more chalkboards



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Shanghai • 上海

26-28 June 2019 • 2019年6月26-28日

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TECNO
mobile

CAMON i4

**AI Triple Camera
Capture More Beauty**



6.2" Dot
Notch Screen



13MP AI Triple
Camera with Super
Wide Angle



16MP AI Selfie
Camera



32GB + 3GB

Rs. 21,499



TECNO
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OFFICIAL PARTNERS



vivo

PUBG
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V15 Pro
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