

**3G/4G services and tech penetration in the market has led to mass awareness of e-commerce**

## Jonathan Doerr

CEO 



**Telenor 850 Mhz Spectrum**  
The Road Ahead

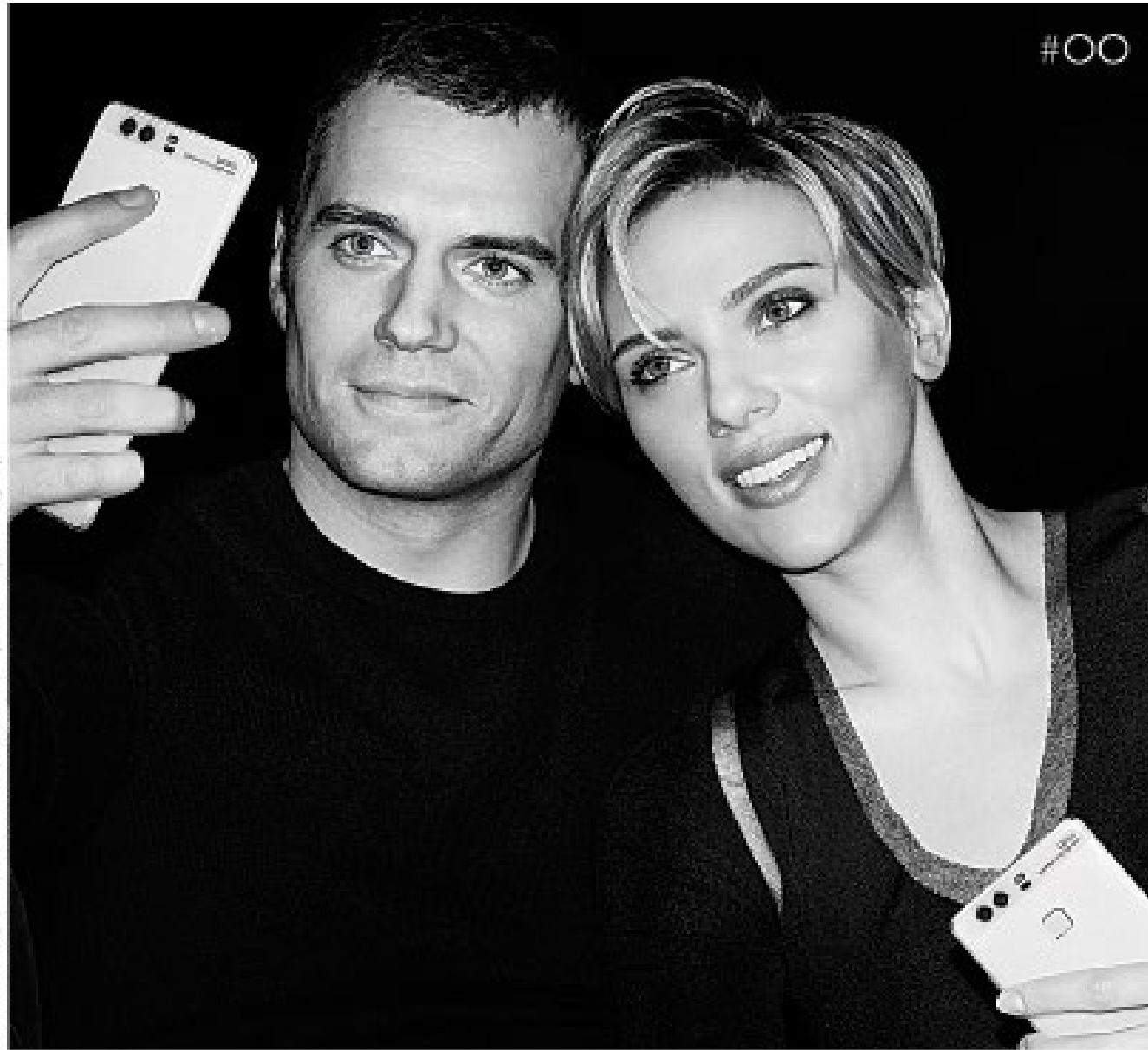
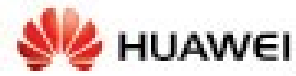


**Pakistani Telcos**  
Who is the King of the Marketing Ring?



Smartphone Review  
**QMobile NOIR A3**





#OO

Product colour, shape, interface and functions for reference only. The actual product may vary.

huawei.com/pk

REINVENT SMARTPHONE PHOTOGRAPHY  
MAKE IT POSSIBLE



HUAWEI P9

CO-ENGINEERED WITH



For Rs. 53,999/-

TOLL FREE  
0800-000116  
HUAWEI

Haier  
MOBILE

Simply Spectacular  
ESTEEM i90



Rs. 23,500/-

5" | 64GB | 13MP/8MP | 3GB/16GB | Battery | Android Lollipop



/HaierMobilePK

www.haiermobile.com.pk

UAN # 042-11-11-42437



Grow your  
**Sales**



36<sup>TH</sup> **GITEX**  
TECHNOLOGY  
WEEK

16 - 20  
OCT 2016  
DUBAI WORLD TRADE CENTRE

**49%**

of senior executives came  
to GITEX with open **RFPs**

**82%**

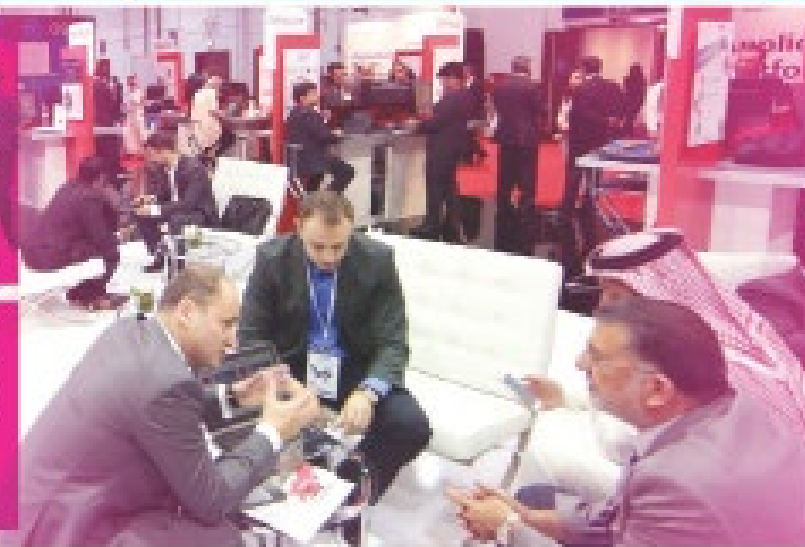
were **closed** at the show

"GITEX brought together some of the best technology minds in the world and it was a pleasure to discuss new advances and best practice with world-wide industry leaders"

**CELIA WADE-BROWN, MAYOR OF WELLINGTON**

"Gitex is extremely important for us. We generate leads for incremental business and it gives us an opportunity to interact and demonstrate."

**RABIH DABBOUSSI**  
FORMER MD & GM, UAE, CISCO

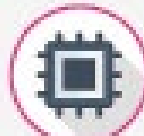


## MAKE GITEX PART OF YOUR GROWTH STRATEGY TO GENERATE LEADS AND WIN BUSINESS



### NETWORK WITH THE C-SUITE

3,000 C-Suite executives and senior government officials from over 15 countries came to Gitex in 2015 to network with technology companies



### TARGET NEW INDUSTRIES

Target your customer portfolios in banking, healthcare, education, public sector, retail and energy



### MEET NEW PROSPECTS

Identify and meet new senior level contacts, pre-event 54,000 meetings were arranged through our Connectives meeting program



### BE SEEN AS A THOUGHT LEADER

Hear from industry speakers, your peers and competitors on how the industry landscape is evolving

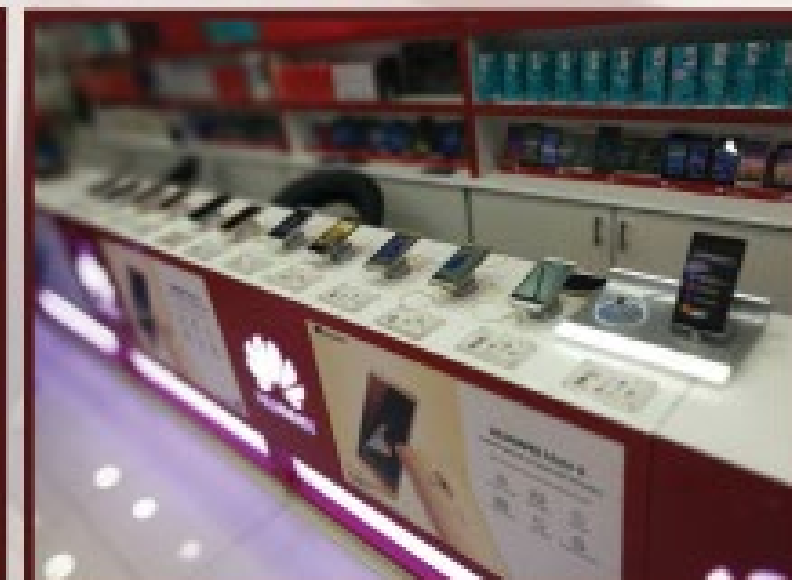
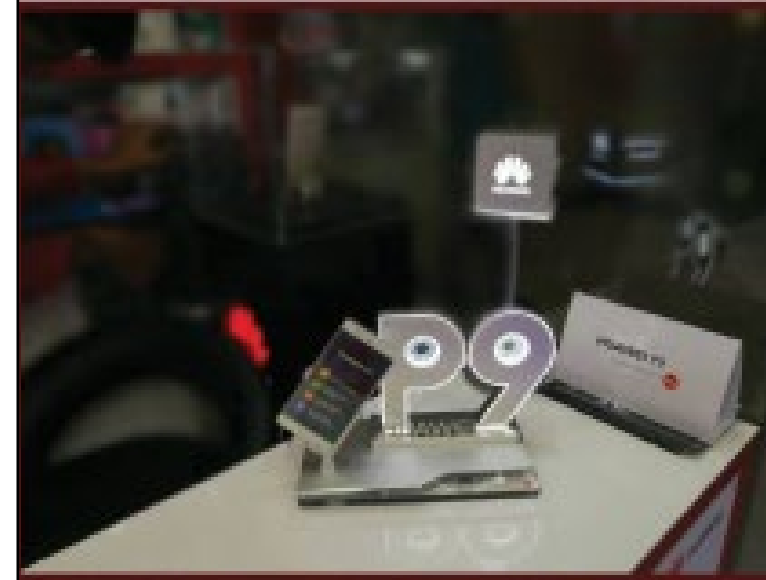
**EXHIBITION | CONFERENCES | STARTUP | NETWORKING**

Get in touch today at [gitexsales@dwtc.com](mailto:gitexsales@dwtc.com) or call +971 4308 6037/6901/6566  
to discuss your involvement in GITEX 2016



# A.S Electronics

Brand Outlet of **HUAWEI**



**A.S Electronics**  
**Shop G-66 Star City Mall, Saddar Karachi**

**Ptcl: 02132229128**  
**Mobile: 03132775947**

[www.as-electronics.pk](http://www.as-electronics.pk)

[www.facebook.com/as.electronics.566](https://www.facebook.com/as.electronics.566)

# WINNING TRUST

## CUSTOMER BY CUSTOMER



Certified Gold Partner of  
**Huawei Mobiles**



Official Partner

 [airlinkcommunication.net](http://airlinkcommunication.net)  
 [www.facebook.com/airlink.comm1](http://www.facebook.com/airlink.comm1)

Tel : +92 (42) 35844063-6  
Email : [support@airlinkcommunication.net](mailto:support@airlinkcommunication.net)  
Address : LG-2, Al-Qadeer Heights, 1-Babar Block,  
New Garden Town, Lahore, Pakistan  
UAN : 042 - 111 667 468



**Adnan Khan**  
Managing Editor

Dear Readers,

ICT industry is the one of the most progressing industry of the country right now. Every month some important event takes place in the IT and Telecom, this time it was the auction of 850 MHz. The results of the auction were quite predictable as Telenor came as the ultimate winner. Mobilink and Warid have recently completed their merger deal, Zong got enough spectrum at hand for 3G and 4G services while Ufone is going through management changes; Telenor is the only operator that has the need for more spectrum to improve its services. How Telenor is going to use this additional 10 MHz spectrum in 850 MHz is the key question that we have tried to answer in our feature article, "Telenor 850 MHz Spectrum: The Road Ahead".

Since telecom is the most dynamic industry with an impressive growth and impact, so not only the quality of service is important to stay ahead in the market but sound marketing strategies are of great importance as well. Our feature article, "Pakistani Telcos: Who is the King of the Marketing Ring?" is a critique on how telecom operator's marketing strategies have evolved over the time and who has been able to gain competitive edge in the market.

Our current issue of Phoneworld magazine also covers an exclusive interview with Jonathan Doerr, CEO of Daraz in which he has discussed various aspects of Pakistan's e-commerce industry and its future. In a short time Doerr has managed to apprehend the dynamics of Pakistani market quite well, so his insight of e-commerce and online retail market will definitely be valuable for industry players and our readers.

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 our readers, we hope you guys will appreciate our efforts and give us your feedbacks so that we can improve further.

Enjoy Reading...!!!

Thank you,  
*Adnan Khan*  
Managing Editor

Feedback  
[info@phoneworld.com.pk](mailto:info@phoneworld.com.pk)  
[www.phoneworld.com.pk](http://www.phoneworld.com.pk)

**Khalid Khan**  
Publisher & Editor in Chief

**Adnan Khan**  
Marketing Head & Managing Editor

**Rizwana Khan**  
Senior Editor

**Saima Ibrahim**  
Associate Editor

**Aimal Ali Khan**  
**Yasir Ajmal**  
**Ikram Ullah Khan**  
**Muhammad Awais**  
Technical Consultants

**Omer Khan**  
Assistant Marketing Manager Lahore

**Nasrullah Shah**  
Bureau Chief Quetta

**Aqeel Shahid**  
Bureau Chief Karachi

**Mufti Mohsin Rehman**  
Consultant

**Bushra Mushtaq Khan**  
Senior Creative Designer

**Fayaz Ahmad Khan**  
Webmaster

### Available @

**Islamabad**  
Saeed Book Bank, F7  
Mr Book, F6  
The Book Shop, F7

**Lahore**  
Feroz Sons, Y Block DHA  
Kitabistan, H Block DHA Lahore  
Nobel Books, H Block DHA  
Liberty Books

**Karachi**  
Book Mart, Karachi Airport  
Agha's Book Shop, Clifton  
Fareed's Book Area, Ocean Tower  
Mr. Old Books, Boat Basin  
Hyperstar Dolman Mall

**Peshawar**  
Welcom Book Shop, Saddar  
Discount Book Shop, Bilour Plaza Saddar



Printing:  
Ink Impressions Islamabad  
+92 313 545 5535

### Subscribe Now!!

and get **six issues** for just **Rs 600**

#### Payment :

- ☐ **1. Cheque**  
I enclosed a Cross Cheque of RS \_\_\_\_\_ payable to Phoneworld.
- ☐ **2. Bank Draft**  
I enclosed a Bank Draft of RS \_\_\_\_\_ drawn on the branch of any bank of Pakistan.

#### Contact Information of Recipient

**Name:** \_\_\_\_\_  
**Address:** \_\_\_\_\_  
**Phone:** \_\_\_\_\_

\*cheque and bank draft should be in the name of "Phone world Magazine"  
\*courier charges are included



# Contents

## Regulatory/National

- 10 Telenor 850 Mhz Spectrum: The Road Ahead
- 15 Smart Moves for Smarter Nation
- 44 How Brands Can Create Lasting Relationships on Social Media

## Feature

- 16 Pakistani Telcos: Who is the King of the Marketing Ring?

## Infocus

- 32 Jonathan Doerr, the CEO of Daraz.pk

## Phone Review

- 24 QMobile Noir A3
- 36 Zuk Z1
- 42 Samsung Galaxy S7 Edge
- 48 Hwawei P9

## Infographic

- 54 The Smart Home of the Not-So-Distant Future

## Wishlist

- 50 Phone Express - New Arrivals

## Telecom Campaign

- 46 A Critical Review of the Latest Ad Campaigns

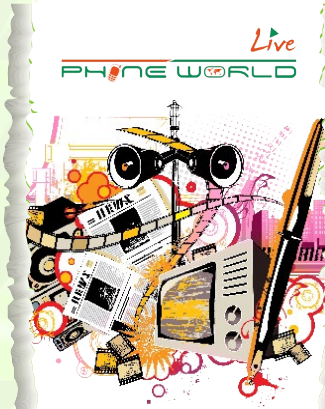
## App World

- 52 Applications and Games for Your Smartphones



China's Smartphone King  
**Lei Jun**

21



3, 2, 1... And  
we are LIVE  
nOw.....!!!!!!

22



**Mobile Money  
Revolution**  
The Next big thing in  
Pakistan

26



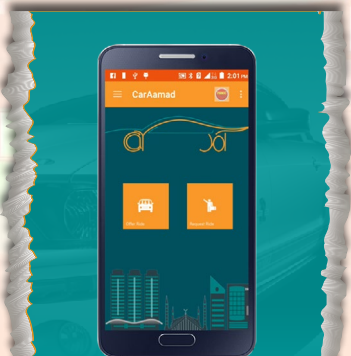
How Technology  
Matters to Men &  
Women

30



Cyber Crime bill;  
Bane or a Boon?

38



**CarAamad**  
The First Carpooling  
Application of Pakistan

40

PHONE WORLD

Issue 20

### For Further Details Contact

Phone: +92 51 260 9339  
Email: info@phoneworld.com.pk  
H# 2, St . 23 , Sector F-7/2, Islamabad,  
Pakistan

PHONE WORLD

Advertisement / Article Contact

### Marketing Department

Adnan Khan 0345-5957155

Omer Khan 0332-3666444

Office : +92 51 260 9339

sales@phoneworld.com.pk



www.phoneworld.com.pk

f /phoneworldmag

t /phoneworldpk



By Aimal Ali Khan



# Telenor 850 MHz Spectrum The Road Ahead

The 850 MHz spectrum auction was until recently quite a hot topic and finally the drop scene took place as Telenor came out as the only player that applied for the Spectrum. In accordance with PTA's Information Memorandum (IM) and as per the scheme of things, it automatically won the 10 MHz in 850 Mhz spectrum.

In one of our earlier analysis available on our website titled "Telenor Verses Surprise" much before the application submission deadline for the spectrum, we had anticipated that no other operator may come forward except Telenor and if there would

be one, it will be a big surprise. Why only Telenor applied for 850MHz spectrum and no one else came? The answer to this fundamental question is the increasing predictability of market situation and relative position of each operator. The result should come very natural to all those who understand a little about the Pakistan telecom industry.

**850 MHz auction result should come very natural to all those who understand a little about the Pakistan telecom industry**

Although, some of our colleagues in the industry and also in media may have taken one player participation negatively in the auction but the industry has finally realized the important element of policy and regulatory predictability which is great achievement in itself. Knowing what is likely to happen with least number of surprises especially in the policy and regulatory environment is an important factor for every business especially if one has to make substantial investment. This reduces the risk of losing investment and provides path for growth and stability. The Government probably needs a pat on the back for not putting the

industry in a flux as has been done by our neighbours in India.

**Mobile Industry in Pakistan has finally realized the important element of policy and regulatory predictability which is great achievement in itself**

There are many logical and obvious reasons why Mobilink, Ufone or Zong did not apply as participants for the spectrum being auctioned. Let's first evaluate each case before we move to the bigger question of what is the 850 Mhz Spectrum eco-system all about and the options that are available to Telenor going forward with what they have bought: Mobilink as after its successful merger with Warid Telecom only a few days back, is undergoing through a major transformational phase. One of the primary reason for merger with Warid is its spectrum which will enable Mobilink to use the much needed 4G spectrum play.

**Availability of additional spectrum from the merger has enabled Mobilink to save spectrum Fee that it can otherwise invest in network and other development activities**

The availability of additional Spectrum from the merger would enable Mobilink to save upon the auction fee of USD 395 Million (base price set for 850 MHz) that it can otherwise invest in network and other development activities. The second reason of course is that together Mobilink-Warid will have now have more mobile subscribers which will maintain Mobilink's market leadership position. Their appetite for more spectrum will

certainly come around in a couple of years.

Zong also didn't apply for the auction as it has already enough spectrum assets that can help the operator for the immediate future (at least a couple of years) to increase its subscriber base and ultimately its network. Zong is more likely to go for some acquisition which could possibly be a struggling operator to primarily increasing its market share.

come forward for the auction and only Telenor Pakistan applied for 850 MHz spectrum as it is the only mobile service provider that is in need of more spectrum in order to improve its network from all aspects.

As far as the subscriber base of Mobile Broadband (MBB) is concerned which is the reason why mobile operators need spectrum in the first place, Telenor has around 8 million subscribers whereas Mobilink has 8.7 million,

**Mobile Spectrum in Pakistan**

OPERATORS (Total Subs)	850 MHz	900 MHz	1800 MHz	2100 MHz	Sub-Total
<b>ZONG (24.9 Mn)</b>		7.6	16	10	33.6
<b>Mobilink / Warid (38.5Mn/11 Mn)</b>		7.6+4.8	6+8.8	10	23.6+13.6=37.2
<b>Telenor (37.4 Mn)</b>	10	4.8	8.8	5	28.6
<b>Ufone (20.7 Mn)</b>		7.6	6	5	18.6
<b>Total</b>	10	32.4	45.6	30	118

Unfortunately, Ufone, which has also shown interest in both 3G and 4G spectrum in previous auction but was not qualified on technical grounds did not come forward to participate in this auction. It could have been the most likely surprise party to have come forward though. Ufone did not apply for the spectrum most probably because the company has embarked upon re-organization and is trying to merge operations with the parent PTCL group. The operator also recently re-farmed its spectrum using 900 MHz band for easing up its QoS issues at least for the short time. Ufone's declining financial situation could have been the deciding factor to stay out of the recent auction till they put their house in order.

The above are a few obvious reasons why no other player has

Zong has around 6 million and Ufone being the fourth on this list has 5 million MBB subscribers.

**Zong has enough spectrum assets for the time and has expressed interest for some acquisition to primarily increase its market share**

In the last 3G/4G auction Telenor ended up with only 5 Mhz for its MBB strategy as compared to Zong's 20 MHz and Mobilink 10 MHz that greatly endangered its chances to have or maintain any position to commensurate with market growth. Therefore they desperately needed more spectrum and that too quickly.

This makes Telenor as the most desiring candidate since it has both the requirement and



appetite for getting more chunk of spectrum in order to increase its data subscribers while improving its overall ranking as well. So in this situation, the 850 MHz spectrum holds great importance for Telenor to get a stronger position in the market.

The Auction of 3G/4G spectrum in 2014 led the mobile industry to move in the right direction. It has proved its potential by enabling the masses with high-end gadgets especially smartphones and making available the technologies to use specific features.

GSMA intelligence report acknowledged Pakistan mobile broadband market growth to overtake most regional markets that have shown good results.

Country	3G/4G Auction	2014		2015	
		MBB Penetration	Growth Rate	MBB Penetration	Growth Rate
Pakistan	2014	7%	592%	19%	185%
Bangladesh	2013	6%	232%	13%	103%
India	2011	11%	46%	35.50%	76%
Indonesia	2006	34%	46.70%	37%	26.50%

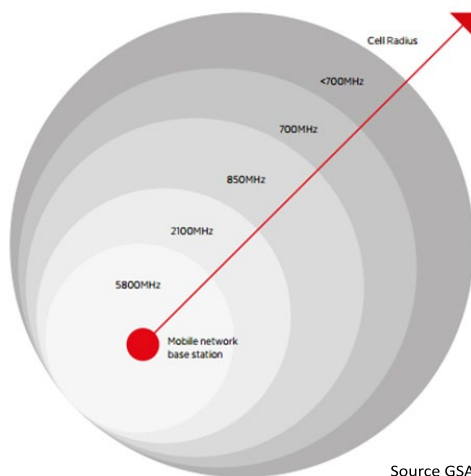
This, together with the individual market share and the spectrum they hold, presents challenges and opportunities for all players especially for Telenor which seems to have ambitious plans and therefore it is important to understand both the 850 Mhz Eco System and the challenges for Telenor that are discussed in the following sections.

**Ufone is tied in merging operations with the parent PTCL group and also recently re-farmed its spectrum using 900 MHz band for easing up its QoS issues**

## 850 MHz ECO System

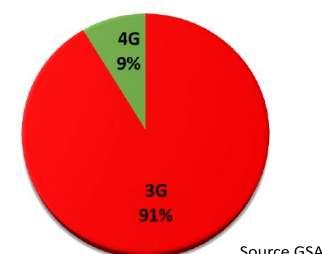
In general, lower-frequency signals reach further and are

Effects of frequency on Coverage



better at penetrating rain or buildings. These lower radio frequencies, as a rule, can serve a larger area with one base station.

The capacity of a wireless connection for data or voice calls is dependent on the amount of spectrum it uses. Importantly, deploying a network that uses higher-frequency capacity bands requires more base stations to cover the same area, and considerably more investment. It is for this reason that 850 MHz spectrum presents technically a very lucrative proposition than 1800 MHz or 2100 MHz. However, there are other factors as well in the eco system that one



Source GSA

needs to take into consideration.

There are around 40 countries where 850 MHz spectrum deployments have been made for 3G and 4G. Most deployments are in the Americas.

These markets predominantly used to be CDMA which got converted to either to 3G or 4G as the eco system evolved. While, the 850MHz spectrum have been used for both 3G and 4G and presently the ratio is more in favour of 3G but the future deployments are increasingly made in 4G

as the technology is getting more traction.

Industry reports especially the one from Global Suppliers Association (GSA) provides authentic data recently observed that while the LTE has been deployed commercially in 480 networks globally the number of LTE networks in 850 MHz is only 11 and these has been predominantly deployed in band b5 (although b18 and b19 also exist) and we expect that it shall be the case for Pakistan LTE 850 deployment as well if Telenor opts to go for LTE deployment in this spectrum.

**Telenor meagre 5 MHz compared to others large spectrum allocation greatly endangered its MBB market position growth potential- needing more spectrum and that too quickly**

The most important point, as far as infrastructure availability is concerned since there are only limited commercial networks, is that if there have been deployments,

the infrastructure equipment is available that should provide sufficient comfort level for operators to make use of the latest and the greatest no matter how are smaller these deployments are. However, it could be incrementally higher as compared to that available for main LTE bands of 1800 MHz, 2100 Mhz or 2600 Mhz. The issue of a smaller deployment is more critical on the end user or device side rather than infrastructure in this case.

Presently, the devices are manufactured mostly to cater all or as much spectrum requirement as possible. By browsing through GSM Arena, one can see a good amount of mobile phones that can support LTE in 1800 also have support for band 850 in both 3G and LTE. The GSA puts the number of LTE FDD devices that support band 5 around 1,163. While, the Average Selling Prices (ASP) for multi-band devices maybe a little higher but it still does present a viable business case as the prices for such smartphones have dropped drastically over the last few years and more importantly this just has made an incremental difference.

LTE FDD	Source GSA
1800 MHz band 3	2,847 devices
2600 MHz band 7	2,638 devices
2100 MHz band 1	2,324 devices
800 MHz band 20	1,573 devices
800/1800/2600 tri-band	1,477 devices
AWS band 4	1,231 devices
<b>850 MHz band 5</b>	<b>1,163 devices</b>
900 MHz band 8	1,136 devices
700 MHz band 17	1,018 devices
1900 MHz band 2	1,031 devices
700 MHz band 7	575 devices
APT700 band 28	329 devices
1900 MHz band 25	257 devices
700 MHz band 12	248 devices

Keeping in view the Pakistani market, local OEMs like Q-Mobile

could be a good contenders besides Telenor Pakistan itself for bringing low cost devices in the 850 MHz band but in any case almost all international brands like i-Phone, Samsung, HTC, Huawei, OPPO etc. already have a good portion of devices supporting LTE 850. The case of 3G could be quite better both in terms of infrastructure and devices but it would largely depend on Telenor individual strategy on how they see the Pakistani market evolve and how they can best utilise options available to them.

**850 MHz spectrum provides technically more benefits as compared with higher bands to reach further and better at penetrating rain or buildings**

Technically speaking, the trends are moving towards better downloads and quicker speeds

3G may be a good solution at present but the flexibility for LTE cannot be ignored and investing in LTE 850 MHz could pay dividend in the long run.

## 850 MHz: Options and Way Forward for Telenor

The amount of spectrum offered in the auction is 10MHz each for Uplink and Downlink in 850 MHz. In the last auction, it was 7.68 Mhz but this time PTA has offered complete 10 Mhz more in line with Industry standards that deserves some

appreciation. Previously, it was reserved exclusively for new players and since none came it remained unsold and all the bidders acquired spectrum offered in 1800 MHz and 2100 MHz.

In a way this benefited the existing players since a few years back the 850MHz had more developmental and infrastructural challenges.

Since, Telenor has managed to secure 10 Mhz of the 850 MHz spectrum, it has a few options to deploy its services in 3G, 4G or combination of both. Let's look at some of the options that are available.

## Option 1: 3G Only

As explained earlier, Telenor currently has only 5 MHz for 3G but being one of the largest MBB operator in the market that is growing aggressively, it has probably reached its Data offering limit and the addition of 10 MHz will certainly ease up its network from choking. If Telenor uses 850 MHz spectrum for 3G, we can expect better quality of service to its existing customers which will help in increasing its market share as well.

**Availability of commercial networks in 850 Mhz provides sufficient comfort level for local operators to make use of the latest and the greatest technology no matter how small are these deployments**

The Eco-System is more mature, deployment complexity would be minimal and the investment in infrastructure could be the least among all options.



However, ignoring to deploy 4G LTE could deprive Telenor from going towards with more advance technology that promises much more in term of Quality of Service to its subscribers and is a more forward looking approach.

### 850 MHz Spectrum Allocation In Pakistan

OPERATOR	UL 850 MHz	DL 850 MHz
Telenor (New Allocation)	824-834	869-879

**LTE deployment in 850 Mhz by Telenor will raise the bar for all operators especially in the suburban areas where it can use this to its advantage as no other operator will be able to compete**

Importantly it may deprive the company from the much needed marketing shout since Zong is also rebranding its 4G brand and its closest competition Mobilink is also weighing its options from the newly acquired asset of Warid to position itself for 4G LTE play.

### Option 2: 4G LTE Only

In terms of infrastructure, with the use of entire 10 MHz of 850MHz for LTE deployment will raise the bar for all operators especially in the suburban areas where Telenor can use it to its advantage as no other operator will be able to compete. This will certainly provide much better MBB service than 3G technology that may cost higher initially but will have profound cost savings in the long run as a future proof deployment. Most importantly, it will mitigate the

impact of 4G LTE marketing shout that Zong and probably Mobilink/Warid may use in the near future to their advantage. The deployment complexity in this case will be minimum but Telenor will have to work really hard on ensuring that it makes

available 4G device portfolio at an affordable price by working with the open market forces.

### Option 3: Spectrum Split for both 3G & 4G

Another option that Telenor could go for is splitting the 10 Mhz of 850 Mhz in two 5 MHz chunks and using one for 3G while other for 4G.

**local OEMs like Q-Mobile could be a good besides Telenor for bringing low cost devices in the 850 MHz band but almost all international brands already have a good portion of devices supporting LTE 850**

The advantage is that while Telenor will be able to ease up its rising congestion on its 3G network, it will also have spectrum for offering 4G LTE services. This also will provide Telenor to mitigate the marketing impact of the shout created or will be the created by competition from Zong & Mobilink/Warid.

This may have some deployment complexity as carrier aggregation may not be as simple as in the first two options and the data throughputs are certainly going to be lower. Importantly, the economies of scale from cost standpoint for devices and equipment may also be negatively impacted.

**Ignoring to deploy 4G LTE could deprive Telenor of more advance technology that promises much more in term of Quality of Service**

There could be other possible scenarios including re-farming of the entire Spectrum but the important development is that almost all operators in Pakistan except one now have various viable options available for development. For Telenor getting this spectrum also means a lot in terms of morale booster as they ended up at the bottom getting the least spectrum in the 2014 auction and this time they found no one to compete with them. Let's keep our fingers crossed for turn of events in the future as now Telenor has acquired new spectrum, Mobilink is building up new strategy after the merger with Waird and MoITT/PTA are working on a plan of action for left over 1800 Mhz spectrum chunk.



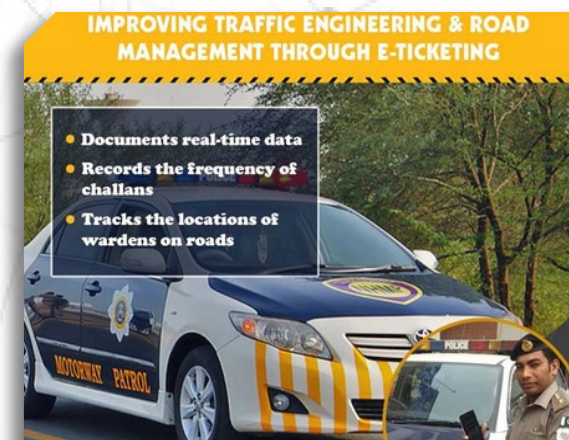
By Saima Ibrahim

# S

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. In this section we will discuss all initiatives taken by government to make Pakistan a Smart Society.

### • e-Ticketing System by PITB

The e-ticketing system is devised by PITB for National Highway and Motorway Police (NHMP). It records the frequency of challans and helps analyze traffic engineering and road management, evaluate key performance indicators of wardens and track their locations on roads.



The data received at the data center and demonstrated on the dashboards helps improve monitoring, which consequently upgrades work performance. e-Ticketing System has successfully achieved 99% commuter satisfaction response.

### • e-police System in Sindh

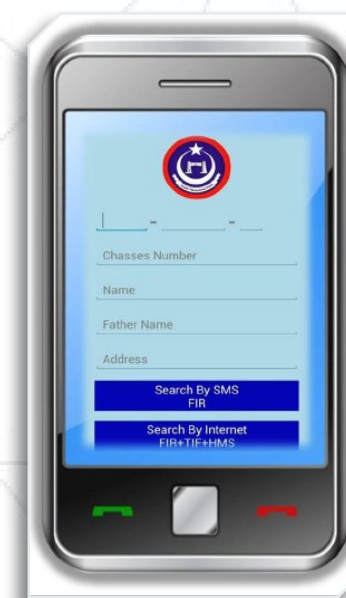
Recently, the Government of Sindh has also embarked on the mission to computerize and modernize the Police Department. The provincial govt. has successfully provided process automation, connectivity & information inflow to the Police Stations, Central Police Office and Prisons all over the province by the utilization of latest technology.

In this regard, other initiatives taken by the IT Department includes the Establishment of e-Police Directorate, Development of Sindh Police ERP, Traffic Police ERP, e-Driving License & Violation Ticketing System and Traffic Management System.



### • Criminal Record Verification (CRV)

The Khyber Pakhtunkhwa Police has developed and launched a centralized database of First Information Report (FIR) record of all the Police stations in the province. The FIR can be searched through Computerized National Identity Card (CNIC) number and string of name, father name and address of the person using mobile phones.



The new initiative has greatly enhanced real time verification capabilities of the Police department which will lead to improved investigations and interrogations. Lastly, and most importantly, the system enables the Police personnel deployed on Police pickets to verify the background of every individual through

a click on their mobile phones. This increases their effectiveness and reduces the chances they have to exploit citizenry.





# Pakistani Telcos

## Who is the King of the Marketing Ring?

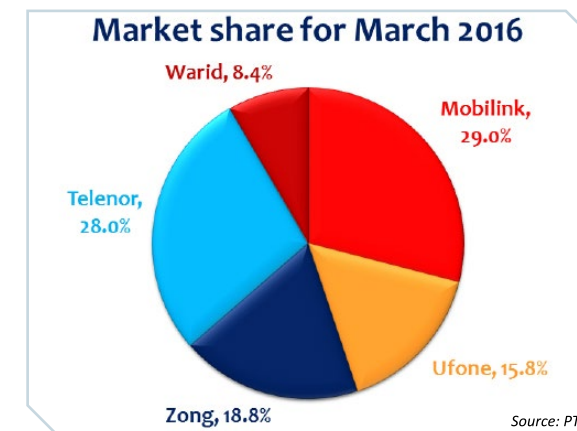
**M**arketing is a wide subject which covers or touches almost all the aspects of a business in one way or another. Marketing is defined by the American Marketing Association (AMA) as “the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large”. To successfully run a business, it is very important to understand the complete marketing mix in order to make strategies to target a specific market. Since telecom is the most dynamic industry with an impressive growth and impact, the importance of sound marketing strategies have gained even more importance. The mobile operators in Pakistan i.e. Mobilink, Telenor, Warid, Ufone and Zong apply their own business vision in their marketing strategies to attain, nurture and retain their customer base. So let's look at what and how our mobile operators are doing in terms of marketing.

If we consider marketing as a political campaign and each telecom operator as a political party, then customers can be regarded as the voters. Each operator tries out a different campaign to win over maximum number of voters. Just like politicians who develop their party manifestos keeping in mind the needs of public, telcos analyze the needs of consumers and develop innovative products accordingly. Although, the important element for both politicians and telco businesses is how they pitch their manifesto/product in the market. Since their basic aim is to win the race for more votes/customers in the market.

**Telecom is the most dynamic industry with an impressive growth and impact, the importance of sound marketing strategies have gained even more importance**

### Current Market Position of Mobile Operators






Mobilink leads the market with the highest number of subscriber base with 29% market share, while Telenor is at second position slightly behind Mobilink with market share of 28%.



Zong that offers both 3G as well as 4G services has about 18.8% of the overall market share. Ufone with 15.8% and Warid with just 8.4% market share are at the bottom.

### Importance of Marketing & Promotion

In order to gain a competitive edge in the market, operators ruminate complete marketing and promotion procedure that starts from idea generation to distribution and availability of the product/service. Anyone can have a creative idea, but the success of that idea is heavily based on how you present that idea to others. So the most important factor is

Target Market	 Mobilink	 telenor	 zong	 ufone	 warid
<b>Youth</b>	Jazz Pre-paid (Student Bundle)	Djuice	Zong circle	Uth Packages	Glow
<b>Low Income</b>	Jazz Pre-paid (Jazz Budget, Jazz One, Champions Package, Jazz Easy)	Talkshawk	Pre-Paid (Flutter, Economy Package, Zong 20)	Pre-Paid (Ufone Super Card)	Pre-Paid
<b>Corporate</b>	Post Paid	Post Paid (corporate call & SMS)	Post-paid	Post Paid	Post Paid
<b>Business</b>	Post Paid (Mobilink One)	Post Paid (karobar packages)	BizXcess	-	Post Paid (Close User Group)
<b>M-Commerce</b>	MobiCash	Easypaisa	TimePey	Upaisa, UMall	MobilePaisa

surely the promotion aspect of marketing since it is the best way to put across the benefits of your idea or service to the customers. Therefore well-designed promotional strategies ensure long-term success and business profitability.

Recognizing the right target market is not only

important in product and idea development but it is also important in selecting right promotional techniques. For example a product developed for youth segment will be promoted differently from a corporate product. This is the reason why promotional activities have taken up a vital importance in business activities.

### Marketing and Promotion activities of Pakistani Telcos

In order to penetrate in to a specific market it is very important to first gain an insight about the culture, taste, demographics and customers' needs of that market, not only to design a product but also to develop its promotional mix strategies. Since telecom operators offer services for all market segments, they use different marketing and promotion strategies for each of their service.

Being the part of the most competitive industry each operator tries to bring some unique and out of the box service for its customers. The service portfolio of each operator is more or less the same so the thing that can and does make a difference is the marketing and promotional strategies each operator uses to build up their image and customer base.

In Television advertisement telecom industry is among the leading brands. According to the MEDIA BANK PAKISTAN report of 2015, telecom industry took hold of 20% of shares of total minutes of advertising and ranked 2nd in the top category list with Telenor, Mobilink and Ufone being the most active telecom players.

Social media and internet has become the most important medium to make a better position in the market and make your brand known in the market. Telecom operators of Pakistan are among the top brands on the internet. Each operator not only has an exclusive website but they are also quite active on all social media platforms. According to



the social marketing report of 2015 by Zeesocial, telecom tops first five industries list on Facebook. Mobilink ranks on no. 2 position in top five Facebook brands, whereas, the social devoted category is also dominated exclusively by the telecom sector. Not only on Facebook but Twitter also is dominated by the telecom sector.



If we look at the marketing and promotional strategies of all operators we see wide variation although the core business and services are same, which makes the ultimate difference. In the following article I have tried to critically analyze each operator in terms of their marketing and promotion strategies.

**The service portfolio of each operator is more or less the same so the thing that can and does make a difference is the marketing and promotional strategies each operator uses to build up their image and customer base**

### Mobilink

Mobilink is the oldest and largest telecom player in the market with 38.1 million subscribers. It started its operators in 1994 after a joint venture between Saif Group and Motorola Inc. later on, Orascom acquired Mobilink and then after few years, sold it to VimpelCom. Under the Orascom's management, Mobilink had two main brands i.e. Jazz and Indigo. Jazz was focused on the youth and low income focused brand whereas Indigo targeted the business segment.

Since Mobilink is the oldest operator in the country, its sub-brands were quite well positioned in the market with great goodwill value. But when VimpelCom took over Mobilink few years back, it not only re-branded Mobilink but also merged its service portfolio under single brand name; Mobilink. Although back then most of the people thought of this re-branding move as disappointing since it didn't

bring any real value for the customers and considered it nothing more than a new logo. Also according to experts, it was an inapt move because Mobilink Jazz and Mobilink Indigo were such strong brand names that customers were proud to be associated with them. Such strong positioning of Mobilink brands was the major reason for strong customer loyalty. Merging these brands under one name was considered stripping identity by many Mobilinkers, specially the Jazz users.

The management has finally understood the value of goodwill, which is considered the most important intangible asset of a business. Just recently Mobilink has reintroduced its Jazz brand. It has also rebranded Mobicash with Jazz cash and launched a device portfolio with the same name, Jazz X. So much hype was created when Jazz X was launched, although it did face negative criticism due to Nargis Fakhri and Mobilink brand ambassador's bold newspaper advertisements. But in the marketing world, no publicity is bad publicity. Although they are overdoing it, still is a good move to re-introduce Jazz brand name because no matter how many years pass by, people will always remember Jazz.



If we look at the overall marketing and promotional strategies of Mobilink, the operators passes with flying colors. It has picked up some very famous names for its brand ambassador role, Shan, Ali Zafar and Nargis Fakhri to name a few. Mobilink has also won the PAS Awards 2016, organized by the Pakistan Advertisers Society, and one of the most recognized and prestigious award programme of the marketing and advertising industry. The award was given to Mobilink in "Telecommunication Service Provider" category for its campaign "Call Drop".

**It is a good move to re-introduce Jazz brand name because no matter how many years pass by, people will always remember Jazz**

### Telenor Pakistan

Telenor Pakistan is the second largest player in the market with 36.7 million mobile subscribers whereas, the biggest 3G player in the market with 7.6 million subscribers. Telenor Pakistan has made a great name in the market in a very small time. It offers a very rich service portfolio with sub brands like Telenor TalkShawk and djuice. In fact Telenor TalkShawk is the cash cow in Telenor's portfolio since more than 80% of revenue is generated by Telenor TalkShawk brand.

**In terms of strategy building, Telenor is perhaps the strongest operator**

In terms of strategy building, Telenor is perhaps the strongest operator. When Telenor went for just 5 MHz in April, 2013 auction of 3G and 4G, everyone thought that Telenor has become defensive in its strategy and has failed to see the future of mobile technology in Pakistan. But look at the market scenario now, Telenor has managed to grab the biggest chunk of 3G subscriber base. Like everything else, Telenor also makes very calculated moves in its marketing and promotion. Its services portfolio is much segmented, each of its brand targets a specific market and all of marketing and promotional strategies are designed accordingly.



When Telenor launched its TalkShawk "Sachi Yaari" campaign along with "Razia Ghundon Mein Phans Gai" series, it was heavily criticized for being shoddy and cheap. But Telenor took this criticism positively and now its TVCs have significantly improved despite same theme. Telenor 3G campaigns are also very impressive. The operator tried to create awareness regarding the uses of 3G. This perhaps is one of the reasons why Telenor is so successful in 3G market.

### Zong

Zong was once considered the fastest growing mobile operator in Pakistan. But since the last auction, we see a downward trend in operator's' performance. Despite walking out with 20 MHz in 2013 spectrum auction with the strongest position, Zong has somehow been unsuccessful to capitalize on this advantage. One of the major reasons of this mischance is the weak and ambiguous marketing.

Although Zong has huge spectrum for 2G, 3G and 4G at hand and it also offers very simple and variety of internet packages, it still didn't manage to capture the attention of mobile phone users. Zong picked up the strategy to differentiate itself from its other 3G competitors and launched "Super 3G" campaign.

The overall campaign was quite good, huge and innovative. LED sign posts were put up in major cities of the country but



results were not as impressive as expected. Also the campaign was unsuccessful in creating the awareness among consumers regarding the 3G technology and specifically Zong's better 3G service quality due to its bigger spectrum chunk. Same is the case with its 4G promotions. In a country where technology literacy rate is very low, the need of the time was to educate the consumers what 3G and 4G technologies actually are. This is one aspect on which all operators didn't perform up to the mark, but Zong which had the strongest competitive edge at the start especially failed.

**Although Zong has huge spectrum for 2G, 3G and 4G at hand and it also offers very simple and variety of internet packages, it still didn't manage to capture the attention of mobile phone users**

The overall Zong promotional campaigns are also nothing out of ordinary. The TV campaigns have almost all the basic ingredients but lack the wow factor, which is most important in today's competitive market. But now it seems Zong is also trying to pick up its game as just recently Zong has also rebranded its 4G services with a new logo. What Zong needs to do right now is to use this rebranding move to create awareness about 4G especially quality of their own service. If Zong wants to take over market, it should let people know the distinct factor of Zong's 4G.

### Ufone

Ufone is all over the place not only in marketing and product development department but also in promotional aspect. The performance of the



operator has been quite unimpressive for the past few years now, though initially it was the second largest telecom player in the market. The biggest problem with Ufone is that it doesn't have any targeted brand for any segment of the market. Mobilink has "Jazz", Telenor has "djuice" and "TalkShawk", "Zong" has "Circle" and "Flutter", even Warid has "Glow". But despite being in the market for over 10 years now Ufone still didn't launched any such brand. Although Ufone does offer various packages for its pre-paid and post-paid users but there is no clear target market for Ufone, which is quite surprising.

### Ufone does offer various packages for its pre-paid and post-paid users but there is no clear target market for Ufone, which is quite surprising

If we talk about the marketing campaigns of Ufone in general, we can consider them quite popular. Ufone adverts are the most talked about commercials and are equally liked by Ufone and non-Ufone users. But in terms of profitability, Ufone did not managed to gain any benefit. People watch and like Ufone TVCs because of their entertaining and humorous aspect which diverts the attention of viewers from service offering to storyline of the commercial. Ufone did manage to get two PAS awards for its marketing campaign but has been ineffective in attracting potential customers.



What Ufone needs right now is a strong service portfolio and effective media campaign to make it known. Although current Ufone marketing campaigns have become a signature style of Ufone but trying something unique and out of the box every once in a while can definitely be a game changer for Ufone.

#### Warid

Warid has never been an aggressive player in the

market. Although it offers all the services that its competitors offer and it has better network in terms of service quality but still it is far behind in the market. One of the reasons why Warid's marketing hasn't been as aggressive as others' is because a major chunk of Warid's subscriber base is its loyal post-paid customers who mainly belong to the business class. This segment of the market is more conscious about the quality of service rather than the cost. So attractive and eye-catching marketing campaigns are not important to attract these type of customers. Warid did try to expand its market when it introduced its Glow brand which is also quite successful. But for even Glow brand Warid didn't try frequent marketing campaigns.



Now that Mobilink and Warid merger is finalized, we can expect major turn of events in marketing and promotion strategies for Warid.

Telecom industry has always been ultra-competitive, be it tariff war, data deals, coverage, VAS or latest handset exclusives, the competition has always been fierce. In order to make these services known to consumers and get an edge over other players telco players, each MNO has tried to go an extra mile on marketing and promotional front as well. Today, digital transformation has further intensified the challenges as consumers are far more connected and aware about services and quality offered by all telecom operators. Some of the operators have been quite successful in coping up with challenges while others really need to step up their game. Because in today's fast paced and connected world, out of sight literally means out of mind.....!!!!!!

**Warid has never been an aggressive player in the market. Although it offers all the services that its competitors offer and it has better network in terms of service quality but still it is far behind in the market**



By Rizwana Khan

**L**ei Jun cofounded and chairs Xiaomi, a privately-held firm that is one of the largest Chinese smartphone makers. To grow, privately-held Xiaomi has expanded, diversifying into Brazil, India United States, Europe and now in Pakistan.

Jun was part of the founding team of Kingsoft in 1992. He later functioned as CEO of Kingsoft in 1998. He founded Joyo.com in 1999. After Kingsoft's listing on the Hong Kong stock exchange, Jun relinquished his post as CEO and remained as Vice Chairman of the company. In the following years, Jun invested in many startup companies like Vancle, YY and UC. In April 2010 Jun founded Xiaomi and demonstrated the power of its brand when it sold 2.1 million smartphones online within just 12 hours, setting a world record for the most mobile phones sold on one online platform in a single day, and by the end of 2014 Xiaomi had surpassed Samsung to become China's leading smartphone vendor.

### The most important thing is to focus, focus and focus

In an effort to continue Xiaomi's growth, Lei increasingly looked for opportunities to expand beyond China. Under Lei's guidance, Xiaomi became the world's third largest smartphone manufacturer—behind only Samsung Electronics and Apple Inc.—in 2014, and Lei himself was widely known as the "Steve Jobs of China."

- > #107 Billionaires (2016)
- > #5 in China
- > #87 in 2015
- > #4 China Rich List (2015)
- > #16 Richest In Tech (2015)

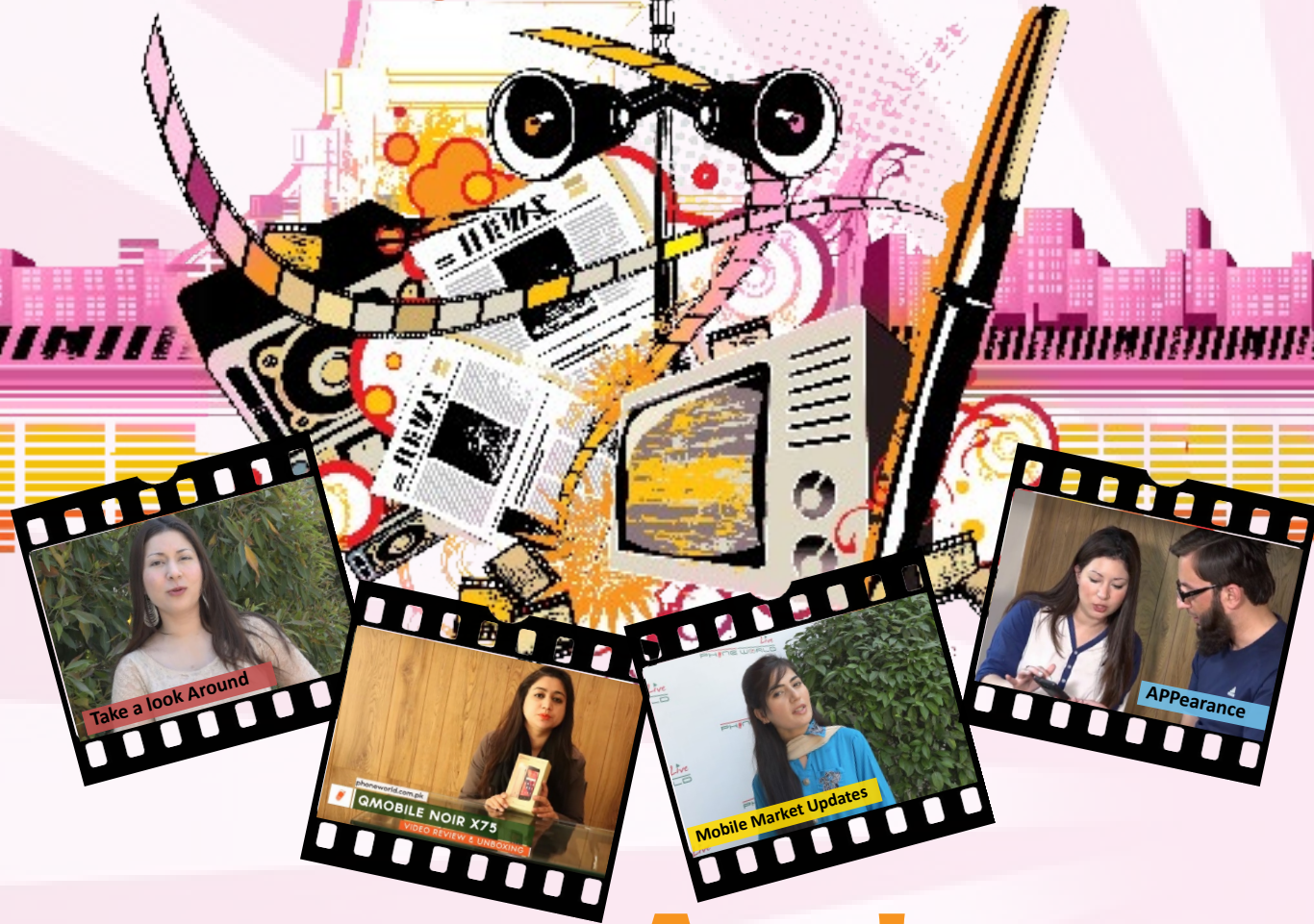
# China's Smartphone King Lei Jun





Live

PHONEWORLD



# 3, 2, 1... And we are LIVE now.....!!!!!!

Uncovering news, updates and reviews on cellular technology trending from around the world is a simple task: a few clicks of the cursor and figuratively speaking the world is at your

feet. Pakistan may well be one of the fastest growing cellular consumer market with industry expertise and technical understanding to rival any, but the industry itself suffers from underreporting. Most of the new advancements

and developments in the field go unnoticed. To counter this phenomenon we are happy to introduce to you our home-grown technological channel that is geared to keep the Pakistani consumers notified of all the impacts technology is

By Sehr Zeb

making in this current media age. IT journalism is still a relatively untapped resource of talent with a necessity for high quality fresh content.

By given access to latest information being updated daily by a young team of presenters and researchers, the average consumer in Pakistan can now start to make decisions about gadgets, wireless broadband available, local networks, mobile handsets, and mobile applications and software along with global media trends specifically geared to their particular national tastes and preferences.

**Pakistan may well be one of the fastest growing cellular consumer markets with industry expertise and technical understanding to rival any, but the industry itself suffers from underreporting and most advancements and new developments in the field go unnoticed**

Breaking new grounds in technological advances is now so much more likely to occur once live streaming of all tech trends on the Live channel starts to become commonplace. Several brainstorming sessions supported the all-pervasive nature of online web pages and mobile appliances that were revealed to undergo the

heaviest traffic from Pakistani users: the names are familiar to the thirty million internet users amongst the nation's population.

The now ubiquitous social media platforms of Facebook, YouTube, Twitter, Google Apps Play Store are the most sought out media that motivated the Live team to stream Vlogs (video blogs) directly attuned to the experiences of the Pakistani community.

**We are happy to introduce to you our home-grown technological channel that is geared to keep the Pakistani consumers notified of all the latest tech trends**

Currently in its pilot stage the channel is already updating its streaming regularly. Phoneworld Live is constantly on the lookout for greater expansion into more specialties within the field to increase the scope of the content being streamed and presented by young and enthusiastic local vloggers and techies.

Our show line-up for the channel includes our very popular device review segment along with some new shows including "Take a look around", "Telecom updates", "Inspector Techtonic", "Appearance" and "Tech Talk". Each of these segment target a specific area of technology with an objective to highlight all the relevant and

necessary information for our viewers. The Live team is further engaged in adding yet more local technological vlogs to its channel with enthusiastic aims to expand the programs into the hitherto unexplored and far reaching domains of the Pakistani technology and telecom arena.

The PhoneWorld magazine began life as a technical magazine covering IT updates within the Pakistani community. The magazine's vision for an accessible and high quality information medium pertaining to technological breakthroughs concerning Pakistanis in particular was the first of its kind and currently enjoys its place as the leading name in its niche market. Pakistan's premier service providers and mobile company marketing teams use the magazine as an instrument to determine local opinion in the field and to advertise their own products and developments. After the great success in print media, Phoneworld has entered the electronic media with Phoneworld Live channel, we hope that we'll get similar result in this medium as well.

**After the great success in print media, Phoneworld has entered the electronic media with Phoneworld Live channel, we hope that we'll get similar result in this medium as well**



# QMobile NOIR A3

## With Fingerprint Sensor

QMobile has launched another new smartphone Noir A-series with two smartphones, QMobile Noir A3 and QMobile Noir A6. We have chosen Noir A3 for review. It's a mid-range smartphone with a notable feature of finger print sensor.

### Display

QMobile Noir A3 is packed with 5.0" HD IPS capacitive display panel which has a decent 720 x 1280 pxl resolution with 320 dpi. The upper and lower portion of display has blackish pixels that looks similar to Huawei displays. The capacitive display supports 5-point multi-touch. 720pxl display is common nowadays in midrange smartphones due to its battery friendly nature as it sucks lesser battery than 1080pxl display.

### Design

QMobile Noir A3 has polycarbonate plastic body frame and metallic back cover. The back cover also covers the edges and chamfered gives more grip in hands while thick black bezel can also be witnessed on edges. The back cover is slightly elevated from edges to adjust the battery in body frame and the corners are slightly curved.

### Processor

QMobile Noir A3 is packed with Media Tek MT6735, Quad core processor. It has 1.3 GHz, ARM Cortex-A53 chipset. This midrange processor can handle 3 to 4 Apps easily without any halt.

Noir A3 has Mali-T720 GPU which provides smooth graphics experience while playing games in fact, it plays GAMELOFT Asphalt 8 quite smoothly. Mali-T720 is comparatively more efficient and power friendly than Mali-T600 since it's the newer version.

### Pros

- Fingerprint sensor
- Affordable price
- 3 GHz Quad core processor
- Game Loft



### Memory

QMobile Noir A3 is a mid-range smartphone with 2GB RAM and 16 GB internal memory whereas, microSD slot supports up to 64GB SD-card.

### Camera

QMobile Noir A3 sports 8MP camera along with LED flash. The camera results are pretty decent however the low light photography is bit noisy. QMobile Noir A3 can make FHD video with 1080px resolution.

Noir A3 has 5MP front selfie shooter with LED flash that make low light selfie possible. The selfie camera can capture good selfie and also make HD videos with 720p resolution.

### Battery performance

QMobile Noir A3 is powered with 2500 mAh non-removable battery. The battery has decent standby time that can work for 3 days with single charge. While with frequent messaging on GSM network, it can work for 8 to 10 hours. For 3G services like browsing, streaming and video call it will provide 6 to 7 hours battery backup which is quite satisfactory.

### Network/ Connectivity

QMobile Noir A3 is dual SIM 4G enabled smartphone which supports all the network bands in Pakistan. The physical connectivity includes MicroUSB 2.0 port, 3.5mm Audio jack and microSD slot that supports upto 64 GB. The wireless connectivity section has Wi-Fi 802.11, WiFi Direct, and hotspot, and Bluetooth 4.1. The smartphone has advance AGPS module for positioning.

### Cons

- Design looks outdated
- Average camera performance

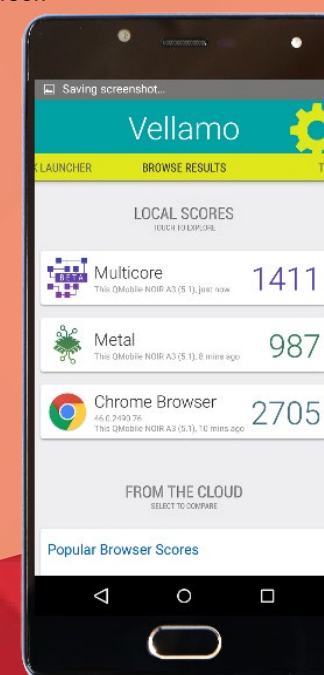
By Muhammad Awais



### Vellamo

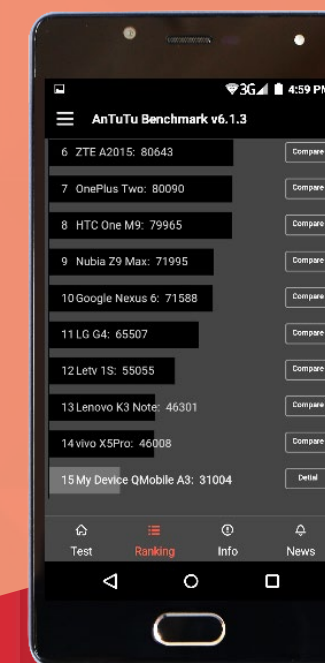
QMobile Noir A3 performed really well in Vellamo benchmarking. It got decent points in all three tests. In single core performance it put up a decent score of 987 point and it is very close to Meizu MX 4 which has powerful processor.

The Multi-core test score is 1411 due to lesser no. of cores but still it performed better than many. With attained score it found a place under the Asus Zenfone 2, which is a flagship device form Asus. In browser test Noir A3 got 2705 points showing that it has a very responsive browser.



### AnTuTu

In Antutu benchmarking, QMobile Noir A3 proved itself as true mid-range smartphone. It got almost 31K+ points. The smartphone stands at 15th position with 31K point. Thanks to its advanced Mali-T720 GPU which really improved the graphics quality and the games run smoothly without any lag.



### Final Verdict

QMobile Noir A3 is a mid-range smartphone with decent specs available at a very competitive price of PKR. 14500/- while the finger print sensor is also a remarkable addition. A great device to buy...!!!



# MOBILE MONEY REVOLUTION



## The Next Big Thing in Pakistan

If you lose your wallet then it means you have lost all your financial belongings for good but if that information is saved in your mobile instead of your wallet, your account is safe from misuse. The modern financial transactions have turned its way towards mobile transactions i.e. Mobile Money or M-banking which refers to payment services operated under financial regulation and performed from or via a mobile device. So instead of paying your bills with cash, cheque, credit or debit cards, now you can use a mobile phone to pay your bills. Though mobile money has a long history but only recently it has gained momentum due to the innovative technology support for it. This trend of "non-coined currency" is adopted across the world in different ways and its demand has been successfully recognized by the companies and organizations.

The modern financial transactions have turned its way towards mobile transactions i.e. Mobile Money or M-banking which refers to payment services operated under financial regulation and performed from or via a mobile device

Obviously, internet is the most fundamental enabler of economic and social development of the 21st century. According to GSMA "Connected Society Programme", 3.2 billion people are online through internet whereas out of this, around 2.4 billion are using mobile phones and directly contributing to the digital economic system. Unfortunately, 4 billion people are still unable to use internet which means that they are still offline and unable to incorporate in the digital economic system.

**3.2 billion people are online through internet whereas out of this, around 2.4 billion are using mobile phones and directly contributing to the digital economic system**

Whereas, in developing countries m-payments have been recognized as a source of encompassing financial services to the community that is still "underbanked" or "unbanked".



Mobile money is now available in



**93**  
COUNTRIES  
**271**  
SERVICES



Source: GSMS Intelligence

There are some fundamental models of mobile banking which are used and also recommended by GSMA under its "Mobile Money Programme"; these include:

-  Premium SMS based transactional payments
-  Direct Mobile Billing

-  Mobile web payments (WAP)
-  Contactless NFC (Near Field Communication)

Mobile money providers are processing an average of

**33** MILLION  
TRANSACTIONS A DAY



Source: GSMS Intelligence

Registered accounts grew by



**+31%** TO A TOTAL OF **411M**  
IN DECEMBER 2015

Source: GSMS Intelligence

The "Overview of the mobile money industry in 2015" of GSMA proved these models very effective as they have increased the importance of online payments than any other industry.

### Scope of Branchless Banking in Pakistan

Definitely the scope of this modern financial solution is very wide and similarly in case of Pakistan it will also help to facilitate millions that are residing in far flung areas who have less banking facilities and it takes days to transfer money. Along with scope, the procedure of fund



transfer is also very simple which suits even the illiterates living in remote areas. Also the youth who don't have bank accounts can easily get the money sent by their parents just with-in a few minutes.

## With over 30 million broadband and 27 million mobile data users, Pakistan is witnessing an internet boom

Mobile money can also help in increasing e-commerce trend in Pakistan. With over 30 million broadband and 27 million mobile data users, Pakistan is witnessing an internet boom. Also with many affordable internet bundle packages that are offered by the telecom operators coupled with the increase in 3G/4G coverage and the rise in affordable smartphone users, Pakistanis have become tech-savvy and internet-friendly. Banking transactions through cell phones have become a popular mode of payment in Pakistan as the introduction of 3G/4G has pushed mobile banking transactions up by 5 % to Rs 26 billion in second quarter of fiscal year 2015-16 (FY16).

## Banking transactions through cell phones have become a popular mode of payment in Pakistan as the introduction of 3G/4G has pushed mobile banking transactions up by 5 % to Rs 26 billion in second quarter of fiscal year 2015-16

Realizing the potential of m-money, recently Pakistan Telecommunication Authority (PTA) and State Bank of Pakistan (SBP) have jointly signed a Memorandum of Understanding (MoU) on Regulatory Framework for Mobile Banking Interoperability in order to frame regulations for m-banking. To make mobile transactions secure, now the authorized financial institutions (AFIs) will be held responsible for the financial losses and

other fraudulent activities in m-banking according to these newly devised regulations.

With convenient, secure and instant payments in place, Pakistan is truly about to witness the dawn of the second generation of e-commerce in the country; E-Commerce 2.0. This situation indicates that Pakistan has the potential and is also ready to adopt modern m-payment services which is already in process along with the mobile operators and some of the banks as well. Let's evaluate each of their status in this regard.

### 1 Easypaisa by Telenor Pakistan

Easypaisa is Pakistan's first and largest branchless banking service which was launched in 2009 jointly by Tameer Micro Finance Bank and Telenor Pakistan. Easypaisa has the largest financial footprint in Pakistan with over 75,000 Easypaisa shops in more than 800 cities across the country. Nearly 650,000 transactions are conducted on Easypaisa every day by 20 million active customers. In 2015, Easypaisa moved nearly 3% of Pakistan's GDP. Easypaisa has the largest product portfolio of services for its customers including remittances, payments, savings and insurance and offers ATM cards and IBFT services that work with all banks connected through 1-Link in Pakistan.



### 2 UPaisa by Ufone

Ufone has also introduced its services for m-money by launching "UPaisa Solution". UPaisa was launched in 2013 in collaboration with U Microfinance Bank Ltd. in order to provide financial solutions to the masses of Pakistan. It claims to have the largest agent networks in Pakistan as it provides convenient access to financial services to even the remotest locations of Pakistan.



### 3 Mobicash by Mobilink

Mobilink along with Waseela Microfinance Bank has also introduced "Mobicash" as branchless banking system. Mobicash is no doubt playing its due role in giving people of Pakistan the absolute financial liberation in far flung areas of the country.



### 4 Timepey by Zong

In this race of financial inclusion, Zong also tried to set its feet by introducing "Timepey" which



facilitates with Utility Bills' Payment, Mobile Account and Funds Transfer. But due to some conflict between Zong and the partner bank, Timepey services are currently discontinued.

## Pakistan Telecommunication Authority (PTA) and State Bank of Pakistan (SBP) have jointly signed a Memorandum of Understanding (MoU) on Regulatory Framework for Mobile Banking Interoperability in order to frame regulations for m-banking

Other than this, there are many banks who have realized the worth and demand of branchless banking and also initiated their mobile money services in order to provide financial solutions to those who don't have accounts in their banks. HBL Express, UBL Omni etc. are such other non-teleco companies in this field.

## During the quarter Jul-Sep 2015, the branchless banking industry surpassed its own m-wallet projections by reaching 13.2 million accounts, due to an impressive 21.2% growth in a single quarter

Still milestone in any field cannot be achieved in a blink of an eye, every initiative needs time to grow especially in a country like Pakistan where technology advancement is interlinked with government willingness to be part of this race. Hence, there is dire need to resolve few of the key challenges faced by Pakistan in its way to financial inclusion:

- Managing cash & liquidity by incentivizing agents
- Creating the right cost and revenue model

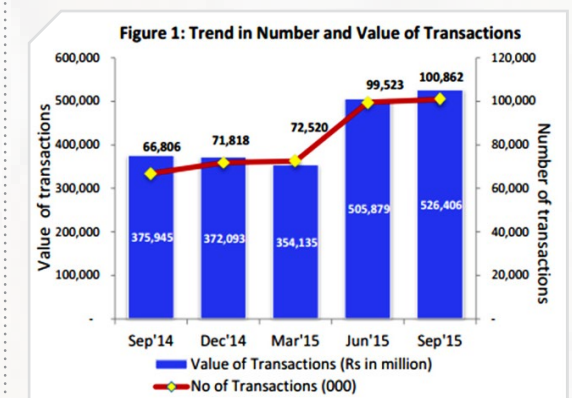
in which clients, Agents, Telcos and the bank benefit

Training & educating both the agents and public to build a homogenous network

Use effective marketing tools, tailored products, and partnerships to rapidly set up and grow the network

Overcoming these mentioned hurdles will get Pakistan to increased branchless bank accounts and will also prove that "Telco Agent Networks" are the best suited model for "Branchless Banking Agents" in Pakistan.

Pakistan has performed well in branchless banking filed as during the quarter Jul-Sep 2015, the branchless banking industry surpassed its own m-wallet projections by reaching 13.2 million accounts, due to an impressive 21.2% growth in a single quarter, reports State Bank of Pakistan. A total of 2.3 million accounts were opened during Jul-Sep 2015, out of which 2.2 million were level-0 accounts.



Source: SBP Jul-Sep 2015 Quarterly Branchless Banking Report

With the entry of new players, branchless banking services in Pakistan are heading towards growth and healthy competition. However, the success rate will still depend on the procedure that how the industry is overcoming issues like accounts activity level, agent quality and network, mass adoption of customers and their confidence on deposit-led solutions, and reliability of system & technology.

Technology boom is the next big thing going to happen soon in Pakistan as with growth in mobile broadband penetration rate (which is 19% as per GSMA Intelligence) and internet penetration, Pakistan is already leading in the region. Hence, this will surely help in many interrelated things in overall growth of mobile money trend in Pakistan.



By Aisha Gul

By Assad Khan

# HOW TECHNOLOGY MATTERS TO MEN & WOMEN

In today's world, if Adam told Eve that, "I have found an Apple", Eve probably would have replied "I thought we were getting an Android". Because in 21st century Apple is not just a fruit but a mobile company too. The transformation in technology and the changes it brought in our everyday life are remarkable. Some great changes have taken place over the last decades especially in technology front. There are so many options available in gadgets, applications, operating systems, OEMs and service providers etc. that now everyone can pick and use products/services according to their own choice and

preference. This is the reason why a single object can have a completely different value for two people.

**No doubt that the culture of technology is profoundly gendered. Men's monopoly in technology has become a key source of their power and identity**

No doubt that the culture of technology is profoundly gendered. Men's monopoly in technology has become a key source of their power and

identity. But let's not get into that debate and see how both these genders have reacted to some of the modern technology.

## THE INTERNET:

In early days, internet was majorly dominated by men giving a very little space to the women. With the arrival of the 21st century the user population has been evenly divided between men and women.



It is a measured fact that men are slightly more active internet users than women. But it was also observed that women are more active online communicators than men as they use email in a more robust way. Some 94% of online

women and 88% of online men use email for communication.

**On internet, men usually go for sports information, weather news, political information, download software and games while women are inclined towards health information, religion guidelines and beauty tips**

Men pursue and consume information online more aggressively than woman. It would be safe to say that by any chance, if one could get hold of the "search histories" of both men and women, I am sure you would see glaring contrasts. According to the, "Pew research Centre", men usually use the internet for activities ranging from getting sports information, weather news, political information, downloading software and even playing games online. Contrary to this, women usually surf the internet for getting information regarding personal health, religion, medical information and even getting information regarding maps and directions.

## MOBILE PHONES:

In a high tech world, it is impossible to think of a life without a mobile phone. We actually can't! I mean what is the first thing you check for

when you leave the house? Obviously apart from the essentials you make sure you have your cell phone with you.



The cellular devices have become an essential part of our lives and why wouldn't it be? Apart from making and receiving calls which is its main use, it can be utilized in so many different ways.

Even here men and women have different preferences when it comes to choosing a mobile phone. Men are considered to be more tech savvy when it comes to buying a phone. They look at the 'specs' and features of mobile phones. While women are influenced more by the aesthetics of a mobile focusing on its color and design.

**For men, mobile specifications is the basic requirement while buying a new phone whereas for women it's all about color and design**

## MOBILE APPLICATIONS:

Similarly the Apps that get installed on these mobile phones serve different purposes. Putting this into perspective one can easily differentiate between the apps which are favored by women and the ones which are used

by men mostly. Then there are also those apps whose usage is equally balanced. I am talking about the social media apps here.

Where the differences in usage lie, is that women are more inclined towards downloading beauty apps, picture editors, grocery list apps, shopping apps and Yoga apps to name a few. In the case of men the tilt is towards downloading fitness apps, dating, sports apps, games and news apps.

**Let's shun away the myth that technology is of masculine gender without going into the never ending debates of feminism**

Technology matters to both the gender but in a different way. What we need to understand is the matter of choice and try to promote gender-specific technology.



Men and women have different needs and expectations therefore, it is better to create the technology according to their needs. It's time to shun away the myth that Technology is of masculine gender.





3G/4G services and tech penetration in the market has led to mass awareness of e-commerce

**Jonathan Doerr,** CEO 

**D**araz.pk is the leading online marketplace of branded products in Pakistan, offering ecommerce services for fashion, electronics and general merchandise.

The online shopping platform has a portfolio of over 1,500 local and international brands and has established itself as a great success story. The all-time highpoint of Daraz.pk was its 27th November's Black Friday event that broke all national sales records with 1.5 million visits on the website and 55 times more orders than a regular shopping day.

Jonathan Doerr (JD), CEO of Daraz.pk joined the company in August, 2015. In a short time Doerr has managed to apprehend the dynamics of

Pakistani market quite well. Phoneworld team (PW) in an exclusive interview with Jonathan Doerr has discussed various aspects of Pakistan's e-commerce industry and its future. Here is what he had to say about the thriving industry of e-commerce and online retailing in Pakistan.

**Customers' trust has been a key for Daraz.pk to become market leader and this continued trust is necessary to keep growing**



By Rizwana Khan

**PW: Can you give us a little background on Daraz.pk? When and how it started off in Pakistan?**

**JD:** Daraz.pk started operations in May 2012 as an online fashion retailer and soon, after getting an overwhelming response from the market, began offering a wide assortment of general merchandise, establishing a strong position in the market.

**All-time highpoint of Daraz.pk was its 27th November's Black Friday event that broke all national sales records with 1.5 million visits on the website and 55 times more orders than a regular shopping day**

**PW: What is the current position of Daraz in the market?**

**JD:** Daraz.pk is the leading e-commerce company in the market. This has been achieved through innovation, highly progressive business campaigns and a constant endeavor to offer customers the absolute best. It is the most trusted e-commerce platform and plans to build on its position continuously as a household brand name.

**PW: What do you believe has contributed to your success in Pakistan?**

**JD:** While there are many factors but Customers' trust has been key for Daraz.pk to become market leader and this continued trust is necessary to grow. Wide assortment of products to choose from, occasion-based offerings, multiple payment options, and speedy delivery are few others of the many reasons Daraz.pk has garnered so much success in the country. Another factor at play is the quarterly campaign which has become the company's unique identity.

**Customer behaviors are changing profoundly due to the increased smartphone penetration as part of the shopping process**

Black Friday and Daraz Fashion Week are two such events that took place recently and has taken the country by storm. We are planning massive mobile phone sale the Daraz Mobile Week - so our customer will hear much more about this in the next couple of weeks.

**PW: What do you think about the e-commerce market of Pakistan? How far has it evolved over last few years?**

**JD:** The e-commerce industry has grown at unprecedented rate in Pakistan. The provision of 3G/4G services as well as tech penetration in the market has led to mass awareness about e-commerce in itself. As people have more access to information about the industry, the more its services have grown in demand.

Interestingly, the ongoing e-commerce revolution in the country is being fueled by the tier two and tier three cities other than major cities like Karachi, Lahore and Islamabad. While people in these far-flung cities have the means to purchase goods, what lacked was the access to contemporary offerings, making ecommerce an attractive proposition - the nationwide popularity of easy-on-the-pocket smartphones and affordable mobile internet packages is bridging the gap considerably.

**People in far-flung cities have the means to purchase goods, but lacked access to contemporary offerings, making ecommerce an attractive proposition**

**PW: E-commerce is taking the lead in nearly every segment? How bigger opportunity e-commerce represents for mobile companies in Pakistan?**

**JD:** In today's competitive retail environment, marketers are grappling with a fast-changing and rapidly developing business settings, it's only the ones who adapt to the changing customer behavior that will win the mark. Customer behaviors are changing profoundly—particularly due to the increased smartphone penetration as part of the shopping process.

Infinix surfaced two years ago, establishing its position as the greatest threat to major companies



in Pakistan. The biggest factor at play for this underdog was its online-only approach on Daraz.pk, helping the company sell premium phones at unbelievably reduced prices.

## With the improvement in data services, there has been a consequential growth in the ecommerce industry itself

Infinix formed an alliance with ecommerce retailer Daraz.pk for distribution of their French-designed premium smartphones and fast became the best-selling phone on the

**PW: What do you think are the biggest mistakes online retailers make when trying to make a sale?**

**JD:** Online retailers need to understand the needs of the customer base better. While many retailers are actively conducting surveys and are trying to understand the customer psyche, more efforts should be made in order to satisfy the customer.

**PW: Mobile broadband is a great facilitator of online retailing. What are your views on that?**

**JD:** Definitely. Faster data services allow for better internet usage on the go. Use of mobile apps also increases. It helps the customer to conduct speedy transactions whenever and where ever. With the improvement in data services, there has been a consequential growth in the ecommerce industry itself.

**PW: What are the top 5 things Pakistanis buy online?**

**major challenge? How it can be overcome?**

**JD:** Cash on delivery is and perhaps, will always be, the preferred mode of payment. However, e-payments are definitely seeing an upward trajectory. For example on Black Friday, the usage rate was 8 times higher than on a normal day.

## The Black Friday sale conducted by Daraz.pk and the impact it had on the company was overwhelming

Also, our returning customers know that they can trust us and use more and more prepayment

The Black Friday sale conducted by Daraz.pk and the impact it had all over the company and mostly all over the nation was overwhelming.

## Stay tuned for the biggest event of the year coming your way this June

**PW: Where do you go from here? What are your expansion plans for Daraz?**

**JD:** We are working on improving every aspect of our business and figuring out how to incorporate many more services and products into the e-commerce platform. Streamlining processes and structures and a lot of other big plans are in the pipeline right now. So you can expect great things from Daraz in future.



Team Photo of daraz.pk

website. Needless to say, the timing to adopt the online-only approach can't be better as there's a large and growing demographic of millennials who were born to the internet and are the early adopters of ecommerce/m-commerce in Pakistan.

QMobile, Pakistan's largest phone company, formed a similar alliance with Daraz.pk to sell its LINQ L20 and L15 exclusively on Daraz.pk - the models have been a raging success for the company and a revolutionary development in the mobile phone sector.

Mobile companies and e-commerce go hand in hand, the more smartphones that are available in the market, the more the demand for faster and better data services is needed. This translates into higher demand for e-commerce services.

**JD:** Phones, clothes, home appliances, shoes and beauty products are among the top selling things through online retails.

## Customer are interested to have the most flawless experience that is the key (beside trust) for all payment options

**PW: COD is so far the most popular mode of payment in Pakistan, other branchless banking initiatives like (Telenor's Easy Paisa, Mobilink's Mobicash etc) are bit behind in this regard. What do you think is the**

options like credit card and mobile accounts.

Customer are interested to have the most flawless experience that is the key (beside trust) for all payment options.

**PW: What industry trends within e-commerce do you see emerging over the next five years?**

**JD:** I see very massive e-commerce growth in coming years. Daraz will be a preferred platform for people to not only purchase anything and everything they want but also the destination for product search in the country.

**PW: In your career, has there been one impactful moment that stands out?**

**JD:** The impact on the career of one person does not really reflect the magnitude of certain events.

## We are proud to be the leading e-commerce industry but we would be nowhere without our customers

**PW: Message to our readers?**

**JD:** We are proud to be the leading e-commerce industry but we would be nowhere without our customers. It is your feedback and comments that help us understand most what we need to do and we always appreciate opinions of those who we serve. Exiting things will keep happening at Daraz so stay tuned for the biggest event of the year coming your way this June.



# ZUK Z1

## A Great Combination of Hardware and Software

**C**hezz Mall is the latest addition in e-commerce stores in Pakistan. It has recently launched ZUK Z1 in Pakistan. ZUK is a sub brand of LENOVO, a Chinese based company with a solid impression in mobile phones and electronic market internationally.

ZUK Z1 was launched a couple of month ago and rumored has it that Chezz Mall had sold 5000 devices in 5 days. ZUK is Mid-range smartphone running on customized OS Cyanogen 12.1, which gives more customization than actual Android OS. It has Metallic Uni-body -managing a huge 4100mAh battery inside the frame itself is a great achievement for ZUK Z1. ZUK Z1 is available at Chezz Mall at price of PKR. 34,999/-.

### Display

When it comes to display, ZUK Z1 has 5.5" FHD IPS behemoth display. The resolution is 1080 x 1920pxl with 480 dpi. The IPS 1080p display is a perfect and suitable choice for mid-range smartphones. Surprisingly, the display has no protection for scratches and dust, but don't worry ZUK is providing extra cover protector for the display.

### Design

ZUK Z1 has Metallic uni-body with 155.7 x 77.3 x 8.9 mm dimensions. Although its a bit thicker than usual phones but extra battery capacity compensates that. ZUK Z1 is almost 156mm in length and 77 mm in width which is normal for a mid-range smartphone.

Let's start with front side, 5.5" display is dominant on the front, the top most area has earpiece at center, 8 MP front camera is placed at right side of earpiece, along with notification LED and sensors.

A special feature is the U-Touch button with fingerprint sensor, that has different functionalities. ZUK Z1's physical button performs 5 different operation, it can sense the fingerprint, touch on the button takes you back to previous activity, pressing the button goes to home screen, double press leads you to multitasking and touch slide switching the Apps.

### Memory

ZUK Z1 has 3 GB RAM and 64GB memory which is more good enough for high-end smartphone. This is



why there is no MicroSD card slot.

### Interface

ZUK Z1 runs Cyanogen OS 12.1 which is based on Android 5.1 Lollipop but gives more customization options than actual Android OS.

### Processor

ZUK Z1 is packed with snapdragon 801 chipset. The processor has excellent performance and provides better battery life. ZUK Z1 has Quad-core snapdragon processor coupled with 3GB of RAM. The snapdragon 801 has Krait 400 cores with frequency of 2.5 GHz.

### Battery Performance

ZUK Z1 has huge 4,100mAh Li-Ion battery. It does not have any special fast-charging solution but it comes with 5V/2A charger that quickly charge the smartphone.

ZUK Z1 has introduced the new hardware module in battery that starts providing direct electricity to smartphone once the battery is fully charged. In this way battery works for long time.

### Camera

ZUK Z1 sports 13MP lens with Sony IMX 214 sensor at the back and 8 MP Selfie shooter at the front. The rear camera has some awesome features including Optical Image Stabilizations and Dual-LED. OIS feature controls the camera focus while rotating or shaking the camera with help of Gyroscope. Camera is capable of making 1080p HD video with H.264 encoding. It can also record slow motion videos and voice quality is also improved with the help of extra mic on back. Although image quality is not what we were expecting since pictures have some visible noise.

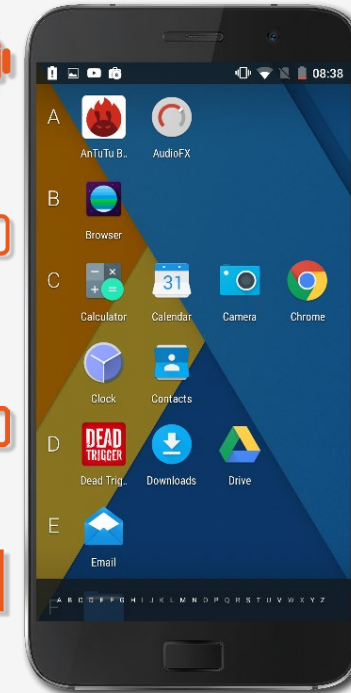
ZUK Z1 has 8 MP lens for selfie shooter on the front with

**OS:** Android OS, v5.1.1 (Lollipop), planned upgrade to v6.0 (Marshmallow), Cyanogen 12.1

**Display:** 5.5 inches

**Battery:** Non-removable Li-Po 4100 mAh

**Dimensions:** 155.7 x 77.3 x 8.9 mm



**Camera:** 13 MP, f/2.2, autofocus, OIS, dual-LED flash

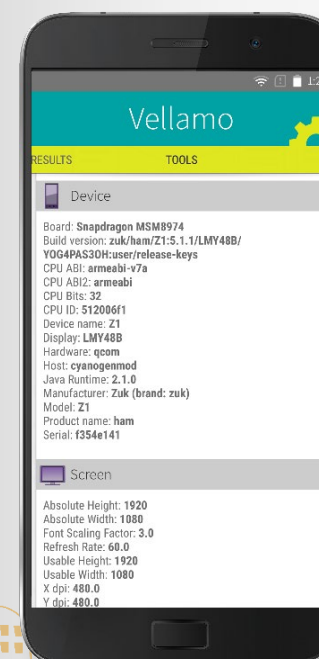
**Memory:** 64 GB RAM + 3 GB ROM

**Processor:** Quad-core 2.5 GHz Krait 400

**Price:** 34,999 PKR

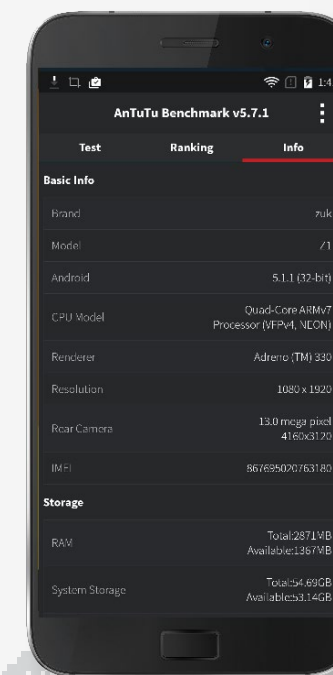
### Vellamo

ZUK Z1 has attained decent points in vellamo benchmarking. The multi-core test score is 1879 points. ZUK Z1 has managed the position under Meizu MX4. In single core test, ZUK Z1 managed to get 1655 points, beating OnePlus One with few points, though both have same chipset.



### Antutu

ZUK Z1 got 58813 points in antutu benchmark, the krait 400 use to be a good chipset, but currently it's not even among the top 10 chipsets. In Z1's price range, however there are mostly octa-core processors available based on Cortex-A53 and low-power GPUs.



### Good

- HD 1080p display
- Powerful Snapdragon 801 Chipset
- 4100mAh battery
- USB Type-C 3.0
- Fast charging with 5V/2.0A charger
- U-Touch button

### Bad


- NO stereo speaker
- Heavier than other smartphones but that's due to 4100mAh battery
- No NFC

## Final Verdict

ZUK Z1 has Quad core Snapdragon 801 chipset, 3 GB RAM and 64 GB ROM that is ideal for a smartphone featuring huge 5.5" HD IPS display and a gigantic battery of 4100mAh. In a mid-range smartphone category ZUK Z1 is definitely a good choice. The ZUK Z1 is available at very affordable price of PKR: 34,999/- in Pakistan at cheezmall.com.



# CYBER CRIME BILL: BANE or a BOON?



**C**omputer crime, or cybercrime is a type of crime that comprises a computer and a network. The computer may have been used in the mission of a crime, or it may be the target. Cybercrime is the new form of doing crime which comprises stealing millions of rupees from online bank to distressing and extreme stalking of cyber users. This crime has become the menace to the international security. Many regions have been the target of this crime. So to make sure such crimes don't happen, the National Assembly of Pakistan approved the long awaited, Prevention of Electronic Crimes Bill (PECB) 2015, which will become a law as soon as it's accepted by the Senate and then

sanctioned by the President of Pakistan.

**The National Assembly of Pakistan approved the long awaited, Prevention of Electronic Crimes Bill (PECB) 2015, which will become a law as soon as it's accepted by the Senate and then sanctioned by the President of Pakistan**

The Cyber Crime bill is imagined to deliver legitimate cover to the development of IT sector and stop any exploitation of IT system particularly for any anti-state activities. The bill is understood as an important necessity to guarantee that the Pakistan

Legal system does offer a system of check and balance for the smooth functioning of services that are based on IT system such as health, education, commerce etc.

The bill was presented in the National Assembly as it was drafted after the Peshawar holocaust of Army Public School, where almost 300 minor students were killed heartlessly inside the school on December 2014. The aim of this bill is to elude cybercrime in the country as terrorists are using information technology to perform their activities in the country.

Many severe punishments have been suggested under the new law which are either in the form of money or imprisonment or can be both. For instance Cyber terrorism can lead towards 14 years in jail or

up to Rs. 50 million in fine or both. In the same way Illegal access to anyone's phone, laptop etc. can put an individual behind the bars for three months or a fine of Rs. 50,000 levied or both.

**The aim of this bill is to elude cybercrime in the country as terrorists are using information technology to perform their activities in the country**

The bill also includes a special endowment for the defense of women. The bill article makes it illegal by law to threaten a woman with sexual ferocity or post images of a woman online without her "definite or implicit consent." If cyber activity threatens injury to a woman's character, her prevailing state of privacy, or puts her in terror for her protection, the delinquent could face imprisonment for up to a year, a fine of one million rupees, or both.

Mostly cases recorded with the Federal Investigation Agency include the mismanagement of technology and cyber stalking that accounts for more than 80 percent of all complaints. It is generally ignored as less essential because the abuse occurs online. But harassment both online and offline can lead to psychological intimidation and emotional grief.

Although in general the bill is a good initiative towards the protection of cyber rights of the people but it has also created certain apprehensions among civil society and human rights activists. They have relentlessly criticized the "Prevention of Electronics Crime Bill", as they are seeing it as an endeavor to arbitrate the right of freedom of expression through recommended legislation on cyber-crime. It was indicated to the NA Standing Committee on

Information Technology and Telecommunication to address concerns highlighted by the opposition members and patrons from the industry.

According to the civil society, the Government has some political intentions behind the endorsement of this bill and it wishes to regulate freedom of speech through the legislature. The journalist community is strongly against the bill as they are naming it as an effort to take legislative control of internet freedoms by the government.

Jehan Ara, president of PASHA also cautioned of this bill's risky effects on the economy as foreign companies wouldn't come here and invest. She further added that it will badly affect many young internet users.

**Mostly cases recorded with the Federal Investigation Agency include the mismanagement of technology and cyber stalking that accounts for more than 80 percent of all complaints**

Farieha Aziz, Director of Bolo Bhi is of the view that no doubt there is a dire need to have a cyber-law that legalizes the activity in information superhighway but there should be some difference between regulating and restricting the entire populace and making them exposed to austere punishments. She further added that the way the bill has been passed by the National Assembly reveals how anxious the government is to have this law passed and applied heartlessly on the people.

However the government representatives claim that

the bill has been revised after consolidation of proposals from different quarters, its adversaries insist that it is almost the same form that was accepted and later withdrawn. The government camp guards itself on estates that they need to have a rule to counter cyber fraud, cyber stalking, cyber terrorism, electronic data and identity theft.

Cyber-attack is even a peril to the nation's authority. Most of the leaders, businessmen and the government have yet to completely hold the notion of how to deal with this new occurrence. Pakistan has already encountered many cyber-attacks recently. Many of these generally happened at high-profile occasions such as the Defense Day or the cricket matches. For this reason cybercrime policies were taken in the form of Cybercrime Bill in 2015. If the bill turns into a law, it will become the foundation on which other parts of legislations and modifications are upstretched. Therefore it is very important that all stakeholders are taken in to confidence before it turns in to law. It is the main responsibility of the government to negotiate with civil society and human right activists and try to take them in confidence instead of ignoring their concerns. The conflict on cyber-crime will only cause discontent in the country, which we cannot afford right now.

**The government claim that the bill has been revised after consolidation of proposals from different quarters, its adversaries insist that it is almost the same form that was accepted and later withdrawn**





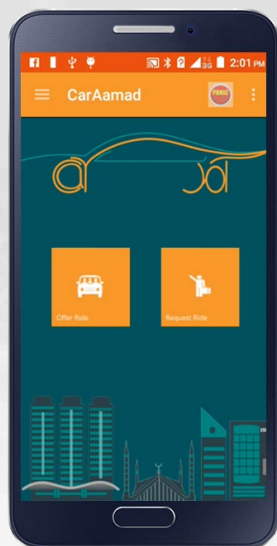
# CARAAMAD

## AN INNOVATIVE CARPOOLING APPLICATION FOR PAKISTAN

**A**vailability of good transportation is one of the major problem an average person faces. 115 million people have to travel every day in Pakistan yet the country lacks efficient transport infrastructure. People either travel in public transports or in personal cars. Public transport is neither convenient nor reliable. Moreover, they are not considered safe especially for women. On the other hand, people who own cars drive mostly alone to their workplaces which causes wastage of space and fuel and also puts financial burden on them.

**115 million people have to travel every day in Pakistan yet Pakistan lacks efficient transport infrastructure**

The concept of carpooling has been around for quite some time but in spite of many attempts of carpooling in Pakistan, this concept hasn't been received in a welcoming manner in our society. It wouldn't be an exaggeration to say that generally Pakistanis are not willing to carpool because of the safety and security concerns. Moreover, the

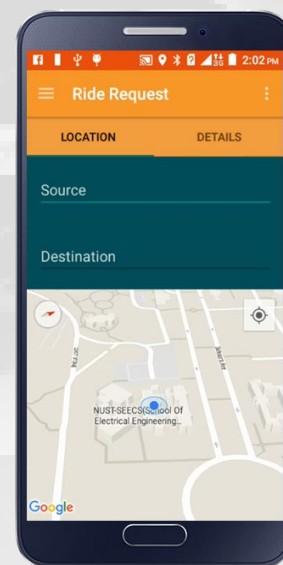


dynamics of women commute are different than their male counterparts in our society. For example, women do not prefer to sit with men in any sort of transport medium in Pakistan.

Since in traditional carpooling, you do not know who else will be in the car apart from the driver and where will you be seated, therefore, such concerns of women made them avoid carpooling. Due to these reasons carpooling hasn't been successful in Pakistan.

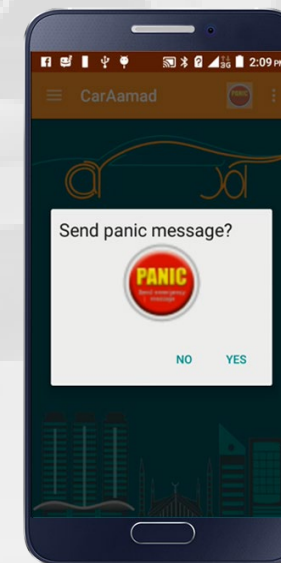
To make carpooling adaptable to the needs of our society, CarAamad team came up with this idea that proposes a secure carpooling service that connects people to travel together who already know each other.

**To make carpooling adaptable to the needs of our society, CarAamad team came up with idea that proposes a secure carpooling service that connects people to travel together who already know each other**



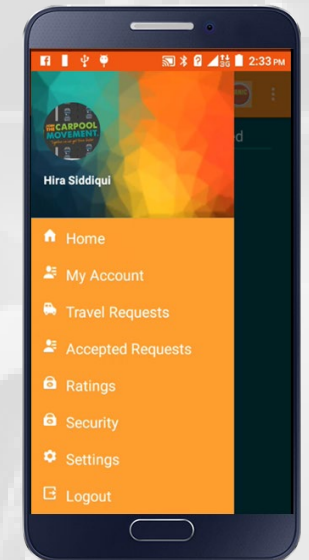
The app connects people that are travelling on the same route and they either belong to the same organization/university or are friends/friends of friends on Facebook. These people can share their rides over a small compensation for fuel. In this way, the ride offeror will get reimbursed for their fuel without going anywhere apart from where they already had to go, and the ride requester gets a secure and economic ride to his/her destination by travelling with people that he/she already knows. The app also has real time location tracking feature to ensure that the cars stay on their intended route. It is made keeping in mind the demographics of Pakistani society catering the sensitive cultural issues and security concerns of masses.

For connecting acquainted people for ride sharing, the best platform that could have been used was Facebook. According to official Facebook surveys, an average person has about 190 Facebook friends and 36000 people in their friends and friends of friends combined. So in a social circle of 36000 people of a user, many people either attend the same university or work in the same organization. Even if neither of these is the case, there is a high probability that a large number of people in the same social circle live in the same city. Keeping these statistics in mind, one can safely assume that



amongst 36000 people, at least 40~50 people would be travelling on the same route every day and can be good candidates for carpooling. This is what made the CarAamad team decide that their app CarAamad would use Facebook APIs to connect acquainted people.

We hope that once this app is launched, people of our country would be receptive to it and give another chance to this tweaked concept of carpooling. If a community of people that could give a helping hand to each other can be developed, some of our major problems, transportation being one of them, could be solved.



**The app connects people that are travelling on the same route and they either belong to the same organization/university or are friends/friends of friends on Facebook**

### The Team:



### Mentors:







By Saima Ibrahim

## SAMSUNG Galaxy S7 Edge

### Rethink What a Phone Can Do

Samsung's Galaxy S7 Edge is successor of Samsung Galaxy S6 Edge which was launched in mid of 2015. Being the successor, Samsung Galaxy S7 Edge inherited many features from Galaxy S6 Edge but has also come up with unique hallmarks that will force you to buy it.

#### Design

The Super AMOLED screen is bigger now with 5.5" screen and ~76.1% screen-to-body ratio. The enhanced Quad HD 1440 x 2560 pixels resolution is not only important for good Oculus-powered Gear VR headset but also for a better experience while playing games, watching videos etc.

The always-on display feature of Samsung S7 Edge is the latest addition. Now display will always be on for you and will show date and time, calendar etc. The display is smart enough to automatically disable when you put your Galaxy S7 edge in bag or pocket.

Above all, the display and back is protected with Gorilla Glass 4.

#### Display

Samsung Galaxy S7 edge has a USB port, water-resistant headphone jack, a speaker and a primary mic at the bottom. On the left side there are two volume control buttons and the right side holds the power button along with SIM/Memory Card Tray. On the back of S7 edge body, there is heart rate sensor and also the LED flash very close to the 12MP camera which is also the undercover fingerprint magnet.

The beautiful front of S7 edge is designed with curved edges display and a home button and two touch buttons at the bottom for back and app switching function. The nice thing is 2mm thinner bezels as compared to S6 edge. The home button also acts as a fingerprint scanner. On the top, there are proximity and light sensors. The front 5MP camera for selfie lies on the right side.

#### Processor

Samsung S7 edge comes with a powerful Exynos 8890 chipset which is a first of its type powered with a newly introduced high performance CPU cores "Mongoose". The eight-core processor of the Exynos 8890 is comprised of four Mongoose cores ticked at 2.6 GHz and the rest of four cores Cortex-A53 running at 1.59 GHz. This powerful



CPU setup "Quad-core 2.3 GHz Mongoose" work together in order to give the user a smooth experience while multi-tasking.

The powerful processor of Samsung S7 edge is controlled by Android OS, v6.0 (Marshmallow) for smooth multi-tasking.

#### Memory

Samsung S7 edge comes with 4GB RAM and 32/64GB internal storage. The 4GB RAM lets you run several apps on S7 Edge without any lag. One of the restored feature in S7 edge is inclusion of microSD card support that let you expand the memory upto 200 GB.

#### Camera

Samsung has made a drop in the megapixel of its flagship 2016 smartphones but also introduced a new technology of dual-pixel in the camera. Samsung Galaxy S7 edge has a 12-megapixel primary camera having f/1.7 aperture lens. The dual-pixel technology helps this camera to quickly auto-focus and also in capturing a decent image for you. The camera resolution is (4032 x 3024) pixels with native ratio of 4:3 and it also records 2160p@30fps pixels video. The 5 MP camera of Galaxy S7 edge is clearer and captures bright selfie. The camera resolution of front cam is (2592 x 1944) pixels with native ratio of 4:3.

#### Battery Performance

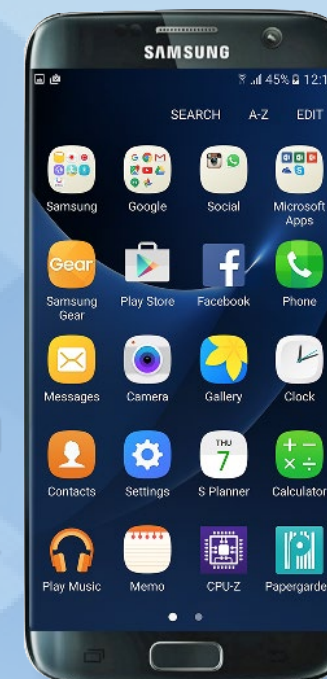
The battery for S7 edge has been updated up to 1000 mAh as it carries 3600 mAh battery. The 38% bigger battery with fast charging gives significantly better battery life.

**Dimensions:** 150.9 x 72.6 x 7.7 mm

**Display:** 5.5"

**Battery:** Embedded Li-Ion 3600 mAh

**Weight:** 157 grams



**Camera:** 12MP, Auto Focus, LED Flash, 5 MP Front

**Memory:** 4 GB RAM + 32/64 GB ROM

**Processor:** Quad-core 2.3 GHz Mongoose + quad-core 1.6 GHz Cortex-A53

**Price:** 89,000 PKR

## Benchmarking

#### Antutu

Samsung S7 edge has successfully scored 100029 points while topping the list among other smartphones in Antutu evaluation; which shows that S7 edge is presently the best smartphone released in 2016 so far. The display supports 10 point multi touch which enables the smartphone to play games perfectly.

#### Vellamo

Samsung S7 edge has also topped in Vellamo Benchmarking. It attained 3335 points in multi core test. In Metal, the single core performance is also extraordinary. The 4855 points of Browser Test clearly indicates that the browser of S7 edge is highly responsive and its loading speed is very high.

#### Good

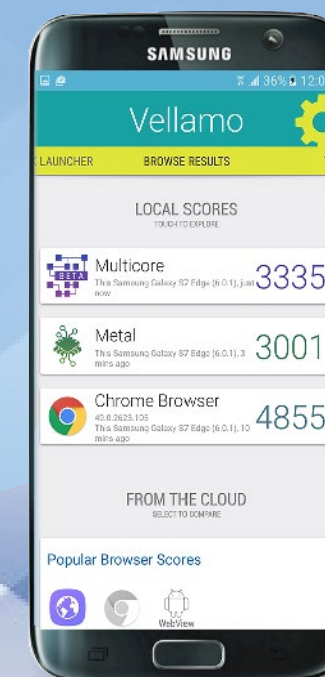
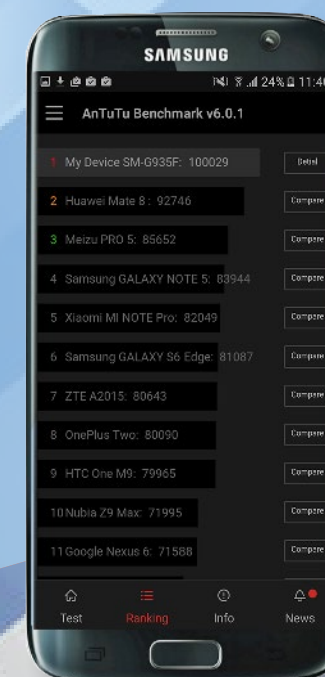
- Always-on screen
- Water resistant, IP68 water proof
- Micro SD card has been restored Adaptive quick charging
- Introduction of Dual-pixel technology
- Battery is almost 1000 mAh increased
- Camera is now embossed inside

#### Bad

- No FM Radio
- Embedded battery
- Too many pre-installed bloatware (now 25 Apps)

## Final Verdict

Some great improvements made have been made in Samsung Galaxy S7. Literally, this trendy smartphone S7 edge will force you to "Re-think What A Phone Can Do". So if your pocket allows to buy an expensive yet innovative masterpiece then go for Samsung Galaxy S7 Edge.







# HOW BRANDS CAN CREATE LASTING RELATIONSHIPS ON SOCIAL MEDIA

One are the days when businesses used to rely on carefully written press releases or catchy ad campaigns to communicate with their customers. In the age of social media, the traditional rules have changed and people today demand a direct relationship with the brands. Can you imagine that the mobile operator from where you have bought a SIM does not have any Facebook profile, Twitter account or Instagram feed? Well this surely is not possible in today's competitive business world.

Without a doubt, marketing is a large part of any organization's expenditure. Following this trend,

brands in Pakistan are spending millions to make their profiles work efficiently and actively for customer support.

**Social media has shrunk the space for press releases and catchy advertisement for promoting businesses**

Let's analyze some of the major shifts in business world and observe how different social media platforms have

By Aisha Gul

helped them in attracting customers and clients.

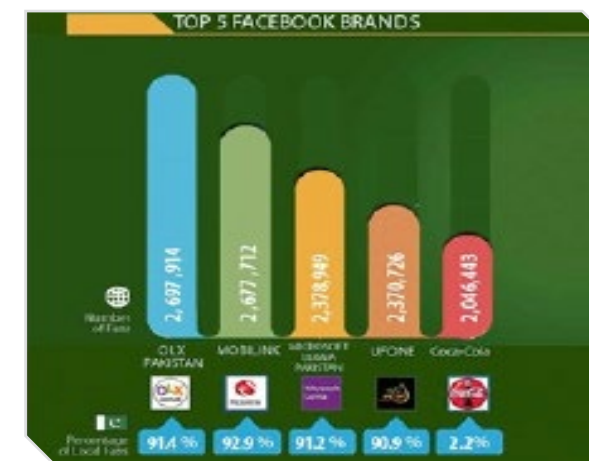
## From "Trying to Sell" to "Making Connections"

In present era, selling has become the second priority while making connection through social media is the primary focus. All the famous brands including mobile phone operators and OEMs prefer to make a strong connection before introducing any new service or product. The connection is actually helping them to read the mind and demands of their consumers.



## From "Hard to Reach" to "Available Everywhere"

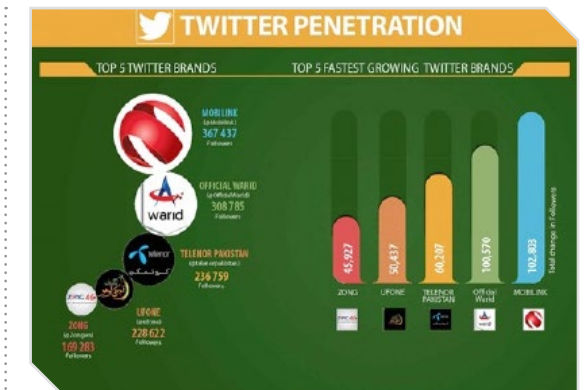
Engaging with your customers by having an email address or by providing a customer service number on one's website is not enough.



Today, people want to interact with their selected brands by commenting or tweeting on the social media platforms for faster and reliable communication. Therefore, businesses have to struggle hard to maintain their market position by keeping active social media pages.

## From "Visit the Franchise" to "One Click Away"

In this fast world neither the operators nor the customers have time to do in-person meetings. Customers for the quick response are now visiting the chatting forums while operators are ready to answer



their questions through social media platforms. What else could be better than saving time and using social media for interaction?

In the end, it can be concluded that the medium may change, but the concept is basic. It's almost impossible for brands to connect to their customers effectively without using social media platforms.

In this new era of social media, business companies are forced to be more transparent and personal.

**Operators prefer to make connection with their customers to read their minds through opinion and suggestions**

Of course, traditional advertising and press releases will be getting a share but social media is going to shrink their space. It seems like in near future different social media like Facebook, Twitter, Instagram etc would be most relevant source to evaluate the productivity and services of businesses. Ultimately, social media will become the source of promoting healthy competition among the companies and the customers will also get more opportunities to share their views, opinions and suggestions regarding their chosen brand and company.

**In this new era of social media, business companies are compelled to be more transparent and personal**



# 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.

4.4

easy

paisha

### Easypaisa - Badlay Zindagi Asani Say

If directed well, TVCs have the power to make us cry, laugh or even frighten just within minutes or seconds. It also shows us the latest tendencies in design, music, and culture. Telenor's Easypaisa is the best combo of all these things. The performance of Shan while giving message of "Badlay Zindagi Asani" has nicely promoted the Easypaisa service. The only thing that stopped me from giving 5 stars is that the characters and story board does not represent the actual market of Easypaisa i-e middle and lower-middle class. They might not be able to feel connected to service. Otherwise, it's a well-executed TVC.

**Verdict:** Message Conveyed!!



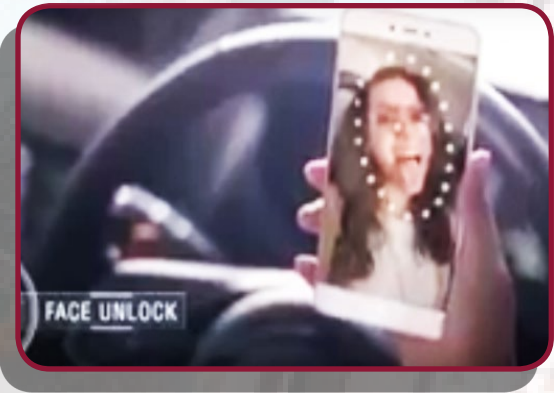
4.5

telenor

### Telenor Smart Max

Telenor's advertisements always prove to be very effective and make viewers convinces that their marketing team is doing wonders. This time with "Ju Bin Kahy Samajh Jata hy Wohi Sacha Sath Kehlata hy creative" adverts Telenor has introduced two very affordable smartphones. The message of connectivity by utilizing other advertising ingredients like music, settings and story is well conveyed through outstanding performances. Well done Telenor Pakistan.

**Verdict:** We are impressed by the team.....!!!!



4

QMobile

### QMobile Noir Z12

We see QMobile devices and their TVCs quite frequently. With time we have seen great improvement in QMobile's television campaigns. Qmobile Noir Z12 TVC is short and simple. This time QMobile has hired an unknown foreign model which is quite unusual because normally QMobile goes for national and international famous celebrities. The advert has good music score, the main features of Noir Z12 are communicated in simple yet effective way.

**Verdict:** Simple yet effective...!!



5

Mobilink

### Mobilink Jazz Relaunch

Mobilink re-launched its well-known brand 'Jazz' and the revival was announced with a unique and creative promotional advert as compared to the other operators. The young Maya Ali and co-model brought such a thought provoking idea that was tingling in my mind for years. The strong message to do something meaningful in order to improve the image of Pakistan in international arena is certainly the need of the hour. Mobilink is well-known for its social responsibility initiatives and this campaign not only promoted re-launch of "Jazz" but has also sent an important message to the public. Thumbs up for those who have successfully combined this awesome theme along with rest of the advertising ingredients.

**Verdict:** Jazz ne Dunya Ko Bataa Dia..!!

3.5

daraz.pk

### Daraz.pk Launches Infinix Zero 3

We rarely see TVCs of online shopping platforms but Daraz.pk is now getting into this competition by releasing commercials to advertise its products. Recently, it released its TVC to promote "Infinix Zero 3" campaign but unfortunately it lacks creativity. Without a convincing script and catchy settings one cannot persuade viewers to buy any product. In a country like Pakistan where online shopping trend is in nascent stage, Daraz.pk needs to direct more convincing adverts.

**Verdict:** Hope to See a Good Ad. Next Time!!!



2.2

ptcl

### CharJi LTE

Why PTCL adverts always disappoints me? It would not be wrong to say that PTCL really needs to hire some good advertising agency for its marketing instead of relying on its unsatisfactory marketing department. In present digitally advanced world, it is very difficult to impress customers with such silly ads. Just look at the wired face expressions of model and the rest of TVC aspects like settings, music, and script, even a child can do more creative work. PTCL must come up with good marketing campaigns.

**Verdict:** Jaag Jao PTCL Walon.....!!!!







# HUAWEI P9

## The Ultimate Smartphone for Mobile Photography

The wait is finally over now, Huawei has unveiled its flagship smartphone Huawei P9. Huawei has made some incredible changes in camera section and the design has also been improved. The sleeker design and amazing photography experience with real professional touch has never been seen in any other smartphone.

### Design and Display

Huawei P9 employed 5.2" IPS-NEO display with 1080 x 1920 pixels resolutions and 480 dpi. It is a sleek and stylish device with 145 x 70.9 x 7 mm dimensions. It is almost 1.2 times thinner than Huawei P8 with 144 grams weight and is available in Ceramic White, Haze Gold, Rose Gold, Titanium Grey, Mystic Silver and Prestige Gold color variants.

Huawei has worked especially well in designing aspect which is quite visible through its tiny bezel which is almost negligible. Huawei is constantly using the same screen technology and resolution for its high ends smartphone. However, the other brands like Samsung are one step ahead with AMOLED screen technology. It's a bit surprising for us that Huawei hasn't deployed QHD screens yet. The IPS-NEO is a great screen technology but in terms of technology AMOLED is definitely better than IPS.

### Memory

Huawei P9 comes with two variants, one available with 3 GB RAM and 32 GB ROM while the second variant is packed with 4GB RAM and 64 GB ROM. Additionally, it supports MicroSD card up to 128 GB.

### Camera

Camera is considered the pride of P9 by Huawei. Huawei has co-developed the Dual camera with a well-known optic company, LIECA. On the back of the handset are two 12MP sensors that work together to create highly detailed images. One to pick up the color of images, while the second sensor is monochrome (black and white) which gets the details of the image in a better quality. This also results in perfect photography in darker area.

P9 camera also allows you to take images just like DSLR camera. The sensor uses hybrid autofocus



which is also backed by laser autofocus, so the camera focuses the object precisely and blurs the background. This kind of photography is also known as bokeh photography.

The camera app is packed with several modes including Monochrome, Beauty, HDR, Panorama, Beauty Video etc.

### Network Connectivity

Huawei P9 supports world wide band including 3G and 4G. Huawei P9 also support Dual band Wifi 802.11 a/b/g/ac, wifi direct, hotspot, Bluetooth 4.2 and NFC. In addition it has GPS, GLONASS and Beidou, yet it lacks FM radio chip on board.

While talking about physical connectivity, it has 3.5 mm audio jack and USB Type-C for charging and data transferring. By default it only charges the smartphone for security reason, so you have to manually select from smartphone in case you want to transfer data.

### Processor:

Huawei P9 is powered with its own processor Krin 955, the latest in the Krin series and a flagship SoC from Huawei. The chipset is octa-core, four cores are cortex-A72 with clock speed of 2.5 GHz while other four cores are Cortex-A53 with the frequency of 1.8GHz. The GPU is Quad core Mali-T880 MP4.

### Battery Performance

Huawei P9 is packed with 3000mAh non-removable battery. Surprisingly it does not supports fast charging however it come with 2.0A charger that promises to charge your mobile quickly in 30 minutes from flat to 40%. The standby timing of P9 is just out class. It just dropped 1% in 24 hours. 3G and 4G services like video calling, internet surfing, streaming can be used for almost 15 to 16 hours.

OS: Android 6.0  
Marshmallow

Display: 5.2 inches

Battery: Non-removable Li-Ion  
3000 mAh

Dimensions: 145 x  
70.9 x 7 mm



Camera: Dual 12 MP,  
f/2.2, 27 mm, Leica  
optics, phase detection  
autofocus, dual-LED (dual  
tone) flash



Memory: 32/64 GB RAM  
+ 3/4 GB ROM



Processor: Quad-core  
2.5 GHz Cortex-A72  
& quad-core 1.8 GHz  
Cortex-A53



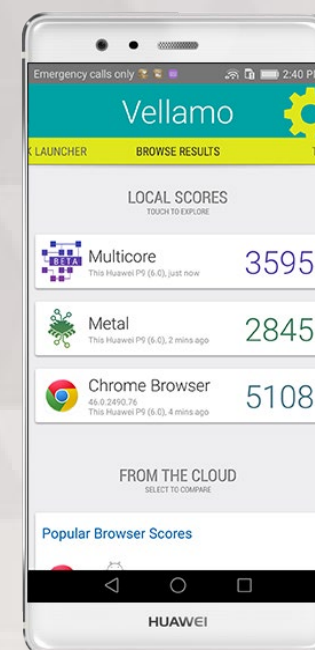
Price: 53,999 PKR

### Vellamo

This flagship device has shown its caliber in vellamo testing. All thanks to 2.5GHz clock speed that encouraged the Huawei P9 to rule over the table with highest points in multicore test.

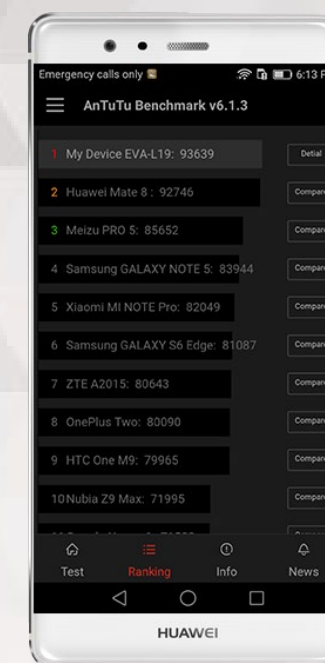
In the Metal test (single core test), Huawei P9 is only few points behind from Samsung Galaxy S7.

On the other hand, in the browser test, Huawei P9 beat the Samsung with few points. Huawei P9 has undoubtedly fastest loading ability. The executions of java script, JQuery is also quite fast.



### Antutu

Huawei has introduced its Krin 955 chip set in Huawei P9. The Antutu benchmarking of Huawei P9 has shown good result and managed to get 93639 points but being flag ship device, we were expecting more from P9. The Samsung Galaxy S7 with 100029 point is ahead of Huawei in Antutu benchmarking.



### Good

- Sleek and compact design
- Efficient battery timing
- The latest processor chipset from Huawei
- Dual camera designed by LIECA
- Android Marshmallow 6.0 with EMUI 4.1 interface
- Finger print sensor

### Bad

- No Wireless Charging
- No Stereo Speaker

## Final Verdict

The P9 is a remarkable smartphone with some outstanding specs, it could shoot Huawei up in the market mainly because of what it brought to the mobile photography scene.



**QMobile Noir Z9 Plus**

**OS:** Android, v5.1 (Lollipop)  
**Display:** 5.5" HD IPS  
**CPU:** Octa-core 1.3 GHz  
**Camera:** 13MP, LED Flash, Auto Focus  
**Memory:** 16 GB ROM, 2 GB RAM

**QMobile Noir LT700**

**OS:** Android, V5.1 (Lollipop)  
**Display:** 5.0"  
**CPU:** Quad-core 1.3 GHz  
**Camera:** 8 MP, LED Flash, Auto Focus  
**Memory:** 16 GB ROM, 3 GB RAM

**Infinix Hot 3**

**OS:** Android v5.1 (Lollipop)  
**Display:** 5.5"  
**CPU:** Quad-core 1.3 GHz  
**Camera:** 8 MP, LED flash, Auto Focus  
**Memory:** 16 GB, 1 GB RAM

**Huawei P9**

**OS:** Android, v6.0 (Marshmallow)  
**Display:** 5.2"  
**CPU:** Quad-core 2.5 GHz & Quad-core 1.8 GHz  
**Camera:** 12 MP Auto Focus, dual-LED (dual tone) flash  
**Memory:** 32/64 GB ROM, 3/4 GB RAM

**Huawei P9 Plus**

**OS:** Android, v6.0 (Marshmallow)  
**Display:** 5.5"  
**CPU:** Quad-core 2.5 GHz & Quad-core 1.8 GHz  
**Camera:** Dual 12 MP, Autofocus, dual-LED (dual tone) flash  
**Memory:** 64 GB, 4 GB RAM

**Samsung Galaxy S7**

**OS:** Android, v6.0 (Marshmallow)  
**Display:** 5.5"  
**CPU:** Quad-Core 2.3 GHz, Quad-core 1.6  
**Camera:** 12 MP, Autofocus, LED Flash  
**Memory:** 32/64 GB ROM, 4 GB RAM

**QMobile i6 Metal One**

**OS:** Android, v6.0 (Marshmallow)  
**Display:** 5.0"  
**CPU:** Quad-core 1.3 GHz  
**Camera:** 5 MP with LED Flash  
**Memory:** 8 GB ROM, 1 GB RAM

**Huawei Ascend Mate 8**

**OS:** Android, v6.0 (Marshmallow)  
**Display:** 6.0"  
**CPU:** Quad-Core 2.3 GHz, Quad-Core 1.8 GHz  
**Camera:** 16 MP, LED (dual tone) flash  
**Memory:** 64 GB, 4 GB RAM

**Huawei GR3**

**OS:** Android, V5.1 (Lollipop)  
**Display:** 5.0"  
**CPU:** Octa-core 1.5 GHz  
**Camera:** 13MP, LED Flash, Auto Focus  
**Memory:** 16 GB ROM, 2 GB RAM

**Infinix X552 - Zero 3**

**OS:** Android, V5.1 (Lollipop)  
**Display:** 5.5"  
**CPU:** Octa-core 2.2 GHz  
**Camera:** 20.7 MP  
**Memory:** 16 GB ROM, 3 GB RAM

**Alcatel Pop Up**

**OS:** Android v5.0 (Lollipop)  
**Display:** 5.0"  
**CPU:** Octa-core 1.4 GHz  
**Camera:** 13 MP, LED flash  
**Memory:** 16 GB, 2 GB RAM

**Lenovo Vibe K5 Plus**

**OS:** Android, V5.1 (Lollipop)  
**Display:** 5.0"  
**CPU:** Quad-core 1.5 GHz & Quad-core 1.2 GHz  
**Camera:** 13 MP, Autofocus, LED flash  
**Memory:** 16 GB ROM, 2 GB RAM

**Lenovo ZUK Z2 Pro**

**OS:** Android, v6.0 (Marshmallow)  
**Display:** 5.2"  
**CPU:** Dual-core 2.15 GHz & dual-core 1.6 GHz  
**Camera:** 13 MP, Autofocus, dual-LED (dual tone) flash  
**Memory:** 64 GB, 4 GB RAM

**Samsung Galaxy J7**

**OS:** Android, V5.1 (Lollipop)  
**Display:** 5.5"  
**CPU:** Octa-core 1.6 GHz  
**Camera:** 13 MP, Autofocus, LED Flash  
**Memory:** 16 GB ROM, 3 GB RAM

**Alcatel Idol 3**

**OS:** Android OS, v5.0.2 (Lollipop)  
**Display:** 5.5"  
**CPU:** Quad-core 1.5 GHz, Quad-core 1.0 GHz  
**Camera:** 13 MP Autofocus, Dual-LED Flash  
**Memory:** 16/32 GB ROM, 2 GB

**QMobile N Z12**

**OS:** Android V5.1 (Lollipop)  
**Display:** 5.3"  
**CPU:** Octa-core 1.3 GHz  
**Camera:** 13 MP, LED flash  
**Memory:** 32 GB, 3 GB RAM

Please Visit Our Website

www.phoneexpress.pk

Flat No.306, 3rd Floor Dossul Arcade, Jinnah Avenue, Blue Area, Islamabad



# TOP MUST HAVE APPLICATIONS & GAMES FOR YOUR SMARTPHONE

## Pakistan Jeep Rally

Rating : 4.6 Price: Free

Now you can experience the adrenaline of the rally through your phone. OffRoad Studios (The arcade arcade gaming studio that brought you 'Najam ki Chirya') is bringing you a fun version of the infamous Cholistan Jeep Rally, with twists you will love. They have infused everything that makes our country great and developed the most Pakistani game ever. Navigate your jeep through the desert while dodging interactive objects; collect coins and powerups as you go.



PAKISTANI SOFTWARE DEVELOPER APPLICATION

## Dictionary Linguee

Rating : 4.7 Price: Free

The Guardian: "Smartphone owners are spoiled for choice when it comes to dictionary apps, but Linguee looks like it could dislodge your current favourite from your homescreen. It translates between a number of languages, with quick tools for searching. And it works offline too".



## GIPHY

Rating : 4.1 Price: Free

The world's largest library of animated GIFs, now on your mobile phone! GIPHY for Android is the fastest, simplest way to search and share GIFs across all of your favorite social channels.



PAKISTANI SOFTWARE DEVELOPER APPLICATION

## J. Mobile App

Rating : 4.5 Price: Free

J. Junaid Jamshed app for Android is created for customers to experience the exclusive variety of J. products online, without any hassle. We offer a complete range of womenswear, menswear, childrenswear, accessories and fragrances.



PAKISTANI SOFTWARE DEVELOPER APPLICATION

## Monospace

Rating : 4.4 Price: Free

Monospace is a minimal notes and writing app, built from the ground up with a designed-for-touch UI. It gets rid of the standard editing features you'd find in standard writing and notes apps and replaces them with a modern-styled, essentials-only formatting popup.



PAKISTANI SOFTWARE DEVELOPER APPLICATION

## Dumb Ways JR Loopy's Train Set

Rating : 3.5 Price: Rs. 239

Before the Dumb Ways characters grew up, they were already making mischief in all sorts of places – kitchens, planes, and of course, trains! Take Loopy and his friends on a train trip! Pick them up and drop them off at different stations. Build your own train track and add fun items to the scene. Pull the handle to hear the train whistle. Toot, toot – let's go!



PAKISTANI SOFTWARE DEVELOPER APPLICATION

## Angry Birds Action!

Rating : 3.9 Price: Free

Pull, aim, action! Send the birds of the Angry Birds Movie crashing through obstacles and bouncing from wall to wall like a wrecking ball – all in the name of saving some eggs. Explore the world of The Angry Birds Movie for the first time ever in Angry Birds Action!



PAKISTANI SOFTWARE DEVELOPER APPLICATION

## PK Cargo Transport



Now you can experience the adrenaline of the rally through your phone. OffRoad Studios (The arcade arcade gaming studio that brought you 'Najam ki Chirya') is bringing you a fun version of the infamous Cholistan Jeep Rally, with twists you will love.

PAKISTANI SOFTWARE DEVELOPER APPLICATION

## Pakistan Hopscotch

Rating : 3.9 Price: Free

Hopscotch Pakistan is inspired by the long forgotten street game Stapu aka Kith Kith. Enjoy the street views of famous Pakistani cities & play Stapu in-front of iconic landmarks like Badshahi Mosque, Minar-e-Pakistan, Mazar-e-Quaid & Faisal Mosque.



PAKISTANI SOFTWARE DEVELOPER APPLICATION

## Jang Real – AR

Rating : 3.8 Price: Free

Jang Real is Jang Group's answer to how Jang's Newspapers should be experienced in the 21st century. By giving you the ability to do more with Jang Newspapers we enable you to go beyond the headlines into an augmented world where you can experience the news and advertisements from our papers in new and exciting ways.



PAKISTANI SOFTWARE DEVELOPER APPLICATION

## Glued

Rating : 4+ Price: Free

Glued makes it simple to manage daily screen time. Argue less, sleep better and spend more time together as a family. Kids can challenge their parents to put down their phones and family members can activate special times when all devices are switched off, like Dinner Downtime or Tech Free Tuesday. Decide what works for you and your family and Glued will automate the rest.



PAKISTANI SOFTWARE DEVELOPER APPLICATION

## Yayvo Online Shopping

Rating : 4.1 Price: Free

The all new Yayvo online shopping app is here. Now you can browse through endless lists of products and shop conveniently with a few taps on your mobile device.



PAKISTANI SOFTWARE DEVELOPER APPLICATION

## Star Chef

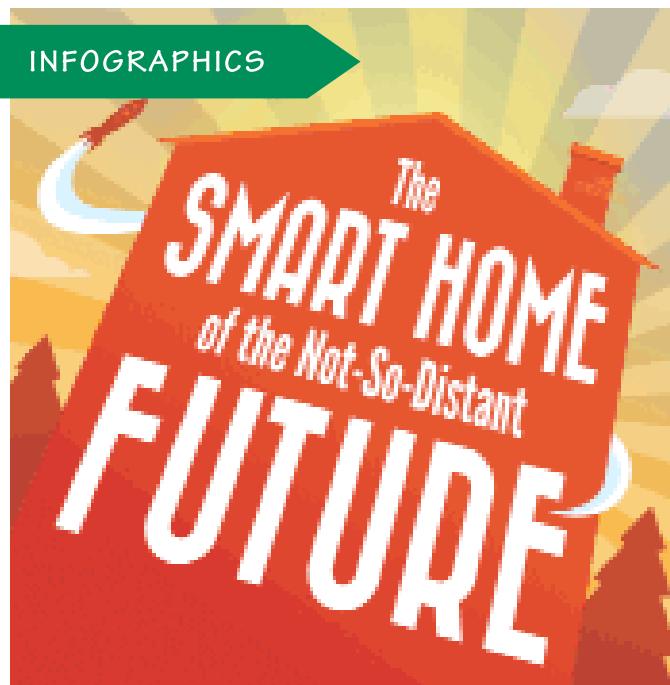
Rating : 4.2 Price: Free

Grow from an Amateur cook to the Culinary Master as you cook a wide variety of mouth watering dishes from all over the world. Build your own classy restaurant in the heart of the city and maintain a high Star Rating. Run a bustling kitchen with specialised cooking appliances and manage a skilled staff... all in this fun filled game Star Chef!



PAKISTANI SOFTWARE DEVELOPER APPLICATION

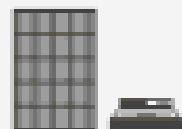




## DID YOU KNOW?

Smart home technology (where lighting, heating and electronic devices can be controlled remotely) has been around since the 1930s.

### A QUICK TIMELINE



1930 saw the creation of a 'home automation machine' called RCHD RC. RCHD could control appliances and temperature, and control shopping lists. Unfortunately it wasn't that useful AND it was huge. It never actually went to market.

1930s



In the 70s, **Phil** **Florian** **launched** a 10-in system designed to enable communication between household appliances.

1970s



In 1994 the **National Association of Home Builders** created "Smart House" - an initiative aimed at encouraging the construction industry to incorporate technology into property design.

1994

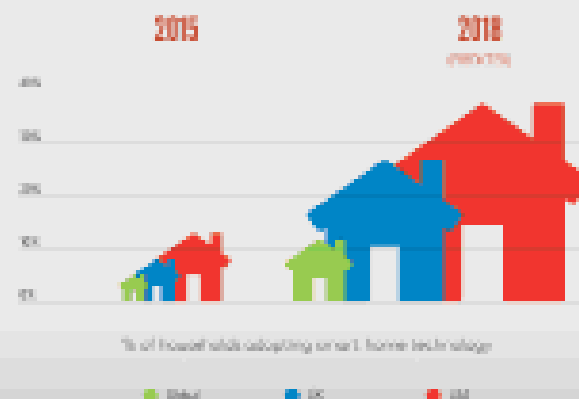
2000s

### TODAY & THE FUTURE



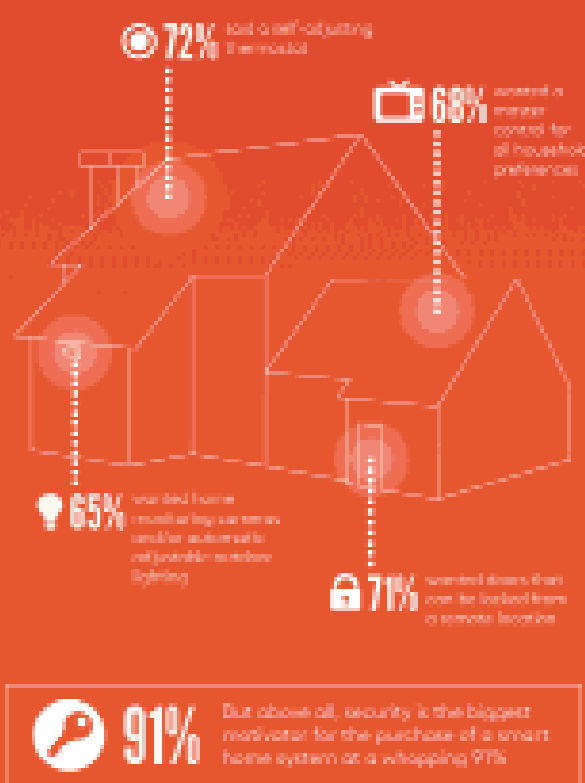
But it's only since the spread of **smart phones**, and technology that can connect our phones with our devices at home, that consumers have really begun embracing the potential of the 'Smart Home'.

Consequently, in 2014 nearly 100 million households across the globe were using smart home technology. By 2018 this is expected to double.



## BUT WHAT ARE WE USING IT FOR?

When asked what type of smart home devices consumers most desired...



## THE (VERY NEAR) FUTURE OF THE SMART HOME

Imagine a home that knows:



In short: a home that **understands your movements** and **controls your surroundings** to help ease the demands of your daily routine.

### PIFF!... SOUNDS FAR-FETCHED?

Not really... It's actually not that far away from becoming a reality - most of the technology needed to achieve this is already available.

### SO WHAT'S THE PROBLEM?

The main barriers to entering the age of truly smart homes are:

#### CHOICE

The sheer number of products and brands available

#### STANDARDS

Lack of technologies to enable them to work together

#### KNOWLEDGE

Limited understanding/awareness from consumers

#### SECURITY

Concerns of how secure the technology is

#### COST

Is the technology justifiably expensive?

### BATTLE OF THE BRANDS



Of those who are aware of smart home devices, 48% stated they are most familiar with **Apple** devices, followed by **Samsung** (22%) and **Amazon** (15%). But there are so many more out there...



...to name a few

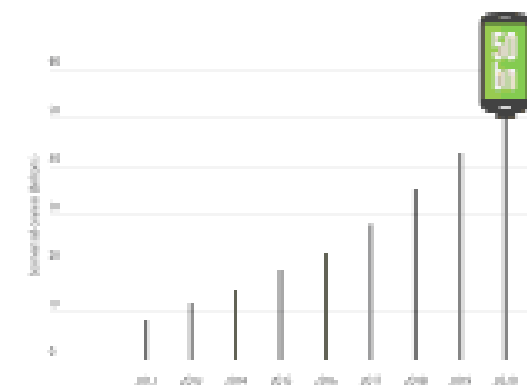
## EMBRACING THE SMART HOME

So, problems aside, the Internet of Things is real. It's big and it's only going to get bigger.

In 2014 14.4 billion devices formed the 'Internet of Things' - it's predicted that by 2020 this number will have risen to more than 50 billion.

### INTERNET OF THINGS

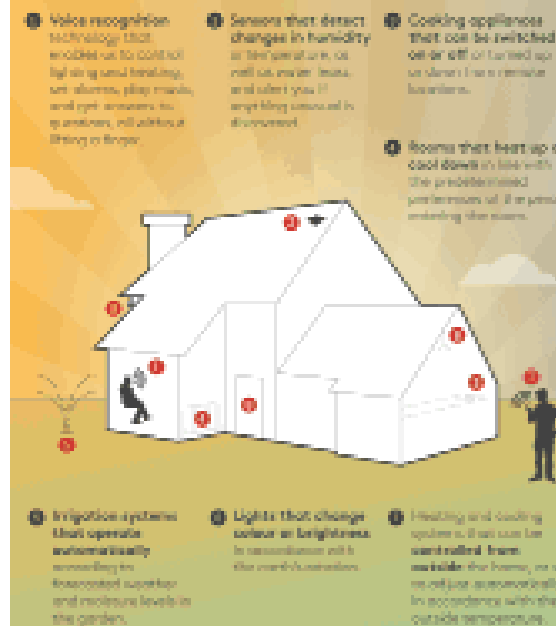
Number of Connected Devices Worldwide



This will consist of devices we carry and wear, devices in our cars and at work, and of course, devices that help to enhance our home life.

In fact, if we were to fully embrace the smart technology that is already available to us, our homes could look something like this, **right now**.

## THE MODERN SMART HOME



Sources:  
- statista.com  
- infographic.co.uk  
- internet.com  
- theguardian.com  
- statista.com

Brought to You by:

VIBRANTdoors

www.vibrantdoors.co.uk



# Live PHONE WORLD



Pakistan's 1st webcasting Channel @  
[www.phoneworld.com.pk/live](http://www.phoneworld.com.pk/live)

- ✓ ICT Policy
- ✓ Twitter Trends
- ✓ Technology News
- ✓ Regulatory Analysis
- ✓ Webinars
- ✓ Product Reviews
- ✓ ICT Events
- ✓ Telecom Market Updates

Pakistan's First Online Phone Store  
with **Official Warranty**



*Best Phones Just a Click Away*

[www.phoneexpress.pk](http://www.phoneexpress.pk)

+92 (0312) 9622333

Office No. 306, 3rd Floor Dossal Arcade,  
Jinnah Avenue, Blue Area, Islamabad



# QMobile NOIR INTRODUCING Z12 METAL THAT MELTS HEARTS

- 1.3 GHz OCTA Core
- 32 GB ROM, 3 GB RAM
- Android Lollipop 5.1
- 5.3 Inch AMOLED Screen
- Corning Gorilla Glass
- 4G LTE Technology
- 13 MP Back Camera
- 5 MP Selfie Camera
- Phase Detection Auto Focus
- HDR Panoramic Photos
- Face Beauty & PicNote
- QR Code Scanner
- Chameleon & Theme Park

111-225-563 | [www.qmobile.com.pk](http://www.qmobile.com.pk)



## In Honor Of **G'FIVE** First Ever **Certified** **Mobile Assembly Plant** In **PAKISTAN**

**SPECIAL OFFER**

On This Occasion  
**G'FIVE Offers**  
**Amazing Prices**  
**As GIFT**

Upto  
**50%  
OFF**

**TO OUR VALUABLE PAKISTANI CUSTOMERS**

**G'FIVE**  
SMART PHONE

Buy Online

[www.gfive.com.pk](http://www.gfive.com.pk)

UAN : 042-111-888-000

[facebook.com/gfivepak](https://www.facebook.com/gfivepak)



1 Year Warranty by **G'FIVE**



# SYMPHONY<sup>®</sup>

new experience



Dual Sides  
Enhanced Glass  
64 bit Processor  
GPU Mali T720 MP2

**X**plorer  
H250



B 12



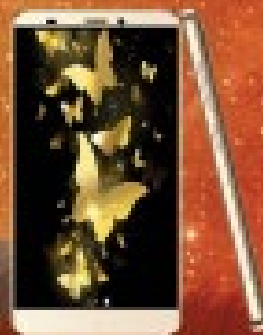
B 13



Xplorer  
V45



Xplorer  
V45



Standout among the stars