

phoneWorld

Issue 35 | Nov-Dec 2018



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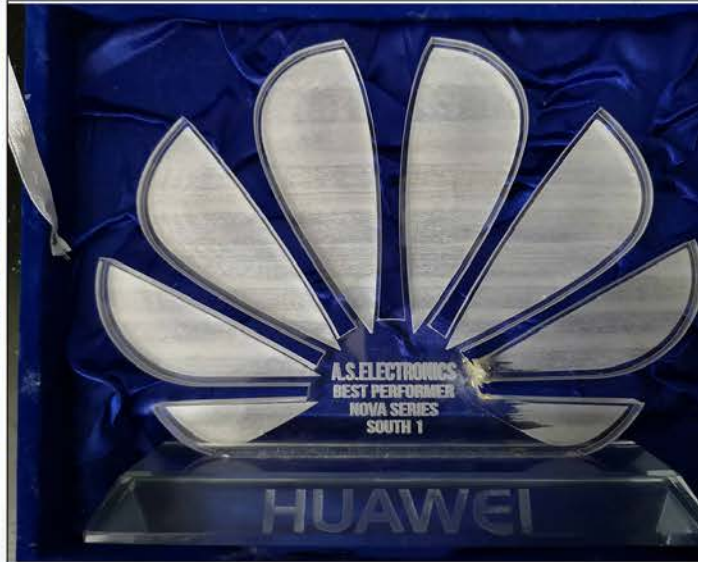
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Adnan Khan
Managing Editor

Dear Readers,

Another transformative year has come to an end with lots of ups and downs but we always move on to the New Year with renewed hopes and aspirations for the future. Since the telecommunications are now indispensable to socioeconomic activities, the role of telecom regulator has become far more important today. Fortunately for Pakistan, the MoITT and PTA are spearheading the phenomenal rise of technology advancement in the country while private sector is also providing a strong support to the government. With growing urban population, improving economy, increased smartphone penetration and better telecom services Pakistan has taken the central stag in international arena for IT and Telecom developments. In our feature article we present to you milestones our industry has achieved in the last 12 months and the issues that still need to be managed.

Along with other good news, reduction in mobile termination rates was also a welcoming addition. The decision was made by PTA to facilitate the consumers and improve the telecom services penetration in the country. In our article, "The impact of Mobile termination rates on Pakistan's Mobile Industry". We have highlighted the benefits of this decision in detail so that all stakeholders could easily understand the short-term and long-terms effects of this decision.

How financial technology and m-health are transforming the respective industries in Pakistan and why these technology changes are important for the progress and development of Pakistan are being discussed at great length in our current issue of Phoneworld Magazine. In addition to that, we have also compiled a list of some interesting gadgets that were released in 2018.

This time, our in-focus section features an exclusive interview of Mr. George Long, CEO OPPO Pakistan. Oppo started its business in Pakistan in 2014 and in a short span of time it became one of Pakistan's leading smartphone brands. In our quick session with Mr. George we discussed the journey of Oppo in Pakistan and the philosophy behind the brand.

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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Contents

Feature

10. Telecom & IT Performance Report 2018

National

20. Transforming Pakistan's Health Sector through Mobile Technology

Infocus Interview

32. George Long, CEO OPPO

Phone Reviews

18. Oppo R17 Pro

40. Vivo Y91

28. Nokia 8.1

46. Huawei Nova 3

Tech Twists

17. Fun Tech Facts

Telecom Campaign

50. A critical Review of TV Ad Campaigns

Wishlist

52. Best selling smartphones of 2018

App World

56. Applications and games for your smartphones

 *Issue 35*

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24. The impact of mobile termination rates on Pakistan's Mobile Industry



32. Exclusive Interview, George Long- CEO OPPO



36. Time for Pakistan to gear up towards fin-tech



39. Personality corner, Peter Theil



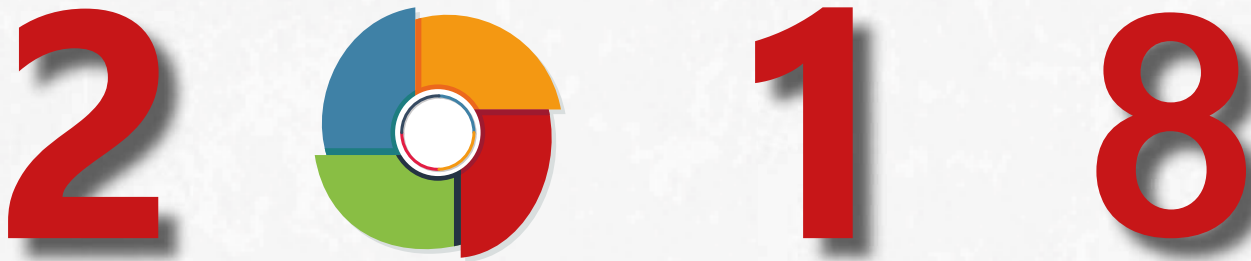
42. Do social media influence our spending?



26. Realme officially launches in Pakistan

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The Highs & Lows of ICT Industry

Before the emergence of internet and other data networks telecommunication only had one simple meaning, the telephone. Today, telecommunication industry has become much more than that, we are so used to it now that the world would collapse if it was taken away. The inventions and innovations that have accompanied the technology revolution have impacted every sphere of our lives and ICT industry has become the most important sector for every country. ICT has taken the central stage, ready to make Pakistan a digital country. There are number of factors that have contributed to the tremendous growth including Pakistan growing population especially in urban areas which means there are a lot of potential consumers coming online every day.

ICT has taken the central stage, ready to make Pakistan a digital country

Pakistan's economy also grew by 5.7 percent in fiscal year 2018 and if the similar trend persists, Pakistan could become the fourth fastest growing economy by 2030.

The country's growing smartphone market is another attraction, currently there are around 152 million cellular subscribers, and 60 million 3G/4G mobile broadband (MBB) subscribers. The number is expected to grow further due to falling smartphone prices and cheap data rates. The Chinese-Pakistan Economic Corridor (CPEC) is the largest Chinese investment venture in Pakistan with around \$62 billion, this alone is considered the monumental aspect in the overall economic progress that will have a definite impact on the ICT Industry. Pakistan also saw a new Party emerge from the elections of 2018 that has a youngish leadership and outlook, with technology and innovation as part of its core agenda for growth.

With such favorable conditions and encouraging outcomes, our ICT industry witnessed number of landmarks in 2018.

Pakistan's economy grew by 5.7 percent in fiscal year 2018 and if the similar trend persists, Pakistan could become the fourth fastest growing economy by 2030

In the industry round-up we present to you milestones our industry has achieved in the last 12 months and the issues and challenges that still need to be managed.

1 Telecom Revenues: A great year for telecom operators

Telecom sector is one of the fastest growing sectors of Pakistan that has created number of opportunities for the country. Although the stats for year 2018 are not released yet but based on the growth trend of last few years, we can expect a steady increase in revenues of around 1 million this year as well.

Despite the tough competition in cellular market, Ufone posted 21%, Jazz 18.7% & Telenor 11.5% increase in their revenues in Q3 of 2018

The year was especially good for the mobile operators as considerable growth was witness in their revenues as well. Despite the tough competition in cellular market, Ufone saw 21% improvement in its Q3 2018 revenue due to its increased 3G footprint by upgrading network sites. Solid organic growth was also witnessed in Veon's overall revenues as well. Pakistani was the biggest market for Veon in Q3 2018 with almost PKR 49 million, an impressive YoY growth of 18.7%. Telenor also delivered a good

quarter with revenue growth and strong profitability. It posted its highest ever revenue of Rs. 30 billion during the third quarter of 2018, up by 11.5% from Rs. 26.89 billion during the same period last year. Zong is the only company that has yet to post its first profit in the Pakistani market. The company, in its responses to Profit, clearly states that being the official Chinese cellular company in Pakistan, their strategy is to enable connectivity for the government, businesses and people of Pakistan and provide them with wider and faster 4G network thus not worried about profits even 10 years after commencing operations. According to telecom experts, if the industry is earning \$2 [ARPU] from voice, Zong is earning \$10 from data which means that their strategy is good and it has even worked.

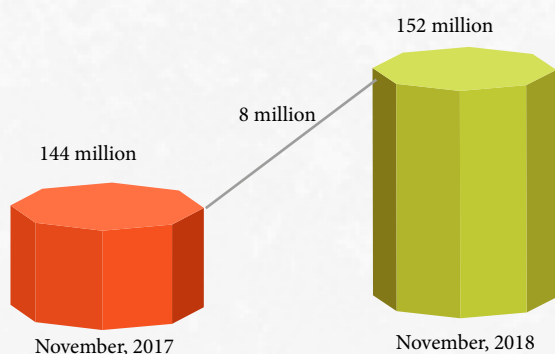
2 Mobile Subscriber base: An impressive growth of 8 million users

The cellular market in Pakistan is growing at a very healthy pace. The uptake of 3G/4G has been quite impressive that has given the government and the mobile operators the confidence to look forward to 5G.

The number of mobile subscribers reached 152 million in November 2018 up from 143 million in November 2017; showing an impressive growth of 8 million subscribers in a year

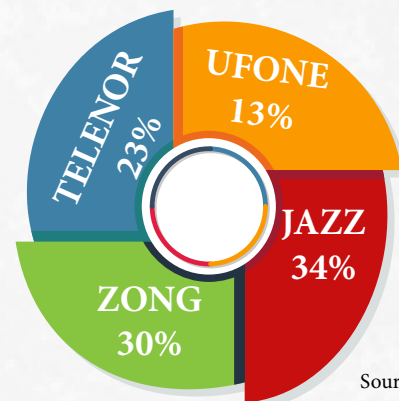
The number of mobile subscribers reached 152 million in November 2018 up from 143 million in November 2017; showing an impressive growth of 8 million subscribers in a year. Similarly, the 3G/4G subscriber base reached 60 million in November 2018, up from 47 million in the same period last year. Mobile operator Jazz leads the Pakistani mobile market with over 20.6 million mobile customers, followed by Zong (17.9 million), Telenor (13.7 million), and Ufone (8.2 million) by the end of November, 2018.

Mobile Subscriber Growth (From November, 2017 to November, 2018)



Source: PTA

3G/4G Marketshare (till November 18)



Source: PTA

3 Mobile brands Market share: A fierce fight to reach the top

With new and innovative technologies coming to the market every now and then, the competition among smartphone brands is also getting fiercer. Many brands entered the mobile market in 2018; some were a hit while others totally miss. The market share of big smartphone brands also changed position in terms of market share. Samsung made a great come back in Pakistani market with its low and medium price devices, especially in 4G enabled device category. Whereas, QMobile that previously was the market leader witnessed a huge dip in its market share after it was engulfed itself in tax evasion controversy.

Samsung made a great come back in Pakistani market with its low and medium price devices while Huawei doubled its market share

According to the market research, the most successful smartphone brand in Pakistan was Huawei that managed to capture a huge chunk of Pakistani market. The market share of Huawei in Pakistan reached 22.2 percent in second quarter of 2018 against 10.5 percent of the corresponding period of 2017, showing a jump of 111.4 percent annually.

Mobile phone market segment witnessed commendable growth this year. More and more people are now moving toward smartphones which are naturally more expensive, hence increasing the cost of imports. In the first four months of fiscal year 2018-19, the mobile imports increased 6.2 percent as compared to last year which means that import

of mobile phones remained at \$260.41 million against the import worth of \$245.21 million during the same period of July-October 2017-18. While on year-on-year basis an increase of 2.9 percent was witnessed taking mobile imports to \$119.99 million in October 2018 from \$116.6 million in the same month of preceding year.

4 DIRBS: The demise of illegal mobile phones

One of the most monumental and groundbreaking initiatives started this year was the launch of Device Identification, Registration and Blocking System (DIRBS). This is considered one of the few pioneering systems being deployed by any regulator. The system is designed to detect and block stolen and non-type approved mobile phones working on mobile networks.

One of the most monumental and groundbreaking initiatives started this year was the launch of DIRBS

The system shall result in the elimination of smuggled mobiles and other illegal SIM-based devices. The system will not only discourage mobile theft and illegal imports but will also improve the quality of mobile service as well. The innovative solution will enhance government revenue and benefit the entire mobile ecosystem, by ensuring that devices are only imported through legal channels.



5 A fresh start: New faces in PTA & Ministry

With the new government coming in to power, a new Minister of MoITT was also instated this year. Dr. Khalid Maqbool Siddiqui, a doctor by profession has been in office since 20 August 2018. Just recently, Gen (R) Amir Azeem Bajwa was appointed as PTA Chairman while Dr. Khawar Saddique Khokhar was made the Member Compliance.

Under the leadership of Previous Chairman Dr. Ismail

Shah and Minister MoITT some ground breaking decisions were made that pushed the industry forward but we have yet to see how the new chairman and administration will perform.



6 MTR reduction: A good news for consumers

Another important decision taken by PTA this year was the reduction in Mobile Termination Rates. MTR is a price which cellular operator charges another operator for receiving a call for all other types of calls- local, long distance and international incoming calls. Previously it was Rs 0.90 per minute which is now reduced to Rs 0.80 per minute.

MTR was Rs 0.90 per minute which is now reduced to Rs 0.80 per minute

The existing MTR rate in Pakistan is 111-198 per cent higher than other comparable countries. Mobile operators have been trying for many years now to convince PTA to reduce MTR. Now that government has finally agreed to it, it will surely bring down the off-net call charges for consumers.

7 Regulatory changes: improved policies for the industry

Availability of radio frequency spectrum for technological developments in telecom industry is of crucial importance. With ever increasing number of mobile users and emerging technologies especially for wireless broadband services, the effective spectrum management has become even more important. This has forced regulators to introduce measures to liberalize the markets by introducing lenient policies to meet the growing demands of radio frequency spectrum.

PTA has also decided this year to allow Pakistani mobile operators to spectrum sharing and trade under certain condition. PTA released its spectrum sharing framework back in 2017 but consultation on framework by stakeholders was invited in April, 2018. To ensure better quality of service for the consumers PTA also changed its tower sharing and acquisition

regulations. While the State Bank of Pakistan also approved local lending for telecom business.

PTA has developed a draft framework to enable the use of 5G radio spectrum on trial basis for noncommercial purposes

The rapid growth in mobile data traffic and consumer demand for enhanced mobile broadband experience have led to an increasing emphasis on the upcoming fifth generation of mobile technology. In this regard PTA has developed a draft framework to enable the use of radio spectrum on trial basis for noncommercial purposes to carry out trials for innovative use of radio frequency spectrum, apparatus/equipment and academic purposes.

These positive outcomes from the Government are reflective of Pakistan's push to increase foreign direct investment into the country while fulfilling its digital agenda.

8 Entrepreneurship: Boosting the economy through innovation

In order to nurture entrepreneurship, job creation and innovation in ICTs, the government has facilitated over 121 startups through National Incubation Centres (NICs) in Islamabad, Lahore, Karachi and Peshawar. This alone has created more than 800 jobs and generated revenues of around Rs. 319 million as revenue.

Over 121 NIC startups have created more than 800 jobs and generated revenues of around Rs. 319 million as revenue

To further improve the ICT environment and attract international companies to do business in Pakistan, Prime Minister has given approval to the formation of a 14-member task force on IT and telecom sector comprising well-known members of Pakistan's tech sector. The committee will work on skills development and producing quality human resource and will also present ideas on how to increase Information Technology and telecom exports, build Software Technology Park, strengthening academia-industry-government linkages and an Innovation Fund Programme to kick-start development of low-cost, high impact applications and systems in the public sector.

9 Suspension of Top-up taxes: A sigh of relief for consumers

The deduction of taxes imposed on the top-up of prepaid cards by cellphone service providers and the Federal

Board of Revenue (FBR) was also suspended this year on orders of the Supreme Court of Pakistan. Previously, for every cellular charge, 5.5 percent was deducted as a withholding tax, 19pc as sales tax and another 10pc as service charges were deducted. Roughly, Rs38.08 was deducted on a prepaid mobile card of Rs100 which is a huge amount, and people showed great displeasure every time an increase in mobile top-up tax was imposed.

Roughly, Rs38.08 were deducted on a prepaid mobile card of Rs100 which is a huge amount

10 Awards & Achievements: Making a mark internationally

Pakistan has also made some great achievements on the international front as well. A remarkable feat achieved was winning the elections for International Telecom Union (ITU) Council seat in Plenipotentiary Conference held in November 2018 in Dubai (UAE) by securing 155 votes out of 177 member states.

An international awards program, APICTA Awards take place every year to create ICT awareness to bridge the digital divide in Asia Pacific region in which number of countries apply in hundreds of categories. Pakistani technology companies and startups have once again proven their metal at the 18th Asia Pacific ICT Alliance (APICTA) Awards that took place in Guangzhou, China. Competing with the top companies from 17 countries across 23 Top Awards Categories, Pakistan bagged one gold award and six silver awards, declaring the delegation third in terms of yield.

Competing with the top companies from 17 countries across 23 Top Awards Categories, Pakistan bagged one gold award and six silver awards, declaring the delegation third in terms of yield

Dr. Umer Saif is a well-known name in IT fraternity; he is the one who put all his efforts in successfully digitalizing Punjab. Due to his tremendous hard work, he was named UNESCO chair for information and communication technology for development. Umer is the only Pakistani who is named among the top 35 innovators in world by MIT technology review in 2011, and a young global leader by the world economic forum in 2010. He is the only

Pakistani who is honored with the Google faculty research award, Mark weiser award, MIT technovator award and Microsoft research digital inclusion award. He was also granted with British Outstanding Alumni Award 2017. In 2014, he was presented with sitara-e-imtiaz by the government of Pakistan, and he is named as the most influential Muslims in the world in 2014-18.

Athan was the only *made in Pakistan* app that made global waves after being featured as one of the fastest growing application in the Asia Pacific region at the Google App Summit 2018 that was held in Singapore this year. The application provides accurate prayer times in every region around the globe as per their location and jurisdiction, helped them find the direction of the Qibla from anywhere, and provided heaps of vital information on Islamic principles.

11 Bridging the digital divide: connecting the unconnected

Another important achievement of government is the provision of telecom service coverage to the un-served and underserved areas of Awaran, Khuzdar, Kohistan, Kharan, Chitral, North Waziristan and Khyber Pakhtunkhwa (KPK) etc. Furthermore, 1037 km of Optical Fibre Cable (OFC) in 20 Tehsil Headquarters (THQs) and major towns of Baluchistan and Punjab has been laid.

Mobile operators increased their network coverage with more than 41,000 cellular network sites providing service coverage to 88% of the population

Mobile network operators also increased their network coverage with more than 41,000 cellular network sites providing service coverage to 88% of the population. This increased coverage resulted in tremendous increase in data usage that reached 1,258,843 tbs of mobile data usage in 2017-18 up from 690,345 tbs in 2016-17.

Government's input & role

Government is the most important stakeholder in any industry since it is the one that gives direction to the businesses by outlining rules and policies. If a government is not interested in a sector or industry, the chances of growth in that area will be minimal. All businesses require government support and backing to create strong foothold in the market. For telecom and IT industry government's support is especially crucial. There are number of issues that are still unresolved despite being highly important.

1 The looming danger Data Breaches and Cyber-attacks

Internet security and data breaches have become a worldwide concern but some countries are better prepared for such situations; unfortunately Pakistani is not one of those countries. The major attack of the year started in mid-October with Bank Islami that spread across 22 banks in Pakistan and resulted in more the 20,000 cyber robberies.

The major attack of the year started in mid-October with Bank Islami that spread across 22 banks in Pakistan and resulted in more the 20,000 cyber robberies

Earlier, Careem and Bank Al-Habib data was also stolen whereas; cyber-attacks on various websites have also become a common thing. Pakistan really needs to focus on the development of a comprehensive cyber security strategy to protect its people and government assets.



2 Discouraging decline in fixed line market

With the increased smartphone and 3G/4G penetration, the fixed line market is declining every year. Few years back there were around 11 fixed-line operators in Pakistan but today there are only 3 left. In 2015-16 the number of fixed broadband users was 457565 that decreased to 327996 in 2016-17.

Due to the dominance of mobile platform the fixed broadband penetration is expected to decline further over the next five years

Due to the dominance of mobile platform the fixed broadband penetration is expected to decline further over the next five years. But there is no denying the fact the fixed line broadband industry is highly important to complete Pakistan's digital agenda. The fixed-line industry requires special attention from the government to sustain in the market.

3 Internet freedom & network shut down

One of the constantly prevalent issues for Pakistani industry is the network shutdown. Unfortunately Pakistan is facing security threats for over a decade now and like everyone else telecom sector has also suffered greatly. On every important occasion like Muharram, 23rd March Parade day, protests and sit-ins telecom services are suspended around the country incurring huge cost to the mobile networks. In sensitive areas like different districts of FATA and Baluchistan telecom services are suspended even during the regular days due to security reasons.

Unfortunately Pakistan is facing security threats for over a decade now and like everyone else telecom sector has also suffered greatly

Secondly, with the advent of various social media platforms and increase in internet users, more and more people have turned towards social media to share their views and communicate with the masses. This has played a major role in creating awareness and educating the people about various issues. But fearing the power of the new technologies, many governments have devised ways to filter, monitor and obstruct the openness of the internet. In Pakistan internet clampdown has specially intensified over the last few years. According to an internet freedom report by global watchdog Freedom House, Pakistan ranked “not free” for the sixth consecutive year in 2017. According to digital experts, this strong wave of internet crackdown is the result of PECA; the country’s first comprehensive cybercrime act that was passed in 2016.

In Pakistan internet clampdown has specially intensified over the last few years

According to PECA, PTA has the complete authority to block anything it considers to be ‘objectionable content’ – a broadly-defined term under the law whereas, prior to this law there was an inter-ministerial committee which would direct PTA to block the content after doing its evaluation. PTA is also working to develop a national level firewall system that could block access to the objectionable content or websites available online. The project is called “Web Management Solution (WMS). However the ambiguous law and complete authority given to PTA has led in increased surveillance by the state authorities that can be deemed as violation of freedom right as the government authorities are blocking all the content that criticizes their policies. Therefore, simply

blocking the content is not the solution, we have to set our boundaries first and decide what exactly can be termed objectionable and what constitutes violation of basic human rights.

4 Promotion of Local Manufacturing

Although the uptake of smartphone is a good sign for the market but it puts huge burden on the national exchequer. For instance, during the current fiscal year alone, mobile imports cost reached \$260.412 million. Since the need of smartphone is increasing in Pakistani market, a better option is to attract OEMs to build manufacturing units in Pakistan. This will not only tone down the pressure on import expenses but will create number of job opportunities for the locals as well. Unfortunately, no previous government has been successful in doing so. We need better regulations and environment to create ease of doing business in Pakistan so that manufacturing companies take interest in Pakistani market from production point of view.

Since the need of smartphone is increasing in Pakistani market, a better option is to attract OEMs to build manufacturing units in Pakistan

What the future holds?

Supported by growing tech-savvy population, increasing businesses and rising internet penetration, Pakistan is destined to become one of the fastest growing economy by 2030 and poised to grab position among the leading digital economies. There is a lot of potential in the IT sector of Pakistan with young population turning to computers and other digital technologies creating a huge market for local and foreign investors.

There is a lot of potential in the IT sector of Pakistan with young population turning to computers and other digital technologies creating a huge market for local and foreign investor

However, more work is needed to be done in order to fully utilize the existing potential. Prime Minister’s decision to form a task-force on IT and telecom sector is a very encouraging decision that will surely bring fruitful results in the future and hopefully 2019 will be a much better year for Pakistan.

The Honor 10 lite; a phone with unique & immersive dew drop display, launched in Pakistan

A perfect blend of aesthetics and technology, shines with flowing gradient colors

HONOR unveiled the HONOR 10 Lite in Karachi at Pearl Continental Hotel, a stylish selfie phone at an unbeatable price point at 38,999. With the AI-powered 24MP camera and flagship-grade configurations, the HONOR 10 Lite is designed to deliver the most exceptional selfie experience. Powered by EMUI 9.0 and Android 9, the HONOR 10 Lite also attracts eyeballs with a shimmering color gradient and slim dewdrop notch.



HONOR 10 Lite's AI technology levels up the selfie game with eight real-time scenario recognition. The AI-powered algorithm identifies different scene types instantly, allowing the camera to enhance your facial features and the background by modifying the exposure time. Supported by 3D facial recognition and AI beauty functions, the device can customize beauty effects based on your age, gender and skin tone, meaning your beauty shines in every shot.



“The HONOR 10 Lite demonstrates the brand’s strong dedication to AI selfie photography and exceptional design. HONOR strives to bring industry-defining products to a dedicated global fanbase,” said George Zhao, President of HONOR. “Young people now want a range of smartphone selfie functions and design features. We are proud to launch this unrivalled selfie device to our smartphone users around the world, answering their needs and expectations.”

Priced at Rs. 38,999; the HONOR 10 Lite will be available in Sapphire blue and Midnight Black with the rest of the colors will be coming at a later date. Now you can purchase your Honor 10 Lite from your nearest retailer or online from Honor’s e-commerce partners; Daraz.pk, HomeShopping.pk, Yayvo.com & Telemart.pk. Know more about the handset @ <https://www.hihonor.com/pk>

TECH TWISTS

1

Wi-Fi Fluke



Wi-Fi Is The Technology Help Us To Share Data Connection With Other Devices From Router Or From Mobile Hotspot & This Will Help Us To Share Connection With Other People. Wi-Fi Technology Was Developed By Failed Experiment Attempting To Detect Mini Black Holes.

The Patience to take the Photo



The First Camera Invented, It took Upto 8 Hours To Capture A Picture & You had To Sit For 8 Hours To Get A Perfect Photograph.

2

3

NASA Prank



1st April Is The April Fool Day & Everyone Like To Prank Their Friends On This Day. Not Only Normal People Like Us, NASA Also Pulled A Prank Telling they Found Water On Mars In 2005. This Was A Prank Pulled From NASA To Fool People On 1st April 2005.

Most expensive Mobile No.



The Most Expensive Mobile Number was Sold For \$2.7 Million In Auction & The Mobile Number was 666-6666. This Number was Auctioned Off For Charity In Qatar. It Broke The World Record Of Chinese Mobile Number. The Next Expensive Mobile Number was 8888-8888 Sold For \$280,000.

4

5

5G Revolution



Once fully available, 5G data speeds will be 1,000-times faster than today. This revolutionary leap will enable ubiquitous connections across the Internet of Things, engagement across virtual environments with only millisecond latency, and whole new Big Data applications and services.

OPPO R17 PRO

with Triple Camera & Two Batteries

Design:

The OPPO R17 Pro is gorgeous, even for a phone with a notch. In fact, that notch, one of the tiniest around, is a point of pride and adds to its beauty and uniqueness. Where most phones flaunt wide or deep cutouts, OPPO takes up only what's needed.

Display:

The OPPO R17 Pro packs a Full HD+ (2340 x 1080) resolution which equates to 402ppi. It also has an AMOLED panel that produces rich colors and deep blacks. The screen is sharp, with good viewing angles, and good outdoor legibility.

Camera:

The OPPO R17 Pro is a promising smartphone especially when it comes to photography, thanks to its triple camera setup consisting of the 12MP F1.5 / F2.4, 20MP F2.6, and TOF 3D Stereo cameras. It has OIS and AI ultra-clear engine, which means night shots are less prone to blurring. As for features, it has light effects, Stickers, animated emojis, Panorama, Slow-mo, timelapse, and Expert mode.

As for selfies, the 25MP front camera can produce sharp images with nice colors even in a dim environment. In Portrait mode, it has Smart Beauty to remove blemishes and enhance your facial features.

When it comes to video recording, the R17 Pro can shoot at a maximum of 4K resolution at 30fps. Quality is nice, with sharp details, good contrast, and colors. Videos are stabilized which is good.

Performance:

Powering the R17 Pro is Qualcomm's new Snapdragon 710 octa-core chipset with Adreno 616 GPU, and 8GB RAM. Performance is good all the way as everything is smooth and fast. We never encountered any lags or crashes when switching between apps, taking photos, or playing games.

Battery:

While that camera system is truly individual, the battery is even more interesting, comprised of two battery modules that work together to produce a faster charge time. That adds up to a battery that can do something few phones can achieve, delivering a very fast charge using Oppo's included charger. This technology is a great inclusion, though you do miss out on wireless charging in the R17 Pro, so it kind of needed something to fill that gap.

Design:

4.5



Ease of use:

4.5



Features:

4.0



Camera:

4.0



Performance:

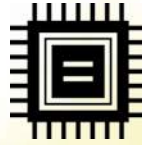
4.0



Battery:

4.0





128GB Built-in, 6/8GB RAM



(Li-Po Non removable), 3700 mAh



6.4 inch



12MP + dual 20MP, front 25MP



Rs.109,999/-

Verdict:

An improved camera, slick software, Super VOOC charging and in-screen fingerprint sensor make the R17 Pro a stellar buy.

PROS

- Beautiful Design
- Long-lasting battery life
- Fast SuperVOOC Flash Charge

- Lacks wireless charging, headphone jack and Micro SD
- No water resistance

CONS

By Laiba Mohsin

Transforming Pakistan's Health Sector through Mobile Technology



We all know that the world of technology has tremendously changed over the last decade. In today's world, technology is playing a key role in every industry along with our personal lives. If we go back to the old era, everything is different. Technology has completely revolutionized the world from our way of communication to household chores. Like many other developing countries, each sector of Pakistan is also transforming gradually due to rising technological trends.

A healthy population is not only valued in its own right, but it also raises the human capital of a country

Out of all of the industries, healthcare is certainly one of the most important. Health plays a very important role in any country's economy. The fact is that a healthy population is not only valued in its own right, but it also raises the human capital

of a country. As a result of which, it positively contributes to the economic and social development of the country. This is the reason that a country's investment in health sectors has a long-lasting effect on its prosperity. From very small innovations like adhesive bandages, ankle braces, wearable sensors and health trackers to more compound technologies like MRI machines, technology has certainly made an unbelievable impact on medicine. Like many other developing countries, Pakistan's Health Sector is also transforming; Mobile Technology being the key reasons behind it.



The ever-growing continuous technological developments in healthcare have saved countless lives. It has improved the quality of life for even more. It has created a huge impact on medical processes and the practices of healthcare professionals as well. The Electronic Health Records (EHRs) have replaced the paper records which has been a game changer for many healthcare professionals. The entire patient's data such as signs, weight, test results, billing etc can now be fed into a digitized system by the nurses as well as the technicians. Each and every kind of information can be shared and accessed by the professionals anytime regarding any particular patient. In addition to this, EHR can alert the nurses of potential issues such as allergies or intolerances to certain medicines especially when the patient is unconscious.

From very small innovations like adhesive bandages, ankle braces, wearable sensors and health trackers to more compound technologies like MRI machines, technology has certainly made an unbelievable impact on medicine

So, it plays a very important role in patient care. EHR can help in identifying the viral or bacterial infection quickly which can help in improved Public health as well. Cloud Computing is one of the most innovative products in healthcare technology today. According to a survey, more than 75% of the health care centers have been using the cloud for health information exchange. Cloud technology in the health sector can benefit in a number of ways. It can help in reducing healthcare costs. It can predict epidemics, avoid preventable deaths, improve quality of life, and reduce healthcare wastage. The most important advantage is that it can help in developing new drugs and treatments.

Mobiles help the practitioners to access a patient's EHR, review medical histories, send follow-up emails, and even complete prescriptions as well

Telemedicine is playing an important role in the health industry. It can be used in many fields, such as cardiovascular healthcare, electrocardiograms (ECGs) etc. Tele monitoring can

monitor vital signs and symptoms remotely so it can offer shorter waiting times for patients. It has access for rural areas. Moreover, it provides improved efficiency leading to savings.

Mobile technology is making it possible to virtually connect to a doctor anytime and anywhere. 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. They can help to generate better health awareness. Such Apps are offering chronic care management, Medication management, Medical references, Diagnostics, Personal health records, Women's health, Fitness and weight-loss etc. There are a lot of Apps that are playing vital roles in the Health Sector of Pakistan. Mytabeeb.pk, Findmydoctor.pk, Ring MD, Pharmapedia Pakistan, Marham are some of the mobile Apps that help people find, book appointments, and consult with doctors online in different cities of the country.

Telecom operators have become a major stakeholder in m-Health by introducing various apps and initiatives. With a huge subscriber base, applications introduced by telecom operators cater to a wider group of people. Ufone UHealth, Warid Doctor's Helpline, Warid Blood Bank Services, Warid Bima Insurance, Zong Insurance, and Mobilink m-Health are some of the initiatives that are playing a major role in Health sector of Pakistan.

According to a survey, more than 75 percent of the health care centers have been using the cloud for health information exchange

In the past, the health care sector of Pakistan was not that good. There was no monitoring systems or surveillance systems at that time. Our doctors were unable to discuss the cases with international professionals. There was inadequacy of Staff at the Health centers because there were no digitized systems so everything was needed to be done by the people themselves that required more time and manpower. However, now the advanced Technology has enabled many initiatives that have helped in improving the health sector of Pakistan in a great way.

Dengue Monitoring System, Disease Surveillance System, Health Watch, Hospital Watch, Monitoring and Evaluation Assistants (MEA) for Secondary Health, Independent Monitoring Unit for Health Sector (IMU) and VET Inspect are some of the m-health initiatives introduced by PITB that have won the international recognition. These all initiatives are playing a major role in Health sector of Pakistan. However, still much more needs to be done. Pakistan's Government should take advantage of technology while planning steadfast m-Health systems through partnership between engineers and doctors. They can together generate and appraise real mechanisms that can guarantee good health facilities. Pakistan's government in collaboration with IT, telecom and medical industry should work together to create an encouraging eco-system to support mobile initiatives.

With a huge subscriber base, Health applications introduced by telecom operators cater to a wider group of people



Furthermore, Pakistan's Government should try to adopt things from the foreign countries also. Our health department should also emphasize on manufacturing cost-effective gadgets like adhesive bandages, ankle braces, wearable sensors and health trackers, MRI machines. It will certainly make an unbelievable impact on medicine. Australia, Germany, China and Mexico have seen a quick trend towards home-based health care procedures. On-Sight diagnostics, Telephone-based health care

services, mobile monitoring are some of the things that have helped these countries to improve their health sector. Pakistan should make policies keeping in mind such trends that are already in practice. No doubt Health is a complicated, fast-paced and stressful industry. However, we can use technology to make some of these procedures quicker and more user-friendly. Health care professionals can use variety of different innovative technologies to improve a patient's experience. It will positively contribute to the economic and social development of the country.

Pakistan's government in collaboration with IT, telecom and medical industry should work together to create an encouraging eco-system to support mobile initiatives



Nokia 8.1

ELEVATING THE VALUE FLAGSHIP EXPERIENCES

Bringing flagship calibre imaging with Zeiss Optics, PureDisplay screen technology and accelerated performance to the value flagship segment

HMD Global, the home of Nokia phones has announced the Nokia 8.1, the newest addition to its value flagship range. As with other Nokia Smartphones in the same category, including the award-winning Nokia 7 plus, the Nokia 8.1 punches above its weight with extraordinary imaging achieved by its highly sensitive, industry-leading camera sensor, ZEISS Optics and Optical Image Stabilization (OIS). Proprietary PureDisplay screen technology with HDR 10 support along with highly accurate colour reproduction delivers enhanced viewing experiences even in bright sunlight, while the chipset ensures smooth performance for up to two days per charge.

All of this comes in a contemporary package with the precise craftsmanship expected from a Nokia smartphone. Running the latest Android software, Android 9 Pie, ensures the Nokia 8.1 delivers the best Android experiences with the latest innovations right out of the box.



The Nokia 8.1 comes with Android 9 Pie, which includes AI-powered features that make your device smarter, faster, and adapt to your behavior as you use it, so your smartphone gets better with time. The Adaptive Battery feature limits battery usage from apps you don't use often, and App Actions predicts what you're about to do so you can get to your next action quickly. These features further streamline your device's functionality and your overall Android experience. Nokia 8.1 also combines the capabilities of the Google Assistant with Dual-Sight, so you can ask it to take both pictures and videos, and even command it to live stream to YouTube for a convenient and seamless experience.

The Nokia 8.1 will receive three years of monthly security patches and two major OS updates, as guaranteed in the Android One program. In addition, Google Play™ protect scans over 50 billion apps per day to keep your phone safe from malware, making the Nokia 8.1 among the most secure phones on the market. It also comes with easy access to helpful innovative services including the Google Assistant, which helps you get things done throughout the day, as well as Google Photos with free unlimited high-quality photo storage. Nokia 8.1 is part of the Android Enterprise Recommended program which means it is recommended by Google as best choice for professionals.



By Fizza Attique



THE IMPACT OF MOBILE TERMINATION RATES ON PAKISTAN'S MOBILE INDUSTRY

Mobile communications market has been growing at an impressive pace worldwide. The mobile subscription in Pakistan also increased from 99 million in 2009-10 to 152 million in October 2018. Competition in the industry has intensified with the introduction of 3G and 4G services. MNOs and regulators around the world have dealt extensively with many issues related to mobile telephony. Today, regulators are especially concerned about inter-network (termination) charges for calls to mobile networks and, starting in the early 2000s, have repeatedly intervened over the years to cut these charges with the aim to improve competition and reduce prices to final consumers.

Regulators are especially concerned about inter-network (termination) charges for calls to mobile networks and, have repeatedly intervened over the years to cut these charges with the aim to improve competition and reduce prices to final consumers

Mobile Termination Rates:

Mobile termination rate means “Mobile operators charge other operators for connecting calls to their network. Both mobile-to-mobile (M2M) and fixed-to-mobile (F2M) calls incur MTRs.” Mobile termination is also known as off-net call charges incurred by mobile operators. Due to these charges, millions of cellular users are forced to pay high mobile termination rates in Pakistan.

History of MTR in Pakistan:

On 1st December 2000, PTA had determined MTR of Rs. 2.20/min for off-net calls. After two years, this rate was revised and cut down to Rs. 2.00/min in 2002. In the year 2005, Pakistan Telecommunication Authority again calculated fixed-to-mobile and mobile-to-mobile interconnection charges. As a result, the MTR was further decreased to Rs. 1.60 per min which was effective from August 2005. Off-net call charges were further reduced to 1.25/min in year June 2006.

Keeping in mind the concerns of people for high MTR, with the help of renowned consultancy firm, PTA determined interconnection charges on the basis of Bottom-up Long Run Incremental Cost

(LRIC) and Top Down Fully Allocated Cost (FAC). This study resulted in further reduction of MTR to Rs. 1.10/min, which was effective from June 2008. MTR kept on reducing every year, till January 2010, when it was Rs. 0.90/min. After this, for the period of eight years, interconnect usage price remained stagnant. Just recently Mobile Termination Rates were further reduced to Rs 0.80 per minute. From January 2020, the off-net call charges of all the operators in Pakistan will be further reduced to Rs0.70 per minute. This rate is fixed by PTA in collaboration with all the operators of Pakistan. Though telecom operators were not happy with the decision and asked for the revision of MTR however, according to telecommunication policy mobile termination rates cannot be revised twice in a year.

PTA determined interconnection charges on the basis of Bottom-up Long Run Incremental Cost (LRIC) and Top Down Fully Allocated Cost (FAC)

Benefits of Reduction in MTR:

With the increase in mobile penetration nowadays, the Mobile-to-Mobile traffic is far greater than fixed line-to-Mobile volume, therefore, operators should now be less worried about possible cuts in their revenues and other short-run consequences. Rather, the further decrease in MRT will decrease the price of calls to mobile phones, which will benefit consumers. Many researches also suggest that these cuts in no way have weakened the mobile operators' position to survive or to compete by making new investments.

Besides, the regulator is of the view that the current Mobile termination rates are 200 percent higher than the other regional countries. The reduction in MTR will help operators in the long run as it will decrease grey traffic since illegal means of calling will automatically reduce. Industry experts also believe that Pakistan's MTR should be between Rs0.30 to Rs0.40 per minute once purchasing power parity is adjusted. According to experts, Pakistan's mobile termination rate is highest in South East Asia, as mobile termination rates in India are 0.21, Bangladesh's 0.22 and Sri Lanka's 0.32.

With the increase in mobile penetration nowadays, the Mobile-to-Mobile traffic is far greater than fixed line-to-Mobile volume, therefore, operators should now be less worried about possible cuts in their revenues and other short-run consequences

The basic purpose of reducing mobile termination rate is to benefit the end consumers. It benefits customers in two ways; firstly, due to Lower termination rates, cost of landline companies passing calls to mobiles is also reduced. In this way, consumers are benefitted by paying low charges. Due to this, all the bigger and older operators will be forced to improve their service quality to retain the customer base instead of using the advantage of their existing market share to rake in higher charges.

The regulator is of the view that the current Mobile termination rates are 200 percent higher than the other regional countries

Secondly, lower termination rates encourage competition in the mobile market. In this way, the customer has a vast choice to choose any mobile network operator. In order to maintain user base, operators will have to bring more pricing flexibility and will be able to increase the variety of packages available to consumers. In addition to providing benefits to the consumers, reduction in MTR will also set grounds for a new entrant. Regulators should reduce MTRs in these circumstances, particularly if they are concerned about a lack of progress by new entrants and where there is a limited fixed-line network (and therefore less reason for MNOs to choose high MTRs in order to exploit their monopoly fixed to mobile calls), as is the case in many developing countries including Pakistan.

The operators need to expand their horizon and introduce new and innovative services to improve their revenues rather than following the old pattern of irrationally charging customers for basic services

International Telecommunication Union (ITU) has ranked Pakistan the fourth country in the world where the average monthly cost of running a mobile phone is quite reasonable when compared to rest of the world, regardless of being the eighth highest taxation telecom sector in the world. With further facilitation provided to consumer, Pakistan will be in a better position to become a digital nation. The operators need to expand their horizon and introduce new and innovative services to improve their revenues rather than following the old pattern of irrationally charging customers for basic services.

Realme Fuses Power and Style with Official Launch in Pakistan Realme's product line-up equips users with speed, style and innovation to meet the needs of Pakistan's youth

Realme, an emerging smartphone brand that specializes in providing high quality smartphones, today unveiled its line-up of devices for the Pakistan market – the Realme 2 Pro and Realme C1. Designed with today's youth in mind, Realme's tagline, 'Proud to Be Young', is focused on revolutionizing the smartphone for the younger generation, combining top notch performances with contemporary style.

Realme is fully dedicated to addressing the needs of the youth. The brand has already been breaking records since its launch earlier this year in India, Indonesia, Malaysia, Vietnam, Thailand and Philippines.

Power meets Style

"By embodying the spirit of 'Proud to Be Young', Realme provides an optimum combination of bold, innovative designs and a balanced integration between software and hardware. Realme represents the concept of 'Power Meets Style', or the amalgamation of fast performance and trendy designs, with remarkable prices," said He Shunzhi, Marketing Head of Realme Pakistan.

To showcase Realme's philosophy - 'Power meets Style', Saud Ur Rehman, Product Manager of Realme Pakistan, introduced Realme 2 Pro and Realme C1 at the launch event together with Kedar Kondap, Vice President, Product Management of Qualcomm. With Qualcomm committed to create paths to a smarter, and more connected world, Qualcomm's partnership with Realme is unsurprising. "We see the increasing power of the younger generation thus it only made sense to work with Realme. The brand, while young, has some deep insights about what the youth require from devices like a smartphone. We are indeed proud to be collaborating with such a foresighted brand to provide the best, affordable products for the target market," Saud said.



Sharp pull on both online and offline

Raising the ante at the launch, Realme also announced its collaboration with the leading e-commerce platform - Daraz in Pakistan. Realme's 'Flagship for Youth', the Realme 2 Pro, will be sold exclusively on Daraz platforms. Faisal Malik, Commercial Director of Daraz said "Realme is another big name which has and is breaking through the walls in other parts of Asia. Soon it will be launched on Daraz Pakistan platform exclusively on amazing competitive prices. And it hopes to break all past records".

The retail price of Realme 2 Pro (8GB RAM + 128GB ROM) is Rs. 46,999, and the retail price of Realme C1 (2GB RAM + 16GB ROM) is **Rs.18,999**.

As the 'Entry-level King', the Realme C1 will be sold exclusively within the time period from 9th Jan to 31st Jan on Daraz, the first sale of Realme C1 will be start at 8pm on 9th Jan with the special offer Rs.17,999. The first sale of Realme 2 Pro will be start at 8pm on 10th Jan with the special offer **Rs 43,999**.

In order to elevate the user experience by providing Pakistani the chance to have a touch and feel of the products. Realme C1 will be available in more than 600 authorized stores across Pakistan from 31st Jan 2019. This is in line with Realme's aim to provide smartphones that the youth need that helps them in their daily lives.

Smart Moves for smarter Nation

● KPITB develops computer-based 'Imtehaan' testing software

Khyber Pakhtunkhwa Information Technology Board (KPITB) has developed a computer-based testing 'Imtehaan' software of multiple choice questions to automate the government's recruitment process of Khyber Pakhtunkhwa Public Service Commission (KPPSC) and to minimize human intervention.



One of the many features of the 'Imtehaan' software is the instant result feature that compiles and displays candidates' results immediately after the completion of the computer-based test. The instant result feature will speed up the exam checking process and will promote transparency. Questions and the multiple choice answers will be in random order for all candidates to eliminate cheating and ensure results are based on merit.

● Citizen Feedback Monitoring Program

Starting from the district of Jhang as a pilot project back in 2008, CFMP has become one of the flagship projects of Punjab Information Technology Board and has been expanded to all over Punjab catering all governmental services. CFMP takes feedback from citizens who avail a government service such as police, health care or land registration, using mobile phone technology.

Whenever a citizen visits a government office, the transaction is recorded along with the phone number. CFMP team acquires the data and makes robo calls followed by SMSs asking the citizens about the quality of the service and whether they were asked to pay any bribe.



The project has become a huge success in improving service delivery in Punjab and the federal government has asked PITB to facilitate it in rolling out the program at federal level. The world organization such as The Economist has acclaimed and quotes it as a globally scalable project in removing corruption and improving service delivery.

● Bio-metric Attendance System in Sindh Hospitals

Bio-metric system of attendance is being introduced to ensure the attendance in health department. The health department of Sindh is facing multiple challenges, however, they have a panel of experts to restructure, reshape and to roadmap in the department. New software will monitor and keep a vigilant check on the performance of lady health workers/supervisors and other medical staff while measures are being taken to make EPI programme more effective.



Nokia 8.1



Style meets Substance

Design & Build:

The Nokia 8.1 comes in two hues Blue/Silver and Iron/Steel, both shades look absolutely stunning. The handset features metal sandwiched in glass and the design elements used here absolutely betray its price tag. The design and color ooze sophistication, enough to awe anyone. The frame is made of brushed aluminum that's said to be diamond cut, lending a well thought out classy touch to a device at this price point making it appear a lot more premium than it is.

Overall, the design and build get a big thumbs up from our end.

Display:

The Nokia 8.1 is a notched handset with minimal bezels. It features an FHD+ 18:5:9 6.18-inch PureDisplay sporting a resolution of 1080 x 2034 pixels and an impressive 81 per cent screen-to-body ratio. The display is finished off in a curved 2.5D cut allowing it to be curved and in the process extremely comfortable to grip. The display is rated at 500nits and it features a pixel density of 403ppi.

Performance:

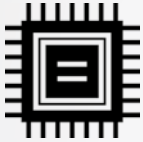
The Nokia 8.1 features the all new Snapdragon 710 SoC which is a part of Qualcomm's new 7xx series of chipsets. This 10nm chipset features 8x Qualcomm Kryo 360 cores (2 Kryo 360 cores clocked at 2.2GHz, 6 Kryo 360 cores clocked at 1.7GHz) and paired with an Adreno 616 GPU that's designed to help with the overall gaming performance. This is also the first time you will find this GPU on a chipset other than a Snapdragon Series 8xx. Alternatively, it also comes with an AI engine where the experiences can be noticed in on-device security, camera audio and gaming. It also has support for Qualcomm's Snapdragon Neural Processing (NPE) SDK that helps in the overall AI on-device processing. This means that the more you use the handset, the better it is able to understand your usage behavior — helping you significantly over a period of time.

The Nokia 8.1 is loaded with a 3500mAh battery that supports an 18W fast charge, with the company rating it at two days on a single charge. We ran a battery of benchmarks and the 710 SoC with its 4GB of RAM performed admirably well.

Camera:

The Nokia 8.1 utilizes a 12MP rear shooter with a 1.4um sensor size as well as a 13MP sensor with the primary sensor featuring optical image stabilization while the secondary camera works on depth information during portrait shots. With Qualcomm's Spectra ISP loaded in the SoC, you should be able to get better low light photography. It also makes use of motion compensated temporal filtering and improved optical image stabilization that helps in the overall image quality.

The handset fares really well when it comes to photography and in daylight scenarios, there is a lot of detail and color accuracy visible. Nokia has got it right once more by making use of the premium Zeiss optics. Focusing is done in a jiffy allowing you to capture images quickly and efficiently because of the PDAF built in. Overall, very little noise or image grain was visible and photos shot in low light are great as well and usable on social media. While capturing selfies with the 20MP FF camera, we observed that the overall image quality was great and skin tones rendered accurately. Exposure levels are great on most occasions save for in direct sunlight when the handset starts to fault on the odd occasion.



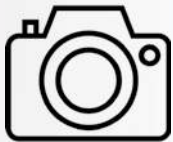
64/128 GB, 4/6 GB RAM
1.8GHz Octa-core



Non-removable Li-Ion
3500 mAh battery



6.2 inch



12MP + 13MP, Front
20MP



PKR.68,999/



Verdict:

Anyone looking at the Nokia 8.1 as a new flagship product is going to be disappointed. HMD Global made it quite clear that the new Nokia 8.1 is a replacement for the mid-range Nokia 7 Plus and on that level, it succeeds. It has the right amount of features to make it a great phone that doesn't cost an arm and a leg.

COOLEST GADGETS OF 2018



Now that 2018 comes to an end it is time to take a tour of what we consider to be the best tech gadgets of 2018. There are some that you'll no doubt expect to find in this list, and others that will probably come as a surprise. So let's get started.

Best iPhone:

The iPhone Xs and iPhone Xs Max have gorgeous OLED Retina displays without bezels and the most powerful chipset in the business. Like their predecessor, they also feature a sophisticated facial-recognition setup, dubbed Face ID.

As expected, the handsets also have an excellent dual camera, great stereo speakers, and wireless charging. Their waterproof bodies also feel like luxury objects, thanks to a stainless steel frame.



Best Android Phone:

The Samsung Galaxy S9+ (£869) fit a 6.2-inch display into a shell that feels, well, normal. Granted, it doesn't look that different to the Galaxy S8+, but Samsung's hardware design is still ahead of most rivals.

It shrugs off a few trends too. There's a headphone jack, now a baffling rarity in new and expensive phones, and no notch. The most important change since the S8+ is a 2x zoom camera on the back, bringing it in line with the iPhone X. Samsung also followed Apple with its AR Emojis, but like a middle-aged uncle suddenly getting into grime music, it's all faintly embarrassing.



2018

Best Laptop:

The Dell XPS 13 is the definitive MacBook-killer. This 13-inch laptop weighs a mere 1.2kg yet is powerful enough to deal with a heavy workload. There are numerous configuration options, including non-glare screens and touchscreen versions. The tiny 4mm screen bezel means it has a very small footprint, making it easy to fit in any bag.

Best Tablet:

We love the iPad Pro, but for most people the standard 9.7-inch iPad is the best choice. The timeless design remains, as does the high-resolution screen, intuitive software and huge collection of apps. No platform can compete when it comes to apps designed specifically for tablets.

The 2018 edition supports the Apple Pencil, adding one of the Pro's key features at a fraction of the price. Add a Bluetooth keyboard and you have a capable alternative to a laptop and 4G versions give you the ultimate freedom to work anywhere.

Best Fitness Tracker:

If you don't have a fitness tracker, the Fitbit Alta HR (£100) is a great place to start. Unlike a smartwatch, the battery lasts a whole week and the slim and discreet band houses plenty of tech. It tracks steps, calories burned, sleep and heart rate and comes in six colors. The only downside is it's not waterproof.

Best Wireless Headphones:

Bose used to be the king of wireless noise-cancelling headphones and the Bose QC35 II are an outstanding set of headphones, but the Sony WH-1000XM2 is definitely a better choice. Bose is just about edges things for noise cancelling, but Sony wins on sound quality and design. The touch controls on the right ear cup work beautifully and the latest version of these headphones boosts battery life to a whopping 30 hours.

Best Smart Watch:

The Samsung Gear Sport smartwatch is the best smartwatch for Android smartphone users. It has a powerful set of fitness-tracking features, including the ability to guide users through various workouts. Its waterproof body can withstand depths of up to 50 meters, so users can take it for a swim, too.

An intuitive interface and interchangeable bands are also among the gadget's cool features. There are two case sizes (42- and 46-millimeter) and three finishes to pick from — black, silver, and rose gold.





OPPO does not believe in following the trends, but rather, in setting them

George Long, CEO OPPO Pakistan



1. How is OPPO performing in Pakistan? What are the company's expectations?

Pakistan is a very important market for OPPO and Pakistan has been very warm in welcoming OPPO. We began our operations in Pakistan in 2014 and in such a short time span OPPO has become one of Pakistan's leading Smartphone brands. This, I believe, is an indicator of customer satisfaction and proof of how OPPO has clicked with the people's choices in Pakistan. Pakistan is the 5th largest country and 65% of its population is aged between 18 to 35 years. This is a great signal for the further growth of the company as the young generation is very acceptable to our technology and designs and we focus on creating a connection with them. Therefore, we are sure of a bright future and that OPPO will be Pakistan's biggest smartphone company in the coming years.

2. Are you satisfied with the market response to your devices?

The Market has always been quick to appreciate our daring styles and innovative ideas. Since our very first phone in the Pakistani market, the impact of our brand on the people has only grown. Especially the youth has been very appreciative of our unique offerings. Whether it is the F7, F9, R17 Pro or the Find X edition, our smartphones have received great response from the consumers. Each technology has been tried, tested and loved by the Pakistani market. As per IDC, OPPO F5 was rated as the No. 1 selling smartphone in 2018. So yes we are very much satisfied with the market response for our devices.

Pakistan is the 5th largest country and 65% of its population is aged between 18 to 35 years. This is a great signal for the further growth of the company as the young generation is very acceptable to our technology and designs

3. What is OPPO's target audience?

Our target audience is the youth, mainly between the age of 18 to 35 years; those who want to set the trend and be bold with our state of the art technology and beautiful designs. OPPO is associated with Sports and Fashion globally and is always testing out new features to bring excitement and convenience to the lives of users. With the F9 we introduced the Waterdrop Notch, the VOOC Flash Charge and an impeccable Gradient designed exterior. We at OPPO do not believe in following trends, but rather, in setting them. OPPO is not just a tech phone but also a lifestyle fashionable device so we strive to cater to our diverse audience through our products and innovative marketing campaigns.

OPPO is not just a tech phone but also a lifestyle fashionable device so we strive to cater to our diverse audience through our products and innovative marketing campaigns

4. What sets apart OPPO from other smartphone brands especially its Chinese competitors in terms of hardware and quality?

As I have stressed upon it earlier, at OPPO, we believe in innovation. Our products are designed to stand out in the crowd. We now have over 29,000 registered patents. As the selfie and camera phone experts, we have 1800 registered patents for photography alone. There is also a flash charge technology that OPPO is the sole provider of the VOOC Flash Charge and the SuperVOOC Flash Charge.

Our products are designed to stand out in the crowd. We now have over 29,000 registered patents. As the selfie and camera phone experts, we have 1800 registered patents for photography alone

We believe in consistently innovating to bring new and exciting features to our phones. These features are crafted to give a holistic experience to our users, whether it is in the area of design, color, camera or the battery. This is what makes OPPO different from others. We also believe in interacting with our youth by being a part of their interests. We have been associated with sports and have collaborated with ICC and PSL. We also partner with popular celebrities to engage with the youth. This is our philosophy.

The Market has always been quick to appreciate our daring styles and innovative ideas



5. What is your take on the mobile market of Pakistan? What are the main changes that you witnessed in the device ecosystem in recent few years?

All challenges aside, we believe Pakistan is one of the most important markets for OPPO with amazing opportunities. The market is yet in its developmental stage but people are open to new technologies with the advent of 4G technology. OPPO has maintained its status of being counted in the Top 3 Smartphone brands in Pakistan (Source: GFK). Our Selfie Expert series (F Series) have been loved by the people and the recently launched OPPO F9 has completely revolutionized the smartphone industry. We strive to be the best in the industry, and we aim to become the NO. 1 smartphone brand in 2019.

6. Do you think our regulatory environment is conducive to the digital revolution?

I believe the digital revolution is something we all need to focus on as it has totally changed the world we live in. Both the people and the industry of Pakistan are catching up with the digital revolution quite well, and we hope to see the same level of acceptance from both ends in the near future.

Our Selfie Expert series (F Series) have been loved by the people and the recently launched OPPO F9 has completely revolutionized the smartphone industry

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

3G and 4G have been readily adopted by the Pakistani population and this is an on-going process. If we are to introduce new technology, there is no doubt that it will be accepted and adopted by the new generation. Smartphones are the future, this can be assessed by the fact that 60% to 70% shopping has been done through these devices. Industries are going digital, so smartphones will be the future. Pakistan is developing and is catching up with the rest of the world when we talk about technology and if such consistency is

maintained then the ICT industry will develop and flourish in Pakistan within no time. 4G has been a huge success in Pakistan and we hope to see the same level of success for 5G.

8. What are some groundbreaking innovations that we can expect from OPPO?

OPPO is always bringing something new to the table. We are currently working on giving a holistic camera experience to our consumers, by introducing exciting features to the camera. The R17 Pro comes with its night vision photography and triple feature. Not only the Camera, but the battery life of our devices is also something we greatly focus on. We have brought with the R17 pro, the SuperVOOC charging technology which is designed to charge 40% of your phone in 10 minutes. OPPO is experimenting in vast arenas. We have also recently made the first 5G call and developed a 5G prototype of the Find X, which is definitely a first for any mobile brand. The company has recently invested \$1.43 billion in research and development. So you can expect some more groundbreaking features from us in the future.

Both the people and the industry of Pakistan are catching up with the digital revolution quite well, and we hope to see the same level of acceptance from both ends in the near future



9. What are OPPO's present and future plans for Pakistan? How is OPPO trying to expand its market coverage in coming days?

The mobile phone industry in Pakistan is expanding rapidly. OPPO definitely is well-equipped and prepared to grow with it. We are offering the best smartphones in all categories and price ranges. We have high-end phones with groundbreaking features, like the Find X, to mid-range phones.

4G has been a huge success in Pakistan and we hope to see the same level of success for 5G

We have a smartphone option for each of our customer segment. In the future, we will soon introduce our latest 5G-abled phone in Pakistan and bring exciting features with the New Year. We are also localizing our communication content to get closer and help our customers to relate and resonate with us as a brand. I think it is very important as OPPO is showing its local customers how important they are to the brand.

In the future, we will soon introduce our latest 5G-abled phone in Pakistan and bring exciting features with the New Year

10. What is the most important message you feel you should get across our readers and the industry?

I would like to convey that OPPO as a brand is always taking its customers to feedback positively. It is continuously innovating and achieving new benchmarks and setting examples around the industry. Recently, we have started to spend more and more on R&D to come up with better consumer products and to provide the best mobile phone technology to our consumers. I can assure this that OPPO will always provide quality products to its consumers and will continue to impress with each smartphone to come.

OPPO will always provide quality products to its consumers and will continue to impress with each smartphone to come

The OPPO logo is displayed in white lowercase letters on a solid green rectangular background.


Time for Pakistan to gear up towards Fin-Tech

| By Onsa Mustafa

The most heated topic nowadays is “Fin-Tech” which is revolutionizing the financial world by unbarring new doors for many businesses. The word “Fin-Tech” is not new; it describes the use of technology to deliver financial services and products to consumers. This could be anything related to finance like banking, insurance, investment, commerce, etc. Fin-tech is changing the world of finance for consumers in countless ways. For example, without physically visiting a bank, you can now open a bank account over the internet. You can also link the account to your smartphone and use it to monitor your transactions. You can even turn your smartphone into a “digital wallet” and use it to pay for things using money in your account. The unlimited use of internet on devices like smartphones and tablets has accelerated the speed of this change greatly in recent years.

With the world’s 5th largest young population and an increased usage of the internet and smartphones, the Pakistani market indicates the potential of adopting new technologies including financial technology

With the world’s 5th largest young population and an increased usage of the internet and smartphones, the Pakistani market indicates the potential of adopting new technologies including financial technology. Pakistan is considered to be almost 73% urban; these areas are connected physically and electronically and promise a high rate of Fin-Tech adoption. According to a report revealed by Karandaaz Pakistan in 2017, Pakistan’s

e-tail is expected to grow to EUR 746 million by 2019 and EUR 1.9 billion by 2024 – a 2.3% penetration.

The unlimited use of internet on devices like smartphones and tablets has accelerated the speed of this change greatly in recent years

The rapid progress in the financial sector of Pakistan is credited to the increasing invasion of branchless banking, awareness of the internet, the improved income level and undoubtedly, the advancement in communication technology. There are a number of companies, including some startups, offering Fin-Tech applications for smartphones that are linked to bank accounts. Telenor Microfinance has already established the well-known EasyPaisa. Jazz has also introduced digital payment solution, Jazz cash, providing users with more control to transfer money to their loved ones more easily. Ufone has digitalized its services by launching UPaisa. Other well-known startups working to disrupt the financial services sector in Pakistan are Finja and Inov8.

The rapid progress in the financial sector of Pakistan is credited to the increasing invasion of branchless banking, awareness of the internet, the improved income level and undoubtedly, the advancement in communication technology

Over the past few years, traditional financial institutions and non-traditional fin-tech firms have begun to understand that collaboration may be the best path for long-term growth. Daraz.pk has been acquired by Alibaba while many big tech firms are proposing financial services in the country. A short time ago, State Bank of Pakistan (SBP) has revealed that three big players are interested to work in Pakistan including FonePay, Monet, and TPL Rupya. The SBP also reported that the financial sector of Pakistan will witness a rise in the business-to-consumer e-Commerce (e-B2C) platforms. The new financial technology will assist people to make online transactions to anyone having mobile wallet account. China's e-commerce giant Alibaba also runs a major global e-payments platform Alipay. It also owns Ant Financial which has recently announced the purchase of a 45% stake in Pakistan-based Telenor Microfinance Bank. Telenor Pakistan runs its own e-payments platform EasyPay which will likely link up

with Alipay global payments platform after the close of the Ant Financial deal.

The fin-tech industry has an immense potential to grow in Pakistan. Currently, we have 152 million mobile phone subscribers in Pakistan, opening up ways towards financial inclusion. Also, Pakistan is among the countries where internet penetration rate is accelerating, giving users more choice to do businesses using the internet. Pakistan is the country with the largest young population that shows the potential of adapting to new financial technologies. A McKinsey and Co analysis shows that adoption of financial technology can help dramatically increase financial inclusion in Pakistan. The widely spread phenomena today is the use of Mobile wallets, also called m-wallets are smartphone applications linked to bank accounts that allow users to make payments for transactions such as retail purchases. According to recent statistics on branchless banking (BB) sector by State Bank, mobile wallets reached a high of 33 million as of September 2017, up 21% over the prior quarter. About 22 percent of these accounts – 7.4 million – are owned by women, up 29% seen in Jul-Sep 2017 over the previous quarter. The share of active m-wallets has also seen significant growth from a low of 35% in June 2015 to 45% in September 2017.

State Bank of Pakistan (SBP) has revealed that three big players are interested to work in Pakistan including FonePay, Monet, and TPL Rupya

Pakistan is the country that has indicated a tremendous growth in the IT sector. According to the United Nations E-government Survey 2018, Pakistan has shown incredible improvements in e-presence and provision of public service online. According to the ministry of Pakistan, over the previous five years, Pakistan's IT industry has been growing rapidly at a rate of 150%. Because of the technology growth, Pakistan is also getting popularity internationally. According to FY-2017-18 annual report, Foreign Direct Investment in Pakistan's business of Information Technology

has escalated to \$1.9 billion. If Pakistan continues at this pace, then in a very short period of time it will be considered as one of the leading countries with IT development. The use of technology in businesses will also accelerate the economy of the country.

A McKinsey and Co analysis shows that adoption of financial technology can help dramatically increase financial inclusion in Pakistan

Unquestionably, advancement in Fin-Tech will revolutionize the IT world. However, there are still some places where we are lacking. One key area in which Fintech firms can fall behind traditional financial companies is the absence of the 'human touch', with their operating models often leaving clients to feel like they are dealing with some faceless entity. And with the use of AI and machine learning on the rise this issue will be more prevalent.

According to the FIA, over 19,000 card details from 22 different banks have been stolen in recent cyber-attack

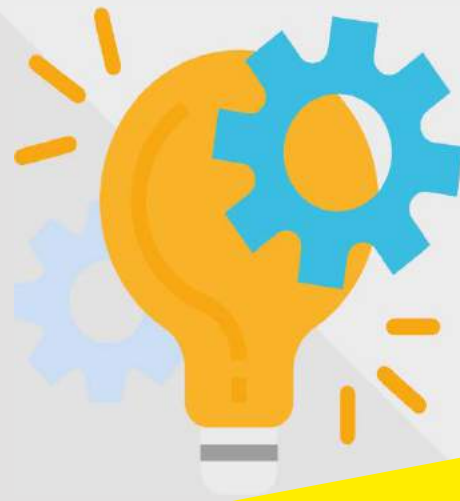
This can leave many Fin-tech start-ups struggling to persuade clients, particularly older clients, to abandon their traditional banks. So, all the public and private sectors need to build Fin-Tech awareness programs and collaboration platforms. Another main challenge that we face is the lack of security. Involvement of internet in businesses has put data on risk. Just recently, Pakistani Banks have faced a major data breach, exploiting important information of their users. According to the FIA, over 19,000 card details from 22 different banks have been stolen in that cyber-attack. At the same time, the integration of traditional finance and fin-

tech gives rise to significant regulatory challenges.

over the previous five years, Pakistan's IT industry has been growing rapidly at a rate of 150%

IT sector of Pakistan has exceptional potential to develop the country's economy and GDP. It is the need of the hour to not only invest and support the local upcoming Fin-Tech in the country but to create an environment encouraging the growth of Fin-Tech in Pakistan. Adoption of Fin-Tech will definitely lead the country towards the betterment and will strengthen the IT sector of Pakistan in no time.

Pakistani Banks have faced a major data breach, compromising important information of their users



Peter Thiel

One of Silicon Valley's most successful and controversial venture capitalists & Co-Founder PayPal

Peter Andreas Thiel is a well-known tech entrepreneur who co-founded the popular money transfer service company 'PayPal'. He is the president of Clarium Capital which is a global macro hedge fund. He is also the managing partner at 'The Founders Fund'.

Thiel was born on 11th October, 1967 in Frankfurt am Main, West Germany. He migrated to the U.S with his family when he was just a toddler. He got his degree of Bachelor in Philosophy in 1989 and in 1992 got a J.D from Stanford Law School. In 1996, he established a multi strategy fund called 'Capital Management'.

Two years later Peter Thiel co-created a website that offered an online payments system. The company became public in February 2002. It was purchased by eBay the same year for \$1.5 billion with Thiel receiving a 3.7% stake that was valued at almost \$55 million. Right after PayPal was sold, Thiel formed a global hedge fund which he called 'Clarium Capital'. In 2004 Thiel did an angel investment of \$500,000 dollars in 10.2% of the giant of social media, Facebook. He also joined its board however was not involved in their day to day decision making. He made several other investments apart from Facebook such as LinkedIn, Slide, Booktrack, Friendster, Yammer, Rappleaf, Yelp Inc., Geni.com, Practice Fusion, Vator, Metamed, Powerset, IronPort, Asana, Votizen, Caplinked, Big Think, Palantir Technologies, Quora, Stripe, Rypple and Legendary Entertainment. Many of these were started by his previous colleagues at PayPal. Some people even call Peter Thiel 'Don of the PayPal Mafia'. He also launched the 'Founders Fund' which was mainly for venture capital investments and angel investments. Thiel is the founder of Palantir Technologies which is financed by the CIA venture capital arm 'In-Q-Tel'. He also created Mithril in 2012 which is a late-stage investment fund.



Peter Thiel is also involved in many philanthropic activities most of which are carried out through his non-profit organization called the 'Thiel Foundation'. Most of his efforts focus on potential revolutionary technologies.

vivo

Y91

SMOOTHER &
LONG-LASTING
THAN BEFORE



Display:

A trendy 6.22-inch Halo FullView Display has given the Y91 a much smaller notch, with an elegant design that resembles the halo of a rising sun. The viewing experience is further enhanced with a screen-to-body ratio of 88.6%. In addition to a smart design, smart hand gesture controls make this large display effortless to handle.

Design:

The Y91 has dimensions of 155.1 x 75.1 x 8.3 mm (6.11 x 2.96 x 0.33 in) and weighs around 163.5 g (5.78 oz). It has adopted a whole new back-cover gloss painting process, intricately blending deep black and shimmering blue that gives the feeling of far-flung corners of the universe.

Y91 allows you to unlock your phone with the rear fingerprint scanner in as fast as 0.2 seconds. Combined with Face Access, unlocking your phone will be smoother and more convenient.

Camera:

The Y91's sharp, 8MP front-camera captures more facial details. Its AI algorithm detects your gender, age, skin tone, skin texture, and lighting environment. It automatically delivers facial enhancements, personally customized to deliver the most beautiful results. Plus, for a fresh selfie experience, AR Stickers enable each of your selfies to stand out from the crowd.

The Y91 has a super-clear 13MP main rear camera, a 2MP secondary camera, and optimized photo algorithms to capture depth-of-field information to rival professional-grade bokeh shots.

Battery:

The high-capacity 4030mAh battery is further complemented by an exclusive, smart-energy power management system. It allows you to play at will, even when on the go, without worrying about running out of power.

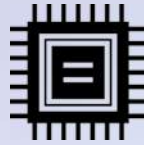
Storage:

Vivo Y91 has a Qualcomm Snapdragon 439 Octa-core. It can run multiple apps with ease, thanks to its 3GB RAM, and octa-core processor with a 12nm design. 32GB of storage space (expandable up to 256GB) gives you ample freedom to download whatever you want.

Smart Features:

The Y91 comes with Jovi Smart Scene personal assistant that understands your needs and become your close companion to help you. It can count your daily steps and calories, tell you the results of your favorite sports teams, update you on the weather, and advise you to take a rest if you're working late into the night.

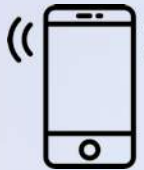
Y91 also has a smart split option; a simple, three-fingered swipe splits the 6.22-inch screen in two. Now you can chat with friends while simultaneously watching videos, so you can get the best of both worlds.



64 GB, 3 GB RAM
1.4GHz Octa-core



Non-removable Li-Po
4030 mAh battery



6.2 inch



13MP + 2MP, Front 8MP



PKR.27,999/

Verdict:

Vivo Y91 is an impressive device at such a reasonable price available and packed with all flagship features. Camera lenses are outstanding and it is also fine for multi-tasking.

PROS

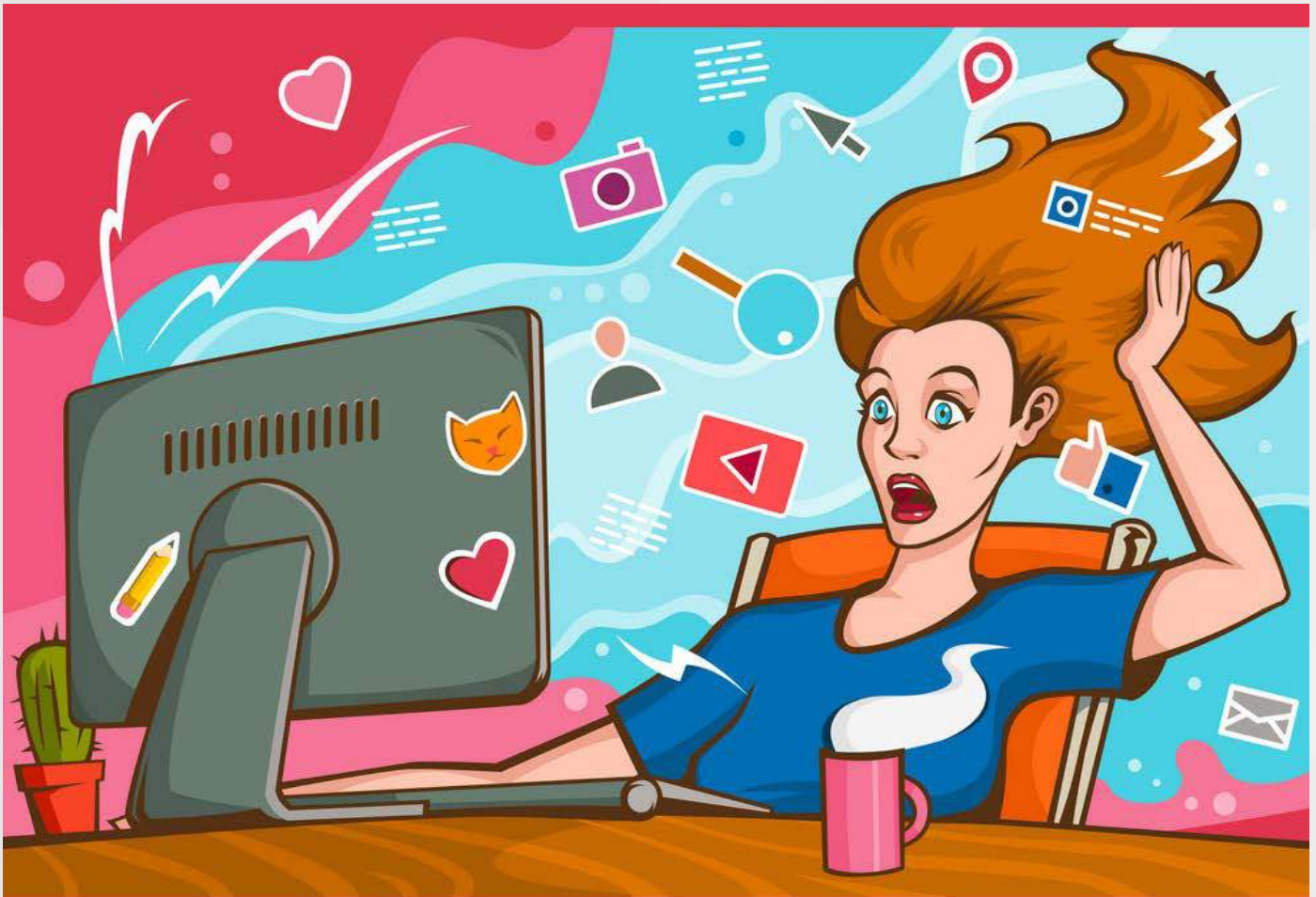
1. Ultra All ScreenHalo FullView Display
2. AI Dual Camera
3. Rear Fingerprint Scanning

1. No Screen Protection
2. No NFC

CONS

Do social media influence our spending?

By Zainab Saeed



Facebook, Twitter, Snapchat, Instagram, we use these social media platforms on daily basis. These social media platforms are getting popularity all over the world as they are designed to facilitate users in creating and sharing content with their friends. Social media platforms are influencing every aspect of our lives and affecting our routine lives and behaviors in many ways. People don't even realize that how much time they are devoting to the social media platforms. This unregulated social media use exerts an adverse effect on our spending habits as well. Social media users are spending way more than their budgets and they even don't know how

to manage it.

Social media is directly or indirectly responsible for overspending. According to the researchers of business school, "social media really can influence the amount of money you spend to the point that you can't control yourself." It has been observed especially among millennials that social media is directly responsible for overspending. A study by Allianz Life Insurance Company suggests that "57 percent of millennials spent money they hadn't planned to because of content on their social media feeds."

Social media is an easy channel to create brand awareness and businesses know it well. Businesses can't survive without making money, and they find social media as a great source to interact with the consumers. Therefore, businesses today are spending more money to reach out to their customers and consumers are devoting more money to buy their products. As a result of that, social media spending has increased dramatically. Customers and businesses have been more connected than ever before through the presence of Internet across the globe.

People don't even realize that how much time they are devoting to the social media platforms. This unregulated social media use exerts an adverse effect on our spending habits as well

Believe it or not but this social media overspending has created depression and anxiety among the people especially in the younger generation. In today's modern life, it is very difficult to save money as we spend a great chunk of our income on paying rent and credit cards bill but now you can add social media too in that list.

Businesses today are spending more money to reach out to their customers and consumers are devoting more money to buy their products

A study by Allianz Life Insurance Company suggests that "57 percent of millennials spent money they hadn't planned to because of content on their social media feeds."

How Social media influence our spending?
So many social media factors make you spend more money and carry out a significant role in hypnotization, here are few:

Social Influencer Reviews:
Here the term "social influencers" represent individuals who maintain a significant following on social media. As many people admire them and see their posts on a daily basis so they are frequently targeted by businesses for the promotion of their products. Most people are inspired by these influencers, so they trust them whatever they say. Their content has a large effect on purchasing decisions; people don't even think for a second that the influencers' posts might be sponsored. For example, if an influencer shares a post on any social platform about his new pair of shoes, raving about how comfortable and affordable they are, his followers will definitely take interest to learn about the new pair of shoes. These types of reviews by social influencers have

undoubtedly affected our spending behavior.

These social media influencers often tag the store or brand of the products they use in their posts. This makes it easier for followers to become familiar with the brands and products which facilitate their buying behavior.

Friends and Family Review:

As we all know that social media is a great way to connect with our friends and family who are far away from us and who we don't see on the daily basis. However, we interact with them via social media platforms, the more we use social media, the more information we share with each other.

Our friends and family notify us about new products they have discovered and vice versa. This has a significant influence on us and also on our friends. According to some researches, 80% of people are buying products recommended by friends or any their family members

Businesses today are spending more money to reach out to their customers and consumers are devoting more money to buy their products

The "mere exposure" effect:

Social media overspending is also caused by the long-known psychology concept known as the "mere exposure" effect. In this psychological phenomenon, the more you are exposed to something, the more you will like it. That can be an image, person, or brand. So many social media ads are designed to give favorable impressions of a brand or a product and over the long-term, the mere exposure effect will make you buy a product or service of that brand you have been most exposed to and you might ignore that best product.



The Store's Presence on Social Media:

Further to the points above, a business' presence on social media has a significant influence on purchasing behavior. Put it this way: Even if a brand has all kinds of attention from social influencers and customers, with a lackluster social media presence it will be difficult to convince anyone of their credibility. A consistent feed which showcases their products in use and provides value will help turn visitors into followers and into buyers.

Social influencers' content has a large effect on purchasing decisions; people don't even think for a second that the influencers' posts might be sponsored



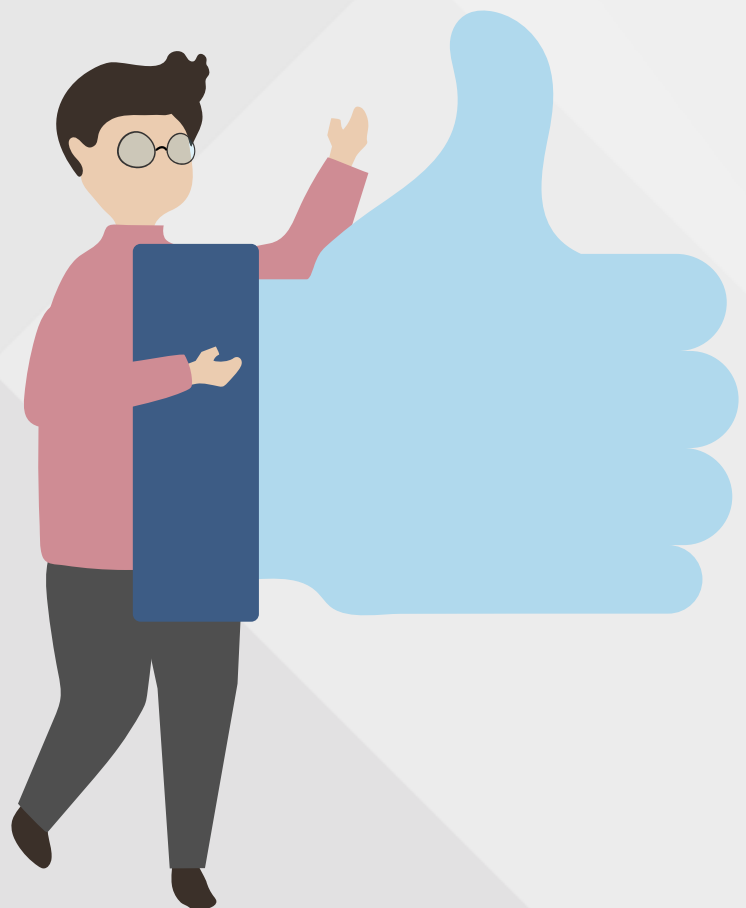
With a strong feed, businesses will typically be able to attract more followers, which is the other key component in driving purchase decisions. Seeing a large number of followers tells new people that others are aware of the brand, entertained by their posts, and satisfied with their products. Its simple math: Cool posts + lots of followers = higher probability of purchases.

With a strong feed, businesses will typically be able to attract more followers, which is the other key component in driving purchase decisions

Social marketing campaigns of businesses are affecting our spending habits. Since 2009, expenditure on these campaigns has grown 25% year over year and that is just because businesses know that social media is the modern-day word-of-mouth. It plays an important role in creating trust, amplifies the brand message, encourages a two-way dialogue, and ultimately affects the bottom line.

Social media undoubtedly influence our buying behavior and exposes us to numerous products that can make our lives easier and better. But we need to be careful and think wisely while browsing on social media. We have to act smart refrain from making impulse buys as this can lead to financial disasters. Take time to plan out your purchases to make sure you absolutely need the product. Other than that, stop assuming that more social media followers mean the product is good. More importantly, do not assume that people around you have a more exotic lifestyle and good decision making power than you. Be confident, stay happy...

We have to act smart refrain from making impulse buys as this can lead to financial disasters



Chairman PTA inaugurates the project for seamless broadband coverage to Makran Coastal Highway

Chairman PTA, Muhammad Naveed inaugurated the project “Seamless broadband coverage from Hub to Jiwani: Makran Coastal Highway” worth PKR 759 Million at a ceremony held on Tuesday in Islamabad.

In this connection, contract of the project was signed by USF with Ufone. Chief Executive Officer, Universal Service Fund, Rizwan Mustafa Mir signed the contract with CEO-Ufone, Rashid Khan.

In order to execute this project, 58 BTS towers will be installed in a contracted time frame of 18 months. To take this further, all major motorways and highways will be facilitated through seamless connectivity in future. Chief Guest of the ceremony, Muhammad Naveed, Chairman PTA while addressing the ceremony stated that that with constant dedication and devotion, we have achieved yet another milestone. He further said that the event marked one of the greatest landmarks achieved in the field of Telecom in Pakistan and would go a long way in taking the developmental work being done by the Ministry to a greater level. He also added that with such projects, Ministry for IT through USF would continue to work towards achieving the mission of broadband penetration across the country to facilitate the masses in rural areas. He said that in addition to Broadband Infrastructure, he expected USF to launch new e-services and m-services to facilitate digital lifestyle adoption for the people of Pakistan.



is the first project under the next Next Generation-Broadband for Sustainable Development programme with focus on broadband coverage to allow for seamless operation of modern APPS. Furthermore, this will be the first network in Pakistan where the winning bidder will be required to enable national subscriber roaming for other consumers to benefit from the service.

Speaking at the occasion, Rashid Khan, President and CEO Ufone said, “Universal Service Fund (USF) was established to promote the development of telecommunication services in un-served and under-served areas throughout the length and breadth of the country. At Ufone we resonate the same goal of providing telecommunication services to every Pakistani. The project has a special significance, as an important highway in Balochistan will be connected through broadband services under this initiative.”

It is noteworthy to mention here that under this project, seamless voice and broadband services will be provided to the coastal highway of 694 kms and for the first time in Pakistan national roaming is also being made available.

Senior officials of Ministry of IT, Ufone, USF and representatives of IT and Telecom companies were also present at the event.

Huawei Nova 3; the New Style Icon



Design:

The Nova 3i simply blows away the competition when it comes to grabbing eyeballs from the world — thanks to its wild color shifting finish. The glass rear sports a vertically aligned dual camera setup and fingerprint sensor. Being a premium smartphone, the edges curve gradually towards the sides, thus imparting a comfortable grip. The front sports a modern edge-to-edge display with a notch on the top. Since there's an LCD panel, a fair amount of chin is prominent.

Display:

The 6.3-inch IPS LCD display is a hoot to consume content. It renders pictures at full HD+ resolution with a vibrant dynamic range and impressive contrast. There no issues with sunlight legibility and viewing angles are pretty wide.

With an 84 per cent screen-to-body ratio, you are assured of a commendable viewing experience. For notch haters, Huawei's EMUI OS does provide for a way to hide it through software trickery.

Performance:

On a day-to-day basis, the Nova 3 is effortlessly fluid. Whether you are switching between multiple social media apps or flicking around aimlessly in Subway Surfers, the Kirin 970 holds up with demands pretty well. Huawei has thrown in 6GB of RAM and 128GB of storage, which is expandable up to 256GB. And as has been ritual, EMUI marks a return atop Android 8.1 Oreo to do the OS duties.

An area where the Nova 3 shines again is with regards to the Face Unlock. The Nova 3 comes equipped with an infrared sensor-based 3D facial recognition system. As expected, you can rely on the Face Unlock even in pitch dark conditions. However, the system isn't quick enough and does require some time to process the verification system. The IR system also paves way for Qmojis — Huawei's answer to Animoji. The Qmojis work decent, with most of the characters able to track the facial systems efficiently.

Camera:

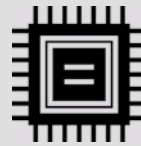
To make sure the Nova 3 is able to fight off the best in terms of optics, Huawei has given it some capable gear. There's a 16MP + 24MP dual camera setup for the rear while a 24MP + 2MP dual camera setup deals with selfie duties.

The rear setup with its f/1.8 aperture for the primary lens churns out impressive photos in daylight with ample details. As is the case with all Huawei/Honor phones, the camera tends to overexpose the images, thus blowing out details. The AI mode, which can detect up to 22 types of scenes and adjust the parameters accordingly, enriches the photos with brighter hues amidst a slightly lower resolution. However, the issue of overexposure isn't helped by the AI mode.

The front dual cameras ensure selfies with loads of details and slightly saturated colors. However, overexposure plagues selfies too, which means that you could be spending some time editing before uploading on social media.

Battery:

With all the latest-gen multimedia features and a flagship-grade chipset, the Nova 3 requires a big fuel tank to make it through a day. And sure enough, with a 3750mAh Li-ion battery, the Nova 3 makes it through a day involving frequent texting, audio and video streaming, occasional selfie sessions and some more.



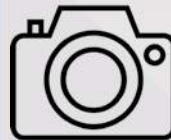
128 GB, 4GB RAM
2.4GHz Octa-core



Non-removable Li-Po
3750 mAh battery



6.3 inch



Dual 16MP + 24MP,
Front 24MP + 2MP



PKR.59,999/

The Good

1. Flagship performance
2. Four different cameras
3. Improved EMUI 8.2
4. Excellent finger-print scanner and face locking technology

The Bad

1. Average screen quality
2. Back camera not flagship level

Verdict:

The HUAWEI nova 3 is one of those phones that tend to blur the lines between a high-end and a mainstream device. It has the fastest processor, Huawei has to offer with plenty of RAM and storage- specs that are generally reserved for flagships. That makes the nova 3 quite fast to use on a daily basis.

It also has good cameras, both on the front and the back as well as a rather large battery to keep it going throughout a day. We also like the design direction Huawei is taking with EMUI 8.2.

CHAIRMAN PTA ELECTED AS CHAIRMAN OF SOUTH ASIAN TELECOM REGULATORS' COUNCIL

Pakistan held highly successful South Asian Telecommunication Regulators Council (SATRC), attended by all Member States of the Region under the umbrella of the Asia-Pacific Telecommunity (APT). The Chairman SATRC, Mr. Digambar Jha, Chairman of Nepal Regulatory Authority proposed, Chairman Pakistan Telecommunication Authority (PTA) as the next Chairman of SATRC and unanimously elected Chairman SATRC in the elections held at the 19th Meeting of the SATRC in Islamabad. The Member States elected Mr. Chencho Dorji, Director General of Bhutan Regulatory Authority as Vice Chairman of SATRC-19 for proposing to hold SATRC-20 in Bhutan in 2019. The Council Meeting held from 13-15 December, 2018 featured national and international speakers to discuss the Regulator Roundtable discussion, industry-regulator dialog and industry session to share best practices and experience. Representatives from 9 countries from Asia Pacific Region, namely Afghanistan, Bangladesh, Bhutan, Iran, India, Maldives, Nepal, Sri Lanka, and as well from United Kingdom, Indonesia, Malaysia and Thailand.

During the concluding session, Ms. Areewan Haorangsi, Secretary General, Asia-Pacific Telecommunity said that deliberations through such meetings are helpful to provide international experiences with a focus on current issues and challenges faced by Asia Pacific Countries. She congratulated Mr. Muhammad Naveed Chairman PTA, for being elected as Chairman SATRC. She expects that all the APT agenda's upcoming in the next year shall be fruitfully accomplished under his leadership.

Chairman PTA said that SATRC has already done some outstanding work and will be continued by Pakistan. As Chairman of the Council, he vowed to carry on this cooperation and engagement among the regulators in the best possible manner. Chairman said that telecom regulators of our region have some big challenges and opportunities ahead of us. Considering the fact that we have such a vast human capital, the need is to channelize our efforts towards embracing the future technologies amicably. Chairman said that the benefits of ICT driven economic growth must be passed on to the common man and we, as regulators, have a central role to play in this regard. Chairman added that, a conducive and friendly regulatory environment will not only improve the confidence of the investors in our region but also generate new economic opportunities for the population of the SATRC Region.



Islamabad: (15 December 2018) Participants of the three-days 19th South Asian Telecom Regulators Council (SATRC-19) hosted by Pakistan Telecommunication Authority (PTA) in collaboration with Asia-Pacific Telecommunity (APT) in Islamabad



Islamabad (15 December 2018):
(Right to Left) Federal Minister for IT&Telecommunications Dr. Khalid Mehmood Siddique, Ms. Areewan Haorangsi Secretary General Asia-Pacific Telecommunity (APT) and Mr. Muhammad Naveed Chairman PTA are on stage during 19th South Asian Telecom Regulators Council (SATRC-19)

The SATRC meets annually to discuss the key policy and regulatory issues of concern to the SATRC members. The SATRC-19 concluded with Regulator's Roundtable, Industry-Regulator dialogue and Industry Session. At the Regulators' Roundtable, the heads of the regulators shared their experiences on different regulatory issues to overcome the challenges collectively and facilitate the business environment. During the meeting outcomes and implementations of the SATRC Action Plan Phase VI was highlighted and new SATRC Action Plan Phase VII was discussed. In meeting Regulators also identified the possible areas of cooperation in South Asia through SATRC. SATRC meeting was a wide opportunity for the industry to raise their concerns and share views on the current and future regulatory trends and their expectations from the regulators.

How to be a Pro at Mobile Photography

It's All About the Light

1

Check out the shadows that the sun makes on subjects. Notice the reflective light off buildings. Practice during the 'golden hour,' the period of time shortly after sunrise or just prior to sunset. Watch how the light from a window falls inside a room at different moments.

Zoom With Your Feet

2

Do not ever use the zoom on your smart phone. If you want to zoom in on something, use your legs and move!

It's All About the Angles

3

Changing your angles and your perspective not only gets you a better shot, it also shows how you see the subject. So get down on the ground, climb up on a high vantage point, move to the side and change your point of view. Try as many different angles on your subject as possible.

Apps-tanding!

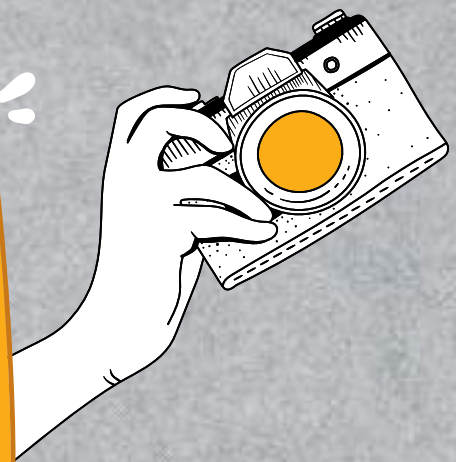
4

Mobile photography is awesome because of the thousands of apps. While you can't correct problems like bad lighting, you can improve other details to make a subject look acne-free, sharpen specific aspects of an image or let you add interesting text or other effects over the photo.

Mirror, Mirror... Who's the Fairest?

5

Mirrors, glasses, puddles and bodies of water, smooth and shiny surfaces all make for awesome reflections. Push yourself to look for reflective surfaces and place your subjects at angles or in direct comparison to the reflection. Even simple shades of light can make amazing reflections.



TELECOM CAMPAIGNS

2.5

OPPO R17 Pro



OPPO has recently released a new advert for its R17 Pro device. There is no innovation in this advert as it follows the same old theme, a girl wandering here and there revealing the features of the device with the every click. Oppo should bring something new now as people are now fed up with the same story. More over music behind the ad is very loud and horrible, though the overall acting and ambience is not that bad.

Verdict: Kuch Naya Lao....!!!

4.5

Jazz

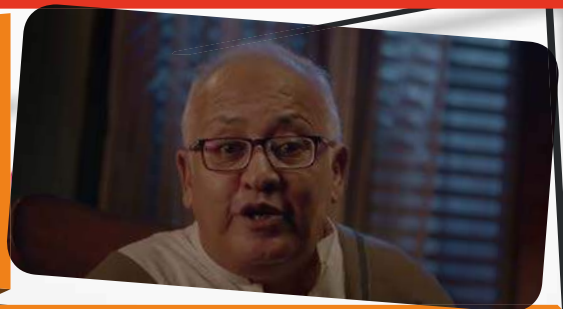


I loved watching this advert, no doubt Jazz always bring something new, thought provoking and humorous. The overall acting, music and ambience have done justice to the overall theme of the advert. The basic purpose behind the advertisement is to promote 4G of the Jazz which is very fast so one will not lag behind from other services.

Verdict: Great AD!!

4.5

Ufone



Kahaniyaan yoon hi chalti rahain, isliay har jagah deta hai saaf awaaz Pakistani Network. Ufone always bring family adverts which are filled with love and have a personal touch. The story of this advert revolves around a grandfather who is telling story to his grandson without any disruption in the network, trying to make him sleep. The basic purpose behind the advert is to promote Ufone service for helping everyone to talk at cost effective rates without any disruption.

Verdict: Sweet!!

3.5

Honor 10 LiteHONOR 10 Lite™
24MP AI SELFIE IN STYLE

Honor brings a new ad of its latest device Honor 10 Lite with the tagline, "selfie in style". The ad starts with a falling drop of water that makes a whirlpool. It is a very short ad that doesn't offer much; it only highlights the feature of the phone. However, the background music is good.

Verdict: Very Average!!

2.5

Telenor

The recent ad of Telenor simply disappoints me. The performers Osman Khalid Butt and Suhai Ali Abro tried their best to perform well and make the ad good, but the overall theme of the ad is not appreciable at all. The background song gets on your nerves pretty quickly.

Verdict: Worst Ad!

5

ZONG

Cool Parkour moves, stunning car racing, heavy bike, Para trooping and some jeep rally moments all of this sums up the stunning new TVC of Zong 4G. These adrenaline pumping stunts depicts the ambitiousness of Zong to provide fast coverage with its more than 10,000 4G towers throughout Pakistan. the music, performance and direction are all on point so, overall it is an impressive advert by the company.

Verdict: Thumbs UP!!

10 BEST SELLING SMARTPHONES FOR THE YEAR 2018 (PAKISTAN)



The smartphone industry has grown tremendously globally as well as in Pakistan in the year 2018. Number of smartphones were launched this year. Some phones were meant for people who are on a budget, while other expensive enough to make your year-long savings spent on a single device. Some had moveable components, like the OPPO Find X and the VIVO Nex, and others were just meant for gaming like the Xiaomi's Black Shark and the Honor Play.

Regardless of all the available options of smartphones to buy in 2018, people in Pakistan chose these 10 smartphones above all.

1. OPPO F5 – The Killer at a Whopping 620,000 Sales!



OS: Android 7.0 Nougat
Display: 6.0 inches
CPU: Octa-Core
Camera: 16MP, Front 20MP
Memory: 64GB Built-in, 6GB RAM
Price: PKR.38,899/-

2. Samsung Galaxy Grand Prime + | The Runner-up with 330,000 Sales!



OS: Android 6.0 Marshmallow
Display: 5.0 inches
CPU: Quad-Core
Camera: 8MP, Front 5MP
Memory: 8GB Built-in, 1.5GB RAM
Price: PKR.17,700/-

3. Huawei Y7 Prime (2018) – 225,000 Units Sold!



OS: Android 8.0 Oreo
Display: 5.99 inches
CPU: Octa-Core
Camera: Dual 13MP +2MP, Front 8MP
Memory: 32GB Built-in, 3GB RAM
Price: PKR.25,999/-

4. OPPO F5 Youth – The Little Brother of the F5 was Loved too with Over 170,000 Sales!



OS: Android 7.0 Nougat
Display: 6.0 inches
CPU: Octa-Core
Camera: 13MP, Front 16MP
Memory: 32GB Built-in, 3GB RAM
Price: **PKR.27,899/-**

6. OPPO F7 – Yes, OPPO Again, 155,000 Units Sold!



OS: Android 8.0 Oreo
Display: 6.2 inches
CPU: Octa-Core
Camera: 16MP, Front 25MP
Memory: 64GB Built-in, 4GB RAM
Price: **PKR.33,000/-**

8. Samsung Galaxy J7 Core – J7 Sticks to the J5 closely with 145,000 Sales!



OS: Android 7.0 Nougat
Display: 5.5 inches
CPU: Octa-Core
Camera: 13MP, Front 5MP
Memory: 16GB Built-in, 2GB RAM
Price: **PKR.18,999/-**

10. Huawei Mate 10 Lite – Finally, the Mate 10 Lite with Over 115,000 units sold!



OS: Android 7.0 Nougat
Display: 5.9s inches
CPU: Octa-Core
Camera: Dual 16MP+2MP, Front dual 13MP + 2MP
Memory: 64GB Built-in, 4GB RAM
Price: **PKR.34,999/-**

WISHLIST

5. Huawei Y5 (2018) – 160,000 Smartphones Sold!



OS: Android 8.1 Oreo
Display: 5.5 inches
CPU: Quad-Core
Camera: 13MP, Front 5MP
Memory: 16GB Built-in, 2GB RAM
Price: **PKR.19,999/-**

7. Samsung Galaxy J5 Prime – J Series finally comes at 7th with Over 150,000 Sales!



OS: Android 6.0 Marshmallow
Display: 5.0 inches
CPU: Quad-Core
Camera: 13MP, Front 5MP
Memory: 16GB Built-in, 2GB RAM
Price: **PKR.18,999/-**

9. Huawei Y3 (2017) – 135,000 Units Sold!



OS: Android 6.0 Marshmallow
Display: 5.0 inches
CPU: Quad-Core
Camera: 8MP, Front 2MP
Memory: 8GB Built-in, 1GB RAM
Price: **PKR.12,000/-**



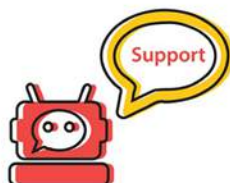
What's Big in Chatbots for 2018 and Beyond



Chatbots that sound more intelligent and human

80% of businesses want chatbots
by 2020 - Oracle

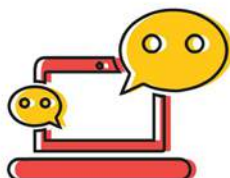
The adoption of chatbots highly depends on how appealing they would be to the end user. In 2018 and beyond, we can see more bots which are incorporated with advanced Artificial Intelligence technologies like machine learning, natural language processing etc. This incorporation enables bots to give smarter responses in a natural conversational tone.



The Emergence of Business Intelligence bots

By **2020** natural-language generation and artificial
intelligence will be a standard feature of
90% of modern BI platforms - Gartner

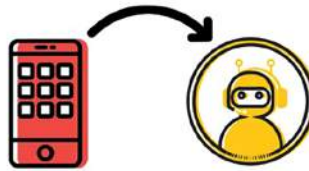
As enterprises continue to churn out massive amounts of data every day, insight-driven decision-making has become a distant dream. AI chatbots will be one popular solution to overcome this challenge. Bots allow quick and convenient delivery of analytics to the actively used messaging channel and increase BI adoption.



The Rise of website bots

63% of people would consider messaging an
online chatbot to communicate with a
business or brand - Mindshare

More and more organizations will recognize the benefits of embedding a chatbot into their website. Chatbots will offer excellent user engagement and boost conversion rates. The 24/7 availability of bots will fundamentally revolutionize the live chat option in websites.



Replacing Mobile Apps

By 2021,
more than

50%

of enterprises will spend more per annum on bots and chatbot creation than traditional mobile app development. - Gartner

As the app market saturates, enterprises will develop a bot strategy and use an AI-powered chatbot platform to deploy, train and manage customized bots for better business workflows. Bots also gradually reduce the number of enterprise applications.



Enhanced Conversational User Experience

By

2021

"conversational AI-first" will be adopted by the majority of enterprise IT organizations as the most important new platform paradigm. - Gartner

A relatively new branch of UX design, CUX will gain more significance in the coming years. An effective CUX ensures users reach their goal in the shortest time with maximum end-user experience. Brand persona development, personalized content, level "0" phrasing, guided conversations are a few trends to watch for.



Mainstream adoption and moving beyond customer service

Chatbots expected to cut business costs by

\$8 BILLION

by 2022 - Juniper Research

TOP MUST HAVE APPLICATIONS & GAMES FOR YOUR SMARTPHONE

New Year Wallpaper 2019

Rating : 4.3 Price: Free



Beautiful Happy "New Year 2019" Wallpaper HD - Funny Colorful Fireworks "New Year Pictures" Background Graphics Art 3D Illustrations Free Download!

Santa Christmas Escape Mission

Rating : 4.1 Price: Free

Show some super-duper moves and get your gifts back from the enemies. Find and save the kids on time and let them enjoy the Snow and Christmas Eve with love, joy and peace!



Granny Subway Run:Christmas

Rating : 4.0 Price: Free



Play this game and you will get invincible fun. You have to dash as fast as you can if you do not want to be defeated.

Fire Balls 3D

Rating : 4.5 Price: Free

Fire Balls 3D is a single-tap hyper casual game that will keep you hooked for hours!

Hold to make your dot fire forward, and be careful from moving obstacles.



3D Creator

Rating : 4.3 Price: Free



Capture your world in 3D straight from your Xperia device and turn people and objects into high-resolution 3D models. Make 3D memories, share them with friends or get them printed.

Stickman Hook

Rating : 4.1 Price: Free

Tap to hook and make incredible jumps; Avoid every obstacle that stands in your way. Can you execute all these acrobatic tricks in a row like a boss?



Racing Xtreme 2

Rating : 4.7

Price: Free



Race the fastest 4x4 offroad monster vehicles and feast your eyes with the fast jump filled racing on the beautiful, hills & valleys packed American countryside!

Create Stickers for Whatsapp

Rating : 3.8

Price: Free

It only works together with WhatsApp beta.

Create stickers for whatsapp easily, with the best app in the category.



Street Archer Run

Rating : 4.2

Price: Free



Would you like to ride horses and shoot enemies? Looking for a game of shooting on horseback, a game of arrows, an archer game or a game of archery Shooting zombies in street? Street Archer Run is Best game to play.

Islamic Stickers

Rating : 4.7

Price: Free

This sticker pack is created to make it easy for people to send greetings in arabic/urdu. As we greet people frequently, we can greet them in arabic text



Get followers, likes for Instagram

Rating : 4.8

Price: Free



Get more than 10,000 real followers fast by our #TAGS, if you want to become popular on Instagram than this is the application for you for increasing to get followers, likes, comments for Instagram.

Owl - Predictor Mania

Rating: 1.8

Price: Free

This application will reveal all the secrets and give answers to most of the questions that you are interested in resisting your whole life. If you are interested in such issues as what awaits you in the future and others.



Avast Antivirus

Price: Free

Rating : 4.6



Protect against viruses & other types of malware with Avast Mobile Security, the world's most trusted free antivirus app for Android.

meMOBILE

easy to connect...

Metal-100

- Display 1.8"
- Dual SIM
- Dual Smart Camera
- 32GB Card Supported
- Stylish Metal Body
- Battery 1500 mAh
- Auto Call Recorder



Metal-200

- Display 2.4"
- Super Slim
- Smart Camera
- Bluetooth
- Wireless FM Radio
- Battery 1800 mAh
- Auto Call Recorder



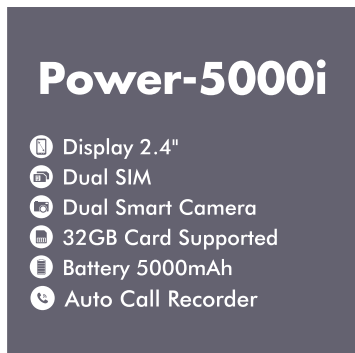
Power-3000

- Display 2.4"
- Dual SIM
- Smart Camera
- 32GB Card Supported
- Battery 3000 mAh
- Auto Call Recorder



Power-4000

- Display 2.8"
- Dual SIM
- Smart With Flash Light
- 32GB Card Supported
- Battery 4000mAh
- Auto Call Recorder



Power-5000i

- Display 2.4"
- Dual SIM
- Dual Smart Camera
- 32GB Card Supported
- Battery 5000mAh
- Auto Call Recorder



Power-6000

- Big 2.8" Large Display
- Big 600 mAh Battery
- Big Torch Light
- Big Loudly Speaker
- Big Power Bank
- Auto Call Recorder

Now You Can Charge Other Phone
Battery From Power 6000 Phone



Power-5000

- Display 2.4"
- Dual SIM
- Without Camera
- 32GB Card Supported
- Battery 5000mAh
- Auto Call Recorder



Music-1

- 2.4" Large Display
- Big 2250 mAh battery
- Wireless FM Radio
- Auto Call Recorder
- Music Phone
- Big Speake
- Music Player Short Keys



AUTHORIZED DISTRIBUTERS

SYMBOS

Active Link

3B Telecom

www.3biztelecom.com



APPROVED BY
PTA
PAKISTAN
Telecommunication Authority

vivo
Camera & Music

Y91 **64GB**

Bigger Battery, More Fun



13MP+2MP Dual Rear Camera

Halo FullView™ Display

4030mAh Battery

   /vivopakistan
www.vivo.com/pk

HONOR

INOVI
Technologies
bringing the best



HONOR 10 Lite^{AI}

24MP AI SELFIE IN STYLE



24MP AI Selfie
Camera



6.21" Dewdrop
Display



Android
Pie