PHONE WORLD

CEOs League

With 42% growth our IT Industry looks well placed to exceed $5 bn IT exports by 2020

Asim Shahryar
MD PSEB

Will it Turnaround
Privatised PTCL

QMobile
NOIR Z9
Device Review

Adnan Khan
Managing Editor

Dear Readers,

Happy Eid Mubarak!

Pakistan is a success story when it comes to mobile sector evolution, with expanded coverage, low internet tariffs and innovations in m-technology. It has indeed changed the very dynamics of ICT in the country. Keeping in view, the importance of leadership for growth of the Mobile industry and their respective organizations, our current issue has come up with a new idea of benchmarking mobile sector CEOs performance. We have tried to benchmark our mobile leadership based upon some important skills sets that we found on public domain such as Linked-in and other web sites while leadership attributes are judged on industry perception.

Our next feature article revolves around the much talked about post privatized era of Pakistan Telecommunication Corporation Limited (PTCL), the fixed line operator in Pakistan. The article mainly revolves around profitability, subscriber growth, network development and other important areas during post privatization period.

In our current issue we have also conducted an interview of Mr. Asim Shahryar Husain who is the MD of Pakistan Software Export Board (PSEB). Mr. Shahryar shed light on the working and goals of PSEB. He explained many future projects that are undertaken by the government which will bring fruitful results in the future and further transform the IT and Telecom sector of Pakistan.

Like always, our regular sections including phone reviews, 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 readers, we hope you guys will appreciate our efforts and give us your feedbacks so that we can improve further.

Enjoy Reading…!!!

Thank you,   Feedback
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Managing Editor   www.phoneworld.com.pk

Contents

Are You Suffering from Digital Amnesia

24

The Looming challenge of E-Waste Debacle in Pakistan

28

Create, Share, Inspire and Earn through Blogging

42

Never Dead Again Boost your Smartphone Battery life

44

Smart Moves for Smarter Nation

46

ICT Personality Corner
led the development of Google's most successful products for more than 10 years and was appointed CEO of Yahoo in 2012,
Marissa Mayer

47

PHONE WORLD

Issue 16

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CEOs League

CEOs League

The "Justice League" is a team of superheroes who represents the respective qualities of their characters. It comprises of heroes of supernatural qualities portraying the role models of humanity, commitment to their duties, risk-taking, loyalty and decision-making. Keeping in view the same background, comparison of Pakistan's mobile operators CEOs has been drawn in this article analyzing their skills, attributes and the repute they have in the industry. Pakistan is a success story when it comes to mobile sector with expanded coverage, low tariff and now mobile broadband data services for consumers that brought extra innovation and helped change the very dynamics of mobile industry and helped Pakistan winning international awards. This could not have been achieved without the talent that exist in the sector and the incredible leadership that we see in the telecom sector of the country, i.e. the heroes of mobile industry.

PhoneWorld team's successful benchmarking for QoS and Pricing gained popularity among the readers, so this time we have tried to do relative benchmarking of personalities of presently working five mobile

operators' CEOs. Evaluation of personalities was indeed the hardest task as one can only estimate and give weightage to certain skill sets and attributes which are quite difficult to quantify. An industry HR expert once told us that "a person does not apply rather he gets picked up for CEO position because of his repute" which cements our belief further that industry opinion and perception for a business leader is really important. Therefore, we have tried to benchmark our mobile leadership based upon the skills sets that we could find on public domain such as Linked-in and other websites and attributes based on industry opinion, reputation and perception.

We have also evaluated our telecom leadership by setting some parameters and judging each leader according to them. Leadership is all about the mapping out where you want to take your people, best utilizing the resources at hand by making bold, innovative and timely decision. Let's look at ranking based on criteria stated for each indicator that are considered important in a mobile corporate world. We have given each indicator a separate weightage with grand total of hundred. Final position has been given according to the total points secured by each CEO.

Leadership Skills

Leadership means different things to different people around the world but everyone agrees that the ability to lead effectively is built upon the basic foundation of three key areas i.e. education, experience and achievements (although achievements and experience has certain overlapping ingredients. Let's first try to measure comparative standing of our five super heroes on these three parameters and then move on to the leadership attributes of their personalities which are even more important.

1   Education (15 points)

Knowledge and experience always go hand in hand when it comes to organization's performance, it is also the major prerequisite for any job whether it is your first job or at the prime of you career. Relevancy of the education is even more important for one not only to rise but also to be an effective manager.

The preferred educational tools could be a combination of technology and business education for the top job manager, but if that is not the case lets settle for the more appropriate educational skillset.

HR Gurus believe "one does not apply rather he gets picked up for CEO position because of his repute" which shows that industry opinion and perception for a business leader is really important

Jeffery Hedberg and Michael Foley both have very appropriate educational background for a top telco manager in line with the ideal scenario discussed above. While, Jeffrey Hedberg has studied business at Northeastern University and International Management at the University of Denver, Michael

Foley is a Graduate of McGill University, Montreal with Organizational Psychology as a subject specialist that is equally equipped with right educational skillset for the top job. Therefore we have given 13 points to Hedberg and 12 points to Folly.

If we were to evaluate CEOs education for a banking sector the race would have definitely be won by Aziz Khan. He with a Chartered Accountancy credentials is probably the most well-read person amongst all. A finance degree is not really the best pick while taking in consideration a top position of a telecom organization. Aziz Khan is at number three position with 11 points.

Pakistan is a mobile industry success story and this is primarily because of the overall talent that exists and the incredible leadership that we see in the telecom sector of the country

Mr. Liu Dianfeng, CEO Zong is a masters from Chinese Academy of Sciences and has done Executive MBA from Cheung Kong Graduate School of Business, which supposedly is a very prestigious school but when it comes to a full time business study against an executive program surely more weight has to be given to fulltime programs. So Dianfeng is at number four position with 10 points.

Muneer Farooqui, CEO Warid who has done Masters in Computer Science would be fifth in the line. He surely cover a good part of technology aspect important for a Telco CEO as technology is moving from hardcore engineering to IT. Some HR headhunters would also look at the graduating institutions and it would certainly have weighted more for Mr. Farooqui had he done his masters from a more prestigious school. However, it remains a fact that Preston has been pioneer in higher education by a Private sector institutes and produced some of the best corporate leadership. But still Muneer Farooqui comes last according to our ranking with 9 points.

2   Experience (15 points)

Experience and especially relevant experience is the most fundamental ingredient for any professional to be considered for the top job. Companies don't want starters and would like to have someone who has rounded experience of various functional areas and environments that includes markets and services in the mobile eco-system. Being a top guy for a number of operations is certainly the key. While, looking at the profile available on public domain it is obvious that

CEOs in Pakistan mobile industry all came from well reputed telecom organizations and that makes our task of ranking them even more difficult.

Jeffrey Hedberg is ranked on top with 13 points on the basis of his working experience with major Telcos around the world. Jeffrey remained at influential positions like CEO of Telkom South Africa, CEO of Multi-Links Nigeria, CEO of Cell C in South Africa, Executive Vice President and Member of the Board of Management of Deutsche Telekom AG, CEO and Chairman of Deutsche Telekom USA.

Jeffrey Hedberg is ranked high becuase of his working experience with major Telcos around the world

Muneer Farooqui, CEO Warid gets 12 points with over 20 years of experience and is ranked at number 2 in comparative standing with his peers in the Pakistan mobile industry. He started his professional journey with Shell Pakistan in 1990. Joined Mobilink in 1993 and worked in various capacities till 2004. Mr. Farooqui joined Warid Telecom in 2004 as part of the core team when the Company stated its journey in the local Telecom Industry. He was elevated to the position of Chief Executive Officer at Warid Telecom, Bangladesh and at a very difficult time was asked to lead Warid-Pakistan in 2010. He has done well considering the difficult situation Warid has been for the past few years as the shareholders have put the company on sale for quite some time and probably has stopped investments in the company. His strategy of face saving to migrate Warid to LTE in an environment where they were cash strapped is also commendable and may go a long way in solidifying his credential as a business leader.

Mr. Aziz is also a very seasoned player but most of his experience is of local market and financial sector, this also is his first assignment as a CEO. He has around 28 years of telecom experience in different organizations like Warid, Price Water Coopers, PICIC,

Millicom International Cellular, Celtel etc. Aziz has been in Ufone as CEO since 2008, which is a big plus. However, inability of Ufone to get enough Spectrum against all expectations in the last 3G/4G spectrum auction conducted by PTA has really smudged his image as Ufone has dropped to number 4 position in terms of subscribers. Therefore we have given him 11 points.

CEO Telenor, Michael Foley, has more than 30 years of sales, marketing and operational experience in the telecom and retail sectors in both advanced and growing markets and is our 4th choice. This is his first assignment as a CEO of major Telco. Michael Foley has worked as CCO at Celtel Nigeria and Executive Director and Chief Commercial Officer of M-Tel Bulgaria from March 2004 to July 2005 when the company was sold to Telekom Austria. He also served as Group CCO for Emirates International Telecommunications (Dubai, Malta, Tunisia). Additionally Michael worked for Procter & Gamble Inc., New Brunswick Telephone, Bell Canada, was President of @Home Networks (Canada) and served on the Board of Excite Canada. He scored 10 points according to our evaluation.

Mr. Liu Dianfeng, CEO Zong, has 25 years of commercial and corporate affairs experience at China Mobile Beijing Co. He was also board member of China Mobile Jilin Co. While, China is a big market and important market that leads business world today, however, it will take some time for Mr. Dianfeng to prove his metal and his first test case is Pakistan. Therefore he comes last on our list with 9 points.

3   Achievements (15 points)
Number of accomplishments attained by an individual are definitely the best way to evaluate performance.

Therefore, we have tried to recollect some successes of each CEO to rate them. Jeffrey Hedberg is certainly the most accomplished CEO in the list. In 2011,

Fortune Magazine ranked Jeffrey as one of the Top 25 Global executives under age 40 due to his multi-billion dollar experience of leadership positions across three Continents. So he once again tops our list with 12 points.

Mobilink under the supervision of Jeffery Hedberg has locally achieved some milestones like the operator has expanded its 3G Network to Over 200 Cities, won 8th Annual CSR Excellence Awards' and became the fastest growing 3G service provider of Pakistan by reaching 1 million 3G customers only in 90 days. However, his most recent major achievement is bringing in some new talent from other companies to get rid of otherwise stagnated and rusty leadership that Mobilink had been suffering from quite some time.

Our 2nd position with 11 points would go to Mr. Muneer Farooqui as he has two achievements to his credit. The first being in January 2006, when Warid decided to expand its horizon of telecom business outside Pakistan it tasked Muneer Farooqui against other experienced hands to lead the challenging task of establishing Warid operations in Bangladesh, which he accomplished quite successfully. The 2nd one is the role he played in leading Warid-Pakistan in turbulent times when the company shareholders had lost faith in investing further and asked him to lead the team. The metal of a business leader is best judged in challenging times and probably he has seen more than his share of challenging tasks in the last decade.

Abdul Aziz-CEO Ufone did exceptionally well in his initial years and managed to put Ufone brand at an elevated position despite slower growth in subscriber base

Abdul Aziz-CEO Ufone did exceptionally well in his initial years and managed to put Ufone brand at an elevated position despite the fact that it subscribers growth remained slower than other operators in the same period. He tried to cover the set-back at the 3G/4G auction quite well by launching it 3G commercial network ahead of others and having the best advertisement campaign for it. He rightly won in 2011, the venerated 'Asia Communication Awards (ACA)' committee award for the "CEO of the Year". Therefore he gets 10 points.

Michael Foley has done well where ever he served but his biggest challenge is yet to come as Telenor needs to strategize with its limited spectrum. This leaves very limited opportunities for growth in the data and data oriented services that Telenor is so focused on. He has been able to get himself appointed as

representative Director at the National Information and Communication Technologies (ICT) & Research and Development (R&D) Fund. Mr. Foley is acting as the representative of the cellular mobile industry in Pakistan; which is his first achievement in the local mobile industry as a business leader and made him secure 8 points on our evaluation table.

Jeffrey Hedberg is certainly the most accomplished CEO among the list. In 2011, Fortune Magazine ranked Jeffrey as one of the Top 25 Global executives under age 40 due to his multi-billion dollar experience of leadership positions across three Continents

Little is known and said about Mr. Liu Dianfeng CEO of Zong, as the case is with many Chinese executives. We don't know much about how he has done at the regional China Mobile entities that he was associated with or otherwise. However, as a start he needs to focus more on ensuring the best from the Zong's initial win of 4G/LTE Spectrum where they have not fared well as Warid is neck to neck with Zong in terms or LTE subscribers despite limited spectrum and smaller deployment.   Due to all these reasons he comes at last number with 7 points.

Leadership Attributes
Besides the three major areas i.e. education, experience and achievements (although achievements and experience has certain overlapping ingredients) there are also certain attributes that are important for CEOs as they play a very important role for leaders to lead their organizations from the front. Therefore, we have also evaluated our league of CEOs on the basis of their leadership attributes in terms of their public image in the industry, personality outlook, their vision for the future, appetite for innovation and strategic approach.

1   Public Image & Team Players (25 points)
In current days of connectivity and communication public appearances and image has gained a vital importance. The work you are doing won't really mean much if it is not properly highlighted in the media. What people think of you and how they perceive you has become the biggest challenge for everyone, this is the reason why public image is now equally important for politicians, business professional, social workers etc.,

as it is for showbiz and sports celebrities. The CEO who has been in the forefront of creating a positive image through media be it social media, television or print is none other than Michael Foley, CEO of Telenor. Not only Michael has quickly adopted Pakistani culture that he has propagated successfully being a foreigner but with his confident personality he has made a good name for himself, both in and outside of industry.

Michael's adoption of Pakistan's national dress, shalwar qameez has gained him lot of appreciation. He is also quite active on his Facebook page where he personally interacts with Telenor customers, Employees and answer their queries- a true team player. Although, you can't find Jeffrey Hedberg on any social media but he is accessible easily at most events. He is also known to be the friendliest expatriate CEO in Pakistan amongst the local staff who know him very closely. Amongst Mobilink employees he is very well appreciated for his down to earth nature.

Michael has quickly adopted the Pakistani culture that he has propagated successfully being a foreigner and with his confident personality he has made a good name for himself, both in and outside of industry

Our local CEOs, Muneer Farooqi and Abdul Aziz could both do well if they interact more often with their customers, employees and importantly with credible industry as their images need to be correctly highlighted. CEO of Zong, Liu Dianfeng still seems to be struggling to settle in, with language barrier as the biggest hurdle. Despite that he is quite active with media. He is working on improving his English speaking skill so that he can interact with people more freely and we are quite sure that he could

come up to the level of his predecessor, Dr. Fan Yun Jun-who would have been a clear winner on most categories had he stayed longer.

According to this analysis we have given 22 points to Folly, 15 to Hedberg, 12 to Aziz, 10 to Dianfeng and 14 points to Muneer Farooqui.

2 Vision and Strategy (20 points)

Clarity of a leader's Vision and Strategy to achieve specific goals is critical to the development and expansion of all organizations. Organizational success solely depends on the competency of its leader/CEO as a competent leader is one who is motivator, inspirational and timely decision-maker. It represents the science of crafting and formulating short and long-term initiatives directed to optimally achieve organizational objectives. As far as the strategies of Pakistani mobile sector is concerned, the much delayed spectrum auction held last year was of vital importance strategically and indeed was a milestone. Although besides Warid all four operators participated in the auction but the result for each one has been quite different.

Warid didn't participate in the auction and everyone thought that the demise of Warid in the near future is imminent, but it came back strongly and used its existing spectrum to launch LTE services. Although the move is quite cosmetic, but by making this move, Warid kept itself relevant in the industry and from devaluation as a corporate entity. This was also done in a way to make sure not to upset the auction winners. The credit rightly should go to its CEO, given that there were not many options available to the company.

Mobilink is the leading operator of Pakistan since the beginning. After Jaffery Hedgburg joined Mobilink, the expansion and development efforts have been further pumped up and Mobilink has successfully

deployed network in 200 cities of Pakistan. It is also widely known in the industry that they are considering to buyout Warid which is a huge strategic move on Mobilink's part. To top it all it has recently reshuffled the team at the top to ensure that growth strategies that they have planned are implemented on ground.

Warid didn't participate in the auction and everyone thought that the demise of Warid in the near future is eminent, but it came back strongly to launch LTE services. Although the move is quite cosmetic, but Warid kept itself relevant in the industry and from devaluation as a corporate entity and credit rightly goes to Muneer Farooqui

Telenor with only 5MHz of spectrum has successfully secured the biggest 3G market share in the country which shows its aggressive market strategy but more importantly it has focused itself on providing more advance services like m-commerce, IoT services and have came up with an application store knowing well that it may lose out with plain Data services if their counterparts start a price war on data pricing that have managed to get larger chunks of spectrum. It is important to note that Telenor has very strong group bindings and SoPs are very clear so very little is at play for local team and CEO to make a difference except operational activities.

Ufone leadership although largely driven by Etisalat Group made a technical mistake in the spectrum auction that saw its otherwise dream of become the dominant player shattered and its employees dejected. It has already been left far behind by Telenor and Zong both of whom are later entrants in the mobile industry. The company although has a very aggressive marketing team but with same amount of spectrum as Telenor, it has the least number of 3G subscribers. The company has slipped to number 4 position despite strong shareholders support and has done little to reverse the downward trend especially in the last couple of years.

While, Zong came out as the most successful operator in 3G/4G auction under the leadership of Dr. Fan Yun Jun with the largest chunk of spectrum, it was expected that Zong will gain a stronghold in the market but interestingly Dr. Fan was replaced at a very critical moment and the result now are quite unexpected. Zong's 3G/4G penetration rate is quite low as it is currently on number 3 position

in terms of 3G subscriber and in struggling position for 4G subscribers with Warid, which has launched services on limited spectrum. The industry does not carry a very favorable view of Zong's current leadership who doesn't have the vision and strategic depth to compete with the likes of Telenor & Mobilink despite having a huge spectrum and deep pocket shareholders, so Zong will really have to work hard in making things look otherwise.

So in this round we have given 14 points to Micheal Foley, 13 to Muneer Farooqui, 12 to Hedberg, 10 to Aziz Khan and 9 to Dianfeng.

3 Innovation (10 Points)

Bringing innovative ideas and services is also amongst the most important factors for the long time success of any organization and an attribute of a successful Telco leader as it keeps company image and customer intact while making business profitable. Looking at the recent past, Telenor has no doubt been in the forefront for introducing new and innovative ideas and services.

Some of the services sometime called shouts in the Telco business includes launch of Pakistan's first Online Payment Solution - Easypay, Internet.org for its subscribers, App Store facilitation of local App purchases through credit minutes, Pakistan's first 'International Remittance Doorstep Delivery' Service and innovation to disaster emergency response through Beneficiary Communication Project. While, Michael Foley certainly a pat on the back but the innovation is embedded in Telenor organizational culture and a business head, he has further facilitated the process.

While, Ufone has dropped to number 4th position as an operator in term of subscriber base but it also is quite known for introducing newer ideas and services. Some of these include the most innovative

FEATURE

and humorous television commercial that have become quite famous, other services that show the innovation of the organization which could be associated with Aziz as a CEO includes customer centric packages, Karachi Police Mobile Emergency Alert System and, Pakistan's lowest Quadcore 3G Smartphone 'U5' to cater to every segment of its customer base.

Muneer Farooqui could rightly take the third place as despite difficult situation he has been able to not only launch LTE services but have introduced the industry's first Shared Tariff Plans and MiFi Devices that were the hallmark of the fixed wireless operator in Pakistan, the PTCL.

Liu Dianfeng as a new comer faces multiple challenges but also has a lot of opportunities for himself and his company to excel with the resources available at hand

It is very difficult sometime for a large organization to be innovative sometimes and that is exactly what is happening probably to Mobilink right now. They will need to change the company culture to encourage newer ideas to bloom and establish simpler to implement SoPs that entice smaller companies to partner up for introducing and bringing new services. Being big is currently playing to Mobilink's disadvantage. However, we feel they should be 3rd because some of the growth strategies have really worked for Mobilink such as expanding their 3G network to 200 Cities so more people could be reached and newer services offered, reaching for the 1 million 3G customers in 90 days all goes in its favor but they have yet to launch any first in the industry.

Zong CEO Liu Dianfeng again will have to work hard in giving his organization the much needed imputes that desires and crave for innovative ideas. It would do him well if he can make use of his experience in China to bring some innovative services to Pakistan and establish closer relationship with the local staff as it has been heard that most decision making is done in the company by expatriate Chinese staff.

With his innovative approach in doing business Micheal Foley has topped this skill set with 8 points whereas Jeffery Hegberg came second with 7 points. Muneer Farooqui landed on third

with 6 points place leaving Aziz Khan and Liu Dianfeng on third and fourth places with 5 and 4 points respectively.

Final Verdict

Michael Foley due to his extra ordinary leadership attributes is our first choice on our final score chart although if we judge him according to his achieved skillsets alone, he will move down to 4th position as compared to rest of his peers in the industry. Following him very closely is Jeffrey Hedberg, although he is outstanding if we judge him on basic skills criteria. Muneer is our number 3rd choice as he has balanced points in both his skill sets required and the leadership attributes. Mr. Abdul Aziz is ranked 4th, just a fraction behind from Mr. Farroqui. Mr. Liu Dianfeng while presently has not fared well but being new comer is a challenging task. He has a lot of opportunity for himself and his company to excel as all operators are aware of the fact that if Zong can put its act together, it can turn around the whole market. So for Zong leadership, there are some tough decisions to make, it is now up to Mr. Liu how he measures to this challenge.

Our ranking of the mobile operators' CEOs is strictly based on the information available to us through internet and our personal observation of the industry. As earlier said, there are other skills and attributes that are at play when one takes the herculean task of running a big company, so we do accept that it may not provide you the most exhaustive, extensive and accurate analysis. However, we have tried our best to provide as much information as we found on public domain, popular sentiments and our personal knowledge of the industry. We are also running a poll on our web site to get feedback from our readers and we encourage them to participate and pick their favorite CEO. So please visit www.phoneworld.com.pk and vote for the CEO you like the most.

3G/LTE Summit

The much awaited Qualcomm 3G / LTE Summit recently took place in Hong Kong from 14th to 16th September, 2015 and as expected it was very well attended by delegates from around the globe. This is Qualcomm's annual event and like every year, the 3 days event was well packaged with series of presentations and panel discussion from mobile technology leaders and exhibition by leading OEM's / ODM's. The event offered a wonderful networking opportunity for all the key players in the Mobile Wireless Technology space.

There was a good attendance by Pakistan's leading OEM's. The delegates included Mr. Zeeshan Akhtar, CEO and Founder of Qmobile and Mr. Zeeshan Yousuf, Director Sales & Products QMobile, Mr. Aamer Manzoor, Director Mobile Internet & Devices Mobilink, Mr. Mian Ahsan Telenor-Pakistan, Mr. Omer Khalid Exec. Vice President PTCL and Mr. Mohammad Salman , Director Danny Tablets.

Qualcomm recent 3G / LTE Summit witnessed key announcements from the technology leader about breakthroughs in connectivity features with X12 LTE Wifi modem claimed to be the fastest Wifi modem ever designed and Quick charge 3.0 offering charging capabilities within 35 min

Panel Discussion on LTE in Emerging Regions

The event had distinguished line up of speakers including Dr. Murthy Renduchintala, Joe Glynn, Jeremy Korst, John Sculley, Thomas Essery and a panel discussion where Mr. Khalid Khan (Chairman Central Asia Cellular Forum) participated from Pakistan.
There were key announcements from Qualcomm including breakthrough in connectivity features with X12 LTE Wifi modem (Snapdragon 820) claimed to be the fastest Wifi modem ever designed with downlink speeds of up to 600 Mbps, Quick charge 3.0 with 0% - 80% battery charging capability within 35 minutes and two new mid-range processors Snapdragon 430 and Snapdragon 617 offering downlink speeds of up to 150Mbps with carrier aggregation.

Zeeshan Akhtar (CEO and Founder of Qmobile) and Mr. Zeeshan Yousuf (Director Sales & Products QMobile) at 3G / LTE Summit, Hong Kong

Smartphone Review

By Ikram Ullah Khan

QMobile NOIR Z9

Qualcomm snapdragon

The new and elegant Noir Z9 features ultimate gloss and style with smooth curves and state of the art features like Anti Finger Print Technology that defines its futuristic DNA molded into a handset covering all basis impeccably. Its special feature is the sleek, lean, thin, smooth shape and design that makes it the second slimmest after OPPO R5.

The dimension of OPPO R5 is 4.5mm whereas, QMobile Noir Z9 is just half mm greater than that with just 5mm thickness. Anti Finger Print Technology leaves no mark over the Corning Gorilla Glass screen even after being touched. With 2GB RAM and 16 GB ROM you do not need to worry about running heavy apps, storing media and apps and heat issues.

Featuring a razor thin body of 5mm, QMobile Noir Z9 is a design marvel. Noir Z9 is a handy device from all angles. Being shaped in an aluminum body with a smooth sensation. The back and front are flat end to end. The box contains a super duper flip cover that is

different from all others, a super charger of 1 amp charge capacity along with a flat flexible data cable. The hands free are also unique and are sent with the perfect match of HD Audio sound system of QMobile Noir Z9.

Design and Display

The dimensions of the sleek Noir Z9 are (142 x 68 x 5) mm. The edges are smoothly curved and both sides are flat. The back cover is not removable and is glassy. A silver ring moves at the sides and covers the device at 360 degrees that enhances the look of Noir Z9. Noir Z9 is a complete black package with black accessories in the box.

The display of QMobile Noir Z9 is a 4.8 inches AMOLED HD display with resolutions of (1280 x 720) pixels. The refreshing rate of Noir Z9 is 60.0 and the density pixels are 320 at both X and Y axis. The GPU of Noir Z9 is driven by Adreno (TM) 306 with frequency range in between 200MHz~400MHz.

Processor

The device is powered with a fast Quad core processor of Qualcomm Snapdragon 410 that is clocked with 1.2 GHz frequency and chip-set model MSM8916. The GPU is Adreno (TM) 306.

Memory

QMobile Noir Z9 has 2 GB DDR3 of huge memory 2GB RAM that is the need of the day. QMobile Noir Z9 has internal memory of 16 GB which is enough for normal use. The only drawback of Noir Z9 is that it lacks memory card port and users have to compromise with the 16 GB ROM only.

Camera

QMobile Noir Z9 has dual cameras. The Rear cam is 8 MP Auto Focus and is supported with a USB flash light. The size of its 8 MP Rear cam image is nearly 3.31 MB and the dimensions are (3200 x 2400) pixels. The 5 MP Front camera also takes good images and can be used for taking selfies and social media video chats like Facebook, Skype, IMO etc. The size of its 5 MP Front cam image is nearly 1.54 MB and the dimensions are (2592 x 1944) pixels.

Battery performance

The feathery slim and sleek Noir Z9 is powered by a 2000 mAh battery that runs quite well with the Qualcomm Quad core processor and 2 GB RAM and 16 GB ROM. The battery gives talk time up to 8 hours and up to 345 hours on standby mode.

Performance and Benchmarking

QMobile Noir Z9 is powered by a Quadcore processor which is clocked at 1.2 GHz, a 2 GB RAM and 16 GB ROM along with 8 MP Rear and 5 MP front camera for a mid-range smartphone like QMobile Noir Z9, results were better than expected.

AnTuTu

A score of over 21 thousand is a big total for a mid-range smartphone with a 1.2 GHz quadcore processor, 2GB RAM and 16 GB ROM. When compared with international brands, QMobile Noir Z9 made its place just below ASUS Zenfone 5.

Vellamo

Vellamo is a free app that checks browser speed and performance, single core performance and multi-core performance individually.

- With its metal part, Noir Z9 makes a total of 842 which is better than the benchmarking results of smartphones like Motorola Droid Razor, LGE Nexus 4, Motorola Moto G and Samsung Galaxy S3.

- For its multi-core performance, QMobile Noir Z9 has a better intra-processor communication and makes 1232 score in total. Leading LGE Nexus 4, Motorola Droid Razr and Samsung Galaxy S3.

- For its browser's bench mark, QMobile Noir Z9 makes a total of 2013 which is best for the mid-range smartphones.

GPU Benchmarking

Noir Z9 is powered with the best Qualcomm's Quad core processor Snapdragon along with the graphics driver, Adreno (TM) 306. Making score over 11,500 is a big total validating its superior performance.
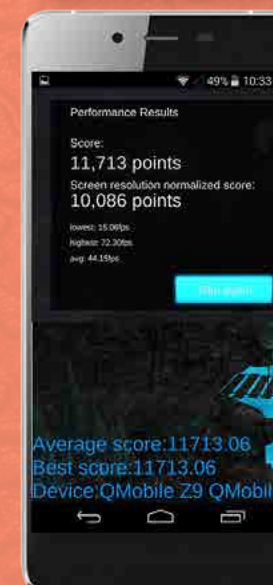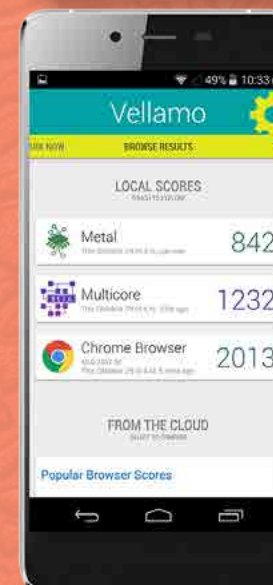
Specifications

Camera: 8 MP LED Flash Rear Camera + 5MP Selfie Camera

Memory: 2 GB RAM, 16 GB ROM

Processor: 1.2 GHz Quad core processor, Qualcomm Snapdragon410, MSM8916

Battery: 2000 mAh, Li-ion technology

Weight: 97 grams

Connectivity: Single SIM–Nano SIM, 4G-LTE 41Mbps

Dimensions & Display: (142 x 68 x 5)mm, 4.8"

Other Features: Anti-Finger Print Technology, Corning Gorilla Glass, GPS, Google Search, Maps, YouTube, Calendar, etc

Price: 25,000 PKR

Final Verdict

A razor thin device with 5mm thickness and a marvelous design with a super-fast Quad core processor of Qualcomm's Snapdragon 410 clocked and a Rear Camera with Sony's IMX219 sensor, Noir Z9 is definitely an outstanding device. The Corning Gorilla glass, 2GB DDR3 RAM, 16 GB ROM along with crystal clear sound system with NXP smart power amplifier are some really cool features and mandatory for any good device. Priced at PKR 25,000 it is surely a good buy.

Rating

★★★★★

PTCL : WILL IT TURNAROUND...???

P rivatization of Governmental assets has been a hot topic of discussion for over a decade now. During this time many organizations have been privatized. According to the proponents of privatization, it is the key factor that enables greater efficiencies and markets to work properly and an ultimate solution to economic woes of a country. This has worked for Banks but has largely met with mixed results in many other sectors -especially with failure where half-hearted attempts were made such as energy, steel, airline and manufacturing. Being part of ICT sector our point of concern is most certainly the privatization and performance of Pakistan Telecommunication Company Limited (PTCL).

PTCL was privatized back in 2005, and since then the performance of the organization has been quite bumpy rather than burgeoning as was expected prior to privatization

PTCL was privatized back in 2005, and since then the performance of the organization has been quite bumpy rather than burgeoning as was expected prior to privatization. The control of PTCL was handed over to Etisalat as part of the offering to the highest bidder. Etisalat being a public sector enterprise of UAE negates the proponents' belief that "state cannot run vital services"-well if the Government is as competent and forward looking as Abu-Dhabi Government, it is not impossible. Maybe Pakistani Government should have taken some lesson and had improved itself instead of privatizing the company. The most important dilemma is that neither Government wants to give up control nor want's to own it fully. Therefore, a very professional and businesslike approach is required now to prevent PTCL from becoming a liability like steel mill, PIA and other such white elephant entities.

The success of PTCL has always been of great importance as this is not only a source of revenue for the Government to fund other development initiatives but at the same time a source of public sufferings if they get deteriorating services and higher prices. While, revenue realization and improved efficiency remain a very important milestone for the PTCL privatization but the most itching factor in the whole episode of PTCL Privatization from the start is the outstanding payment issue of around USD 800 million that Etisalat has refused to pay to the Government of Pakistan even after 10 years. The weakness could be witnessed from the onset when the buyer was able to get the product at discounted rate along with management control-which could have been handed over to Singtel or China Mobile, the two other aspirants having considerably more experience to take the daunting task of turning PTCL around. Although, we keep on hearing news about settlement of long standing payment issue between Etisalat and Government of Pakistan but nothing much has happened. This long standing issue is quite recently added in the mega scandal list of FIA; which is a new twist that will definitely lead this issue no-where.

The main objective of privatization is to turnaround the performance of a company when it is not possible for the Government to do so. In essence, one needs to look at the performance parameters like profitability, customer growth, network development, increase in service portfolio and quality of service besides appreciation of the company assets to judge how well the organization has been performing. Let's
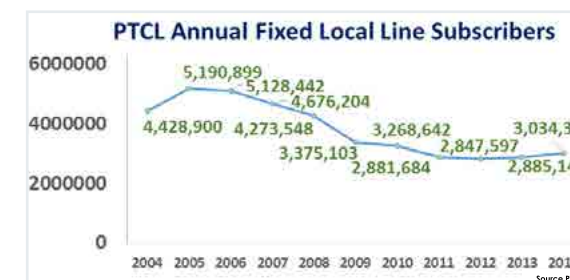
By Rizwana Khan | By M.Bilal Abbasi

look at some of these parameters briefly to analyze the performance of PTCL:

PROFITABILITY: Soon after its privatization, PTCL had posted revenues of Rs. 71 billion and net profit of 15 billion rupees. Whereas, last year PTCL reported Rs. 81.5 Billion revenue and 5.7 Billion profit.

overall effect on the organizational efficiency has improved as there is now lesser and more competent workforce in action, and more importantly political interference has been reduced to almost zero thanks to its existing President Waled Irshaid-who maybe a very crude person to deal with but has largely been responsible to thwart any move that has been the primary reason for the demise of corporations like steel mill, PIA and other government utilities.

PTCL Revenue & Profits

The revenue boost mainly resulted from abolition of International Clearing House (ICH). Although some see it as an artificial support at the expense of the consumer but the real impact will be seen next year as ICH has been abolished quite recently. While, revenue drop is certainly a big issue, the major impact is seen in the sharp drop in profits as well i.e. Rs. 5.2 Billion last year almost 3 time less than it was way back in 2007. This just shows that the company is operating its business at a very high expense and if the current trend continues, the company could go in loss unless some drastic steps are not taken to arrest the trend just being explained.

SUBSCRIBERS: In last seven years, PTCL landline connections reduced significantly. The maximum number of connections recorded were in the year 2005. The landline market has been either stagnant or witnessed little growth because people have now turned toward cellular phones specifically smartphones that not only provided calling service but also solved the problem of easy availability of internet.

While, revenue drop is certainly an issue, the major impact is seen in the sharp drop in profits as well i.e. Rs. 5.2 Billion last year almost 3 time less than it was way back in 2007

PTCL Annual Fixed Local Line Subscribers

The decline in net profits indicates that OPEX and CAPEX have been quite high throughout these years. Although in 2014 company incur huge expenses due to fire struck in PTCL exchange but one of the main element responsible for high OPEX is certainly increased HR cost. At the time of PTCL's privatization there were around 60,000 employees out of which only 17 to 18 thousand are left, thanks to the various VSS initiations. But the employee benefits announced under these initiatives greatly affected company's profits after privatization. But

However, with over 25 million households in Pakistan, it was expected that there certainly will be some growth in PTCL's landline market but in reality it has been otherwise. As seen in the graph the number of connections or subscriber have been reduced to half as compared to 2005 and 2006.

DSL Subscribers

On an average PTCL is losing around 40,000 customers each year. The consumers are increasingly moving towards cellular services while many customer in the cosmopolitan cities have opted for landline services from other providers like Nayatel, that is becoming quite popular for not only landline but its broadband and cable television services as well.

At the time of PTCL's privatization there were around 60 thousand employees out of which less than 18 thousand are left, thanks to the various VSS initiations that such fat was reduced over time

PTCL could have benefited from increased landline network had it expanded aggressively and then converted these same customers to broadband subscribers. Although PTCL has done well especially in the urban areas, where it enjoys more than 80% market share. PTCL still continues to have the largest broadband subscribers based on its landline connections. While, PTCL Broadband users are split into DSL, 3G-EVO and CharJi 4G wireless broadband. DSL facility provided on PTCL landline is the most popular and PTCL enjoy a good grip in the market as compared to its competitors while, EVDO and LTE services provided in the form of Dongles, Mifi and Tablets have also good traction but facing stiff competition from the mobile operators who have also started offering these services to the consumers. PTCL still hold the biggest market share in broadband services, its market is growing at a steady pace and in fact it is its key strength and also the major source of revenue. The consumers still prefer DSL services as they get a healthy and stable internet connection while there is no data limit as one can use internet without any data restrictions, making PTCL the preferred internet service provider in the country.

Network development: There is no doubt that technologically PTCL has tried to move with time which is so very important for a technology company. PTCL was successful in making its mark in the wireless broadband services by introducing new technologies despite remaining within the limits of the WLL regulations of fixed wireless. By introducing EVDO-Rev A services PTCL became the first telecom operator to provide 3G services in the country. PTCL's EVDO-Rev A services were provided through EVO dongle, EVO Wi-Fi cloud, EVO Tab & EVO Droid. In 2010, PTCL upgraded to EVDO-Rev B called "EVO Nitro Rev. B". It was amongst the world first few commercial network

based on EVDO- Rev B technology that could theoretically offer speeds up to 9.3 Mbps.

PTCL also sensing competition from 3G auction introduced LTE services called 'Charji EVO' by re-farming its spectrum and through strategic alliances. This latest move to start LTE service was a good addition to its fixed wireless strategy to ensure that there is a continuous evolution and network growth. This LTE technology can provide comparable speed and QoS as is expected to be provided by the mobile operators in Pakistan.

The services are available in the major cities across Pakistan and also being expanded. The good part is that that devices such as dongles and Mi-Fi clouds have the ability to fall back to the EVO Rev A or Rev B networks in case there is no LTE service available in the area. PTCL is expanding its wireless broadband coverage across the country, if it does so successfully it can provide a good competition to the cellular operators with competitive price and good speed.

PTCL sensing competition from 3G auction introduced LTE services by re-farming its spectrum and strategic alliances. This latest move was a good addition to its fixed wireless strategy to ensure that there is a continuous evolution and network growth

PTCL also has done well on the network development side by offering Fiber to Home (FTTH) services for its home and business customers. The first ever Fiber to Home service was based on Gigabit Passive Optical Network (GPON) technology that was deployed in Karachi. Fiber to Home or Fiber to the Building (FTTB) services allows it consumers to enjoy speeds up to 100 Mbps. This is possible with the Optical Fiber solution which not only provides considerably higher efficiency as a transport medium but also delivers quite simple and a greater scalability for future expansions in supporting more and extra services with lower cost. Consumers of the technology can enjoy fastest internet speeds, flawless streaming, content services and much more.

SERVICE PORTFOLIO: PTCL has also been able to increase its service portfolio to keep itself afloat. Besides its biggest strength, broadband services, its portfolio includes services like Smart TV, PTCL Tablets, dongles, Wifi and Mifi devices that have been introduced over a period of time. Through timely introduction PTCL enjoyed a good

period of virtual monopoly and also secured a sizeable subscriber base in each segment of its service portfolio, although PTCL could have done much better if it had continued with its aggressive marketing strategy as there was no credible competition.

Corporate and enterprise business remains a potential for further growth as PTCL offers, several products/services such as Managed WAN, Cloud computing, Video Conferencing and Geographical Information System (GIS) that were launched specifically for the corporate sector. The business relationship with various government and educational entities could further strengthened PTCL's position in the market.

QUALITY OF SERVICE: Over the years PTCL's quality of service has also improved through better network and products, it has indeed tried to improve its service delivery as well which is the most important part. PTCL has recently been ranked as the number one broadband operator in Pakistan and also the fixed line telephony service provider-although not much competition do exist at such scale because other fixed line service providers are limited to a couple of cities. This survey conducted by Best Buy Award research in association with Swiss organization ICERTIAS measures customer experience relative to price-quality ratio and best value for money. But still, internet disconnection is a huge issue in many small cities especially in Baluchistan, where according to residents internet is disconnected for several days and sometimes for weeks. PTCL mainly suffer from a bad image in terms of QoS from the past and will have to focus on improving its image in addition to actually improving further the quality of service and quality of delivery as well.

ASSET VALUATION: Technology and communication segment holds the biggest chunk in the stock market of Pakistan, currently it tops all sectors listed on the stock market with 24% share and PTCL obviously is a major patron in that. Slightest fluctuation in its share volume can seriously jolt the market. PTCL stock share value saw a nose dive in the period from 2007 to 2009 and has comparatively stabilized since then. The market value of PTCL shares may not be as significant as it was when it was first listed but it still presents a very important portfolio. The stability of PTCL shares does have a huge impact on the stock exchange and therefore it is equally important for the government that it ensures and maintain its healthy growth. PTCL could do well if further regulatory concessions are made to enable it to get mobile devices so that it could compete with the mobile operators that are

eating company's market share. If PTCL is able to convert its huge infrastructure to get subscribers on board, it shall definitely be able to improve its financial position that will also see improvement in its share value.

PTCL historically suffers from a bad image in terms of QoS and will have to focus on improving its image in addition to actually improving further the quality of service and quality of delivery as well

Despite shaky performance, PTCL is still the largest broadband provider of Pakistan with 1.4 million DSL subscribers by the end of July 2015. PTCL has the capacity to maintain its dominance over other broadband services if it further improves the quality of service along with its wide network. The hour of need is to devise an aggressive strategy to convert all of its strength into profitable customers. This could include tapping into new market with wider product portfolios and most importantly to have a joint strategy with its subsidiary Ufone, which is also facing a downward trend due to limited spectrum. If both operators come up with a combined strategy for broadband services while using each other's resources, they will be able to offer newer and better mobile services to compete in the market.

Privatization of PTCL most certainly freed itself from political interference which was the biggest dilemma for its growth and development. It has all the opportunities and ingredient that are needs to emerge as the telecom giant in the region as it is still the largest landline operator and broadband service provider of the country. It has everything that its contemporaries like SingTel and Telekom Malaysia have; the technology, infrastructure, technical experts etc and with its 100% owned subsidiary, Ufone, PTCL can have leadership position in the fixed and wireless market of Pakistan, that obviously can only be made possible if PTCL comes up with aggressive strategies while making full use of its capabilities and resources at hand.

ARE YOU SUFFERING FROM DIGITAL AMNESIA?

People fail to recall important information because they've passed this responsibility to their smartphones

By Kanwal Ayub

The demand for access to business and personal data applications through mobile technology is surging and has turned into user's favorite tech behavior. The massive adoption of these technologies around the world has also made many of us wonder that what would be the future.

While mobile phones and other devices are increasingly essential in our lives and often the main place we store all our information and manage our daily schedules. Researchers have warned that we are increasingly forgetting information because of the phones in our hands.

Our relation with our device resembles a human relationship because of the reliance and trust we place in it

No doubt that smartphones have enriched our routine habits, but they have also caused the prevalence of Digital Amnesia in our generation. A recent study from Kaspersky Lab reports exposed the truth of how modern technologies are affecting human memory skills.

With the easy access to information at the touch of our fingertips, we prefer storing information in our cell phones and this is something which makes it harder for us to remember things.

Our smartphone acts like an external hard drive for our memories, 70-80% of us store important information like birthdays, anniversaries, numbers, pin codes, passwords and other vital information on smartphones. Most of us rely on our handset when we need to recall our partner or children's phone numbers.

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We are so attached to our smartphones that we can no longer imagine our lives without it. Digital amnesia is a result of our brains adapting to an age where our phone, and the internet, is always available. Dr. Kathryn Mills, a UCL cognitive neuroscience researcher said that our relation with our device can resembles a human relationship because of the reliance and trust we place in it.

Certainly, connected devices enrich our lives but they have also given rise to Digital Amnesia

The feelings are established in the same way - through experience. Repeated experience with a reliable individual builds a 'schema' or association for that individual in our memory, telling us that this person can be depended on. If a digital device is continually reliable then we will build that into our schema of that device.

We highly depend on our devices, however have you ever imagined what will happen if you lose your smartphone somewhere? What if your handset breakdowns? This kind of situation can be a lethal disaster for the people of modern age. According to the study from Kaspersky Lab reports, among women, 44 % would be "overwhelmed by sadness" if they lost their devices and so lose memories they might never get back. A large number of women and young people would "panic", since their devices are the only places they store their important data.

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Perhaps the very devices that are designed to increase our efficiencies are actually increasing our deficiencies?

It's time to take a break; certainly, connected devices enrich our lives but they have also given rise to Digital Amnesia. We need to understand the long term consequences of depending on devices. Plus, we also need to find out ways for remembering and protecting the memories we want to keep.

By M.Bilal Abbasi

Project Loon

Balloon powered Internet for everyone, connecting people who have no internet access or can't afford it

The majority of people in the world who don't have access to the Internet either they can't afford a connection, or none exists where they live. Efforts are being made by Google to bring those people online through their project called "Project Loon".

Loon is an ambitious attempt to bring Internet to roughly 5 Billion people on the planet who are out of range of the existing networks

Loon is an ambitious attempt to bring Internet to roughly 5 Billion people on the planet who are out of range of the existing networks. The project involves hanging cellular access point to a high-altitude balloons to provide internet access to those on the ground, this is an idea that sounds simple and effective.

It's almost been two years now since Google first disclosed Project Loon, while the company continues to keep most details of the project secret, the technology and challenges behind it are slowly coming into focus.

The balloon that emits signals travels with the air current at an altitude of around 60,000 feet. That's close enough to earth to maintain a direct connection to a smartphone but is high enough to avoid aircraft collision. It's also in a part of the atmosphere crisscrossed by high-altitude winds, so Google can steer the balloons by moving them up and down to catch air currents moving in different directions.

The main purpose of the Loon is for communication and the initial plan was to send Wi-Fi signals to a fixed antennas on the ground, but soon it was switched to cellular LTE signals

As the balloon travels at the height of 60,000 feet it has to face frigid temperature of around -65 degree Celsius. At that high altitude and cold temperature batteries and other components do not work well, so all the electronics sit in a large Styrofoam-insulated container to keep it warm. While, the components that are not working are also switched on to that, the components stay warm at that high altitude. Perhaps counter-intuitively, that means better battery life, because bringing cold components back to life requires more energy than just leaving them ticking over.

Google's Loon carry radios that operate in the 2.2 GHz and 2.6 GHz LTE bands. These bands of LTE have been chosen because those bands provide coverage across Asia, Europe and U.S

The cold also makes the nylon the balloons turn brittle and causes lubricants to break down—challenges to Google's goal of keeping each balloon in the air for at least 100 days. The balloons are bathed in strong ultra-violet and cosmic radiation, adding to the challenges, and endure extreme pressure changes because of the helium inside expands and contracts as the balloons float in and out of sunlight.

When Loon was first announced, high-altitude balloons typically could stay aloft for no more than a couple of days before puncturing,

and some thought Google's endurance goal was crazy. But the company is now regularly meeting its 100 day target, and one balloon stayed aloft for 187 days.

The main purpose of the Loon is for communication and the initial plan was to send Wi-Fi signals to a fixed antennas on the ground, but soon it was switched to cellular LTE signals. By doing this Loon was able to deliver a signal directly to a smartphone, which means Loon can operate in a part of the spectrum with less interference then Wi-Fi bands. Today, most of the Google's Loon carry radios that operate in the 2.2 GHz and 2.6 GHz LTE bands. These bands of LTE have been chosen because those bands provide coverage across Asia, Europe and U.S. Each balloon can cover an area with a radius of 40 kilometers, and Google is preparing to do test in 700 MHz LTE band to cover an area four times as large.

The Loon's internet connection also comes from access point on the ground, and because a balloon won't always be within range of one, the signal is passed from one balloon to the next until an access point is in range. This balloon-to-balloon network can run at speeds of up to 4Gbps while the downlink speed to handsets on the ground is around 30Mbps at best.

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Google's Loon stay connected with Google through Iridium Satellite network. They send out location and other data at intervals ranging from every second to every couple of hours. The balloon also log thousands of data points every second which are recorded and stored later for analysis, so any part of the flight of any balloon can be analyzed.

Flight tests are currently taking place in New Zealand, Argentina, Chile, and the state of New Mexico, and now, the project looks poised to expand to Sri Lanka

Flight tests are currently taking place in New Zealand, Argentina, Chile, and the state of New Mexico, and now, the project looks poised to expand to Sri Lanka. One of the most recent innovations has been an automatic balloon launch system. The balloons are slated to launch in the next coming months. Once the balloons are up and running, local Internet service providers will be able to buy access to the Loon network, through which they can then connect their subscribers. Sri Lanka is a smaller island as compared to other countries but with population of 2.8 million mobile users and and 606,000 fixed-line users. This makes it a good starting point for Loon's experimental technology, if the project is successful there, it will likely to be deployed in bigger countries as well.

THE LOOMING CHALLENGE OF
E-WASTE
DEBACLE IN PAKISTAN

Where do electronics go when they die? It is the most important question to ponder upon in current times but sadly just like many other environmental and general issues it is also the most neglected matter especially in third world countries like Pakistan. The level of awareness regarding the matter is very low, people do not have the slightest idea that what catastrophic consequences the looming clouds of e-Waste will bring in the future.

Now with rapid advancement in technology many consumers replace their electronic gadgets more frequently mainly in western countries like USA and United Kingdom

Now with rapid advancement in technology many consumers replace their electronic gadgets more frequently mainly in western countries like USA and United Kingdom. The dangerous part of this trend is that poor countries become the dumping destination of rich world's trash. Pakistani is one of the main countries where large amount of e-Waste is generated. Developed countries in order to get rid of their undesirable and obsolete electronic goods send shipments containing tons of equipment every year to Pakistan for recycling and disposal. Karachi is considered the hub for electronic waste in Pakistan.

The disposing off of electronic waste is 10 times cheaper than recycling it locally but the damage that it is making in damping destinations is higher than anything else. E-Waste is a difficult type of waste and its recycling and dismantling is even more difficult.

Developed countries in order to get rid of their undesirable and obsolete electronic goods send shipments containing tons of equipment every year to Pakistan for recycling and disposal. Karachi is considered the hub for electronic waste in Pakistan

The e-waste recycling sector in developing sector is largely unregulated and the lack of technical knowledge about the e-Waste handling and management results in health and environment hazards in these countries due to the presence of e-waste heavy metals, Persistent Organic Pollutants (POPs), flame retardants and other potentially hazardous substances. The workers are the ones who suffer the most from e-waste hazards as they are exposed to risks that lead to physical injuries and chronic ailments such as asthma, skin diseases, eye irritations and stomach diseases. Particulate matter collected from e-waste recycling areas can even lead to inflammatory response, oxidative stress and DNA damage.

E-waste hazardous components that are burnt in Iyari not only pollute the air but many of the chemicals from e-waste also seep in to the river which has turned black now

The health risk for overall population are also quite high and lead to breathing difficulties, respiratory irritation, coughing, choking, pneumonitis, tremors, neuropsychiatric problems, convulsions, coma and even death. E-waste hazardous components that are burnt in Iyari not only pollute the air but many of the chemicals from e-waste also seep in to the river which has turned black now. Presence of the chemical substances in air and soil has endangered flora and fauna as well along with human life.

United Nations Environment Programme (UNEP) has released a report this year on illegal waste trafficking according to which up to 90 per cent of the world's electronic waste, worth nearly US $19 billion, is illegally traded or dumped each year. The report states that every year electronic industry around the world generate up to 41 million tons of e-waste from goods such as computers and smartphones. If the current trend continued it is forecasted that figures may reach 50 million tons by 2017. Africa and Asia are the key destinations for large scale shipments of hazardous waste for dumping and recycling. In West Africa, Ghana and Nigeria are the largest recipients of e-Waste. Whereas in Asia besides Pakistan, China, Hong Kong, India, Bangladesh and Vietnam are bearing the e-waste problem.

Many countries already have implemented laws regarding e-waste and recycling management, strict rules are being introduced on imports of second hand electronics. Although Pakistan is a signatory to the Basel Convention on the control of Trans-boundary movements of hazardous wastes and their disposal but still no substantial initiatives have been taken so far. Pakistan Ministry of Environment (Ministry of Climate Change) demanded Rs1009.447 million for 24 projects but the planning commission rejected the long list of projects and only allocated Rs116 million for two ongoing projects.

United Nations Environment Programme (UNEP) has recently released a report on illegal waste trafficking according to which up to 90 per cent of the world's electronic waste, worth nearly US $19 billion, is illegally traded or dumped each year

According to Planning Commission Minister Ahsan Iqbal, Environment Ministry was not able to convince the commission to allocation of funds. But according to inside source in the commission, the government's main focus right now is the completion of China-Pakistan Economic Corridor (CEPC) project, therefore, it is cutting down budgets of all ministries and divisions. According to a senior official of Environment Ministry the Development Wing that is responsible for making project proposals is working under the supervision of a Joint Secretary of Ministry, who is not well aware of issues related to environment. He also stated that Pakistan economy is facing four billion dollars loss every year due to the environmental degradation in the country.

The level of consequences that our nation has to face due to certain problems result from the lack of seriousness from the government and not by the problem itself. Sadly decisions are not made until problem hits us in the face. Like every other issue, decisions will only be made once the damage is done and large number of adults and children start suffering from serious health disorders spread due to the exposure to lethal chemicals in e-waste. There is a dire need to enforce laws and regulations for the safe handling and disposal of e-waste in Pakistan. Many foreign companies have contacted Pakistan Environmental Protection Agency (Pak-EPA) and expressed their interest in working in the recycling industry by reusing e-waste in the country.

Although Pakistan is a signatory to the Basel Convention on the control of Trans-boundary movements of hazardous wastes and their disposal but still no substantial initiatives have been taken so far

The government should provide legal cover to the recycling business and support companies that are planning to start such businesses. Pakistan could earn millions if such initiatives are taken, besides that it will create thousands of jobs for the people while achieving the main objective of minimizing health and environmental risks.
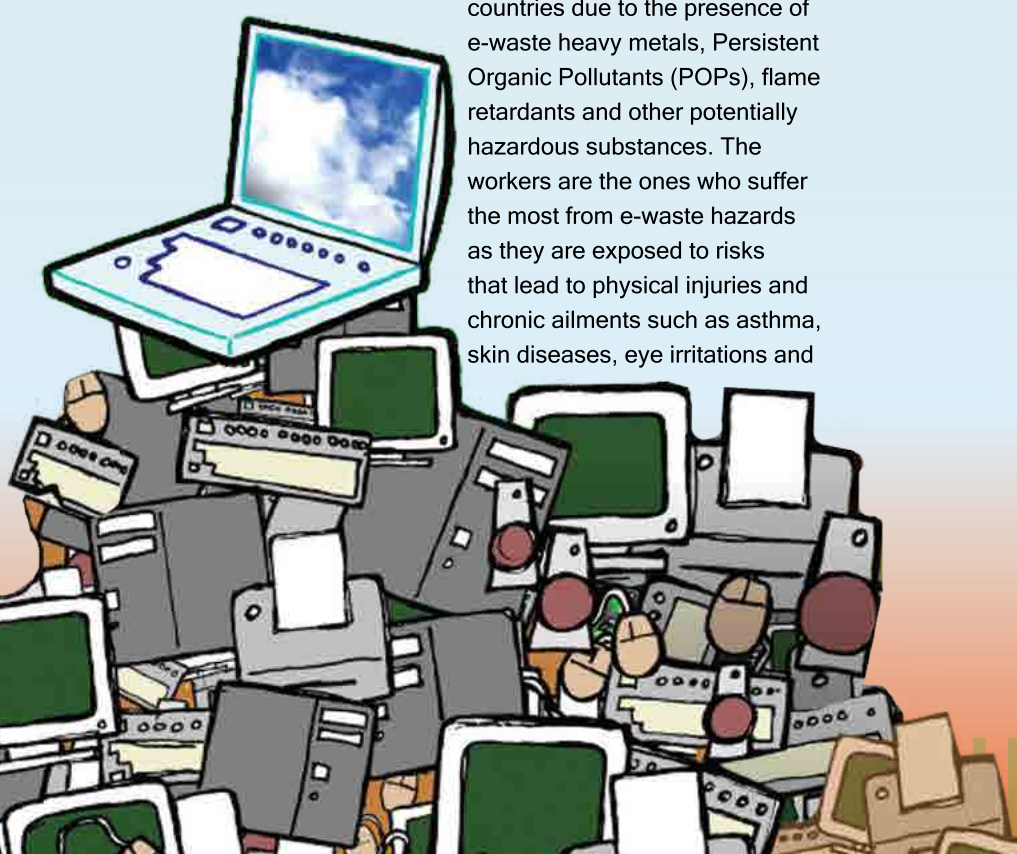
ELECTRONIC WASTE

WHERE DOES IT ALL END UP?

(WHAT IS E-WASTE?)

Electronic waste, commonly called e-waste or e-scrap, is the trash you generate that's made up of **obsolete, broken, or surplus electronic devices.**

Electronic waste can include any number of things such as:

- Laptops
- Video game consoles
- Cell phones
- Televisions
- DVDs, CDs, and other storage mediums
- Video Cameras

Here is a list of some of the most used electronics that are frequently replaced:

Cellphones
Replaced every 22 months

Desktop computer
Replaced every 2 years

Television
Replaced every 10+ years

Portable music player
Replaced every 2 to 3 years

DVD player
Replaced every 4 to 5 years

Printer
Replaced every 5+ years

Our electronics addiction is an expensive habit, too. The average American household spends almost $120 every month (nearly $1,400 annually) on electronics, with the total rising every year.

HOW MUCH WE ARE WASTING

Every year, the world tosses **20 to 50 million** metric tons of electronics, recycling only **10% to 18%**

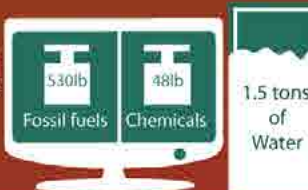That's like throwing away **45,500 to 125,000** fully loaded 747s annually.

Electronic waste is the **fastest-growing portion of the municipal waste stream.**

While other types of municipal waste are decreasing, e-waste is growing by close to **5%** annually.

Yet electronics are full of valuable resources, including silver, gold, titanium, fossil fuels, aluminum, iron, tin, copper, and much more.
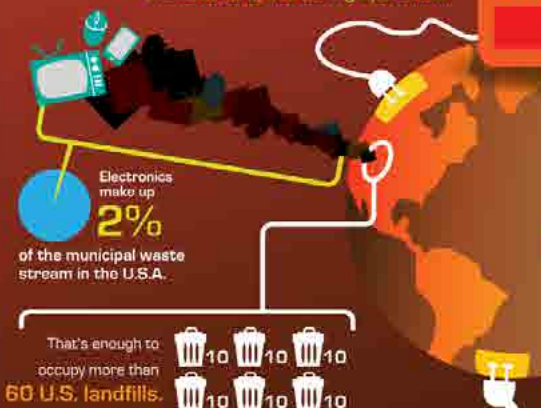
MATERIAL CONTENT OF MOBILE PHONE

Producing one computer and monitor requires:
- 530lb Fossil fuels
- 48lb Chemicals
- 1.5 tons of Water

81% of the energy associated with a computer is used during **manufacture, not during operation.**

Electronics make up **2%** of the municipal waste stream in the U.S.A.

That's enough to occupy more than **60 U.S. landfills.**

E-WASTE AND HUMAN HEALTH

Many of the materials used to make electronics are not at all healthy for us. If they **ultimately** end up in our bodies (sooner than you think), they wreak havoc on our health.

Electronics Toxins

- **Antimony:** Poisonous
- **Arsenic:** Poisonous
- **Barium:** Gastrointestinal, neurological, and cardiovascular toxin
- **Beryllium:** Carcinogenic, Acute Beryllium Disease
- **Cadmium:** Carcinogenic, organ toxin
- **Chromium:** Organ toxin, carcinogenic
- **Dioxins:** Carcinogenic
- **Lead:** Central and peripheral nervous system toxin
- **Mercury:** Central nervous system and endocrine system toxin
- **Nickel:** Carcinogenic, respiratory toxin
- **Polychlorinated Biphenyls (PCBs):** Blood, skin, and organ toxin
- **Polyvinyl chloride (PVC):** Organ toxin, endocrine disruptor

Health Impacts

- Nose bleeds, seizures, retardation, child development, sinus perforations
- Mouth, teeth, and gum damage; thyroid damage
- High blood pressure, irregular heartbeat
- Lung damage, asthma, bronchitis, cancer
- Kidney, liver, digestive system damage; fetus neurological damage; ulcers
- Skin cancer, paralysis
- DEATH

WHERE E-WASTE ENDS UP

Those people manufacturing and deconstructing e-waste are the hardest hit with health problems. Even when you send your e-waste to a recycling facility, it may not end up where you think.

Much of the electronic waste created in the U.S. is exported to countries like Ghana, Nigeria, Pakistan, India, and China.

There it is deconstructed by men, women, and even children, who are rarely protected from the toxins.

When it isn't recycled, all of those toxins **end up in the environment**, at home and abroad.

When it isn't recycled, all of those toxins **end up in the environment**, at home and abroad.

In all, electronics contribute to many environmental hazards:

- **Climate emissions** released during manufacture and operation
- **Manufacturing wastewater** dumped in rivers and streams
- **Incineration** and disposal of electronics
- **Toxins** released during mining of metals and minerals

Ultimately, water is poisoned, air turns toxic, soil becomes dead, and as a result wildlife, aquatic life, and plant life all suffer.

As a consumer, you can help!

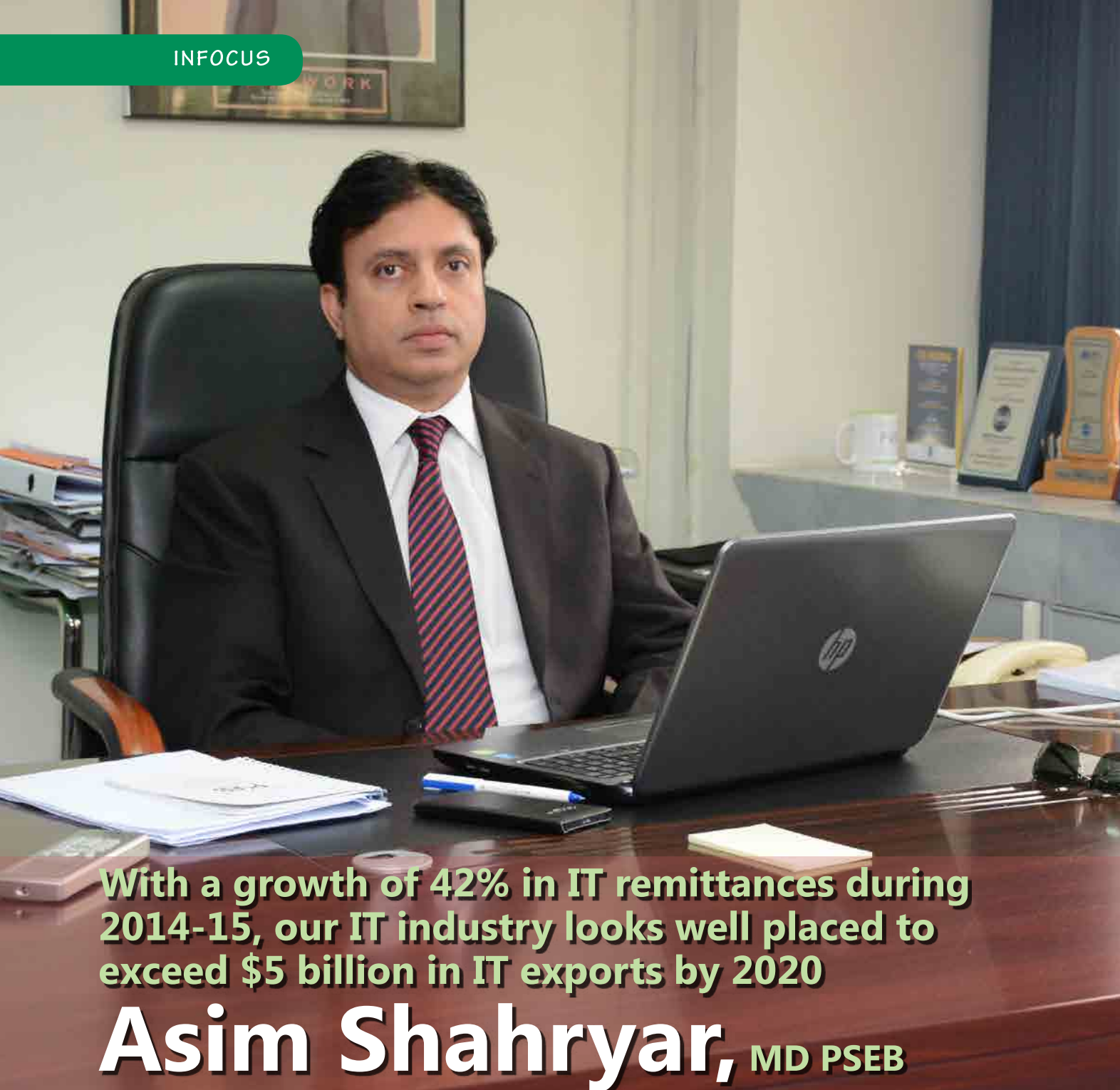- Buy durable electronics that will last longer
- Care for electronics to lengthen their useful life
- Donate old electronics to charities
- Recycle broken or obsolete electronics responsibly through e-Stewards approved by the Basel Action Network

e-Stewards

By Saima Ibrahim   By Rizwana Khan

With a growth of 42% in IT remittances during 2014-15, our IT industry looks well placed to exceed $5 billion in IT exports by 2020

Asim Shahryar, MD PSEB

P akistan Software Export Board (PSEB) was founded in 1995 to help guide and nourish the development of the IT industry in the country, and to provide one-stop facilitation for interaction of IT companies with different departments of Government of Pakistan. Today, PSEB's mandate has been broadened to encompass not only facilitation but to position Pakistan as a key player in global IT market, to create an environment that is conducive for IT business in country, and to encourage local and foreign investment in IT sector.

Mr. Asim Shahryar Husain (AS) is the Managing Director of Pakistan Software Export Board. He has done BS in Computer Engineering from Stanford University, California and an MBA in Marketing from Duke University, North Carolina with 21 years of professional experience in software engineering, product management, and technology marketing. PhoneWorld team (PW) had the pleasure of meeting him for a candid interview in which he shared the visions and ambitions of his organization. Let's read what he has to say about PSEB and the Pakistan IT Industry.

PW: What is the role of PSEB in Pakistan's IT sector?
AS: Pakistan Software Export Board (PSEB) is an apex body of the Ministry of Information Technology with the mandate to promote Pakistan's IT Industry in local and international markets. PSEB has been facilitating IT industry through a series of projects and programs in international marketing, human/intellectual capital development, infrastructure development, company capability development, as well as promotion of innovation and new technologies. PSEB's mandate is to ensure sustainable development of Pakistan's IT industry, to bolster cooperation of Pakistan's IT sector with the international outsourcing community and to motivate investors to invest in Pakistan's IT sector.

> **Our IT remittances have grown by 42% to $527.7 million during 2014-15. Since, Pakistani software companies also keep three fourth of their earnings abroad to finance the cost of their foreign office and international marketing, the total expected IT business of Pakistani companies at present is estimated at around $2.1 billion/year**

As MD of PSEB, my objectives is to accelerate the exports of our IT industry and to attract FDI towards the local IT Industry. To achieve these objectives, PSEB has set in motion several projects and programs that focus on improving perception of Pakistan as an attractive destination for IT outsourcing. These include new software technology parks, low cost and reliable bandwidth to IT companies, participation in international IT exhibitions, international certifications for IT companies and capacity building through internships and trainings. We are working with all stakeholder specially the IT Industry to ensure that we take steps that would be most helpful to the industry. To achieve this end, PSEB has been holding seminars with IT industry as well as conducting online surveys on a regular basis.

PW: What are the exact official and real software exports of Pakistan as we hear different figures from all around?
AS: There are various figures for exports of Pakistan's IT industry depending on the method being used. Based on figures from State Bank of Pakistan, our IT remittances have grown by 42% to $527.7 million during 2014-15. Since, Pakistani software companies also keep three fourth of their earnings abroad to finance the cost of their foreign office and international marketing, the total expected IT business of Pakistani companies at present is estimated at around $2.1 billion/year.

PW: IT laws and regulations and proposing improvements and modifications in Pakistan's public policy for the IT industry is one of the main objective of PSEB but we don't see any substantial work done in that regard, why is that?

AS: The Ministry of IT has already drafted a telecom policy based on consultation with the entire telecom industry. Now, it is in the process of drafting an IT policy based on inputs from the IT industry.

The main goal of the government is to advocate business friendly policies and incentives for foreign investors and local IT companies. The government has done well in this regard as is evident by sustained growth of the IT industry in Pakistan. The forth coming IT Policy as I indicated do plan on recommending to the Finance Ministry to extend tax exemption on IT exports by at least another 5 years. Once implemented this single step will enable growth and nurture our IT industry to a level where majority of the companies will become sustainable and profitable.

PW: What role PSEB is playing in creating business friendly environment and overcoming unemployment issue in Pakistan?
AS: PSEB extends maximum facilitation and assistance to foreign and local investors who are considering to establish IT operations in Pakistan thereby making it extremely simple to setup an IT company in the software technology parks already established in Pakistan. Investors from all over the world particularly from North America, Europe, and Middle East have invested in Pakistan's ICT sector.

> **Plan on recommending to the Finance Ministry to extend tax exemption on IT exports by at least another 5 years. Once implemented this single step will enable growth and nurture our IT industry to a level where majority of the companies will become sustainable and profitable**

Pakistan's IT oriented exports comprise of software development and IT enabled services (also called ITeS which include call centers, medical transcription and billing, and other business process outsourcing) employs over 100,000 IT professionals directly and generates another 100,000 supporting jobs. Pakistani companies have especially done well in emerging areas like mobile application development (iOS, Windows, Android) mobile gaming and animation. In 2004, there were only a handful of IT companies doing a small business, whereas currently there are more than 70 IT companies with annual revenues exceeding $1 million and in certain cases exceeding US$50 million a year.

PSEB incentivizes Pakistani IT companies with a

focus on creating and enabling environment in which innovators can generate new ideas and in which entrepreneurs can turn ideas into new products, new companies and new jobs. These incentives include 100% equity ownership, 100% repatriation of capital and dividends, and 7-year tax holiday for venture capital funds. PSEB works extensively with foreign investors and local IT companies to create linkages between them to boost the IT industry.

PW: What challenges do you think Pakistan is encountering while making use of true IT potential of the country? What can it do to address those challenges? Pakistan has a very large community of IT/software graduates emerging from their

seminars with the IT industry in all major cities of Pakistan to ensure implementation of steps that would be of maximum benefit to the industry.

> PSEB is also creating a documentary on the IT industry of Pakistan to be shown at foreign and local IT events. The documentary will have footage of Pakistan's IT companies as well as statements of local CEOs and their foreign customers

at foreign and local IT events. The documentary will have footage of Pakistan's IT companies as well as statements of local CEOs and their foreign customers. PSEB is also working on other marketing activities to present a positive image of Pakistan and its IT industry.

PW: Building software and IT parks was a great initiative taken by the government which was given much hype as well. But sadly we didn't see much development in that either. How would you respond to that?
AS: PSEB established many IT parks by signing agreements with owners of existing buildings in good shape and sufficient space but it does not own these IT parks. PSEB is planning a new state-of-the-art

startups with the expectation that their investment will give at least a 40-50% return upon IPO.

> PSEB is planning a new state-of-the-art IT Park on a land allotted to PSEB in Islamabad in collaboration with Korea Eximbank. New IT parks in Karachi and Lahore are also being planned in future

There is a rising wave of entrepreneurship in Pakistan at present, particularly in the IT sector. Talking about investments of Rocket Internet, a German venture

institutes- Is there a fear of brain drain as well or you see this as an opportunity for Pakistan?
AS: The competition around the world for IT outsourcing pie is intensifying. The government is doing its best to assist the IT industry in this regard and has taken numerous steps including giving incentives and tax breaks for foreign and local investors in IT sector, providing subsidy to IT companies for participation in international IT exhibitions and to IT companies for CMMI & ISO certifications. PSEB is also providing IT internships and training courses for recent IT graduates and sponsorship of IT business plan competitions.

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Our goal for the future is to enhance exports of Pakistan's IT industry to at least $5 billion by 2020. To achieve this ambitious goal, we have been holding

Brain drain is not much of a problem for our IT industry. In fact, many of our IT companies are owned or run by expatriates and they have been instrumental in ensuring the growth of the IT industry in Pakistan. They also have setup their sales and marketing offices abroad and outsource software development and IT work to their back office in Pakistan.

PW: Pakistan Brand as a software developing country is not very good- how is PSEB helping to improve this?
AS: Pakistan's perception in general has not been positive because of the security and energy issues over the last decade. However, things have started changing from this year. Different investors from Saudi Arabia, Korea, Kuwait, Canada, Australia, etc. have approached PSEB for exploring investment in the IT sector and things are looking positive. PSEB is always trying to project a positive image of Pakistan's IT industry be it at international events or at local events. During 2014-15, PSEB participated in international IT exhibitions and delegations with Pakistani IT companies in USA, China, Spain, and Kenya and this year, PSEB is planning on participating in GITEX Dubai, Mobile World Congress Spain, and CEBIT Germany with IT companies. Such participation creates awareness about the IT industry of Pakistan and its potential and creates linkages with foreign customers and investors. PSEB is also creating a documentary on the IT industry of Pakistan to be shown

IT Park on a land allotted to PSEB in Islamabad in collaboration with Korea Eximbank. New IT parks in Karachi and Lahore are also being planned in future. However, these IT parks will take 2-3 years for planning and construction. In the short term, PSEB plans on establishing new IT parks by converting existing buildings with sufficient space, backup power, and parking at affordable rent for IT companies.

> At present, there are a couple of private VC funds in Pakistan but we need a lot more of such funds to drive and motivate entrepreneurship. PSEB has recommended ICT R&D fund for planning a small VC fund to support promising IT startups by next year

PW: Does PSEB's plans to have something similar to Silicon Valley in launching VCs (venture capital) funds and help boost IT startups?

AS: The reason Silicon Valley has taken off is because of a complete ecosystem of universities, research centers, startups, companies, investors and venture capitalists. These venture capitalists invest in promising

capital firm, in different ecommerce ventures in Pakistan such as carmudi.pk, lamudi.pk and daraz.pk. Most of the venture capital funds in Silicon Valley are private funds, which invest in startups to make money. At present, there are a couple of private VC funds in Pakistan but we need a lot more of such funds to drive and motivate entrepreneurship. PSEB has recommended ICT R&D fund for planning a small VC fund to support promising IT startups by next year. ICT R&D fund is also planning a new technology incubator for startups in Islamabad.

PW: How is your strategy coming along for achieving 5 billion dollar mark by 2020 from (current) 2.5 billion dollars in exports and domestic revenue for IT and IT-enabled services?
AS: The government has been offering many initiatives to the IT Industry over the past two decades including tax holiday on exports revenue for 15 years. There are many IT parks in operation and more are being planned over the next couple of years. PSEB is also participating in major international IT exhibitions with IT companies to create their linkages with foreign customers and investors. To achieve goal of $5 billion by 2020, we need an average annual growth of 20% a year. The IT industry is doing well and our remittances and exports grew by 42% last year. So we feel that this target of $5 billion is pretty achievable.

PW: 10. How would you rate the application development/software products scenario in Pakistan and where does it stand in international market?

AS: Pakistan's IT Industry has done well in the global IT market while competing with companies from other key outsourcing countries. NetSol Inc. for instance became the first Pakistani technology company to enlist on the NASDAQ back in 1999, and is a leading provider of software to the financial services industry not only locally but also globally. Pakistani IT companies are providing a diverse range of products including financial software, healthcare software, telecom software, oil & gas software, mobile applications, gaming, and animation. For example, in financial services sector, our IT companies are providing software for the mortgage industry, payment solutions, trading systems, asset management systems, core banking systems and specialized banking applications. Mixit's software was handling transactions worth half a billion dollars on NYSE and NASDAQ.

Pakistan has produced some great gaming studios. The title animation sequence of Game of Thrones, the world's most-watched TV series these days, has been produced by Hameed Shaukat, a US-born Pakistani. Cricket Companion application which received world-wide recognition was also developed by Tricast Media, a Pakistani startup. Pakistani Visual Effects Artist, Mir Zafar

Ali has received three Oscar awards for his work in The Golden Compass, Life of Pi and Frozen. Novaira Masod, a Pakistani animator, has provided stunning visual effects in some of the most popular Hollywood movies including Maleficent, A Christmas Carol, Thor, Transformers 3. One of the world's best payment processing solutions was developed in Pakistan by i2c. Eyedeus Labs, previously featured at CNN, is working on a groundbreaking video based technology to disrupt the way we interact with ads.

> **Pakistani IT companies are providing a diverse range of products including financial software, healthcare software, telecom software, oil & gas software, mobile applications, gaming, and animation**

Clearly our IT industry has the skills, depth and the marketing acumen to perform at the global level. Since 2010, Pakistan has won 25 gold or silver awards at Asia Pacific ICT Awards (APICTA) in different categories including startup, mobile applications, e-learning, e-health, e-government, security, supply chain management, communications, and financial applications. These achievements are a testament to the high-end expertise of the IT companies of Pakistan.

STP at ETC Islamabad

MD PSEB and DG Shenzhen STIC signing minutes – Dec 2014

...tan Pavilion at Mobile World Congress 2015

PSEB

RESEARCH STUDIES
INTERNATIONAL MARKETING
INTERNATIONAL CERTIFICATIONS
SUBSIDIZED BANDWIDTH
INTERNSHIPS & TRAININGS
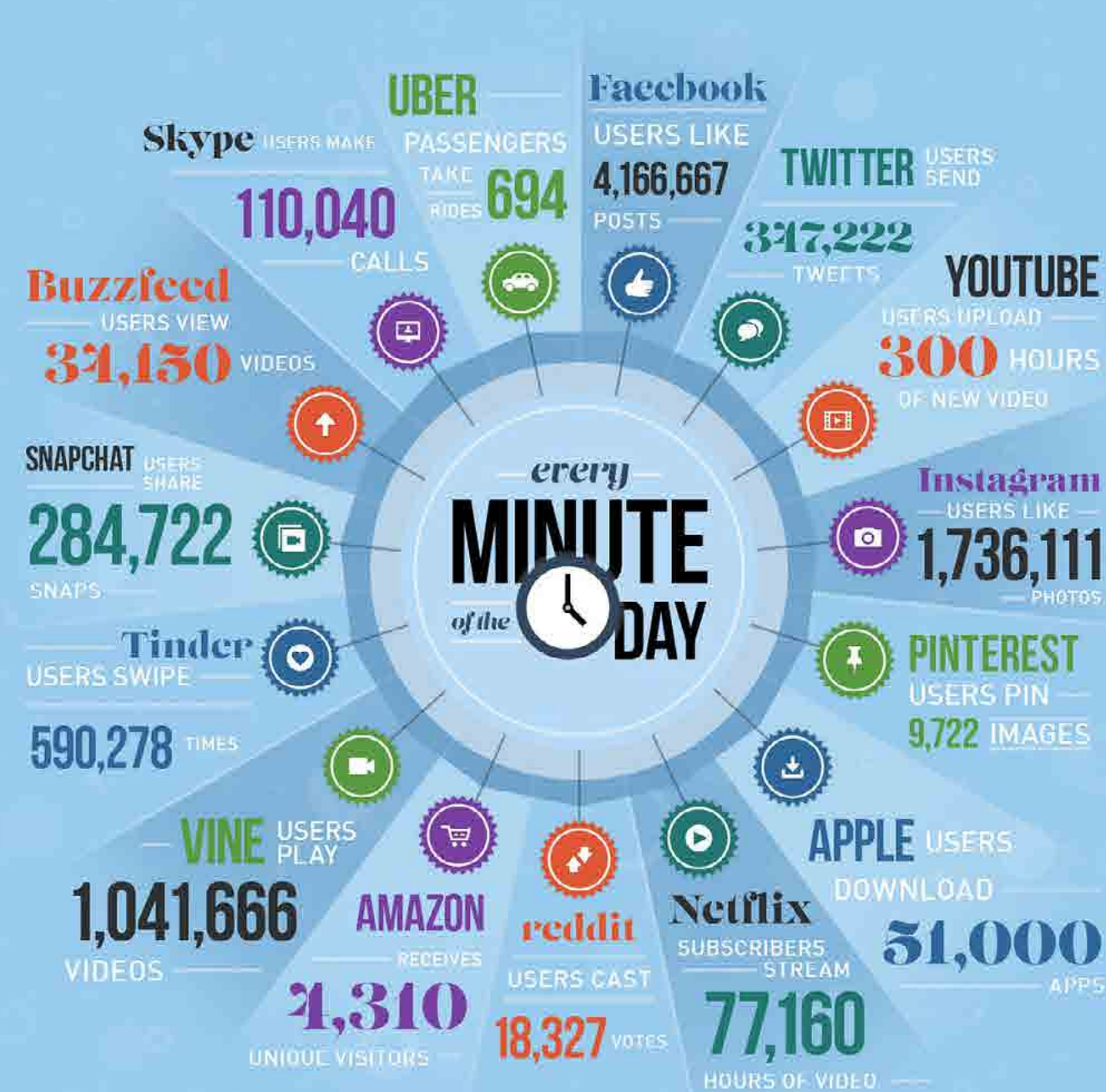POLICY MAKING

DOMO

DATA NEVER SLEEPS 3.0

How much data is generated **every minute?**

Data is being created all the time without us even noticing it. Much of what we do every day now happens in the digital realm, leaving an ever-increasing digital trail that can be measured and analyzed. Just how much data do our tweets, likes and photo uploads really generate? For the third time, Domo has the answer—and the numbers are staggering.

every **MINUTE** of the **DAY**

Skype USERS MAKE 110,040 CALLS

UBER PASSENGERS TAKE RIDES 694

Facebook USERS LIKE 4,166,667 POSTS

TWITTER USERS SEND 347,222 TWEETS

YOUTUBE USERS UPLOAD 300 HOURS OF NEW VIDEO

Buzzfeed USERS VIEW 34,150 VIDEOS

SNAPCHAT USERS SHARE 284,722 SNAPS

Instagram USERS LIKE 1,736,111 PHOTOS

Tinder USERS SWIPE 590,278 TIMES

PINTEREST USERS PIN 9,722 IMAGES

VINE USERS PLAY 1,041,666 VIDEOS

AMAZON RECEIVES 4,310 UNIQUE VISITORS

reddit USERS CAST 18,327 VOTES

Netflix SUBSCRIBERS STREAM 77,160 HOURS OF VIDEO

APPLE USERS DOWNLOAD 51,000 APPS

THE GLOBAL INTERNET POPULATION GREW 18.5% FROM 2013–2015 AND NOW REPRESENTS **3.2 BILLION PEOPLE.**

With each click, share and like, the world's data pool is expanding faster than we can comprehend. Businesses today are paying attention to scores of data sources to make crucial decisions about the future. The team at Domo can help your business make sense of this endless stream of data by providing executives with all their critical information in one intuitive platform. Domo delivers the insights you need to transform the way you run your business. **Learn more at www.domo.com.**

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Rivo Rhythm RX80

Take Control with the New Rivo Rhythm RX80

Rivo Rhythm RX80 is the latest phone in the Rhythm series to hit the local market. The Rivo Rhythm seeks to target customers who are looking for smartphone having solid specifications and features with great value for money.

1 INSIDE THE BOX:

The box contains a 'Rivo' phone case and a screen protector along with other essentials such as USB phone charger along with a two-pin charger, in-ear headphones and a user manual.

2 DESIGN & DISPLAY:

The RX80 is a compact and sleek phone weighing just over 120 grams. The back of the phone has a matte black finish with the Rivo insignia in chrome. The matte finish makes it harder for the phone to scratch. The charging dock is situated at the bottom, volume buttons and the power button are on the side and the 3.5mm audio jack is on the top of the phone. The Rivo Rhythm RX80 offers an impressive 4.7 inch QHD IPS display which offers no viewing angle issues.

3 PROCESSOR:

The Rhythm RX80 is powered by a 1.3 GHz quad core processor, chipset used is ARM Cortex - A7 and the architecture is 32 bit. The phone is powered by four processors and work at a frequency range of a minimum of 598.0 and a maximum of 1300.0 MHz. Following are the results of the stability test which shows performance benchmarking scores to CPU component and changes in temperature of battery.

4 MEMORY:

Rhythm RX80 has a RAM of 1 GB which is quite substantial for a mid-tier smartphone. It has an internal storage of 8 GB, however this can be expanded upto 32 GB with micro SD card.

5 CAMERA:

The Rhythm RX80 features an impressive camera with auto focus as well as flash capabilities. The camera also features other interesting features such as auto capture when 'smile' is detected and the capability of scanning a QR code via the camera.
- Front Camera is 2 megapixels and has the capability to capture images at good resolutions.
- Rear Camera is 8 megapixels and captures images at a high resolution of 3264 x 2448 pixels.

6 NETWORK & CONNECTIVITY:

The Rhythm RX80 is 3G enabled and can handle GSM as well as WCDMA frequency bands. GSM frequency bands that are supported are 850/900/1800/1900 while WCDMA frequency bands supported are 900/2100.

7 INTERNAL STORAGE & BATTERY PERFORMANCE:

The device houses an 8 GB internal memory which can be upgraded to 32 GB with a micro SD card, the 2000 mAh battery is also satisfactory and gives an impressive performance allowing the user to use the phone throughout the day on a single charge. This is also a big plus for the RX80 because usually entry level smartphones have less than average battery performance. According to the benchmarking performance test following is the rank of the Rhythm RX80. Note that for an entry level smartphone the RX80 battery performance is rather way more good.

8 BENCHMARKING:

- **Antutu**
We tested the device performance using the AnTuTu Benchmark v5.7.1 which tests various functions such as multitasking, storage I/O performance, CPU integration, RAM operation and graphical interfaces etc. The score came out to be approximately 20,000. According to the results the Rivo Rhythm RX80 has above average general performance.

- **Vellamo**
Using Vellamo as a tool to check single core, multi core and browser performance.
- In the browser category of Vellamos' benchmark, performance score is 1790 which is very good for the category of RX80.
- Testing the multicore with Vellamo, the score is 1124 which is an indicator of good inter core performance and shows that the four core processors are good at communicating with each other and offer a seamless experience.
- In the single core performance, the performance score came out to be 642 which for the price range of the RX80 is actually pretty high.

9 GPU BENCHMARK:

According to the performance results on the GPU benchmark, the lowest fps recorded was 26 while 88 fps was the highest, averaging out to 50 fps.
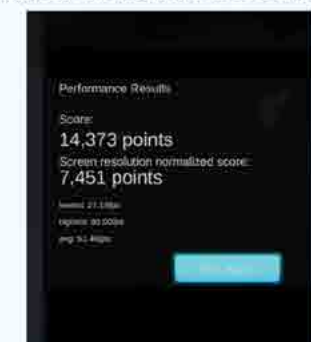
10 FINAL VERDICT:

In conclusion Rivo is successful in putting together new innovative technology and solid hardware in the shape of the Rhythm RX80. The good quality 8 megapixel rear camera and a 1 GB RAM along with many handy features and 3G support makes the RX80 a good buy for the customer especially keeping in mind the low price of just **Rs.11,400.**

SPECIFICATIONS:

Dimensions: 137.9 x 68.9 x 8.8 mm
Memory: 1 GB RAM and 8 GB internal memory
Processor: CPU Model MT6582, Quad Core with a maximum frequency of 1.3 GHz
Network & Connectivity: GSM 850/900/1800/1900 MHz; Wi-Fi, Bluetooth, 3G, GPS, Edge
Camera: 8 megapixels auto focus rear camera with LED flash light and 2 megapixels front camera.
Display: A resolution of 540 x 960 with 234 PPI (pixels per inch); offers multi touch support up to two points.
Battery: 2000 mAh
Other Features: Sensors including that of; direction, G-sensor, light, temperature, accelerometer, gyro, proximity, compass, barometer, gesture, and heart rate plus GPRS and location services are active.
Operating System: Android OS 5.0 lollipop.
Price: PKR 11,400

By Rizwana Khan

ARE OUR KIDS REALLY GETTING ADDICTED TO THE TECHNOLOGY ...??

Do not risk children falling behind at school or with their peer groups just out of fear of getting them addicted to their devices. Remember, Balance is key...!!!!

Over the past decades mobile phones have become necessity for every adult, it has become the ultimate communication and convenience tool. It seems impossible to stay without it even for few hours. But the point of concern today is not the importance of mobile phones in adults' life but it's standing in kids' lives as lot of hype is being created about evils of technology and how digital devices endanger bad behavior among children.

Despite some parents complaining about its downside, smartphones indeed are a great tool for learning

Many researches have been conducted over the years that show harmful effects of smartphones on kids. Still, there are many parents who give smartphones or tablets to their kids as early as at age 2. Most of the parents now have mobile devices so it is inevitable for kids not to get attracted to these devices. Conversion from a feature phone to a smartphone has also added fuel to tech addiction in kids. Smartphones are like mini computers with so many functionalities that kids easily get lost in them. There are countless games and applications available in app stores for kids of all ages and busy the kids for good 2 to 3 hours.

There are many apps that are available which can be used to monitor children's activities, set up timelines, and block inappropriate material

Smartphones are definitely mesmerizing piece of technology that we have today. Despite some parents complaining about its downside, smartphones indeed are a great tool for learning. Some parents use smartphones as a way out from parenting and use them to put their children to sleep while others use them to calm down their kids. Parents expose their kids to technology at very young age but when kids get hooked to it, they complain about it. I think it is a parental negligence rather than the smartphones downside.

One of the biggest concern of parents today is that kids get so caught up in their games and texts that they lose themselves in virtual world and fail to learn social skills and imagination. In addition to that low grades and anxiety in kids is also associated with higher cellphone usage. All of these downsides can be easily handled if parents pay a little more attention to their kids than they are already giving.

With cellphones kids feel safer and parents can also easily get a hold of them

Parents should know what their kids are doing with their smartphones. There are many apps that are available which can be used to monitor children's activities, set up timelines, and block inappropriate material. They can also set time limit for their children to use phones every day. Talking to children about the problems and concerns regarding internet safety and protection is a beneficial thing to do. Instead of shying away parents should openly discuss do's and do not's of internet world. Because benefits of smartphones are far greater than the easily manageable drawbacks.

Technology is a prominent influence on our lives today and children cannot be kept away from it either. With cellphones kids feel safer and parents can also easily get a hold of them. Especially in times like these when kidnapping and other crimes are on peak, you cannot imagine to let your kids out of the house on their own without keeping some form of connection.

Pakistan Telecom Authority has also recently launched first and one of its kind m-education portal which is comprehensive repository of m-education applications

Forbidding children to use technology also hamper their abilities to engage with modern world and learn new trends. Technology offers many educational benefits for children, with technology they have better opportunities to learn. It enable kids to do complex problem solving at early age and makes them learn things faster and better. Huge number of beneficial applications are available on app markets which can be easily accessed. Pakistan Telecommunication Authority has also recently launched first and one of its kind m-education portal which is comprehensive repository of m-education applications besides m-Health, m-Agriculture, m-Cities and other such initiatives.

Technology has definitely changed our lives, sometimes for better and sometimes for worst. People blame technology for various ills in society such as obesity, insomnia, violence, aggression and language development issues, in reality that is not the case.

It enable kids to do complex problem solving at early age and makes them learn things faster and better

There is no evidence that supports this argument that removing technology from their lives, children will be fitter and mental health problems such as aggression and depression will diminish. But in a tech-based world it is important to maintain a healthy balance between technology and real life. Children's love for technology has mirrored the devotion that many adults have for their devices. To maintain a perfect balance in children's life it is important for parents to model a controlled behavior for their kids, encourage positive interaction and provide opportunity for tech-based experiences, so that children could learn and grow in a healthy and positive environment.

In a tech-based technology it is important to maintain a healthy balance between technology and real life

By Saima Ibrahim

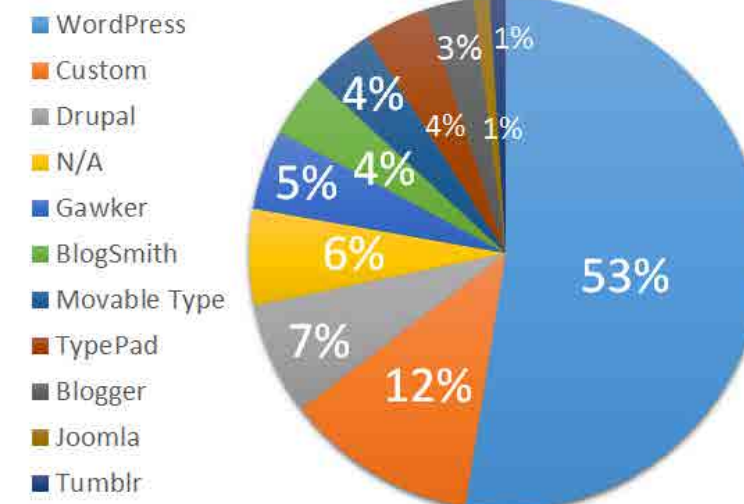# Create, Share, Inspire
and Earn through
BLOGGING

Websites are the backbone of the Internet, but they never really enjoyed the kind of popularity that they have gotten now through blogs. Blogging has become a new internet phenomenon over the past few years. A Blog is a discussion or informational site published on internet and consisting of posts, typically updated daily; blogs often reflect the personality of the author. One can write blog on any topic of interest; from technology, medical sciences, fashion, entertainment, media,

and politics to education. Further, the advanced technology has made it more convenient to share and publish blog on any web portal hence making the writer a "published author" which is an advantage over traditional article writing.

There are many other advantages of having a personal blog. It can provide one with permanent/part time job and one can easily earn a handsome income while sitting at home. Just like famous columnists and writers, bloggers also have recognition across the globe so

ATTRACT   CONVERT   CLOSE   DELIGHT

Strangers → Visitors → Leads → Customers → Promoters

Blog
Keywords
Social Media

Forms
Calls-to-Action
Landing Pages

Email
Signals
Workflows

Events
Social Inbox
Smart Content

Top 100 Blogs by Platform

- WordPress — 53%
- Custom — 12%
- Drupal — 7%
- N/A — 6%
- Gawker — 5%
- BlogSmith — 4%
- Movable Type — 4%
- TypePad — 4%
- Blogger — 3%
- Joomla — 1%
- Tumblr — 1%

if a blogger spreads knowledge in an influential way, he will be known and followed by many in no time.

A Blog is a discussion or informational site published on internet and consisting of posts, typically updated daily

This means, no more messing around with HTML coding, software problems or web design issues. There's no technical know-how needed to publish a blog. If you have something to say, or a story to tell, just login to your blog platform and post your blog entry to make the magic happen. Anyone who's subscribed to your blog, will then be immediately alerted to your latest posting.

With this much significance of blog, it is pertinent to make my prestigious readers know about the whole science involved in blogging.

The Five Steps for Starting a Blog:

- Choose your preferred blogging platform (WordPress is the most common and used by almost 52% of the world).

- Choose whether you want to self-host and a paid domain, or get a free blog.

- Setting up a blog on your own domain (if you choose self-hosting and a custom domain).

- Designing your blog (which is a bit interesting activity).

- Provide good and original content.

- Useful resources for blogging.

Everyday millions of people participate in this creative hobby; blogging. With the newly designed tools by web developers, blogging has become full-time job for individuals who are currently earning a lot in this profession.

Females can also easily do blogging and earn, with a laptop and internet connectivity; they can have a respectable and secure job.

If you have something to say, or a story to tell, just login to your blog platform and post your blog entry to make the magic happen

The concept of online job is not new in Pakistan, it has already gained momentum in our community as students are earning a lot from blogging. In near future, it will further be opted by many individuals as their full-time job; which will ultimately contribute to the national economy and in the long run will increase employment ratio as well.

Females can also easily do blogging and earn, with a laptop and internet connectivity; they can have a respectable and secure job

Benefits of BLOGGING

- Connects
- Easy way to express yourself
- Engaging: activity for free time
- Enables you to easily establish yourself as an expert in your field of interest
- Eventually lead to your blog becoming an authority site, which will rank well in search
- Income
- Become published author
- Can prove as a source of employment for many
- Platform for your business
- Recognition
- best kind of advertising

By Rana Junaid Naseer

NEVER
DEAD AGAIN
Boost your Smartphone Battery life

Whether it's an iPhone, Android, or Blackberry

When it comes to smartphone selection even of big brands like Apple, BlackBerry, Samsung, Sony, Huawei etc. all brands are going to make you think twice before buying due to the power consumption. The more functionality we pack into our smartphones, the more power they need to run. It's a simple logic that is usually neglected by the users before buying any smartphone but once they buy it; there comes the complaints about weak battery.

Given the diverse range of capabilities and multi-functionality running on a mobile (as in on-the-go) platform, it's no wonder that battery life has always been a concern for developers, manufacturers and the users alike. On average, most smartphone batteries last between one and two days before being completely depleted, and in need of a recharge. Here are some easy steps to at least make your battery

work for better duration:

■ Firstly, check what uses the most power in your smartphone.

■ Turn off the GPS.

■ Reduce display power.

■ Set your screen timeout to the shortest length possible.

■ Turn off the phone vibration function.

■ Black wallpaper can save battery.

■ Close unnecessary Apps.

■ No Bluetooth, Wi-Fi, 3G/4G when not in use

The more functionality we pack into our smartphones, the more power they need to run. It's a simple logic that is usually neglected by the users before buying any smartphone

Despite the limitations there are many smartphones available in the market that offer tremendous battery timings. Lithium Ion (Li-ion) is fastest growing battery system and is used where high-energy density and lightweight is of prime importance.

But there are also other types of battery technologies that are being used based on the price and usage of the smartphone. Motorola Droid Turbo, although not available in Pakistan, has largest battery and showed long lasting performance as well.

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The central reason of poor batteries performance is that the lithium-ion battery inside our phones is not fully lithium if it was, it would last a lot longer.

Every battery has three main components: an electrolyte providing electrons, an anode discharging them, and a cathode receiving them. In the rechargeable batteries inside today's smartphones, lithium is found in the electrolyte, but not in the anode, restricting the efficiency and lifespan of the blocks. If a viable lithium anode could be developed, our batteries would be lighter,
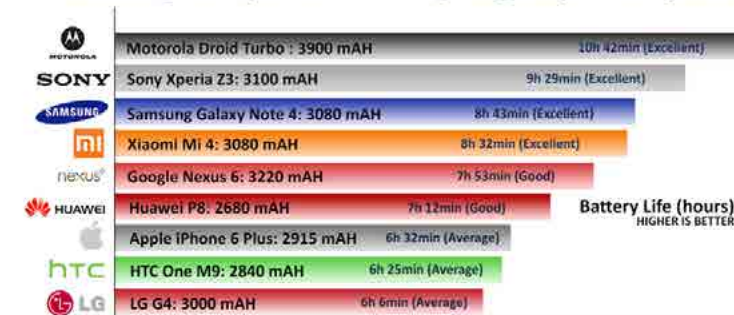
smaller, faster to charge and long lasting.

Now a days, many relevant devices for charging smartphones are also present in the market. After "Power Banks", Solar Power Banks are also introduced recently. So if you have doubts about your poor battery timings, carry one power bank along with you to save yourself from bad day.

The best thing about technology is that it keeps on advancing and works to get better, now we have better camera, faster processors, and clearer and larger displays large storage in our phones. While smartphones are growing more advanced, they are still restricted by power issues. Every smartphone user wants a device that offers terrific battery life.

According to a technology site, a U.K based company is designing hydrogen-powered iPhone battery which will supposedly last for a whole full week

The battery has not advanced since decades, but we are now on the verge of a power revolution. According to a technology site, a U.K. company is designing hydrogen-powered iPhone battery which will supposedly last for a whole full week. Many other companies are also working on how to increase the battery timings for smartphones and other gadgets; which will eventually satisfy the user regarding battery timings. Next year will shape up as the year of batteries change as many developments in battery technology are in progress. So we can expect that days of battery debacle will soon be over.

Battery Comparison of 2015 Flagship Smartphone

MOTOROLA	Motorola Droid Turbo : 3900 mAH	10h 42min (Excellent)
SONY	Sony Xperia Z3: 3100 mAH	9h 29min (Excellent)
SAMSUNG	Samsung Galaxy Note 4: 3080 mAH	8h 43min (Excellent)
Mi	Xiaomi Mi 4: 3080 mAH	8h 32min (Excellent)
nexus	Google Nexus 6: 3220 mAH	7h 53min (Good)
HUAWEI	Huawei P8: 2680 mAH	7h 12min (Good)
Apple	Apple iPhone 6 Plus: 2915 mAH	6h 32min (Average)
htc	HTC One M9: 2840 mAH	6h 25min (Average)
LG	LG G4: 3000 mAH	6h 6min (Average)

Battery Life (hours)
HIGHER IS BETTER

By Saima Ibrahim

Smart Moves for Smarter Nation

Keeping in view the world wide advancements in technology, Pakistan is also trying to improve its system with the help of latest technologies. All provincial Governments have started working on many projects of e-Governance & m-governance by making use of latest ICT developments. The provision of technological services will no doubt revolutionize the performance of Pakistani Government from many perspectives. This is why we have started this new section in which we will discuss all the initiatives taken by government to make Pakistan a Smart Society.

HospitalWatch is an initiative taken by PITB, which offers a framework for monitoring emergencies, PAEDs, OB/GYN wards in DHQs and THQs across Punjab.

This will ensure that better healthcare quality is provided by using mobile application. The benefits of this application will result in timely reporting, obedience of responsible officers to the parameters defined like attendance, availability of medicines, functional status of equipment etc. The information gathered through the application will become a powerful tool for the management of district, tehsil and central level officials.

Automated Case Flow Management System is an initiative automating the workings and processes of the courts to ensure transparency and enable efficient service delivery.

As part of the project, petitioners are informed through auto-generated messages sent via Cause List Messaging system of PITB. More than 6.2 million such SMSs have been sent so far disseminating cases information.

The Government of KPK has introduced "**Biometric attendance system**" in both hospitals and very recently in Department of Elementary and Secondary Education for the effective and smooth performance check. The traditional system of marking attendance through "signature" has been replaced by the effective "Biometric attendance system" which will definitely make the teachers and other staff more efficient regarding their duties.

Marissa Mayer led the development of Google's most successful products for more than 10 years and was appointed CEO of Yahoo in 2012, at the age of 37

Marissa Mayer

It is still uncertain whether or not Marissa Mayer can save Yahoo, but that hasn't stopped the company's CEO from dominating tech headlines and glossy magazine covers since she assumed the position in 2012.

With a pair of computer degrees from Stanford and a resume that includes a lengthy stint at Google, Mayer is at once a Silicon Valley cliché and -- as one of the few powerful women in a male-dominated industry -- a rare exception to the status quo. She is number 36 on Forbes's list of America's Self-Made Women (2015) and no 22 on Power Women list (2015) released by the same magazine. The Yahoo chief's pay package jumped 69% to $42 million in 2014, making her one of the country's highest-paid CEOs.

> I always did something I was a little not ready to do. I think that's how you grow. When there's that moment of ‚Wow, I'm not really sure I can do this,' and you push through those moments, that's when you have a breakthrough

Mayer's 14th job offer came from Google founders Larry Page and Sergey Brin, who quizzed her on artificial intelligence while sitting at a ping-pong table that the company used for conferences. In 1999, Google wasn't yet an Internet search giant. In fact, the company had only 19 employees. Upon accepting an offer to lead Google's user interface and Web server teams, Mayer became the company's 20th employee and its first female engineer. Her tenure at Google involved work on some of the company's most recognizable and successful products, including Google Maps, Google Earth, Street View, Google News and Gmail.

Mayer captured tremendous interest both in Silicon Valley and around the world. In July 2012, she was appointed president and CEO of Yahoo, a company besieged by declining stock prices, layoffs and slowing ad revenue. Tasked with course-correcting the company, Mayer became the fifth CEO hired by Yahoo in five years, as well as one of only 20 women running a Fortune 500 company. As a female technology CEO, Mayer follows in the footsteps of former Hewlett-Packard CEO Carly Fiorina and former eBay CEO Meg Whitman. And many believe that she just may have what it takes to turn Yahoo around.

By Ikram Ullah Khan

SAMSUNG

Galaxy Note 5

Samsung's True Flagship Smartphone

Samsung's Galaxy Note 5 is the smoothest, sleekest stylus-equipped jumbo-screen smartphone that the company has ever made. It comes with a slim, shiny, large-screen, a strong camera along with a killer battery enhanced with a retooled stylus. Samsung's Galaxy Note 5 is an improvement in the last year's Note 4 with extended battery to 3000 mAh.

Design

The Note 5, while eye-catching, is also the least distinctive of the Note line. It's still Samsung's only phone for 2015 with a stylus (and a good one at that), but at a glance it looks pretty much the same as the Galaxy S6 Edge+ which features a dual curved-edge screen, but otherwise it has nearly same specs. Meanwhile, both the Note 5 and S6 Edge+ are basically supersized versions of the Galaxy S6 and S6 Edge models that Samsung debuted back in March.

In essence, the stylus (Samsung calls it the "S Pen") is just about the only thing that makes this device truly different. In contrast, 2014's Note 4 leap-frogged the Galaxy S5's hardware capabilities, even when you removed its S Pen. Still, even if the Note 5 doesn't blow us away with newness, its flaws are few and its stylus makes it a more feature-packed phone than any other large-screen device.

Memory

4 GB of RAM of Galaxy Note 5 is the unbelievable part when it come to the memory. It is bigger and faster than any smartphone ever. This much of RAM provides you with fast browsing and easy switching between the apps, high end games and media.

Samsung Galaxy Note 5 comes in dual variations i-e with 32 GB as well as 64 GB internal memory. The memory stick has been removed and user can't have memory larger than that. On the other hand users have been given a free hand to use 15GB of cloud data.

Camera

It is the need of the time that a powerful device must have a powerful camera and Samsung Galaxy Note 5 is set with a 16MP Rear Cam that takes just 0.7 of a second to launch with a quick succession. The size of its rear cam image comes out to be almost 6MB and the dimensions are 5312 x 2988 pixels. In a similar way, the front camera is 5MP and the size of its image is almost 2.5MB and the dimensions are 2592 x 1944 pixels along with the orientation sensor. There are 16 millions of pixels in its rear cam image.

The camera of Galaxy Note 5 is awarded with two things by a survey of over a million people in the third quarter of the year 2015:

- The best Camera
- The best Selfie

If you look at the megapixel count alone, not much has changed with the Note 5's camera. Samsung has adopted a wider aperture lens (f1.9 instead of the Note 4's f2.2), the same one that's used in the Galaxy S6 and S6 Edge. Why is this "good"? A bigger aperture let more light in, and more light leads to better photos, specifically low-light pictures.

Processor

The SamMobile report points to a Samsung-made processor being used in the next-gen Note – specifically an Exynos 7422 SoC. That's not too surprising given that Samsung's semiconductor arm had no trouble supplying chips for the GS6, a device likely to sell in higher volumes than the Note.

Experiencing the Internal Interface

The Galaxy Note 5 runs on Android 5.1 Lollipop, bolstered by Samsung's own TouchWiz layer. That means the phone will be able to tie into Google's wide array of services, such as Google Now, turn-by-turn navigation and access to Google Drive files. But it can also tap into Samsung's own software, all of which customizes the display's look and feel -- like those quick-access toggles in the notifications shade and anything that has to do with the S Pen. Microsoft's One Drive cloud storage app is also onboard.
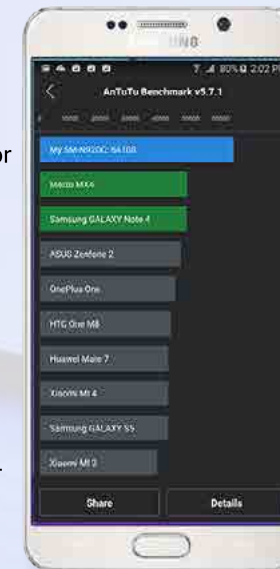
Performance and Benchmarking

While benchmarking Samsung's Galaxy Note 5 with different apps and benchmarking applications, we can say that there is no comparison for Samsung Galaxy Note 5 and it has beaten Meizu Mx 4 by a large margin.

AnTuTu

Samsung Galaxy S5 has been powered with the world's best Samsung's own Octa-core processor with 64-bit system which is clocked at 2100 MHz. The display, camera and the other hardware are so well selected that it pushes the unbeaten Meizu Mx 4 with a lead of over 20,000 score with Antutu that is the best achievement and it is quite obvious that Samsung is going to retain its place for a long time. The 4 GB RAM with the latest technology also makes Note 5 unique as none of the smartphones has ever been launched with 4 GB till now..

Vellamo's Bebchmarking

Vellamo is another benchmarking application that is used to check single core, multicore and browser's performance. Note 5 has leading edge in all the three benchmarking sites.

For its metal, the total score is 2706 which is almost 100 points greater than the previously launched Samsung Galaxy S6 in the first Quarter of 2015.

For its multicore part, the total score is 3000 which is almost 200 points greater than the Samsung's previously launched Flagship device Samsung Galaxy S6.

Stability Test

Testing Note 5 with Antutu's stability testing app, the results were way above satisfactory and unlike the previous Galaxy S4 and Galaxy S5 which became hot with apps and heavy games. Note 5 is quite cool and efficient in that matter. Indulging our Note 5 with heavy looped and confused tests that keeps the CPU busy, the temperature rise was not even a single degree and the performance was not affected.
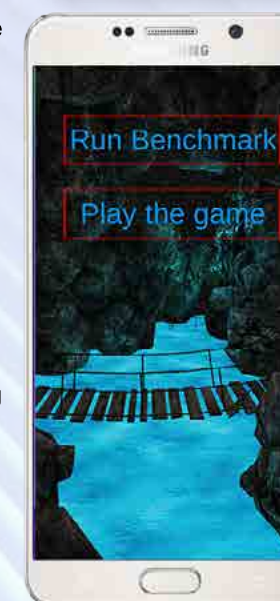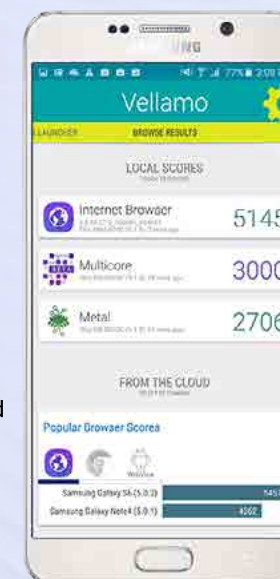
Other Specs

Weight: 171 grams

Display Size: 5.7" IPS LCD

Memory: 4 GB RAM, 32/64 GB ROM

Processor: Quad-core 1.5 GHz Cortex-A53 & Quad-core 2.1 GHz Cortex-A57

Camera: 16 MP LED Flash, Autofocus

Battery: Non-removable Li-Po 3000 mAh battery

Color: Black Sapphire, Gold Platinum, Silver Titan, White Pearl

Pros
- Great new design
- Easier to hold than previous Notes
- Outstanding camera
- Refined S Pen experience

Cons
- Underwhelming speaker
- Slippery Glass back
- Awfully expensive

Final Verdict

Samsung Galaxy Note 5 appeals to more people than ever before. If you want a big screen phone with plenty of power, great camera and a pen to write with, you don't have to look further. But obviously you will have to buy a huge amount of PKR 82,000 for that.

GTX
Horizons: Robotics
The region's largest leading
demonstration of robotics
and drones live
at Gitex.

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CXOs

144,000
Visitors

3,900
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Meet the world's
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GTX
Student Lab
See a display of next
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projects from today's
brightest minds.

GTX App Hack
Developing smart city
solutions for
Regional Governments.

THE INTERNET FUTURE OF EVERYTHING

From drones to robotics, GITEX Technology Week 2015 will mark its 35th anniversary by showcasing live demonstrations of next generation technology solutions that will drive Middle East business transformation in the Internet of Things (IoT) and emerging Internet of Everything (IoE) era.

Courtesy of strong regional technology take-up, Middle East organisations are ideally placed to become leaders in IoE innovation. The Middle East and Africa is set to post the world's second-fastest growing ICT market in 2015, reaching USD 270 billion, according to IDC. Longer-term, the Middle East's IT market is set to grow by 23 per cent, from USD 204 billion in 2014 to USD 252 billion in 2019, according to Gartner.

With more people, devices, organisations, and government collaborating on smart environments and integrated ecosystems, Deloitte predicts global IoT hardware connectivity revenues stand to rise 20 per cent per year, while related services revenues will grow 50 per cent annually.

Middle East and Africa's High-Growth ICT Market Boosts Global Internet of Things Revenue Tripling to USD 7 Trillion in 2020: IDC

"The IoE era is a fourth industrial

revolutions that is redefining how new technologies such as drones and robotics are transforming global and regional organisations and their consumer experiences," said Trixie LohMirmand, Senior Vice President, Dubai World Trade Centre, the organisers of GITEX Technology Week 2015, which will be presented under theme "The Internet Future of Everything".

"However, Middle East organisations face increasing urgency to innovate or be left behind. We're dedicated to advancing the regional innovation agenda by showcasing next generation technology solutions, vertical-specific research, and networking opportunities. With Dubai Smart City a global future city beacon, GITEX Technology Week 2015 is the ideal platform to demonstrate the latest smart and connected solutions," added Trixie

By Rizwana Khan

LohMirmand.

The new GTX Horizons zone will showcase demonstrations of emerging solutions such as 3D Printing, Autonomous Vehicles (drones), robotics, and transport. Additionally, the new GTX Communities area will provide new research, networking, and solutions for firms in key vertical sectors - banking, construction, education, healthcare, retail and oil and gas - can lead innovation, source next generation technologies and develop strategic partnerships.

In support of Smart City innovation, GITEX Technology Week 2015 will be themed around the key pillars of the IoE revolution - Innovation, Connected Cloud, Big Data, Mobility, and Security, along with the return of the Google CSI Lab. Demonstrating the potential for the fast-growing Middle East market, already marquee technology companies are confirmed as event sponsors, including HP, SAP, Vodafone, and Gemalto.

New Drones and Robotics Zone Shows How Regional Organisations Can Leverage Next Generation Technology to Transform Operations and Experiences

The landmark 2015 event will continue the innovation narrative with hundreds of globally-renowned speakers leading the

show's expansive conference formats, as well as displays of disruptive, transformative Smart City technologies. Speakers include Ken Singer, Director of the Centre for Entrepreneurship and Technology, UC-Berkeley; Benoit Montreuil, the 'Father of the Physical Internet' and Coca-Cola Chair in Material Handling and Distribution at Georgia Institute of Technology; Jonathan Reichental, CIO, Palo Alto; and Miguel Gamino, CIO, San Francisco.

In support of Smart City innovation, GITEX Technology Week 2015 will be themed around the key pillars of the IoE revolution – Innovation, Connected Cloud, Big Data, Mobility, and Security, along with the return of the Google CSI Lab

GITEX Technology Week 2015 is expected to welcome more than 140,000 visitors from over 140 countries including more than 20,000 C-level executives, and more than 3,500 exhibiting brands from 55 countries.

For more information on the 35th GITEX Technology Week - running from 18-22 October 2015 at the Dubai World Trade Centre - visit: www.gitex.com.

About GITEX Technology Week
Launched in 1981, GITEX is the ICT business gateway to the Middle East, North Africa and South Asia Region.

Focused on providing exhibitors with high ROI through direct business opportunities with decision makers, GITEX has maintained its position as the industry's trend setting authority. For more information, visit www.gitex.com.

About Dubai World Trade Centre (DWTC)
Website: www.dwtc.com
As the organiser of GITEX Technology Week, Dubai World Trade Centre offers more than 34 years' experience of delivering world-class events in the Middle East. Our team organises 20 of the region's largest and most successful international and regional shows, providing local, regional and international exhibitors with unmatched expertise and in-depth market knowledge.

In addition to providing an ideal platform for regional business development, our commitment to on-going innovation within the exhibition industry has supported the rapid growth and development of a wide range of business-to-business and business-to-consumer shows, as well as delivering consistent satisfaction to exhibitors and visitors.
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TELECOM CAMPAIGNS

By Saima Ibrahim

The advertising campaigns play a vital role in promoting a brand/product. A truly memorable campaign creates a visceral response – but one bad campaign can ruin it all. PhoneWorld keeps a close eye on the latest ad releases in telecom industry. Here is a critical review of the latest telecom campaigns.

Ufone 3 Pe 3 Offer

5

Can't stop smiling. This ad truly makes you feel happy inside out. Now I have to admit that the advertising skills of ufone marketing team really rocks. The campaign „ufone 3 pe 3" truly conveys its message to the users. The stunning Shehzad Roy appearance added more fun to the scenes and script. At the same time the fast music adds more shine and can attract attention even from the corner. Comedy, effects and settings; nothing went out of proportion in this ad.

Verdict: Ab Chalao Apni Marzi with ufone. Thumbs up ufone!

Warid Double Faida

3.5

Legendary boxer, Amir Khan and top cricketer, Shahid Afridi, together appeared on screen for the promotion of Warid Double Faida Offer. With less creativity and awkward music, this add has not excited the audience. The setting, script, acting and message could be pictured in a better way by adding more creativity to the ad. Poor script has made the acting of both heroes unrealistic. It's about time that Warid starts pushing its marketing team for creating better ad campaigns.

Verdict: Phone World ko ad Bilkul acha nahi laga!

Rivo Sapphire S625

4

Rivo has come up with an advertisement that showcases Sapphire S625, in particular highlighting the devices' high powered battery. The ad features school going children in a well-choreographed setting attempting to capture the audience attention by creating a high energy environment which the ad later link with Sapphire S625's long lasting and powerful battery. It does not bore the audience by naming common features, instead it focuses on a single aspect of the phone which is the high powered and long lasting battery life. Rivo Sapphire S625 TVC is a smart and effective advertisement and successfully reaches out to its target audience.

Verdict: Well-conveyed Message

Mobilink Wifi

4.4

Mobilink does not produce as many TVCs as ufone but it always maintains its quality while releasing TVCs. The operator has promoted well its Mobilink Wifi campaign through script, setting, music and most importantly the cutest acting by kids. Everything appeared well in Mobilink Wifi TVC and the message has been successfully conveyed.

Verdict: Good attempt by Mobilink

Rivo Rhythm RX80 and RX65

4.5

Rivo has recently released its RX80 and RX65 smartphones TVC. Although its not a local advertisement, but it works in favor of Rivo and immediately catches the attention of audience. The Ad is very well directed and presents a real life scenario of the power of a smartphone in this age where a person tries to find a girl and he accidentally met through his Rivo smartphone. All in all, the story is well integrated with the product and successfully retains the audiences' attention throughout the ad. New faces, beautiful city Paris, appealing script/message and enchanting music has made the TVC different.

Verdict: Simple but Effective TVC

Telenor Easy Card

4.2

Telenor Easy Card TVC has come up with nice idea to introduce „Easy Card" for its customers. The campaign is well connected to the overall concept of the script. The ad is successful in getting the intended message across to the audience. The ad is not complicated and does not bore the audience with unnecessary information. Humor, acting, music and settings of this ad went in harmony with each other.

Verdict: Well done Telenor!

M. Mohsin Rehman

TOP MUST HAVE APPLICATIONS & GAMES FOR YOUR SMARTPHONE

Manager Explorer
Rating : 4.9   Price: Free

You can see the hidden files and folders, backup installed apps, running process, Customized your own file manager completely. Search & Share the files like APK, MP3, MP4, JPG, PNG and all other file types. Moving data. Built-in controls for media. List view and Grid view in the files and apps explorer. Create and delete folders. If you are offline, you can still search for files that have been indexed. Root Explorer for rooted devices.

PAKISTANI SOFTWARE DEVELOPER APPLICATION

APPNEX

Stylo Pvt Ltd
Rating : 3.9   Price: Free

Stylo Pvt Ltd and is very first mobile commerce application of its kind. Now you can view Stylo's complete catalog and buy shoes in a few taps from your smart device. More over you can locate Stylo's stores near you and can share the app with your friends.

PAKISTANI SOFTWARE DEVELOPER APPLICATION

Stunt Bike Extreme Mad Drive
Rating : 4.9   Price: Free

Welcome to this wild game of Stunt Bike Extreme Mad Drive. Complete your challenge by riding this stunt bike and try to avoid the obstacles and jump over from one container to another. This is a so wild game so enter into the reign of wildness. We bet you can't go through from first obstacles without crashing five times. You will see massive jumps, difficult track, different and too difficult levels.

PAKISTANI SOFTWARE DEVELOPER APPLICATION

PUREPUSH ON THE GO

Sahulatbazar
Rating : 3.7   Price: Free

The Online Store. Gifts to Pakistan, India, UK, USA, Fashion Street, Clothing & Islamic Products. A Reliable Online Gift Store.

PAKISTANI SOFTWARE DEVELOPER APPLICATION

Sniper Shot 3D:Military Zombie
Rating : 3.8   Price: Free

Zombies have taken the military base under control. As a last hope for the military take your sniper rifle and go to battle. Military Assault Zombie is FPS game where you can see stunning 3D graphics with night textures& enjoy night time sound effects.

PAKISTANI SOFTWARE DEVELOPER APPLICATION

PUREPUSH ON THE GO

EdX - Online Courses
Rating : 4.2   Price: Free

Learn from the experts at Harvard University, MIT, UC Berkeley, Tsinghua University, Microsoft, Linux, The Smithsonian and more. Live stream course videos or download them to watch on the go. With edX, you have the flexibility to learn on your schedule. It is free education, when and where you want it.

Blood Pressure Simulator Prank
Rating : 3.6   Price: Free

New Unique, more accurate Prank Application - A must have for the concerned. Usage of this simulator application requires precision due to sensitivity of its category. It simulates your blood pressure in two steps with appx. ±100%.

PAKISTANI SOFTWARE DEVELOPER APPLICATION

PUREPUSH ON THE GO

Telenor Music
Rating : 3.9   Price: Free

Telenor Music se jo chaho, jab chaho Direct Chalao....
Stream your favorite Pakistani, Bollywood and English songs wherever and whenever you want from collection of 500,000+ tracks. Be it the legendary Qawwali and Ghazal, Pop and Rock from around the world or Bollywood item numbers that bring out your Desi side, you have it all here.

PAKISTANI SOFTWARE DEVELOPER APPLICATION

Zong Customer Care
Rating : 4.1   Price: Free

ZONG Customer Care App for Smartphones is an easy to use application through which you will always be connected to Zong and "Your life will be fully mobile". You can activate/de-activate products on your number, check your current balance, manage your account, , get information and know about Zong latest promotions and much more....

PAKISTANI SOFTWARE DEVELOPER APPLICATION

ARY ZINDAGI
Rating : 3.8   Price: Free

ARY Zindagi Presenting a diverse genre of content which includes, Pakistani as well as International productions. A wide variety of flavored programming is offered on one platform to quench the entertainment needs of our viewers.

PAKISTANI SOFTWARE DEVELOPER APPLICATION

Pedometer Step Counter
Rating : 3.7   Price: Free

Exercise is important for good health. With this app you can count your daily steps taken, whether you're walking running jogging or just wants to monitor your calories if you want to lose weight. With this app you will always have the number of steps calories burned and distance traveled in a single window.

APPNEX

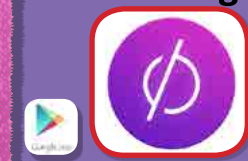## Domino's Pizza Pakistan
Rating : 4.3   Price: Free

Order your favorite pizza in less than a minute. Are you up for the challenge? Sign in or checkout as a guest. It's convenient, easy and fun !

PAKISTANI SOFTWARE DEVELOPER APPLICATION

Internet.org
Rating : 4.1   Price: Free

Browse a list of popular websites for free with a SIM card from a qualifying carrier. Search for jobs, get health information and keep in touch with friends and family without data charges.